

GAMBETTA, CHARLES L., D.M.A. *Conducting Outside the Box: Creating a Fresh Approach to Conducting Gesture Through the Principles of Laban Movement Analysis.* (2005)

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The purpose of this study was to introduce and test the effectiveness of a unique, interdisciplinary approach to conducting gesture based on key principles of Laban Movement Analysis (LMA). This method is the product of the researcher's ten year investigation of LMA and its practical application to conducting. The concepts and techniques presented in this study provide conductors with the means to observe and experience their gestures from a new and different perspective that facilitates a better understanding of the relationships between elements of musical expression and the gestures conductors use to represent them.

Four conductors of varying backgrounds and levels of proficiency participated in the study. Following a pretest conducting performance of the opening 154 measures of Beethoven's (1770-1827) Overture to *Coriolanus*, Op. 62 (1808), the participants completed five hours of LMA training administered by the researcher. This mini-course provided movement instruction, some of which was related to conducting, but it was not a conducting class. No specific applications of the course material to the study repertoire were prescribed. Participants were asked to use homework assignments and in-class participatory exercises as the means to incorporate newly acquired skills into their conducting.

Both the pretest and posttest performances were documented with a Samsung model SD23 MiniDV camcorder and single-point stereo microphone placed in front of

the orchestra. The resulting video recordings were edited without any change in content and transferred to DVD. The data were analyzed by two expert panels of two conductors and two LMA specialists respectively. A third channel of data included in the findings was collected through a post-study interview of each participant conducted by the researcher.

The LMA panel was able to confirm significant changes in movement choices and an expanded range of movement possibilities for all four participants that could be attributed to LMA training. The conductor panel was able to concur that the changes they observed constituted a positive development for all four participants, and the participants themselves agreed that the LMA training they received was of great value to them. The results of this study strongly suggest that LMA instruction would be a valuable addition to any conductor's training and practice regimens regardless of experience, proficiency or area of specialization.

CONDUCTING OUTSIDE THE BOX: CREATING A FRESH APPROACH  
TO CONDUCTING GESTURE THROUGH THE PRINCIPLES  
OF LABAN MOVEMENT ANALYSIS

by

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Approved by

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Robert Gutter, Committee Chair

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To my loving wife, Angelika, and my beloved children, Tara and Jeremy.

You have been and continue to be my strength and inspiration.

APPROVAL PAGE

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CHAPTER I  
THE ART OF SILENT MUSICAL PERFORMANCE

After nearly five decades of conducting symphony and opera performances around the world, I have come to the irrevocable conclusion that there is no function in the entire realm of the performing arts as universally misunderstood as that of the conductor.

–William Steinberg, “The Function of a Conductor”

In little more than 200 years, the orchestral conductor’s art has evolved from its simple origins of time-beating and rudimentary directorial duties to become one of the most complex, demanding disciplines in the performing arts.<sup>1</sup> It stands alone in the midst of musical endeavors devoted to performance because it is practiced in silence.<sup>2</sup> Recognizing this unique circumstance, conductor, teacher, author Hermann Scherchen (1891-1966) identifies gesture as “the conductor’s one and only medium during performance.”<sup>3</sup> Even in rehearsal, when a conductor often employs the voice to instruct or demonstrate desired execution, he still relies most heavily upon nonverbal, physical communication, conducting technique, to transmit his vision of the score to the ensemble.

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<sup>1</sup> The earliest documented account of beating time in the context of a prescribed pattern was presented by Bohemian lexicographer and organist Thomas Balthazar Janowka (1660-1741) in *Clavis ad Thesaurum Magna Artis Musicae* (1701). Elliot Galkin, *A History of Orchestral Conducting in Theory and Practice* (New York: Pendragon Press, 1988), 198.

<sup>2</sup> Silent conducting was not always the norm. Beating time, the practice of tapping a bow, rolled up manuscript or baton on the podium (or sometimes the floor) continued into the nineteenth century in parts of Europe. Galkin, 200.

<sup>3</sup> Hermann Scherchen, *Handbook of Conducting*, 10<sup>th</sup> ed., trans. M. D. Calvocoressi (London: Oxford University Press, 1966), 14.

William Berz further confirms the importance of gesture as the conductor's primary mode of communication in his 1982 study where he reports that most of the participating conductors "relied on hand movements for expressing musical ideas nonverbally, rather than on facial expression, posture, or vocalics."<sup>4</sup> Accepting that there are many such technical elements that may contribute to a conductor's performance (eye contact, aural acuity, bearing, demeanor, rehearsal skills, theoretical and historical knowledge, for example), this study concentrated solely on gesture, the use of hands, arms and body, as the central means by which a conductor conveys musical expression to his collaborators.

While vocal and instrumental performers have at their disposal long established traditions and conventions upon which they can more or less concur, conductors and conductor educators have yet to reach substantial, meaningful agreements regarding the proper approach or methods for the acquisition and development of technique. Listing this deficiency among his primary motivations for writing *Lehrbuch des Dirigierens* in 1929, Scherchen wrote: "Indeed, there does not even exist a standard method of teaching the technique of conducting, a method providing teachers and pupils with materials for systematic exercises and dealing, in a gradual order, with the problems of conducting."<sup>5</sup> Sir Adrian Boult (1889-1983) came to the same conclusion in 1959 when he observed: "There has so far been no time for someone's 'method' to be evolved and opposed to

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<sup>4</sup> William L. Berz, "The Development of an Observation Instrument Designed to Classify Specific Nonverbal Communication Techniques Employed by Conductors for Musical Ensembles" (Ph.D. diss., Michigan State University, 1983), 144-5.

<sup>5</sup> Scherchen, 3-4.

someone else's as we have seen with all other forms of interpretation, vocal and instrumental."<sup>6</sup>

Nearly twenty-five years later in 1982, noted choral conductor educator Gail Poch maintained: "There is [still] no source which offers a logical and meaningful learning sequence for the development of the techniques and skills of conducting."<sup>7</sup> This disparity between instructional methods in other performance disciplines and conducting persists today despite recurrent admonishments from leading pedagogues and artists of the twentieth century as well as dozens of texts and treatises published since Hector Berlioz's (1803-1869) groundbreaking 1855 essay, *L'Art du chef d'orchestre, le theorie du son art*, was appended to the revised edition of *Grand traité d'instrumentation et d'orchestration modernes*. A brief examination of the development of conducting technique over the last three hundred years helps to explain why this circumstance continues even into the twenty-first century.

### **From Time-Beating to Sculpting Time**

Composers and performers gave birth to the practice of musical direction out of necessity. Larger groups of singers and musicians that performed more complicated musical scores required direction of some kind to preserve ensemble and impose temporal consensus. During this early period, no highly specialized technical skills were required. The director beat time audibly or silently, gave simple cues, offered instructions

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<sup>6</sup> Sir Adrian Boult quoted in Michael Bowles, *The Art of Conducting* (New York: Doubleday, 1959), 9.

<sup>7</sup> Gail B. Poch, "Conducting Movement Analogues through Effort Shape," *Choral Journal* 23, no. 3 (November 1982): 21-2.



and corrections when required, and the ensemble followed.<sup>8</sup> Conducting responsibilities often fell to the *Kapellmeister* who directed opera and choral works from the klavier and instrumental music from the concertmaster's desk. If not composers, such pioneer conductors were performers (usually but not exclusively violinists) with previous leadership roles.<sup>9</sup> These practices continued until the close of the eighteenth and, in some locations, into the opening decades of the nineteenth century.

Musical direction began its evolution towards true conducting when the rising popularity of concert music and changes in performance practice during the first half of the nineteenth century compelled ensemble directors to become the primary interpreters of music as well as timekeepers.<sup>10</sup> To further complicate this new added challenge, late eighteenth-century composers had already embarked upon a campaign to stretch the boundaries of musical expression that would continue unabated well into the twentieth century. New instruments were added to the orchestra, and existing sections were augmented to maintain balance. In response, choirs grew larger to produce more sound

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<sup>8</sup> Some behaviors associated with the direction of musical ensembles can be traced back to the first millennium b.c.e. and beyond through iconographic evidence and biblical references. However, for the purposes of this discussion, the "early period" is defined by historical records dating from the seventeenth century onward. Galkin, 241-74.

<sup>9</sup> According to Carse, there were three common methods in the eighteenth century for controlling performances of instrumental music or combined vocal and instrumental music. Leadership duties were divided between the *Kapellmeister* (usually the composer) and the concertmaster for operatic performances. Instrumental performances were sometimes subject to the same dual leadership method but more often conducted solely by the concertmaster who exerted full control. Choral performances, with or without instruments, in large spaces where performers were more widely dispersed required the services of a time-beater, armed with a roll of paper or wooden staff, who marked the time visually or audibly. Adam Carse, *The Orchestra of the Eighteenth Century* (Cambridge: W. Heffer and Sons, 1940), 88-9.

<sup>10</sup> Galkin, 467.

and keep pace with the expanding instrumental forces of the orchestra.<sup>11</sup> Musical forms grew longer, more complex and more flexible, while technical demands placed on the musicians tested the limits of their instruments.<sup>12</sup> At the same time, a new and growing appetite for music composed by deceased masters demanded that conductors from the mid-nineteenth century onward acquire an increasingly large and more diverse repertoire.<sup>13</sup> Because of this unusual set of circumstances, broadly accepted techniques and methods for leading opera, choral or symphonic performances were given neither the time nor the attention required to develop much beyond simple rules for beating time. The art of conducting—or more specifically, conducting technique—had to be invented on the job.

The preceding historical synopsis explains how and why the disparity between conducting and other performance disciplines commenced. To discover why it persists requires a comparison of the actual processes of study and practice for the development of instrumental and vocal technique with those same processes for conducting technique. The former are rooted in the production of sound. Indeed the goal of such practices is complete mastery over every nuance of sound. The performer begins by constructing an abstract aural image of the desired sound-time continuum for the music to be performed

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<sup>11</sup> Carse, *The Orchestra from Beethoven to Berlioz* (Cambridge: W. Heffer and Sons, 1948; New York: Broude Brothers, 1949), 12-23, 295.

<sup>12</sup> Improvements in both the construction of instruments and the training and technical accomplishments of those who played them spurred composers to fully exploit the new textures, colors and breadth of musical expression now open to them. Galkin, 37-42.

<sup>13</sup> Weber, William, “The Rise of the Classical Repertoire in Nineteenth-Century Orchestral Concerts,” in *The Orchestra: Origins and Transformations*, ed. Joan Peyser (New York: Charles Scribner’s Sons, 1986), 367-76.

and completes the process by materializing that abstraction through the medium of an instrument. A direct physical connection with the sound and, in turn, the music is made through the context of bodily movements required to create the sound. It is, by definition, impossible to separate the physical activity from the sound. Exercises may be pursued to develop dexterity or improve control apart from a given instrument, but ultimately the requisite movements and the resultant sounds are inexorably linked together.

Like instrumental/vocal performers, the conductor begins by creating an abstract aural image of a musical blueprint (the score) provided by the composer. However, he materializes that abstraction, apart from the instruments or the sounds they make, through the media of expressive movement (conducting gesture), facial expression and interpersonal contact with the musicians in the ensemble. Although a keyboard, other instrument or perhaps the conductor's own voice may be used to help him learn the music, the direct physical connection to his imagined version of the score is ultimately maintained with the gestures, postures and expressions intended to convey the musical, emotional and spiritual contents of a composition and *not* with any sound the conductor produces. More to the point, the conductor's gestures should connect his own abstract representation of the sounds and temporal flow called forth by a composer's notation with the actual sounds the musicians need to produce at the precise moments these events need to occur. Scherchen makes much the same assertion when he insists that conducting gestures "must indicate perfectly clearly the metrical course of the work; and, at the same time, [they] must convey in unequivocal fashion the varying expression and general

shaping of the work.”<sup>14</sup> The conductor’s performance personifies and transmits this information *without* making a sound, and an ensemble’s audible interpretation of its conductor’s silent rendition of a musical opus is, in fact, the collective, collaborative product of his performance.

Clearly the art of conducting should be as firmly rooted in the art and science of human movement as it is in the art of music. Mastery of either discipline without a complementary mastery of the other has been insufficient for nearly two hundred years. Metronomic precision combined with strict adherence to traditional beat patterns (the hallmarks of time-beating) are simply not enough.<sup>15</sup> The conductor’s technique should convey tempo, rhythm, articulation, dynamics, character, style, breath and shape—every nuance the orchestra needs to complete a mutually satisfying musical performance. Consummation of this marriage of music to movement comes only when the conductor has established a deep and unbreakable physical connection between his gestures and his fully formed abstract representation of the sounds of music. Put another way, the conductor must maintain a continuous connection between his gestures and the flow of musical expression if he is to effectively communicate his vision of the music to the

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<sup>14</sup> Scherchen, 14.

<sup>15</sup> The prescriptive use of beat patterns is often employed by conductors who believe that this type of beating is clear. References to “clarity,” when used to describe conducting technique, have long been a source of confusion. A clear beat is not necessarily the result of uniformity of size, speed and placement of gestures. These characteristics are often neither desirable nor appropriate. True clarity requires careful consideration to determine the qualities of gesture that will most effectively evoke the desired sounds from the ensemble. An “unclear” beat—one that includes modifications of speed, force, direction, size and shape—often transmits the most powerful and successful message to performers. Farberman comes to the same conclusion. “Brilliant musical minds, accumulated musical knowledge, and probing musical insights—all are negated when forced to use two-hundred-year-old beating formulas.” Harold Farberman, “Beating Time: How Not to Make Music,” *Music Educators Journal* 88, No. 3 (Nov 2001): 39-40.

musicians he is conducting. It is this accomplishment alone that elevates conducting from craft to performance art.

### **The Synthesis of Two Disciplines**

Human beings are born movers. In fact, we are already moving months before birth. Cultures around the world have evolved traditions of expressing thoughts, feelings, opinions and states of being through the medium of movement. A shrug of the shoulders, a wave of the hand or a grimace each convey meanings that are instantly understood given the proper context and circumstance.<sup>16</sup> Yet these seemingly innate capacities to move and interpret movements as forms of personal expression and interpersonal communication do not necessarily predispose conductors, teachers of the art or their students towards an understanding of the relationships between expressive movement and musical events.

Conducting technique is a highly specialized, extremely rich form of nonverbal communication through gesture. Accepting this description, it logically follows that any “school” or method of conducting should include thorough training in the means by which elements of musical expression are translated into movements that are immediately recognized and understood by musicians regardless of differences between forms of culturally embedded nonverbal communication.<sup>17</sup> The fact that conductors use gesture to

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<sup>16</sup> Moore and Yamamoto recognize body movement as “a highly structured, culturally-coded form of symbolic communication, equivalent in its sophistication to the better-known extensions systems of language, music, mathematics, and so on.” Carol-Lynne Moore and Kaoru Yamamoto, *Beyond Words* (New York: Gordon and Breach, 1988), 84-5, 108-14.

communicate with ensembles of all kinds around the globe, provided the musicians are schooled in the traditions of “Western” music, suggests the existence of a distinct physical vocabulary of conducting.<sup>18</sup> The first attempts to codify such a vocabulary appear in early seventeenth century documents and are limited to simple instructions for communicating meter and pulse.<sup>19</sup> Multiple diagrams of patterns for beating time in different meters followed roughly one hundred years later.<sup>20</sup>

Berlioz included still more complex diagrams with detailed technical instructions and applications of these patterns to musical examples in *L'Art du chef d'orchestre*. Richard Wagner (1813-1883) avoided direct references to technique and beat patterns in *Über das Dirigieren* (1869), concentrating instead on execution, feeling, character, interpretation and aesthetics. From these treatises, two competing schools of thought emerged: one convinced that technique could be learned and the other equally convinced that the ability to conduct was an inborn trait that could be neither learned nor taught. Among adherents to the latter thesis, perhaps none expressed the view that conducting could not be learned more eloquently than New York Philharmonic conductor Anton Seidl (1850-1898).

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<sup>17</sup> Cultural differences can confound efforts to send and receive information through gesture. For example, most Western cultures understand a motion of the head from side to side to mean “no,” while many Eastern cultures interpret a similar, although slightly different movement, to indicate “yes.” Examples of this kind of culturally specific context are cited in Moore and Yamamoto, 111-14.

<sup>18</sup> Max Rudolf (1902-1995) extends the linguistic reference in the title of his venerated text, *The Grammar of Conducting: A Comprehensive Guide to Conducting Technique & Interpretation*, 3<sup>rd</sup> ed. (New York: Schirmer Books, 1994). Koch goes farther in his 2003 study by describing a “tripartite framework of interrelating syntactic factors” among the organizing forces behind conducting motions. Christopher Jason Koch, “Towards a Theory of Conducting Motion,” (Ph.D. diss., University of Washington, 2003), 127-31.

<sup>19</sup> Carse, *Orchestral Conducting: A Textbook for Students and Amateurs* (London: Augener, 1935), 90-1.

<sup>20</sup> Galkin, 261-7.

The ability to conduct is a gift of God with which few have been endowed in full measure. Those who possess it in abundance do not wish to write about it; for them the talent seems so natural a thing that they cannot see the need of discussing it. This is the kernel of the whole matter. If you have the divine gift within you, you can conduct; if you have not, you will never be able to acquire it. Those who have been endowed with the gift are conductors; the others are time-beaters.<sup>21</sup>

Seidl's comments raise two salient points that address this study. First, whether his belief in "the divine gift" refers to some mystical quality of musical leadership or to technical virtuosity, there can be no doubt that a fortunate few conductors are beneficiaries of a natural seemingly inborn kinesthetic sense that facilitates the creation and application of effective conducting gestures. Yet such gifted individuals are not necessarily the best equipped to teach less physically adept conductors how to develop or improve as movers. Second, the fact that few truly great conductors are exceptional educators as well stems less from a lack of interest in writing or talking about their art and more from the apparent absence of proper tools and methods for dissecting and describing, with words and other means, precisely how a conductor is able to communicate musical expression through expressive movement.

### **Setting Music to Movement**

For conductors and teachers who remain convinced that conducting can be learned, the search for new, more effective methods that will better promote an unshakable, dynamic connection between conducting gestures and musical expression

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<sup>21</sup> Anton Seidl, "On Conducting," in *Anton Seidl: A Memorial by his Friends* (New York: Charles Scribners Sons, 1899), 215.

continues. Despite valiant efforts by practitioners and pedagogues to identify, document and codify this connection, a thorough understanding and mastery of the means by which gesture conveys musical expression remains largely beyond the grasp of conductors and teachers. Further, conductors who possess such skills and are able to successfully transmit musical expression through the medium of gesture are seldom capable of sharing this knowledge with students and colleagues because they are unaware of the tools and techniques that would allow them to do so. This difficulty is no surprise and no one's fault because while conductors are (or should be) expert musicians, they are not often well schooled in techniques for the observation, analysis and description of human movement.

Those who recognized this deficiency began searching for remedies nearly fifty years ago. Some, like Hideo Saito (1902-1974), Frederik Prausnitz (1881-1996) and Harold Farberman (b. 1929), have made important contributions to these efforts through their conducting texts by trying to more fully explain the components of conducting gesture in the context of beats or strokes. Others looked outside of the domain of music for answers. Alan Baker recommended adaptations of Dalcroze Eurhythmics and actor training to reduce inhibitions and better connect with the music in his 1992 study.<sup>22</sup> Dale Lonis developed a model for teaching conducting gesture based on the learning theories of Benjamin Bloom in 1993.<sup>23</sup> John Dickson incorporates elements of

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<sup>22</sup> Alan Lee Baker, "Creating Conductors: An Analysis of Conducting Pedagogy in American Higher Education" (D.M.A. diss., Stanford University, 1992), 4-9.



kinesthetics into his conducting curriculum because: “many conducting programs often limit instruction by teaching only abstract mechanics and techniques of gesture which, in many cases, are divorced from the music making process.” Further emphasizing the point, he continues:

As a result, conducting robots are created who understand the mechanics of gesture, but have little concept of the music itself—its shape, flow and direction.

By conceiving music through the methodology of kinesthetics, however, students are sensitized to the shaping of music in relationship to their body responses. Simply put, conducting gestures emanate from the interpretation and concepts of the music rather than from a collection of programmed responses.<sup>24</sup>

Among the most promising interdisciplinary approaches to conducting that reveal such relationships between body movement and musical expression, applications of Laban Movement Analysis have been and continue to be acknowledged as a positive force in conducting practice and teaching for a small but growing cadre of conducting pedagogues. Laban Movement Analysis (LMA) is the name given, in the United States, to the methods, tools and techniques developed by Rudolf Laban (1879-1958) and his students for perceiving, describing and annotating human movement. LMA practitioners combine an elaborate descriptive vocabulary with graphic symbols to observe, experience and, of course, analyze every aspect and detail of movement. Properly designed and implemented applications of this discipline underscore the correlation and unity of all

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<sup>23</sup> Lonis’s curriculum emphasizes repetition of traditional conducting skills until they are so heavily embedded in the student’s mind and body that he can perform tasks automatically. Dale Jon Lonis, “Development and Application of a Model for the Teaching of Conducting Gestures” (Ed.D. diss., University of Illinois at Urbana-Champaign, 1993), iii, 107-16.

<sup>24</sup> John H. Dickson, “The Training of Conductors Through the Methodology of Kinesthetics,” *Choral Journal* 32, no. 8 (March 1992): 15.

components of human movement by reaching beyond mechanics to the sensations and actual experience of movement for both movers and observers. Irmgard Bartenieff (1900-1981), Laban disciple and founder of the Laban/Bartenieff Institute of Movement Studies, similarly describes her teacher's unique perspective and approach to the analysis of human movement.

Laban observed movement processes in all aspects of life: from the martial arts to spatial patterns in Sufi rug weaving, factory work tasks, rhythmic patterns in folk dances, crafts and the behavior of emotionally disturbed people. It was the process itself that compelled his attention, not just the end points or goals of the action, and he, with his colleagues, refined movement observations into an exquisitely precise method of experiencing, seeing, and recording them so that body movement functional and expressive implications became increasingly apparent.<sup>25</sup>

Arguably the first conductor to recognize the potential of LMA as a method for helping conductors improve their awareness and understanding of expressive movement, Neal Bartee (b. 1947) concluded in his 1977 theoretical study that: "Comprehending Effort-Shape dynamics visually, kinesthetically, and conceptually would help a conductor gain a deeper understanding and awareness of the components of movement that could be used in conducting expressively."<sup>26</sup> Effort-Shape analysis focuses on changes in the qualities of movement related to the expenditure of kinetic energy (Effort) and

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<sup>25</sup> Irmgard Bartenieff, *Body Movement: Coping with Environment* (New York: Gordon and Breach, 1980), ix. Bartenieff first met Laban in 1925. She studied and later worked with the Master and his inner circle of colleagues until she and her family fled Nazi Germany in 1936. She is universally acknowledged as one of primary forces behind the continued development of Laban's theories through the remainder of the twentieth century until her death in 1981.

<sup>26</sup> Neale King Bartee, "The Development of a Theoretical Position on Conducting Using Principles of Body Movement as Explicated By Rudolf Laban" (Ph.D. diss., University of Illinois at Urbana-Champaign, 1977), 147.

adaptations of the body in space (Shape).<sup>27</sup> The terms and observational techniques are tools that explain *how* a person moves rather what parts of the body are moving, where movements begin and end or when they take place. Specifically addressing the advantages of understanding and using this terminology for describing the dynamic qualities of movement, Bartee adds:

Laban's Effort-Shape terms give the conductor a means of comprehending a wider range of movements. Training in Effort and Shape principles helps the conductor take on the movement characteristics of the music he is trying to express.<sup>28</sup>

After adding an introductory unit of LMA training to his conducting curriculum, choral educator Gail Poch observed that his conducting students “have been able to realize a tangible relationship of conducting gesture to the music they are studying. This physical awareness and its association to the entire body have provided the missing link.” He additionally cites the benefits of using LMA as a tool for remedial instruction as well as self assessment and peer review.

The analysis of movement qualities has also proven to be especially beneficial in identifying individual problems and in facilitating the correction of those difficulties. The students become extremely perceptive and are quickly able to apply these principles as an evaluative criterion for assessing the performance of others. They are able to determine why a movement is working well and are better able to employ a similar effort in their own conducting.<sup>29</sup>

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<sup>27</sup> Cecily Dell, *A Primer for Movement Description Using Effort-Shape and Supplementary Concepts*, 2<sup>nd</sup> ed. (New York: Dance Notation Bureau Press, 1995; 4<sup>th</sup> printing, 1993), 5-7.

<sup>28</sup> Bartee, 167.

<sup>29</sup> Poch, 21-2.

Author and choral conductor James Jordan includes a chapter devoted to Laban's Effort theories in his text, *Evoking Sound: Fundamentals of Choral Conducting and Rehearsing* (1996). He claims that: "Whether one is beginning one's study of conducting or has considerable experience conducting, the categorizations of Laban can be of great assistance." Jordan uses Effort training as a set of exercises for helping conducting students reacquaint themselves with their own movement potential. He explains:

Rhythm, which comes from a source within us, can be manifest as external movement. That external movement can be labeled to help us appreciate the infinite possibilities and experiences of rhythm manifest as movement. Rhythm is a manifestation of tension and release that provides points of reference that we commonly refer to as meter. Rhythm phrases, then, are movement manifestations of the Efforts in Combination.<sup>30</sup>

Although he makes no reference to using Effort training or other LMA principles as tools for the observation and analysis of conducting gesture, Jordan's text remains an important addition to conducting literature because of his decision to include Laban's Effort descriptions as part of his recommended methodology.

### **Statement of Purpose**

The purpose of this study was to introduce and test the effectiveness of a unique, interdisciplinary approach to conducting gesture. This method is based on an application of key principles of Laban Movement Analysis that the researcher developed in order to explore, explain and describe the relationships between elements of musical expression

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<sup>30</sup> James Jordan, *Evoking Sound: Fundamentals of Choral Conducting and Rehearsing* (Chicago: GIA Publications, Inc., 1996), 23, 44-5.

and the movements conductors use to represent them. Its introduction and demonstration will lead to an improved understanding of how conductors translate meaningful signals in a musical score into gestures, strokes and postures that accurately convey the flow of musical events, as realized by the conductor, to the performers under his direction.

### **The Value of This Study**

Twenty-seven years ago Bartee presented a theoretical case that argued for the adoption of LMA training for conductors. Since that time a number of conductors and teachers have experimented piecemeal with portions of the discipline developed by Laban and his protégés. The results of an exhaustive search show that all extant Laban Movement Analysis research related to conducting has, thus far, fallen into one of three categories that each fail to take full advantage of the tools and techniques LMA has to offer. Theoretical studies similar to Bartee's 1977 volume present arguments, make comparisons and offer generalized suggestions for changes in conducting practice and pedagogy, but commitments to a specific course of action are lacking. Observational studies follow a track comparable to Therees Hibbard who retained the services of a Certified Movement Analyst (a thoroughly schooled LMA specialist with credentials from the Laban/Bartenieff Institute of Movement Studies) for her 1994 case study of one prominent choral conductor's use of movement as an instructional technique in rehearsal.<sup>31</sup> Results from these studies provide useful albeit limited comments regarding the conductors' movement preferences and the dynamic contents of conducting gesture.

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The remaining pedagogical and quasi-experimental studies introduce Effort training that emphasizes Laban's Basic Effort Actions (eight combinations of Weight, Time and Space Effort elements) to a treatment group of self-selected conducting students or ensemble members in order to measure the effect of such training on these students when compared to a control group that received no Laban training.<sup>32</sup> While few would argue the benefits of this limited strategy, it neither fully explores nor completely explains the connections between conducting gesture and musical expression. The treatment group instruction tends to limit rather than expand movement choices because it is sometimes restrictive (prescribing a single gesture for a specific musical event) and because the eight Basic Effort Actions address only a minute portion of the expressive movement repertoire conductors need to develop if they intend to communicate effectively with their collaborators. Hibbard confirms these assessments with a call for additional research that "examines the qualities of [conducting] gestures through Laban Movement Analysis to [link them] with the desired qualities in the music."<sup>33</sup> Ramona Wis also arrived at much the same conclusion following her 1993 field study of two prominent choral conductors. She insists that:

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<sup>31</sup> Therees Tkach Hibbard, "The Use of Movement as an Instructional Technique in Choral Rehearsals" (D.M.A. diss., University of Oregon, 1994), 226-7, 269-71.

<sup>32</sup> Laban's Effort theory uses four motion factors—Weight, Time, Space and Flow—to describe the dynamic qualities of movement. The Effort elements are inner attitudes towards these motion factors expressed within a range of two extremes: one of indulging or surrendering to a factor and the other of resisting or struggling against a factor. For example, reaching for and grasping a delicate blown glass ornament would require attitudes toward Space, Time and Weight totally apart from those needed to hammer a hook into the wall upon which said ornament would hang. Bartenieff adds: "Such inner participation is a combination of kinaesthetic and thought processes that appear to be almost simultaneous at different levels of consciousness. Irmgard Bartenieff and Dori Lewis., *Body Movement: Coping with the Environment* (New York: Gordon and Breach, 1980), 51-3.

<sup>33</sup> Hibbard, 281.

Students of conducting, especially those in teacher training programs, should be acquainted with the effectiveness of a movement-based teaching pedagogy and should be encouraged to experiment with their own conducting gestures so they can develop from a pattern-and-beat-only focus to a wider vocabulary that will be a more effective physical metaphor for what is inherent in the music... Studies are needed which explore the relationship between conducting gesture and musical gesture—between the quality of the conductor’s gesture and the qualities embodied in the music.<sup>34</sup>

To that end, this study combined a more comprehensive understanding of Laban’s Effort theories than earlier research has been able to produce with limited instruction in Shape and Space in order to confirm concrete connections between conducting gesture and musical expression that extend far beyond meter and pulse. Results from a test of this uniquely conceived application of LMA training for conductors clearly demonstrated the effectiveness of LMA training for a group of four student conductors. Their success also corroborates the researcher’s revelation and elaboration of the fundamental equivalence between the dynamic qualities of movement and all types and shades of musical expression. Such a synthetic approach to conducting gesture should help liberate conductors from the long standing practice of using prescriptive, repetitive beat patterns as the preferred context for developing and organizing gestures. Through this shift in emphasis from beat patterns to the dynamics of movement as they apply directly to the elements of musical expression, conductors will be better able to imagine, create and execute communicative, effective gestures that impel the music forward by compelling musicians to recreate their conductor’s conceptual ideal of the composer’s score.

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<sup>34</sup> Ramona M. Wis, “Gesture and Body Movement as Physical Metaphor to Facilitate Learning and Enhance Musical Experience in the Choral Rehearsal” (Ph.D. diss., Northwestern University, 1993), 252.

## Research Questions

Investigative study grounded in the fruits of labors past often provides the most illuminating and profound contributions to the collective understanding of an ostensibly familiar yet utterly complicated task such as conducting. The researcher therefore used the strongest features and concepts from earlier research as the foundation for a study that answered the following research question and three supporting sub-questions.

What effect does five hours of introductory LMA training have on four conductor-participants' ability to accurately represent elements of musical expression through conducting gesture?

### Sub-Questions

1. Focusing on the ability to accurately represent elements of musical expression through conducting gesture, what differences does a panel of expert conductors observe between each participant's pretest and posttest conducting performances?
2. Focusing on the diversity, range and phrasing of Effort-Shape possibilities, what differences does a panel of LMA professionals observe between each participant's pretest and posttest conducting performances?
3. What changes and improvements do the conductor participants report in their experience of the connection between musical expression and conducting gesture after five hours of LMA training?

These questions provide a solid foundation for the design and completion of a meaningful explanation and trial of this fresh approach to conducting gesture.



## Methods and Procedures

The methods and procedures used in this study were the outcome of one conductor's (the researcher) ten-year personal exploration of and experience with Laban Movement Analysis joined with the most salient concepts, methods and instruments gleaned from a thoughtful review of related research. The result is a pluralistic project that begins with a descriptive account of the researcher's unique application of LMA to conducting gesture and concludes with a descriptive study of this interdisciplinary approach to assess its potential as a learning tool for other conductors. Four volunteer conductors were selected to participate in the study from a pool of present and former University of North Carolina at Greensboro students who have completed at least one year of conducting classes or private studio instruction.

These four participants submitted to a pretest wherein they conducted a full orchestra in a performance of measures 1-154 of Ludwig van Beethoven's (1770-1827) Overture to *Coriolanus*, Op. 62 (1808). These pretests were documented by video recording and later used to establish a standard against which the results of a posttest performance were measured and compared. The participants then completed five weekly one-hour sessions of instruction in Laban Movement Analysis administered by the researcher. They were expected to invest at least five hours of personal study each week apart from the guided sessions. This mini-course neither addressed the study repertoire in detail nor provided any instruction to the participants on how to prepare and perform the score. It was designed solely to expand movement possibilities for the conductors and help them better understand how the dynamic qualities of movement combine to

represent elements of musical expression in *any* piece of music. Participants were instructed to devise their own methods for applying what they learned in the sessions to their study for the conducting posttest.

Upon completion of the mini-course, posttest conducting sessions of the pretest repertoire performed under the same conditions were videotaped and delivered with the pretest recordings to independent panels of two expert conductors and two Certified Movement Analysts. The panels compared pretest with posttest recordings to observe and confirm changes in and additions to each participant's collection of conducting gestures and to determine the impact of the mini-course on the participants' ability to connect conducting gesture to musical expression. Following the posttest sessions, each participant was interviewed by the researcher and asked to complete an evaluation of the LMA training and its impact on his/her conducting.

### **Definitions**

Among the many obstacles facing those committed to interdisciplinary modes of study, perhaps the most difficult to navigate are the points at which the technical vocabularies of the two specialties intersect or merge. Readers familiar with either musical study or LMA will encounter terms common to both disciplines that may or may not share common meanings. For example, musicians traditionally equate *dynamics* only with changes in force or intensity within a range between *pianissimo* (softest) and *fortissimo* (loudest). While even Laban himself would certainly recognize such patterns of change as dynamic, the language of LMA uses the term in a more expansive manner to describe the qualities of movement that reflect patterns or processes of change, growth

or activity. Perhaps musicians could learn from this broader context and realize that transformative changes in tempo, registration, density, articulation, amplitude, etc. are all examples of *dynamics* (surely a salient point but a topic that is not part of this study). Because listing the intersecting terms and their separate definitions a single time would add to rather than diminish confusion, the researcher will instead avoid intersecting terms wherever possible and make usage clear whenever terms common to both music and LMA are required.

Additional challenges arise because terminology also varies within the Laban community as well. For example, where the American school uses “direct” and “indirect” to describe Space Effort, the British school tends to favor “direct” and “flexible.” Observers trained in Movement Pattern Analysis, a system developed by Laban protégé Warren Lamb (b. 1923), favor more vivid descriptions of movement qualities such as increasing and decreasing pressure to indicate strong and light Weight respectively. To prevent confusion, the present researcher consistently uses the following terminology for Effort descriptions: direct and flexible Space, strong and light Weight, quick and sustained Time, and bound and free Flow. When differences in terminology appear confounding, the researcher adds a parenthetical clarification using above descriptors.

### **Limitations and Delimitations**

Discussing the conductor’s myriad tasks and responsibilities, conductor and composer Gunther Schuller (b.1925) insists: “Conducting is surely the most demanding, musically all-embracing, and complex of the various disciplines that constitute the field

of music performance.”<sup>35</sup> Aside from the acquisition of an effective technique, there are a number of talents conductors should possess and a multitude of skills conductors need to master. Although these abilities are vital to any conductor’s overall success and artistry, this study was limited to an exploration of the process through which meaningful signals in the score are translated into effective conducting gestures. The researcher therefore assumed competence in and avoid a separate investigation of these associated disciplines. Any discussion of beat patterns was limited to their use as an alternative to the method of using adaptations of Laban Movement Analysis as the basis for developing the ability to connect gesture to musical expression.

The study excluded references to or comparisons between “expressive” and “non-expressive” conducting because these terms are misleading and fundamentally flawed. All conducting movements express something. In fact, even total stillness on the podium can express a great deal. The relevant question is and always has been whether or not movements made by the conductor produce the proper overt physical expression of musical signals found in the score. If the information contained in the movement is incorrect, the conducting is still expressive; it is just not helpful or, even worse, deleterious.

While the researcher’s area of specialization is orchestral conducting, this study referenced related research from band and choral specialists when such information was relevant to the stated purpose and goals. For example, there exists within the choral conducting community a growing body of research regarding the use of Laban Movement

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<sup>35</sup> Gunther Schuller, *The Compleat Conductor* (New York: Oxford University Press, 1997), 3.

Analysis as a tool for improving both conductor effectiveness and ensemble performance. Although much of this research is pedagogically oriented, and this study certainly dealt with issues related to pedagogy; the present study is not intended to represent any specific approach to *teaching* conducting. The methods and practices presented are offered as a set of tools to help conductors, teachers and students at any stage of development better understand the dynamics of conducting gesture. This knowledge will, in turn, help them connect their own interior musical vision to a more accurate and vivid outward representation through the medium of expressive movement.

Lastly, the domain of human movement is itself a complete and distinct discipline worthy of independent investigation. Indeed, Laban Movement Analysis can and has been applied to a wide range of human activities and conditions not normally associated with movement per se. Such extraordinary flexibility and adaptability are truly among LMA's greatest strengths. Admitting that a comprehensive application of all its components and techniques to conducting gesture would be both illuminating and useful, that endeavor remains far beyond the limits of this study. Following an introduction to Laban's theories of human movement, further investigation of Laban Movement Analysis is limited to applications of Effort, supported by Shape and Space, as the means to develop an understanding of how effective, communicative and compelling conducting gestures are created from the raw materials provided in a composer's score.

## CHAPTER II

### RUDOLF LABAN: HIS LIFE AND THEORETICAL FRAMEWORK

It is said, and I think it was a prominent scientist who first said it: ‘Dance is rhythmically ordered movement.’ All right! But what movement is not rhythmically ordered? Thus any kind of movement would be dance.

–Rudolf Laban, *Rudolf Laban Speaks About Movement and Dance*

#### **A Master of Dance and Movement**

Dancer, choreographer, theoretician, philosopher, teacher, and author Rudolf von Laban’s fascination with, commitment to, and understanding of the phenomenon of human movement was as expansive as the definition above that he offered during the first in a series of eight lectures on the “History of Dance” at Dartington Hall, United Kingdom (1939). He was a visionary who constantly challenged his students to transform themselves and their world through the media of movement and dance. Revered by some as the father of modern dance and progenitor of the movement culture and denounced by others as a Nazi sympathizer, Laban saw himself as neither prophet nor villain but rather as a pathfinder and teacher. Shortly before his death in 1958, he offered this summation of his life’s work.

I have invented a few means and instruments to serve as a starting point in the exploration of the world of movement and to stimulate the understanding of harmony of movement.

My tools can be better or worse than other people's and more suitable for some people than for others. They are in no way a means to establish a method, or to attract people to 'Labanism' to form Labanites or Laban folk and all this nonsense.<sup>1</sup>

Born on December 15, 1879 in Poszony, Hungary (now Bratislava, Slovakia), Laban spent his youth near Mostar, Bosnia-Herzegovina, where his father was ranking officer and Military Governor in command of six thousand Austro-Hungarian occupation troops. As a child he developed a deep affection for Nature and the countryside that followed him throughout his life. After completing a traditional classical education and a year of Officers Training School foisted upon him by his autocratic father, Laban left home for Paris where he supported himself by performing odd jobs, selling newspapers, painting posters and drawing caricatures. In addition to studies in art and architecture, he also began experimenting with free dance in small cabarets, and he taught his first movement classes on the roof of the newspaper office where he worked. Paris was also where Laban's disdain for rapid industrialization and technological advancement turned his youthful optimism to disillusionment. He later described the commencement of this transformational process in his autobiography.

I saw with growing clarity how man will come under the domination of the machine. The soul-less steel-ox, the locomotive, is only the beginning. Thrilling as the power of conquest over sea and air may be, man will surely have to pay dearly for it.<sup>2</sup>

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<sup>1</sup> Rudolf Laban, TMs, Laban Archives, 1957, Laban; quoted in Vera Maletic, *Body - Space - Expression: The Development of Rudolf Laban's Movement and Dance Concepts*, Approaches to Semiotics 75 (Berlin and New York: Mouton de Gruyter, 1987), 182.

<sup>2</sup> Rudolf Laban, *A Life for Dance*, trans. Lisa Ullmann (New York: Theatre Arts Books, 1975), 48.

Laban moved to Munich in 1907 and formed his first dance company and school there in 1910. These new ventures provided him with opportunities to experiment freely with dancing and dancers and to investigate the language of movement for its own sake. Mary Wigman (1886-1973), one of Laban's early disciples and a seminal figure in twentieth-century modern dance, affirms his contributions to the art of dance as a teacher and theoretician: "Laban liberated dance from its slave-like association with music, and reinstated its independence and beauty of an absolute language."<sup>3</sup>

Three years later he brought his students to Ascona, a retreat community on the Italian border of Switzerland. There Laban and his followers established the Schule für Lebenskunst (School for the Art of Life) and took up residence in rustic huts on the hillside of Monte Verita (Mountain of Truth). In Ascona Laban found the perfect laboratory to begin his theoretical work in earnest and to achieve his goal of elevating dance to the status of primary art. His classes and movement sessions were the medium through which he crystallized his early theories of Choreutics (Space Harmony) and Eukinetics (Effort) as well as his system of movement notation. Describing this incredibly rich period of exploration and experimentation, Wigman recalls:

What years later was to become his dance theory and was called his dance philosophy was at that time still a free country, a wilderness, an exciting and fascinating hunting ground where discoveries were made every day. Every new phenomenon was looked at with equal curiosity only to be jammed into one big bag, where it had to stay, to be studied, to be analyzed, to be worked on at a later date.<sup>4</sup>

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<sup>3</sup> Mary Wigman quoted in Ed Groff, "Rudolf Laban Portrait in Paradox, 1988," TMs (Photocopy), pp. 9-11, Laban Bartenieff Institute of Movement Studies, New York.



Laban continued his work at schools in Ascona and later Zurich through World War I to the end of 1919 when he left Switzerland and founded the Dance Theatre Laban in Stuttgart. With this company and subsequently with the Chamber Dance Theatre Laban in Hamburg, he began his richest creative period as choreographer, writing at least twenty dance plays and touring Germany, Italy, Austria, and Yugoslavia. He also published several books including: *Die Welt des Tanzers* (The Dancers' World 1920), *Gymnastik und Tanz* (Gymnastics and Dance 1926), and *Choreographie Parts I* (1926) and *II* (1928).<sup>5</sup> After his dancing career was curtailed by an injury in 1927, Laban continued to teach, train his students as teachers and promote his movement choirs (group movement activities for large masses of participants). For the largest of these choirs he assembled representatives from over 400 trades as part of a Viennese festival celebrating arts and crafts. Laban directed the various guilds to develop movement themes related to their respective trades and tied them together with Viennese waltzes that were familiar to participants and audience alike. Using self effacement to make his point, he later remembered the enormous logistical challenges of organizing such an immense pageant.

In a few weeks, the giant snake, seven kilometers long, with about 10,000 participants, countless decorated floats and costumes and bands, was to move through the town and so far nobody had yet shown any desire to come forward and join the crazy professor from Berlin whose mind was made up to lead the whole procession dancing through the city.<sup>6</sup>

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<sup>4</sup> Mary Wigman, *The Mary Wigman Book: Her Writings*, trans. and ed. Walter Sorrell (Middleton: Wesleyan University Press, 1984), 35-6.

<sup>5</sup> Ed Groff, "Rudolf Laban Portrait in Paradox, 1988," TMs (Photocopy), p. 17, Laban Bartenieff Institute of Movement Studies, New York.

<sup>6</sup> Laban, *A Life for Dance*, 142.

His rise in prominence as a leader in dance and movement culture continued until his entanglement and association with the Nazis tainted much of his work. The Third Reich and its Minister for Public Enlightenment and Propaganda, Joseph Goebbels (1897-1945), quickly recognized the power of movement to incite desired behaviors and attitudes leading Goebbels to pervert many of Laban's techniques in order to promote and direct the Nazi agenda. Laban was named Director of the *Deutsche Tanzbuhne* in 1934 and held the position until 1936 when his work was ultimately declared hostile to the state.<sup>7</sup> He perhaps could have preserved his appointment had he declared full allegiance to the Party, but his conscience would not allow him to do so.

After living clandestinely with friends and supporters for several months, he used an invitation to speak at the Science of the Arts Conference in Paris to escape from Nazi Germany in 1937.<sup>8</sup> He found refuge in England the following year with a cadre of his students who were teaching at Dartington Hall in Devonshire and spent the last twenty years of his life teaching and continuing to further refine and elaborate his theories with assistance from students and colleagues. Laban is best remembered for his system of movement notation (Kinetography or Labanotation), his theories of Body, Effort, Space and Shape, his work regarding efficiency of effort in the workplace, and his contributions to educational dance.

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<sup>7</sup> Maletic, *Body - Space - Expression*, 24.

<sup>8</sup> Valerie Preston-Dunlop, *Rudolf Laban: An Extraordinary Life* (London: Dance Books, 1998), 200-2.

### **Introduction to Laban Movement Analysis**

Laban's theories of human movement have done more than survive the test of time; they have flourished. Several successive generations of students, who themselves became masters of this discipline, have continued to build upon the theoretical framework and practicum created by Laban during his lifetime. LMA applications have been developed for areas of human endeavor that reach far beyond dance to include other artistic disciplines (notably music), athletics, medicine, physical therapy, psychology, education, occupational therapy, industrial efficiency, conflict resolution and cross-cultural studies. Elaborating on the universal application of LMA to all aspects of human movement, author and Certified Movement Analyst Ed Groff stresses that: "At the heart of LMA is a recognition that movement is a psycho-physical process, an outward expression of inner intent. The emphasis is on objective description of movement itself."<sup>9</sup>

The language of LMA is a rich tapestry of descriptive terms that provides practitioners with both global (whole body) and local (parts of the body) perspectives. In other words, it is possible to look at an entire "forest" of movement, or to focus on a particular "grove of trees," or even select a single "tree" for study. LMA parses human movement into four components—Body, Effort, Space, and Shape (BESS)—that can be compared to the four staves of a string quartet or four-part vocal score. Just as the lines of a musical score emerge, rise, fall, and retreat independently or simultaneously during the ebb and flow of a musical composition, these four components of human movement

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<sup>9</sup> Ed Groff, "Laban Movement Analysis: Charting the Ineffable Domain of Human Movement," *Journal of Physical Education, Recreation and Dance* 66, no. 2 (Feb 1995): 29.

constantly change, shift, and proceed through time to create the totality of movement experience. An observer of movement trained in the techniques of LMA can choose to follow all four components or select one or more for scrutiny.

Laban himself likened the process of observing and assimilating a person's characteristic movements to remembering a musical theme.

If a person can remember a tune, and is capable of reproducing it mentally, he will later be able to discern single pitches and rhythms in every detail. Without falsifying the proportions of the strength, duration, and other peculiarities of the flow of the music, he will be able, with his inherited or acquired musical memory, to write down, to discuss and to analyze the tune. The ability to observe and comprehend movement is like a gift, but it is also, as in music, a skill that can be acquired and developed through exercise.<sup>10</sup>

Continuing the musical analogy, many of Bartenieff's observations suggest "that LMA has done for the field of movement what music theory has done for the field of music—that is, it has provided a systematic structure for pedagogy, analysis, and composition."<sup>11</sup> While LMA specialists are prepared to acknowledge common threads between music and movement, most musicians are not yet inclined to reciprocate. Prausnitz, for example, claims in the opening pages of his treatise on conducting that: "The beat is the only aspect of conducting that lends itself to systematic analysis."<sup>12</sup> Bartenieff argues to the

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<sup>10</sup> Rudolf Laban, *The Mastery of Movement*, 4<sup>th</sup> ed., rev. Lisa Ullman (London: Macdonald and Evans, 1980; reprint, Plymouth: Northcote House 1988), 95.

<sup>11</sup> Lynn Matluck Brooks, "Harmony in Space: A Perspective on the Work of Rudolf Laban," *The Journal of Aesthetic Education* 27, no. 2 (summer 1993): 31.

<sup>12</sup> Frederik Prausnitz, *Score and Podium A Complete Guide to Conducting* (New York: W.W. Norton and Company, Inc., 1983), 17.

contrary with her assertion that LMA can be used to better understand human movement in whatever context it may appear.

Labananalysis [LMA] provides a means of perceiving and a vocabulary for describing movement—quantitatively and qualitatively—that is applicable to any body movement research even when there are differences in interpretation of function and communication. It makes subtle distinctions among a great range of specific components and component constellations inherent in movement process.<sup>13</sup>

It is precisely the abilities to observe, understand and experience movement objectively, without prejudice or bias, that will enable practitioners and teachers of an intensely personal art like conducting to use the tools recommended in this study to such great advantage. The following descriptions and terminology offer ample evidence that every aspect and nuance of conducting gesture can be observed, analyzed and, therefore, learned. More importantly, such analysis enlivens the process of understanding the creation of conducting gestures and reveals genuine correspondence between musical expression and conducting gesture.

### Body

The organizing principles behind the Body component of LMA are designed to help the mover/observer determine how the body is used, from where in the body the movements originate and the ordering or sequencing of movements. Focusing on how the body is used, it is possible to differentiate between *gestures* that involve isolated parts of

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<sup>13</sup> Irmgard Bartenieff and Dori Lewis. *Body Movement: Coping with the Environment*. (New York: Gordon and Breach, 1980), viii.

the body, *postures* that are supported by the body and whole *body actions* like jumping, running, stretching or twisting. By finding the location in the body from which these actions and movements spring forth, specific *points of initiation* can be identified including *core* (trunk), *proximal* (hips/shoulders), *mid-limb* (knees/elbows) and *distal* (feet/toes, hands/fingers, head) [fig 2.1]. Attending to the *sequencing* of movement, the mover/observer can distinguish between *simultaneous* (two or more parts at once), *successive* (adjacent body parts one after another), *sequential* (non-adjacent parts one after another) or *unitary* (whole body).<sup>14</sup>

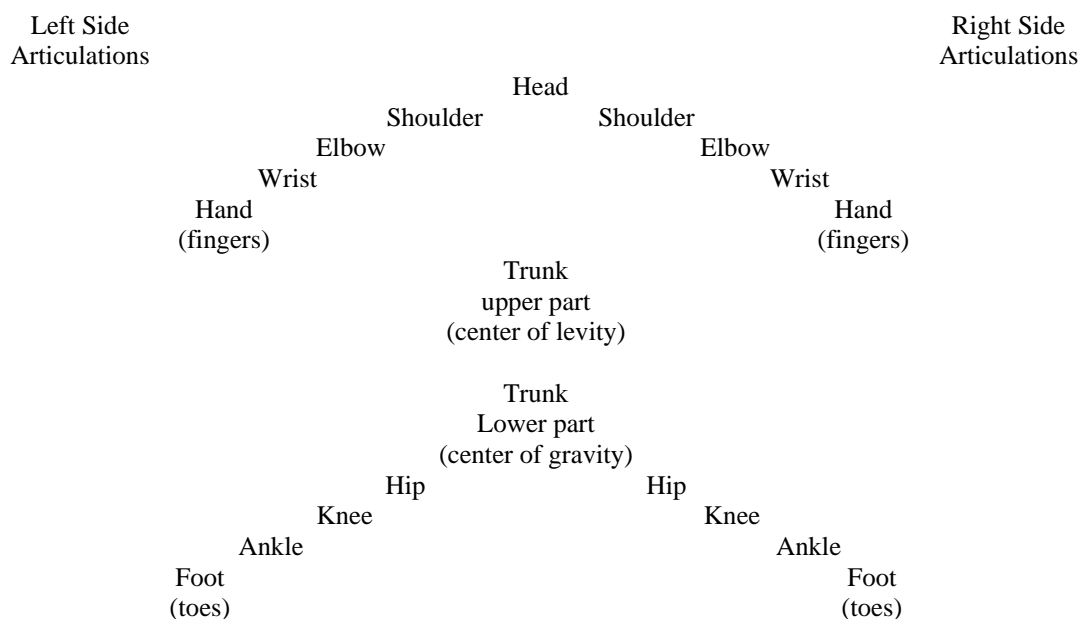


Figure 2.1. Basic Subdivisions of the Body.

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<sup>14</sup> For a complete exploration of Body refer to Peggy Hackney, *Making Connections: Total Body Integration through Bartenieff Fundamentals* (Amsterdam: Gordon and Breach, 1998).

## Space

Laban differentiates infinite or general space from space within the reach of the body by labeling the personal space that travels with an individual through general space as the *kinesphere* [fig. 2.2]. More like a pliable bubble and less like a container, it shifts and mutates freely in perfect concert with the mover it surrounds. Its dimensions are equivalent to the extended reach of the body's limbs in all directions. The *kinesphere* neither confines nor limits the possibilities of movement; it merely defines the boundaries within which human movement takes place. Movement in this personal, portable space is addressed in terms of *proximity* to the body (near, mid and far reach), *location* (points in space where movements begin and end) and *pathway* (courses movement travels between those points).

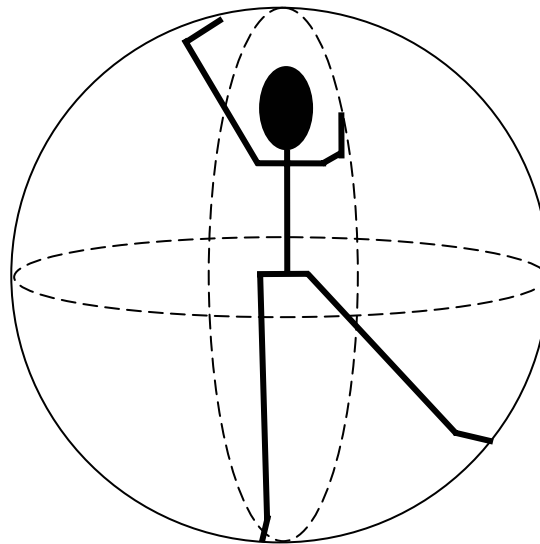


Figure 2.2. The Kinesphere.

Orientation is defined by the three dimensions of *height* (high-low), *width* (left-right) and *depth* (forward-backward) [fig. 2.3] and further delineated by four space diagonals [fig. 2.5] and the *vertical* (door), *horizontal* (table) and *sagittal* (wheel) planes [fig. 2.4]. By using lines to connect and enclose these dimensionals, diagonals and planes,

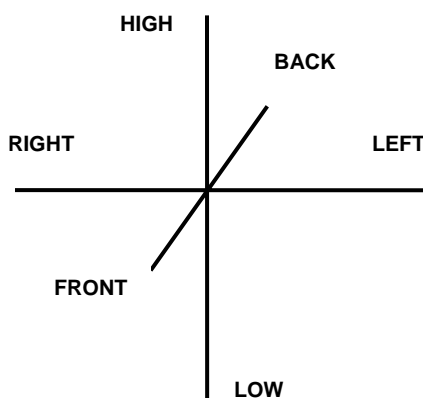


Figure 2.3. The Dimensional Cross of Axes.

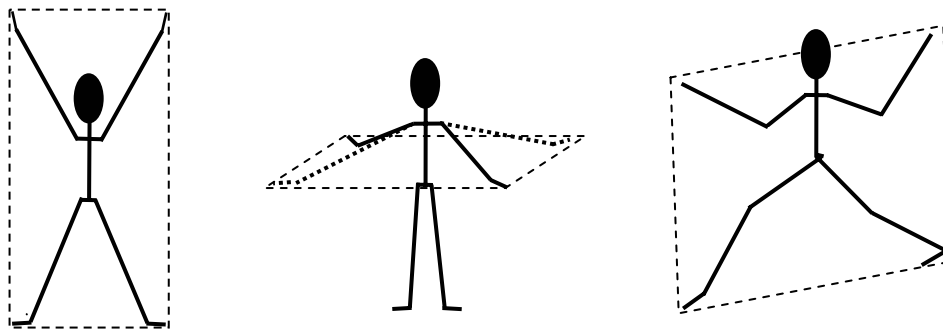


Figure 2.4. The Three Planes. *Left*, vertical: *center*, horizontal: *right*, sagittal.

Laban creates crystalline forms to provide a unique system of scaffolding for trace forms or visible shapes that are the result of movement through space. Connecting the points of



the dimensional cross yields an octahedron [fig 2.5]. The eight directions resulting from the space diagonals connect to form a cube [fig 2.5], and linking the edges and intersecting points of the three planes produces an icosahedron [fig 2.5]. These forms and others serve as the basis for Laban's spatial scales that help movers explore (and observers perceive) space through contrasts between stability and mobility.<sup>15</sup>

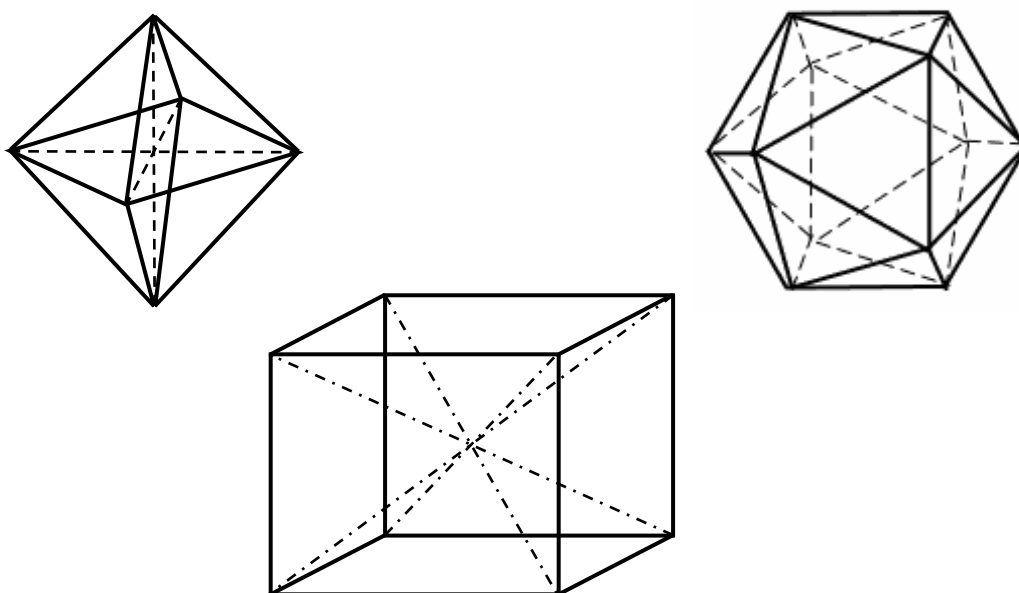


Figure 2.5. Laban's Crystalline Forms.  
Left to right: octahedron, cube with space diagonals, icosahedron.

### Effort

Through observation and experimentation Laban came to realize that although movement possibilities were infinite, the motivation behind the forces or Motion Factors

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<sup>15</sup> For additional information about Space see Vera Maletic, *Body - Space - Expression: The Development of Rudolf Laban's Movement and Dance Concepts*, Approaches to Semiotics 75 (Berlin and New York: Mouton de Gruyter, 1987), 56-92.

that contribute to the qualities of movement were limited to only Weight, Time, Space and Flow.<sup>16</sup> According to Cecily Dell, these four “factors are always present in movement as quantities” (i.e. how much weight, time, space and flow are required). However, Laban was more interested in qualitative assessments to determine whether movements were *strong* or *light* (Weight), *quick* or *sustained* (Time), *direct* or *flexible* (Space) and *free* or *bound* (Flow). These eight Effort elements are often described as *inner attitudes* towards the Motion Factors or as the means to cope with or control the factors.<sup>17</sup> The constant interplay and rhythm of elements can be quickly documented by using a simple Effort Graph that expresses each pair of extremes as a continuum on a grid [fig. 2.6].

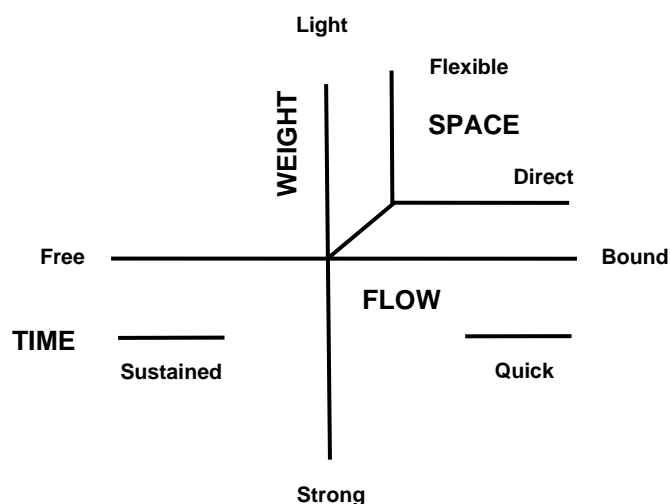


Figure 2.6. The Effort Graph.

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<sup>16</sup> To eliminate confusion for the reader Space, the Motion Factor, defines a mover’s inner attitude towards space while Space, the BESS component, addresses proximity to the body, location, pathway and orientation in the Kinesphere.

<sup>17</sup> Cecily Dell, *A Primer for Movement Description Using Effort-Shape and Supplementary Concepts*, 2<sup>nd</sup> ed. (New York: Dance Notation Bureau Press, 1977. 4<sup>th</sup> printing, 1993), 12.

Movers can effect changes in Effort through conscious choice, reactive response, intuitive insight or unconscious behavior. For example, someone in the midst of cooking may use direct space and free Flow to reach for and remove a hot pan from the stove without thinking. Startled and burned upon touching the handle, the cook recoils with quickness and Free flow. In response to the burn, the cook tries to cool her hand by flapping it in the air with free Flow, strong Weight and quick Time. After donning an oven mitt, she reaches for the pot a second time with direct Space, sustained Time and bound Flow. This sequence shows unconscious behavior (grabbing the pot without remembering that it is hot), reactive response (recoiling and flapping) and conscious choice (the second more cautious attempt). To distinguish between differing levels of intensity, paired Motion Factors like the first two examples above are called *States*, while combinations of three Motion Factors such as the final two instances are labeled *Drives*. Movements that include all four Motion Factors, though rare, are considered *Full Efforts*.<sup>18</sup>

### Shape

A mover infuses his Body with various combinations of Effort elements as he moves through Space in order to achieve a specific goal or purpose. Any movement, regardless of intensity, duration, direction or progression, requires the body to adjust and adapt accordingly. These visible changes in the body's form and the resulting relationships between the body, its parts, the surrounding space and any objects in that

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<sup>18</sup> For additional discussions of Effort, refer to Rudolf Laban and F.C. Lawrence, *Effort: Economy in Body Movement*, 2<sup>nd</sup> ed. (Boston: Plays, Inc., 1974) or Imrgard Bartenieff and Dori Lewis, *Body Movement: Coping with the Environment* (New York: Gordon and Breach, 1980).

space are explained through the tools and terminology associated with the three Modes of Shape Change: *shape flow*, *directional movement* and *shaping*.

*Shape flow* describes movement exhibiting qualities of growing and shrinking or opening and closing. Examples of this category include the respiratory cycle of inhalation and exhalation or a string player completing a down bow/up bow sequence. *Directional movement* serves as a bridge that “(links) the mover with a place in space” in one of two ways.<sup>19</sup> *Spoke-like movement* juts out from an axis in straight lines while arc-like movement scribes flat arcs in space. Imagine two students raising their hands to answer a question in distinct fashion—one reaching straight up overhead and the other swinging her arm out and around the side of her body—and a clear picture of both possibilities emerges. *Shaping* is observed when the mover is actively molding, accommodating or adapting to “the plastic character of objects in space.”<sup>20</sup> A potter molding a clay vase on a pottery wheel would be an example shaping as would a groom brushing a horse or a commuter squeezing through a crowded subway car to reach the exit. The object can be real or imagined; the effect may be intentional or unconscious. In any case, the important consideration remains the mover’s ability to create an impression of the contour or shape of three dimensional objects.<sup>21</sup>

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<sup>19</sup> Dell, *A Primer for Movement Description*, 49.

<sup>20</sup> *Ibid.*, 55.

<sup>21</sup> To learn more about Shape see Cecily Dell, *A Primer for Movement Description*, 43-64.

### **An Integrative Approach to Human Movement**

Armed with the knowledge presented in this introduction, students of LMA can begin to observe and experience movement from a new perspective. Each of the four components—Body, Effort Space and Shape—enables observers and movers to concentrate on a specific aspect of movement. When combined the four components of BESS deliver a practical, lively and comprehensive approach to understanding any movement on its own terms. Such an open and flexible system should be especially useful to conductors precisely because it avoids entanglements connected with value judgments that often lead to mistaken conclusions. (i.e. This gesture is better than that gesture, or that gesture is bad.) By putting aside their personal movement preferences, conductors and teachers would be better able to concentrate on the only issues that are truly relevant to conducting gestures: 1) whether or not a conductor's gestures accurately represent his interior vision of the score, and 2) why those gestures produce (or do not produce) the desired musical outcome. The challenge for conductors is therefore to absorb the essence of all four components and focus intensely on those that are most helpful.

Body, Space and Shape, though not necessarily easy to master, are relatively simple concepts to grasp because they describe what seem to be familiar constructs.<sup>22</sup>

The human body is plainly visible. Movements originate from specific points of initiation

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<sup>22</sup> Each human being approaches movement with a set of preferences and skills as unique as fingerprints. These closing paragraphs suggest one possible array of abilities, not a universal prescription for approach or understanding. What comes naturally to the researcher may seem obscure to some readers. Conversely, what is challenging for the researcher may come very easily to readers. Our ultimate success as movers depends as much on our openness and perception as it does on our practiced skills and histories.

in the body. They display various patterns of sequencing, and they traverse spatial directions, leaving trace patterns in their wake in order to reach different locations in space. As movements proceed, the body changes or adjusts its shape to achieve a goal or purpose. Whether one agrees or disagrees with the theoretical framework for Body, Space and Shape, their existence is difficult to dispute because they are largely self evident and self explanatory.

Effort can be the most difficult to grasp, and it is arguably the most important component for conductors to comprehend because it is through Effort that the interior life of the mover—his attitudes, emotions, feelings and, for the purposes of the present study, his musicianship and artistry—are revealed. The brief descriptions of Body, Space, Shape and Effort in this chapter are not intended to substitute for a more comprehensive review of the analytical tools, observational techniques and descriptive terminology that, together, constitute Laban Movement Analysis. It is nonetheless possible for the reader to understand these fundamental principles to a degree that will facilitate the discussion of related research that follows.

## CHAPTER III

### BLAZING TRAILS TOWARD THE UNDISCOVERED COUNTRY

The art of conducting, on daily display though it is in hundreds or even thousands of concert halls and opera houses around the world, yet remains the most obstinately indefinable of musical activities.

–Bernard Jacobson, *Conductors on Conducting*

#### **The Growth and Development of Conducting Scholarship**

The historical record shows that conductors and scholars began writing about conducting soon after the first downbeat was given.<sup>1</sup> Early attempts to explain conducting gesture were limited to basic visual descriptions of time-beating techniques sometimes accompanied by simple line drawings intended to suggest the directional movements of the hand or the tip of the baton through space. Although reference to any representation of musical expression beyond the progress of meter was absent, even such elementary directions can quickly become cumbersome and imprecise as this set of instructions extracted from Thomas Janovka's (c.1669-1741) *Calvis ad thesaurum magna artis musicae* (1701) clearly indicates.

The means of measuring an ordinary measure is that the first quarter is traced by lowering the hand, the second by carrying it to left moderately higher, the third by going again to the right a bit higher, and the fourth by raising it to the height of the shoulder. And this is to be understood as concerning the right hand.<sup>2</sup>

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<sup>1</sup> Elliot Galkin, *A History of Orchestral Conducting in Theory and Practice* (New York: Pendragon Press, 1988), 198, 241-74, 487-93.

<sup>2</sup> Thomas Balthasar Janovka, *Clavis ad Thesaurum Artis Musicae* (Prauge: in Magno Collegio Carolino Typis Georgis Labaun, 1701); quoted in Galkin, 198.

From the Baroque onward, musical reference volumes and treatises began to include definitions for the craft of musical direction that often read more like job descriptions than a set of instructions for conducting technique. French critic, arranger and librettist Castil-Blaze (1784-1857), for instance, provided the following short paragraph in *Dictionnaire di musique moderne* (1821).

*Maître de musique*: the musician engaged to compose the music or to execute it. It is the *Maître de musique* who beats the time and conducts the musicians. He must know how to compose even though he does not always compose the music which he plays.<sup>3</sup>

Recognizing the conductor's changing role and added responsibilities, pioneer American musicologist John Weeks Moore (1807-1889) identified the conductor as “the person who arranges, orders, and directs the necessary preparations for a concert, and also superintends and conducts the performance.” To this definition he added an extraordinary list of imperatives for conductors extracted from a *London Musical World* article.

1. It is absolutely necessary that the conductor should be a composer ...
2. He must possess a knowledge of the world as well as of music....
3. He must possess a thorough knowledge of every piece performed ...
4. He must possess a quick susceptibility of faculty, rendered in the highest degree acute by culture ...
5. A conductor must be endowed with the most delicate perception of the measure of time and the play of rhythms ...
6. A good conductor must, at all times, be prepared to accompany on the piano-forte all kinds of pieces...<sup>4</sup>

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<sup>3</sup> François H. J. Castil-Blaze, *Dictionnaire di musique moderne*; quoted in Galkin, 202.

<sup>4</sup> John Weeks Moore, *Complete Encyclopaedia of Music: Elementary, Technical, Historical, Biographical, Vocal, and Instrumental*, (Boston: John P. Jewett and Company, 1854), 221-2. Moore further expands each point with numerous additional prerequisite skills that, although undeniably important to the art of conducting, are not related to the present study.



Berlioz's treatise, published a year later, was the first technical manual for conductors to include in a single source a detailed explanation of baton technique, a list of prerequisite talents and characteristics similar to Moore's plus lengthy discussions of style and performance.<sup>5</sup>

Over the next 120 years, great conductors rose in stature eventually to eclipse composers as the preeminent musicians of the twentieth century. While the biographical, critical and historical documentation of a young profession grew profusely, thoughtful inquiry regarding the creation and analysis of conducting gesture remained largely uncharted territory. Even as the question of whether or not conducting could be learned or taught framed a lively debate that continues to attract advocates to both sides, a parade of conducting texts commenced that has yet to reach an end. Scholarly investigations of conducting technique in general and the nature of conducting gesture in particular finally blossomed during the closing three decades of the twentieth century due primarily to four important developments:

- 1) renewed interest in nonverbal communication and body language,
- 2) the proliferation of conducting programs in American higher education,
- 3) easy access to new technologies (i.e. professional quality consumer video recording equipment and personal computers) that facilitate the documentation and analysis of conducting behaviors and
- 4) an expanding search for alternatives to the use of beat patterns as the dominant organizing principle for conducting technique.

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<sup>5</sup> Galkin, 283-4.

The present review of related research will concentrate on studies that considered one such alternative approach, the application of Laban Movement Analysis, as a tool for creating, observing and describing conducting gestures.

### **Theoretical Studies**

Like many trailblazers Neale Bartee was unsure of his destination when he began searching for a method or technique that might help conductors improve their movement skills. Immersed in graduate school, he had hoped to find a direction for his doctoral thesis by enrolling in a few theater arts classes at University of Illinois in 1971-2. One of Bartee's instructors recommended supplementing coursework in acting and mime with readings by Rudolf Laban. Shortly after taking his teacher's advice, Bartee realized that Laban's theoretical framework was both the object of his quest for a complimentary movement discipline for conductors and the topic for his dissertation.<sup>6</sup> The fruits of his labors, "The Development of a Theoretical Position on Conducting Using Principles of Body Movement as Explicated by Rudolf Laban" (1977), have inspired a generation of researchers to explore, experiment and expand the possibilities of LMA as a tool for conductors and teachers.

The purpose of Bartee's study was "to examine the writings of Laban as the basis for improving the use of body movement in orchestral conducting." He cites the "limited familiarity that conductors have with the possibilities of movement [as] the most

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<sup>6</sup> Neale King Bartee, Professor of Conducting and Trombone, Arkansas State University, personal communication, 15 September 2004.

significant motivation for [his] investigation.”<sup>7</sup> To help make his case he constructs a bridge between conducting gesture and musical expression with philosopher Susanne Langer’s (1895-1985) theories of musical meaning and tonal motion.<sup>8</sup> Although somewhat tenuous at times, this roundabout connection nonetheless establishes an indirect link between conducting gestures and the sounds of music that allows him to make several salient deductions regarding the adoption of LMA training for conductors.

Foremost among these proposals is Bartee’s assertion that thorough grounding in Effort/Shape can help conductors create gestures that better convey the mood and feelings reflected in the music. Paraphrasing Laban he maintains:

[The] performance of sequences of Effort and Shape structures can produce moods and feelings which correspond to [these sequences]. This concept implies that certain movements express certain effects and that the conductor can learn which patterns better express the mood he is trying to achieve in the music.<sup>9</sup>

While he stops short of describing a specific method for using LMA to unite gesture with musical content, he extends this theoretical application from moods to expression, observing that “Laban’s link between movement and inner feeling patterns gives the conductor a basis for developing expressive movements corresponding to his conception

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<sup>7</sup> Bartee, “The Development of a Theoretical Position on Conducting Using Principles of Body Movement as Explicated By Rudolf Laban” (Ph.D. diss., University of Illinois at Urbana-Champaign, 1977), 2, 17-8.

<sup>8</sup> *Ibid.*, 39-46. In contrast to Bartee, the present researcher remains convinced that Langer’s theories create an unnecessary layer of separation between a conductor’s fully formed abstract representation of the score and his gestures because musical meaning is both self evident and self explanatory for thoroughly schooled musicians. Untrained listeners may need a performance or recording to comprehend a composer’s creation, but conductors, by definition, should be able to experience the complete composition without the sensory experience of hearing the work performed.

<sup>9</sup> *Ibid.*, 160.

of the expressive line of the music.”<sup>10</sup> After adding a lengthy list of specific implications to support these two overarching themes, Bartee sums up his exploratory thesis by concluding that “the conductor can improve his ability to use expressive gesture by studying movement as it is practiced in the movement arts.”<sup>11</sup>

Baker’s 1992 study, “Creating Conductors: An Analysis of Conducting Pedagogy in American Higher Education,” argues for the adoption of an expanded curriculum for conductors that shifts the focus from what he calls the “existing objectivist program” to a more balanced approach that encourages better integration of the internal and external processes involved in conducting.<sup>12</sup> He defines objectivism as the “domination of performance training by the ideology of modern science” that tends to “remove the subjective, personal and emotional faculties from human social action.”<sup>13</sup> His antidote to the prevailing mechanistic and impersonal conductor training programs involves a set of exercises adapted from techniques developed by author and singer/actor coach H. Wesley Balk (1923-2003).

As explained by Baker, Balk’s methods cultivate the integration of three projective/expressive modes—the vocal, facial/emotional, and kinesthetic modes

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<sup>10</sup> Bartee, 161.

<sup>11</sup> *Ibid.*, 200. Although Bartee’s specific suggestions are unquestionably important to conducting pedagogy and practice, most of them (such as podium presence, rehearsal technique, visibility, control, teaching conducting, etc.) address issues that exceed the limits of the present study. For the complete list refer to Bartee, 192-9.

<sup>12</sup> Alan Baker, “Creating Conductors: An Analysis of Conducting Pedagogy in American Higher Education,” (D.M.A. diss., Stanford University, 1992), iv-v.

<sup>13</sup> *Ibid.*, 4-5.

respectively—into a single synergistic system.<sup>14</sup> The recommended regimen includes exercises devoted to externally motivated messages (i.e. responding to randomly ordered flash cards or mirroring a partner) and internally motivated messages (communication through mime or improvising gestures in response to sounds).<sup>15</sup> Although Baker admits his proposals are “highly non-specific,” he believes that consistent work with these techniques will help students eliminate “tensions which restrict conductors’ physical potentials,” encourage “improvisation as a basic activity” and foster the development of a “more specific language for evaluation.”<sup>16</sup> It is this interest in improving the terminology used for conductor evaluation that motivates him to include a brief discussion of the *language* of Laban Movement Analysis and its possible application for conductors.

Baker correctly recognizes that LMA would provide conductors and students with “an expanded vocabulary by which to describe movement,” but his observations fail to accurately represent the discipline’s philosophical basis, theoretical framework or practical application. These errors stem from his mistaken premise that all movement “could be described in reference to eight fundamental gestures.”<sup>17</sup> The eight Basic Effort Actions (not gestures) may, indeed, be expressed gesturally, but they can and do just as often include participation by the whole body. Furthermore, they represent only the

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<sup>14</sup> Baker, 77-92.

<sup>15</sup> Ibid., 102-07.

<sup>16</sup> Ibid., 94, 101.

<sup>17</sup> Ibid., 103. For clarification and explanation of Effort, Motion Factors, Weight, Time, Space, Flow, Drives and States, refer to Chapter 2 of the present text, pages 36-8.

movement possibilities within one of four drives, each of which includes eight combinations of three Motion Factors (Weight, Time, Space and Flow). Laban's Effort theory also describes six *States* or *inner attitudes* that each contributes four additional possible combinations of two Motion Factors.<sup>18</sup> Though still far from a complete list of the components and aspects of human movement addressed by LMA, these fifty-six qualitative movement descriptors sufficiently illustrate the shortcomings of Baker's otherwise valuable contribution to conducting research.

In contrast to Baker's call for additional practices intended to encourage the integration of the conductor's mind and body, Koch proposes the integration of salient points from diverse methods that constitute the "current paradigm" to suggest a "theory of conducting motion."<sup>19</sup> To accomplish his goal, he distinguishes between "the broad range of non-verbal expression effected by facial and body position and the motions of arm and hand which directly communicate musical intention."<sup>20</sup> Building on this confinement of conducting technique to the right arm and hand, he claims:

All gestures are also motions, (but) the reverse is true only when motion is assigned contextual meaning. This distinction between motion and gesture allows conducting to be examined either in the context of its motion characteristics or in the context of its functional meaning.<sup>21</sup>

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<sup>18</sup> Vera Maletic, *Dance Dynamics Effort and Phrasing Workbook*, (Columbus: Grade A Notes Academic Services, 2004), 23-35, 41-51.

<sup>19</sup> Christopher Jason Koch, "Toward a Theory of Conducting Motion" (D.M.A. diss., University of Washington, 2003), 3, 27.

<sup>20</sup> *Ibid.*, 1.

<sup>21</sup> *Ibid.*, 33.

The author of the present study disagrees with the notion that motions become gestures only when context and meaning are attached to them and instead suggests that gestures (what Koch calls motions) *accumulate* meaning to the degree that they are understood by both the person making the gestures and the person(s) for whom they are intended.

Koch insists his study, for the most part, does not “proclaim anything new or call for revolution of the old; rather [it] suggests a more coherent, cohesive ordering of the ideas already represented in current paradigm.”<sup>22</sup> In other words, he distills the extant works of pedagogues, artists and scholars to gather cogent thoughts and then organize them to present descriptions that attempt to better explain the functions and meanings of conducting motion. He defines motion theory as “an organized conceptual framework of motion that describes and explains the conformation of gesture and the processes by which it acquires meaning,” and he recommends a tripartite system for understanding conducting motion that includes analysis at the descriptive, functional and syntactical levels.<sup>23</sup> Like Baker, he places a high priority on the development and application of specific terminology for descriptive analysis of conducting. He stresses description as the foundation of his study because it informs function and syntax, “the two higher levels of analysis.”<sup>24</sup> Considering this declaration, Koch’s investigation of Effort is both logical and practical.

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<sup>22</sup> Koch, 27.

<sup>23</sup> Ibid., 2.

<sup>24</sup> Ibid., 27.

He begins with an acknowledgement that Laban's movement theories "represent a comprehensive and well-established conceptual framework of motion which can only help to inform the practice of conducting."<sup>25</sup> Following a brief introduction to the four Motion Factors, Koch declares: "The Motion Factors of Time and Space immediately suggest a correlation to the motion theory dimensions of velocity and shape."<sup>26</sup> This assessment reveals a misunderstanding of Effort at the most fundamental level because Koch's concepts of dimension address only the motion of the tip of the baton (or hand if no baton is used) without regard to the body movements responsible for creating that motion.<sup>27</sup> Conversely, Laban insists that "Every human movement is indissolubly linked with an effort, which is, indeed, its origin and inner aspect."<sup>28</sup> For Laban the expressive essence of conducting gesture clearly resides within the mind and body of the mover, not at the tip of the baton. If the baton is not effective, it is the conductor who must change his movement because the baton is merely an implement incapable of movement or expression apart from its controller. The Effort elements codify the very nature of the impulses from which all human movement springs and enable specific qualitative analysis and description of its dynamic qualities. Koch's dimensions are exclusively quantitative measurements of spatial location, size, shape, velocity.

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<sup>25</sup> Koch, 62.

<sup>26</sup> *Ibid.*, 63-4. According to Koch conducting gesture possesses four visual characteristics—spatial location, size, shape and velocity—that he calls dimensions, 34.

<sup>27</sup> *Ibid.*, 33-5, 64.

<sup>28</sup> Rudolf Laban, *Mastery of Movement*, 4<sup>th</sup> ed., rev. Lisa Ullman (London: Macdonald and Evans, 1980; reprint, Plymouth: Northcote House 1988), 24.



Continuing with his comparisons of motion theory to Effort, Koch states that:

An analysis of Weight and Flow may be useful to the technique of conducting, but not to an analysis of the motion produced by technique. Simply, while the trajectory of gesture can have shape, size, velocity, and a spatial address, it cannot have weight or isometric resistance to forward progress.<sup>29</sup>

These claims plainly demonstrate that Koch uses the theory of conducting motion to create a schism between the conductor's body and the trajectories through space of motions produced by that body for the expressed purpose of conducting. Since the present study will propose and test a method that uses LMA to help conductors fuse force of will and musical intentions with the body in order to create more effective gestures, there is little, if any, common ground to cover. As if to affirm this assessment, Koch concludes that "the practice of conducting may be informed by, but not explained with Laban movement theory."<sup>30</sup>

Beyond his erroneous appraisal of Laban's Effort theory, Koch's study includes useful discussions of the functions of conducting gesture and the processes through which it acquires syntactical logic. He believes that "function in motion theory is ordered by the concept of signification ... [and] framed by three general principles."

- 1) Gesture can be either predictive of or concurrent with sound.
- 2) Gesture can represent either a particular sound or the effect of sounds in combination.
- 3) Gesture can appear either to show or not show the sound.<sup>31</sup>

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<sup>29</sup> Koch, 64.

<sup>30</sup> Ibid., 66.

<sup>31</sup> Ibid., 118-25.

These principles are further divided into three primary subcategories—signifying, analogous, and action/reaction gesture—that together describe *how* gesture conveys its function. According to Koch, the syntax of conducting gesture is understood through its relationship to three referential objects (sound, music, and conducting environment) and further clarified by three syntactical factors: power, conducting mode and relational meaning. Power is the “measure of the conductor’s capacity to effect change/manipulate sound with gesture in a particular conducting environment.” Mode refers to “defined pairings (declamatory, corrective and narrative) of referential gesture and conducting environment,” and relational meaning is “the logical manner in which information (determined by the conductor’s intention) is relayed by conducting gesture.”<sup>32</sup>

In spite of their shortcomings with respect to LMA, there is much to recommend in both Baker’s and Koch’s studies. Because Koch’s text is rich with explanations replete with copious detail, his theory can be used to great advantage to provide insight into the present researcher’s application of LMA to conducting gesture. References to function and syntax as expressed by motion theory may support explorations and descriptions of the connections between gesture and the sounds of music. Baker’s exposition on conducting as a balance of internal and external processes may contribute to discussions that address the channels through which the internal aspects of conducting gesture emerge as outward physical expression.

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<sup>32</sup> Koch, 66, 149-50.

### Observational Studies

Among the many advantages LMA offers practitioners and students alike, perhaps none is greater than the ability to use the same techniques and terminology to enrich and enliven one's movement experience as either a mover or an observer. While most investigations of conducting that included applications of LMA favored approaches that attempted to measure the effectiveness of LMA as a pedagogical tool, two authors chose to employ the discipline to observe and analyze movement behaviors of the conductor, the ensemble members or both. These researchers combined description and classification of conductor movement behaviors by musicians with complementary analysis by one or more Certified Movement Analysts (CMAs).<sup>33</sup>

Hibbard examines a leading choral conductor's use of movement in rehearsal as an instructional technique in her 1994 study, for which she lists four specific sub-purposes:

1. To determine why the selected conductor employs movement as a rehearsal technique, and why it is viewed by the conductor as an effective pedagogical tool.
2. To explore how this exemplary conductor employs movement and dance-related activities in the choral rehearsal.
3. To identify, describe, and analyze the movements demonstrated by the selected conductor and performed by the choral singers...
4. To develop a grounded theory of the effective use of movement as an instructional technique in choral rehearsal.<sup>34</sup>

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<sup>33</sup> Certified Movement Analysts are professionals with extensive specialized training and certification granted by the Laban/Bartenieff Institute for Movement Studies in New York.

<sup>34</sup> Theeres Tkach Hibbard, "The Use of Movement as an Instructional Technique in Choral Rehearsals" (D.M.A. diss., University of Oregon, 1994), 6-7. While Hibbard makes distinctions between rehearsal vs. performance settings and instructional vs. artistic or expressive movement behaviors, the

To achieve these goals, Hibbard conducted a two-week field study of the conductor that yielded sixty specific movement behaviors she described and then added to one of eleven categories according to instructional purpose as defined by the subject-conductor (i.e. establishing tempo, communicating rhythm encouraging breath support, centering pitch, showing releases and cutoffs, etc.).<sup>35</sup> After the movements were classified, the video documentation of the field study was subjected to Laban Movement Analysis under the guidance of a Certified Movement Analyst (CMA).

Hibbard originally intended to use LMA “to describe the movements in a systematic manner which would then allow further qualitative analysis.” However, she ultimately elected to limit her application of LMA to Effort/Shape and Effort/Space analysis because a comprehensive treatment was not manageable within the limits of her study (a decision noted and heeded by the present researcher). The results of her work with the CMA revealed “possible connections between Effort/Shape/Space qualities and musical or vocal qualities the movements seemed to reinforce.”<sup>36</sup> For example, she observed:

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present researcher does not. The aspects of conducting gesture selected for scrutiny in the present study can and do apply to rehearsal and performance situations. Further, such gesture is both instructive and expressive; the two qualities are complementary and inseparable.

<sup>35</sup> Hibbard, 188-94. Although her analysis includes movements made by the conductor that qualify as conducting gesture, her study “focused on those movement techniques used by choral conductors to improve vocal production, musical expression, and comprehension of musical concepts for the choral singer.” Hibbard, 5. For Hibbard, the traditional view of conductor gesture as a medium for communicating musical intentions to the ensemble was certainly a concern, but she was also interested movement behaviors that the conductor asked the singers to reproduce. Because the present study addresses conductor movement behaviors only in the context of conducting gesture, discussions of Hibbard’s study will not reference movements performed by ensemble members.

<sup>36</sup> *Ibid.*, 226-27.

Weight Effort seems to [show] a relationship [between] strength or lightness of touch and tone production. Strong, heavy movements with a Strong weight Effort produce stronger, fuller, richer tone qualities, or if combined with Sustained time Effort, a full, sustained phrase or tone.<sup>37</sup>

Conversely she found that movements exhibiting light Weight and quick Time “tend to promote quicker tempos, quieter dynamics, and more exacting articulations, diction and releases of notes and phrases.”<sup>38</sup> Hibbard detected free Flow when Smith (the conductor) wished to encourage “vocal freedom, resonance, or release of tension,” and controlled (bound) Flow on occasions when a “supported, centered, focused tone” was the goal.<sup>39</sup> Her conclusions regarding Space Efforts are less convincing because she fails to grasp their proper meaning and associated characteristics.

Hibbard claimed that all sixty of the conductor’s movements exhibit direct Space Effort, “meaning all movements have a direct focus in their execution, a purposeful directing of the movement in space.” She continued: “This relates to the specific instructional intention Smith has in mind when using movement with singers, with the Space Effort corresponding to this meaningful intention.” Here Hibbard confuses the impulse to move or “inner attitude” towards a particular Motion Factor (in this case Space) with the intended purpose of the movement.<sup>40</sup> Without the video recording it is impossible to compare Hibbard’s analysis with the actual movements, but this researcher

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<sup>37</sup> Hibbard, 227, 235.

<sup>38</sup> Ibid., 236.

<sup>39</sup> Ibid., 236-7.

<sup>40</sup> Ibid., 228. Hibbard also seems to confuse Space Effort with aspects of movement that are not germane to Effort. One can move through space without an *inner attitude* toward the Motion Factor of Space. If movements do not *attend* to space, then there is no Space Effort involved.

can state with absolute certainty that a mover's specific instructional purpose does not automatically lead to movement choices that exclude flexible (indirect) Space. If that were the case, then all conducting gesture would be limited to direct Space Effort because there is (or should be) a specific intent or purpose behind all conducting.

Timothy Bengé enlisted the services of two experienced, well recognized college level music educators, one wind ensemble conductor and one choral conductor, for his 1996 study. He listed four purposes for the study including:

- 1 To examine conducting as a form of non-verbal communication...
- 2 To identify conductor movements of body and baton determined to stimulate expressive musicianship.
- 3 To analyze these movements through the application of LMA to determine what contribution may be offered by the movement framework of Rudolf Laban.
- 4 To establish a practical basis for the improvement of existing conductor/teacher preparation programs.<sup>41</sup>

The conductors' performances were documented on video tape and reviewed by panels of three collegiate performers, two CMAs and the conductors. After watching their performances each conductor was asked to select three contrasting movement behaviors from his video for further study. The performer panel viewed the tape as a group, but each individual was instructed to stop it whenever he/she saw "movements that tell you, as an individual performer or as part of the ensemble, to respond expressively and/or musically." With the tape paused, they were then asked to describe how they might respond—what they would do differently as a member of the ensemble—after observing

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<sup>41</sup> Timothy John Bengé, "Movements Utilized by Conductors in the Stimulation of Expression and Musicianship" (D.M.A. diss., University of Southern California, 1996), 3.

the movements in question. Instances where all three performers agreed that the movement(s) communicated strong expressive and/or musical stimulation were so designated and singled out for additional review as well as more extensive description. The CMAs started their analysis with the three movements chosen by the conductors in order to “identify the fundamental ‘baseline’ and movement preferences for each conductor.” More detailed analysis of the movements singled out by the performer panel followed with emphasis on Body, Effort, Space and Shape.<sup>42</sup>

Since the conductors in Benge’s study worked in different idioms with different ensembles that performed different repertoire under different conditions, the contrasts in their movement preferences, as recorded by the CMA panel, are not surprising. In fact, such differences would persist even if the ensembles, repertoire and conditions were identical because an individual’s movement preferences are as distinct as fingerprints; no two people are the same. The CMA panel reported that the wind conductor’s style “is characterized by an independence of the conducting action from the Body Core [torso]” while the choral conductor’s style “is characterized by [an] overall ‘Awake State’ feeling of attention to Time and Space [Efforts] supported by the Body Posture.” Focusing on Effort drives, the CMAs agreed that the wind conductor favored Vision Drive (combinations of Space, Time and Flow), and they confirmed the choral conductor’s apparent preference for Passion (Flow, Weight and Time) and Action (Space, Weight and Time) Drives.<sup>43</sup>

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<sup>42</sup> Benge, 46-7.

<sup>43</sup> Ibid., 51-2.

More remarkable than such predictable *differences*, the qualitative characteristics of movement patterns that these two conductors *share* as they apply gesture to musical content relate directly to the present study. The CMA panel observed several movement patterns that were used by both conductors for common musical purposes including the following pairings of movement with music:

- intensifications including crescendos with Bound Flow,
- recessions including decrescendos with Shrinking, Retreating or Narrowing,
- movements higher in the kinesphere with lighter articulations and timbre,
- those lower in the kinesphere with heavier articulations and darker timbre,
- quick, strong movements with accentuation and emphasis,
- changes in Weight with heaviness or lightness of attacks,
- light, quick, direct movements (dabbing) with staccato,
- light, sustained, flexible movements (floating) with legato.<sup>44</sup>

Armed with this evidence of the confluence between movement and musical expression, Bengé concludes: “LMA training is clearly applicable to the art of conducting,” and he insists that “conductor preparation programs can be strengthened through the infusion of Laban movement training.”<sup>45</sup>

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<sup>44</sup> Bengé, 58-9.

<sup>45</sup> *Ibid.*, 60-1.



### **Pedagogical and Quasi-Experimental Studies**

Benge and Hibbard plainly demonstrated the power and efficacy of LMA as a tool for observing, describing and analyzing the movement behavior of conductors. They were also able to link several qualities of conducting gesture with musical events those movements were meant to represent. However, such observations alone can neither recommend nor explain a process for developing a genuine physical, indeed often visceral, connection between conducting gesture and musical events. Only through the direct experience of movement sensations and the qualities associated with them can conductors begin to equate the sounds of music with movement. As Jean Newlove, LMA specialist and longtime personal assistant to Rudolf Laban, explains:

A purely intellectual understanding of [Laban's] work will be as nothing without the accompanying hard work of exercise. The two go hand in hand, body and mind as one, fused in a single unity or Gestalt. It is only such a unified approach that will enable performers to extend their range of movement."<sup>46</sup>

The five remaining researchers here reviewed stand in agreement with Newlove's philosophy as evidenced by their decisions to include active participation in LMA related activities—specifically some kind of Laban movement training for conductors or ensemble members—in their studies.

Four of the five authors used experimental designs in which treatment groups that received either traditional instruction combined with LMA or LMA training alone were compared with control groups that received traditional or no instruction. In her 2001

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<sup>46</sup> Jean Newlove, *Laban for Actors and Dancers* (New York: Routledge, 1993; reprint, New York: Routledge, 2001), 22.

study the fifth researcher, Lisa Billingham, created a prescriptive application of Laban's eight Basic Effort Actions (combinations of Weight, Time and Space Efforts) "to demonstrate differences in articulation, rhythm and phrase shape."<sup>47</sup> After completing limited LMA training with a CMA, the author applied her "gestural vocabulary" to specific locations in three pre-selected choral scores. According to Billingham each of the chosen events possessed musical and stylistic content that corresponded to the inherent qualities found in one of the Basic Effort Actions [Table 3.1].<sup>48</sup> The gestures

Table 3.1. The Eight Basic Effort Actions

<u>Basic Effort Action</u>	<u>Effort Elements in Combination</u>
Float	Light Weight, Sustained Time, Flexible Space
Punch	Strong Weight, Quick Time, Direct Space
Glide	Light Weight, Sustained Time, Direct Space
Slash	Strong Weight, Quick Time, Flexible Space
Dab	Light Weight, Quick Time, Direct Space
Wring	Strong Weight, Sustained Time, Flexible Space
Flick	Light Weight, Quick Time, Flexible Space
Press	Strong Weight, Sustained Time, Direct Space

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<sup>47</sup> Lisa Adalade Billingham, "The Development of a Gestural Vocabulary for Choral Conductors Based on the Movement Theory of Rudolf Laban" (D.M.A. diss., University of Arizona, 2001), 9.

<sup>48</sup> Ibid., 9.

were presented and refined during fourteen fifty-minute rehearsals with a university choir directed by the researcher. Choir members supplied ongoing feedback in the form of three surveys completed over the course of the rehearsal schedule. The final survey following the last rehearsal was used to determine the effectiveness of the eight gestures used in the study.<sup>49</sup>

Results showed that six of the eight gestures in the vocabulary (float, punch, glide, dab, flick and press) were successful. In other words, the choir was able to recognize the conductor's musical intent and produce the desired effect (to the satisfaction of the conductor/researcher) according to the dynamic quality of her movement at that time. The two remaining movements, slash and wring, were deemed ineffective because the choir was not able to connect them to corresponding musical events.<sup>50</sup> Billingham cited probable conflicts between textual content and the choir's perception of the movements as well as difficulties with the physical execution of the slash and wring in the context of beat patterns as possible reasons for the failure of these two gestures.<sup>51</sup>

Using the gestural vocabulary within the confines of beat patterns seemed to sometimes confound both the choir's perception of the gestures and the conductor's attempts to execute them properly. After the second of three surveys, she reported:

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<sup>49</sup> Billingham, 61.

<sup>50</sup> Ibid., 74.

<sup>51</sup> Ibid., 65, 72.

Incorporating Laban gestures into the beat pattern, rather than a movement in isolation, created problems for the responses to the vocabulary, in that several respondents in the Second Survey commented that what they saw in the tested examples was beat pattern only and not an expressive gesture.<sup>52</sup>

Conversely she later surmised: “The Gestural Vocabulary was more effective as the gestures were adapted into a beat pattern.”<sup>53</sup> Since both of these statements cannot be equally valid, the present researcher tends to agree with earlier comments from the choir because Billingham failed to consider the possibility that the most accurate physical representation of musical events in the score at any given moment may not “fit” into a “traditional” beat pattern. When movement of any kind is forced into some kind of unnatural relationship or conformation, part or often all the meaning is lost, or as Laban explains: “A movement makes sense only if it progresses organically and this means that phases which follow each other in a natural succession must be chosen.”<sup>54</sup> Perhaps the solution for the two unsuccessful gestures is to look beyond the BEAs and the confines of beat patterns for the most compelling combination of movement qualities. Despite these problems with two of the Basic Effort Actions, Billingham ultimately concluded that “Laban Movement Theory is a tool that can [be used to] create a successful gestural vocabulary.”<sup>55</sup>

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<sup>52</sup> Billingham, 71.

<sup>53</sup> *Ibid.*, 74.

<sup>54</sup> Rudolf Laban, *The Language of Movement: A Guidebook to Choreutics*, ed. Lisa Ullman (Boston: Plays, Inc., 1974), 4.

<sup>55</sup> Billingham, 76.

The first to test Bartee's theoretical consideration of LMA training for conductors, Stephen Miller's 1988 study compared two approaches to teaching conducting and their respective effects on the students' abilities to communicate their musical interpretations through gesture.<sup>56</sup> Two populations of third and fourth year undergraduate music students in their first semester of conducting study were used to create one control group and one experimental or treatment group for each population. Although both populations were enrolled in intact conducting classes, these courses were offered at four different universities, and there were four (two treatment group and two control group) teachers involved in the study. To help ensure reasonable experimental control Miller selected teachers with similar educational and professional experiences, and, while admitting these circumstances could have affected the results, claimed that "this situation in fact served to average student characteristics."<sup>57</sup>

The treatment group received instruction that combined traditional conducting pedagogy with LMA training and its application to actual conducting practice while the control group curriculum was limited to traditional methods (beat patterns, expressive gestures, preparations, releases, fermatas, dynamics, style, phrasing and the like).<sup>58</sup> The subjects' initial and final conducting sessions during the instructional period were recorded on video tape for later analysis by a panel of three experienced university

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<sup>56</sup> Stephen W Miller, "The Effect of Laban Movement Training on the Ability of Student Conductors to Communicate Musical Interpretation Through Gesture" (Ph.D. diss., University of Wisconsin-Madison, 1988), 21-5.

<sup>57</sup> *Ibid.*, 75.

<sup>58</sup> *Ibid.*, 26-7, 71-2.

conductor/teachers. The first conducting sessions were reviewed by the panel to determine entering behavior levels (high, medium and low conducting skills), and the results were used to construct a three by two experimental model (two instructional methods and three entering behavior levels). The last sessions served as the posttest in Miller's posttest-only research design.<sup>59</sup>

At the conclusion of the instructional period all subjects were taped while conducting three verses of "America." The raw data from this posttest was submitted to the expert panel for evaluation using the Conductor Evaluation Guide II, an instrument created by Miller, that provided the basis for rating "the subjects' level of skill at gesturally communicating the basic parameters of musical interpretation: tempo, dynamics and articulation."<sup>60</sup> The panel's assessments "indicated that the use of Laban Movement Study within conducting pedagogy is worthwhile and that the method works similarly at all three levels of entering behavior." Miller closed his study with several suggestions for further research including the repetition of his project with a larger sample, an investigation of LMA training for conducting teachers, and the application of LMA to remedial training programs for experienced conductor/teachers.<sup>61</sup>

Timothy Yontz added several significant refinements in his 2001 repeat of Miller's study beginning with a more tightly focused purpose.

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<sup>59</sup> Miller, 68-9, 82-3.

<sup>60</sup> Ibid., 73, 88, 121-30. An earlier version of this instrument, the Conductor Evaluation Guide I, was used to complete assessments for entering behavior levels. Ibid., 116-20.

<sup>61</sup> Ibid., 105-6.

The purpose of this study was to examine the effectiveness of Laban-based principles of movement and previous musical training on undergraduate beginning conducting students' ability to convey intended musical content.<sup>62</sup>

Ninety-one subjects were drawn from a self-selected pool of undergraduate students enrolled in beginning conducting classes at two universities "to provide enough subjects to adequately present findings within the range of acceptable parameters as described by the analysis." (Miller's subjects were spread across four universities.) While Miller left the design and application of treatments up to the four teachers involved in his study, Yontz alone "organized and administered all aspects of the two treatments, namely Laban movement training and expressive gestures as defined in Elizabeth Green's (1906-1995) *The Modern Conductor* (1961-97) to avoid confounding variables of teacher personality." The Laban materials were developed after "extensive research in the area of Laban-based movement and participation [by the researcher] in a Laban movement workshop at The Ohio State University." His expressive gestures exercises and handouts were the result of his experience with Green's methods and text as a teacher.<sup>63</sup>

Following three 50-minute sessions of instruction given over the course of five weeks and after two weeks of individual preparation for the posttest project, the subjects conducted a mixed ensemble (saxophone quartet/vocal quartet) in a performance of the researcher's re-orchestration of William Schuman's (1910-1992) "Chester" Overture (1956). Like Miller Yontz enlisted the services of three experienced university

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<sup>62</sup> Timothy Gene Yontz, "The Effectiveness of Laban-based Principles of Movement and Previous Musical Training on Undergraduate Beginning Conducting Students' Ability to Convey Intended Musical Content" (Ph.D. diss., University of Nebraska, 2001), 8.

<sup>63</sup> Ibid., 19-21.

conductors to evaluate these videotaped posttest performances, and he adapted Miller's Conductor Evaluation Guide II to suit the specific requirements of his study.<sup>64</sup> Yontz retained the parameters of tempo, dynamics and articulation and added Green's concept of impulse of will to the list.<sup>65</sup> He also reduced Miller's numerical rating scale to a range of 1 to 5 (down from 1 to 25) "to achieve a higher percentage of agreement among the panel of conducting experts, thus increasing the inter-rater reliability of the judges."<sup>66</sup>

Analysis of the data showed that "The Laban-based treatment group's ability to convey intended musical content was significantly higher than that of the expressive gestures group" while factors of conducting orientation (choral or instrumental) and previous musical training "did not significantly effect posttest conducting scores." After supplementary analysis Yontz also found a correlation between the judges' posttest assessments and the grades given to subjects by their respective conducting class teachers. Grades for the LMA treatment group were higher than the expressive gestures group. Based on these findings, he reasoned that "Laban-based movement [training] appears to have value as an instructional tool for undergraduate beginning conducting

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<sup>64</sup> Yontz, 19-20, 57.

<sup>65</sup> Green coined the phrase "impulse of will" in *The Modern Conductor*. Instead of a definition, she supplies descriptions of conditions and circumstances under which a conductor demonstrates appropriate "impulse of will" and those wherein she does not. Elizabeth Green, *The Modern Conductor*, 6<sup>th</sup> ed. (Upper Saddle River: Prentice-Hall, 1997), 12-3. Adding to Green's narrative Yontz suggests: "When a nonverbal gesture of communication is initiated, the motivation behind it is a desire to emphasize an element of information. This is referred to as impulse of will." Both Green and Yontz insist that impulse of will is a display of the conductor's personality through gesture. Yontz, 45-6. This researcher would argue that without an accurate definition, interpretations of "impulse of will" are entirely subjective and reminiscent of Supreme Court Justice Potter Stewart's infamous ruling on obscenity. Were his comments made in reference to conducting, he might have said: "I can't define impulse of will, but I know it when I see it." The present study clearly defines "impulse of will" as the unification of musical and physical intent through the application of key principles of LMA.

<sup>66</sup> Yontz, 19-22, 54-6.



students.” Yontz closes with several recommendations for further study including: replication of his study over a longer treatment period, increasing the ensemble size to provide a larger range of expressive experiences for conductor and performers, and combining Laban training with other methods to form hybrid treatment groups.<sup>67</sup>

Rather than investigate the effects of LMA training on conductors, Michele Holt elected to focus her research on the ensemble in her 1992 study that explored “the application of Laban’s theories of movement to conducting gesture and choral performance.” To carry out this purpose, she randomly divided seventy-four members of a high school concert choir into two groups to examine the comparative effects of LMA centered preparation versus traditional (non-LMA) rehearsals “upon the performance of high school choral ensembles consisting of high and low levels of musical aptitude.”<sup>68</sup> Following ninety-minute introductory sessions for both groups to familiarize them with the study subject matter and materials, the researcher conducted each group in seven forty-five-minute rehearsals within about four weeks to prepare three movements from Bela Bartok’s (1881-1945) *Four Slovak Folksongs* (1916). The Laban-based rehearsals included instruction in Laban terminology and an introduction to Effort theory. The singers participated in movement activities based on the Effort elements, and they were instructed to use Effort motif writing to mark their scores. The non-Laban group was schooled in “traditional vocal pedagogy, vowel and consonant production and tone

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<sup>67</sup> Yontz, 102-3.

<sup>68</sup> Michele Menard Holt, “The Application to Conducting and Choral Rehearsal Pedagogy of Laban Effort/Shape and its Comparative Effect upon Style in Choral Performance” (D.M.A diss., University of Hartford, 1992), 9, 63-4.

quality, (and) students were instructed to mark their scores with appropriate breathes, dynamics and phrasing.”<sup>69</sup>

Upon completion of the instructional period, the resulting performances were professionally recorded in stereo on audio tape. Duplicate cassettes were used by three expert judges to evaluate the recordings using a five-point continuous rating scale to rate five dimensions: tone quality, intonation, rhythmic accuracy, balance and blend, and expression.<sup>70</sup> A one-way analysis of the variance revealed that the Laban group scored consistently higher than the non-Laban group. Holt summarized her findings with “an analysis of variance [that] showed a significant difference between the mean scores for Group I [non-Laban] and Group II [Laban].” She continued:

Since the mean aptitude scores of both groups were similar, the significance found cannot be attributed to differences in aptitude. Group II scores were higher to a greater extent on the rating scale suggesting that the use of Laban instruction improved the performance capabilities of Group II.<sup>71</sup>

On the weight of this evidence, Holt concluded that “instruction using Laban movement theory was superior to instruction using conventional verbal instruction when comparing stylistic performance capabilities of choral ensembles that are similar in terms of musical aptitude.”<sup>72</sup> She also suggested that additional studies with both larger and smaller

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<sup>69</sup> Holt, 52-3.

<sup>70</sup> Ibid., 53.

<sup>71</sup> Ibid., 64.

<sup>72</sup> Ibid., 64.

ensembles over more extended time periods may lead to a better understanding of the benefits LMA training offers vocalists.

In her 2003 study of LMA training for conductors, Erica Neidlinger chose to explore the effect of Laban Effort/Shape instruction on “young conductors’ ability to perceive expressiveness in movement” across four artistic disciplines: conducting, dance, figure skating and mime.<sup>73</sup> She formulated five research questions and five corresponding null hypotheses to investigate her central purpose from several different perspectives.

- 1 Does instruction in Laban’s Effort/Shape theory affect young conductors’ ability to evaluate examples of expressiveness in movement?
- 2 Does instruction in Laban’s Effort/Shape theory affect young conductors’ ability to evaluate examples of expressiveness in movements over a period of time?
- 3 Does instruction in Laban’s Effort/Shape theory affect young conductors’ comfort level with evaluating examples of expressiveness in movement immediately after the instruction and over a period of time?
- 4 Do differences exist among subjects’ posttest evaluation of expressiveness by treatment and by discipline?
- 5 To what extent does instruction in Laban’s Effort/Shape theory affect participants’ motivations when evaluating examples of expressiveness in movement immediately after instruction and over a period of time?<sup>74</sup>

The fifty-four subjects in Neidlinger’s study constituted the enrollment in two sections of conducting class at a large Midwestern university. Students enrolled in section one were designated the control group, and students in section two were designated the treatment group. These two groups were randomly subdivided into control groups two

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<sup>73</sup> Erica Jean Neidlinger, “The Effect of Laban Effort-Shape Instruction on Young Conductors’ Perception of Expressiveness across Arts Disciplines” (Ph.D. diss., University of Minnesota, 2003), 26.

<sup>74</sup> *Ibid.*, 26-7.

and four and treatments groups one and three respectively to create a modified four-group design in order to “limit the effect of testing as a confounding variable.” This model included a pretest given to groups 1 and 2 only plus a posttest and a re-posttest given to all four groups. (The re-posttest was required because the study involved an assessment over a period of time.) The same materials were used for all three tests.<sup>75</sup>

Neidlinger designed the measurement instruments and selected the expressive movement examples for her project. The Music/Movement Demographic Inventory was used to gather information about the subjects’ prior experience and training in music and/or the other arts disciplines in the study.<sup>76</sup> She selected three videotaped examples, representing low, medium and high levels of expression, from each of the four disciplines in the study. These twelve excerpts were randomly ordered to create three possible versions for testing with the Expressive Ratings Form which included one nine-point Likert scale for each movement example plus an additional nine-point scale for rating comfort level. A short answer question was added to the end of the form “to elicit a written response from subjects about what motivated them when making evaluative decisions.”<sup>77</sup> A panel of twelve “highly experienced and successful” experts—three each from conducting, dance, figure skating and mime—used the same Expressive Ratings Form to verify the researcher’s original assessments regarding expressive levels of the videotaped examples and to establish a standard rating for each example against which

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<sup>75</sup> Neidlinger, 63-5.

<sup>76</sup> Neidlinger reported that 19 participants had studied dance; six had studied figure skating, and two had studied mime. *Ibid.*, 63-4.

<sup>77</sup> *Ibid.*, 65-8.

subjects' ratings could be compared. To promote structural validity, the researcher used only ratings by the experts of examples within their respective disciplines to calculate mean scores.<sup>78</sup>

The treatment groups (one and three) received four fifty-minute sessions of instruction led by the researcher over a span of two weeks that included “an explanation of the Effort/Shape principles, class discussions, group activities and group evaluation of video examples representing all four disciplines contained in the study.” The control groups (two and four) were given no movement instruction of any kind. Instead the conducting class instructor led sessions that focused on the “non-movement aspects of conducting, including the history of conducting and score study.” Immediately following the treatment period, all subjects were randomly given one of three possible versions of the posttest. Five weeks later the process was repeated in a re-posttest. Neidlinger reported that the control groups had received some movement instruction by the re-posttest date but was quick to point out that such instruction was not related to Laban or Effort/Shape training.<sup>79</sup>

The results for Research Question 1 revealed that the control group “was significantly closer to the expert ratings than was the treatment group (while) no significant differences were found between treatment and control groups in any of the other disciplines.” As for the effect of Laban training over time, Neidlinger surmised: “Effort/Shape instruction initially made subjects highly critical of their own discipline,

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<sup>78</sup> Neidlinger, 68-70.

<sup>79</sup> Ibid., 72-3.

but this effect lessened over a period of time.” She found no significant differences in comfort level related to rating examples of expressive movement at any time during the pretest or posttest, but a significant difference favoring the treatment group did develop, over time, by the occasion of the re-posttest.<sup>80</sup> Reporting differences between treatment and control group ratings across disciplines, she noted that “the treatment group showed a greater range of distinction between minimally and moderately expressive examples and moderately expressive and highly expressive examples.” Finally the data showed that even though “subjects were motivated by many of the same factors, the control group responded in general terms, while the treatment group could more explicitly describe what they saw.” In other words, the LMA vocabulary enabled the treatment group to better articulate their impressions of expressive movement.<sup>81</sup>

Despite the inconsistencies in her results, Neidlinger was able to conclude that “Effort/Shape instruction can positively influence young conductors by increasing their awareness of expressive qualities and enabling them to discuss their observations [more thoroughly].” She added that “an increased awareness and use of [the Laban] vocabulary can make students better critics of themselves and others” and lead to “greater individual expressive development.” Her study did not include an application of LMA for conducting teachers, but she nonetheless argued that such training would offer them a “vocabulary to specifically define and discuss the elements of expressive movement with

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<sup>80</sup> Neidlinger, 126-8.

<sup>81</sup> Ibid., 128-32.

students” and allow teachers to give each student more individualized instruction with specific feedback tailored to his or her personal needs.<sup>82</sup>

Neidlinger explained the contradictory findings in her study (disagreements between treatment group ratings and the expert panel mean scores) by suggesting that a panel filled with “only experts who were also knowledgeable in the Laban principles” would have produced greater agreement between treatment group scores and the expert standard.<sup>83</sup> While possibly true, this assumption fails to consider the quality of instruction as an additional confounding factor. For example, the present researcher takes exception with Neidlinger’s definition of Flow Effort as “the order in which the body parts are set into motion.” She here confuses Flow Effort with the concept of *successive sequencing* as it relates to the Body component of BESS. Enlarging her error, she continues:

Movements beginning in the center of the body and moving out towards the extremities are considered centralized and appear to flow more freely than do movements of the extremities alone with the center of the body remaining still. Flow is the essence of change from one body position to another and therefore the essence of movement.<sup>84</sup>

While the present researcher can agree that movements originating in the body’s core (trunk) and proceeding outward toward the extremities may tend towards free Flow, the same *sequencing* of movement may, under different circumstances, just as likely exhibit bound Flow. If a mover’s *inner attitude* toward the Motion Factor of Flow is bound, then

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<sup>82</sup> Neidlinger, 136-8.

<sup>83</sup> *Ibid.*, 134-5.

<sup>84</sup> *Ibid.*, 13. Neidlinger’s representation of Flow Effort is based on a misread of Laban’s explanation of Body as opposed to Effort in Rudolf Laban, *Mastery of Movement*, 18-9, 75-6.

the resulting movement will present the quality of bound Flow regardless of where in the body said movement is initiated or through which parts of the body it proceeds. Free or bound Flow can be observed in a movement that involves a single digit of one hand or a movement that includes the whole body. It is a qualitative assessment that addresses the *progression* of movement—whether it progresses with some degree of freedom or with some degree of resistance or control—and not the sequence of body parts involved in movement.

Effort is unquestionably an integral component of entirety of human movement experience as defined by BESS. More importantly a mover's Effort choices color, shade and otherwise affect movements in specific, unmistakable fashion to produce outcomes that can be recognized apart from other considerations. In other words, two movements that engage the same parts of the Body in the same sequence while following identical pathways through Space and producing the same qualities of Shape may still be distinct from each another due solely to differences in Effort. This understanding is central to the theme and purpose of the present study and should have been better explained in Neidlinger's study as well.

### **Relevant Tangents**

The studies reviewed thus far have all applied the tools and techniques of LMA to one or more aspects of conducting practice (gesture, pedagogy, critical observation, rehearsal technique etc.) in order to determine whether or not LMA training would add to the collective understanding of the conductor's art. Composer Kevin Frey chose a decidedly different application of LMA for his 2002 study. He created an original



musical opus, *Arcade*, using a compositional technique of his own invention that combined Effort motifs with selected symbols from Labanotation to guide performers through his work. More like chord changes than traditional notation, the score was a framework over which three musicians were instructed “to perform Effort and Effort phrases as sonic interpretations of inner attitudes toward Weight, Time and Space, regulated by free or bound Flow.” To support this direct application of Laban movement theory to music performance, he reasoned: “[Just] as amplitude, duration, pitch and timbre are interdependent parameters of sound, present in any movement are the interdependent [Motion] Factors of Weight, Time Space and Flow.”<sup>85</sup>

Frey identifies the “possibility of hearing the results of Effort” as the basic premise for his composition and lists three fundamental arcade-like movement characteristics that influenced the compositional process: “(1) interaction with an object; (2) where Space is intensely personal and direct; and (3) in a place where other people are present for a similar purpose.”<sup>86</sup> He describes *Arcade* as “a multimedia event, incorporating sight, sound and movement to form a textual counterpoint,” or alternatively as “a comment on the effects of living in a technological society.”<sup>87</sup> The composer calls

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<sup>85</sup> Kevin T. Frey, “Arcade: Laban’s Effort Dynamics as Sonic Manifestations” (D.M.A. diss., University of Wisconsin, 2002), 5.

<sup>86</sup> *Ibid.*, 7, 10.

<sup>87</sup> Frey offers the following description of the real-life analog to his composition, the video arcade experience. “In the arcade, you indulge your personal space in a public arena. Spatial focus shifts between a single view with intense directness, and a flexible maneuvering amid the polyglot of people and machines. Time is measured by events, not by nature or by the hours on a clock ... The interaction with a hand held device or keyboard, with greater emphasis on digital control, contrasts with the body-level weight shifts used in playing a larger machine. In either of these gaming modes, Effort dynamics exist and, therefore, are readable.” *Ibid.*, 6, 9.

for a silent abstract film to be shown during performance to add “a visual textural component for the audience.” He selected Viking Eggeling’s (1880-1925) *Symphonie Diagonale* (1924) because it possessed “an exceptional clarity of visual rhythm in the movement of the transforming images” that, in turn, served as “a rhythmic foundation toward forming the total texture in performance.”<sup>88</sup>

The performers received their Laban training through an eighteen-minute video that introduced them to Laban’s Effort theory. Frey believed this brief introduction to Effort to be sufficient because he limited his Effort “palette” to the eight Basic Effort Actions. A copy of the score as well as their individual parts displayed on a video screen and the Laban training tapes were given to the musicians two weeks prior to a single ninety-minute rehearsal. The composer offered minimal instruction to performers and relied more heavily on answering their questions to help them prepare. He reported that the most frequent inquiries were related to interaction between members of the ensemble. His response to such questions reminded them of the concept of arcade and directed them “to use personal judgment and do what they felt was natural as musical performers.”<sup>89</sup>

Frey’s observations were drawn from his experiences with two performances of *Arcade* given in separate venues with two different ensembles under different conditions. The ensemble for the first performance consisted of clarinet, horn and percussion, while soprano voice was substituted for clarinet in the second rendition. He emphasized that, though different, each venue supplied the necessary equipment and required space for a

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<sup>88</sup> Frey, 12.

<sup>89</sup> *Ibid.*, 27-8.

valid performance.<sup>90</sup> Frey described his composition as an intersection of the cultures of music and dance at the video monitor. Building on this premise, he elaborated:

The composer set the context, eliciting expressions suggestive of fundamental arcade-like movement. The performer interprets the prescribed Effort configurations within the given context. Expressive sounds resulting from these movements form the basis for exploring this intersection.<sup>91</sup>

Completing the process he started with his self-described intersection of dance and music, Frey ultimately concluded that “*Arcade* demonstrates that original, composed Effort phrases can form the basis of a composition.”<sup>92</sup>

Computer technology certainly enlivened Frey’s experimental application of Laban’s Effort theory as a tool for musical composition, but the direct application of computer-based systems specifically designed to record, analyze and understand human movement related to musical performance was not the focus of his project. Seeking to combine timeless human expression with cutting edge technology, several researchers have developed both hardware and software applications that act as expressive, interactive instruments for performers. Two such projects that were created for conductors offer promise as tools for understanding and teaching conducting gesture. The first is a wearable garment, the Conductor’s Jacket, fitted with an array of electronic sensors that sends data through a bank of software filters to a network of computers for analysis and interpretation, and the second is a motion capture system that records

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<sup>90</sup> Frey, 25-6.

<sup>91</sup> Ibid., 41.

<sup>92</sup> Ibid., 41-4.

changes in position of light-reflective markers on capture subjects as they move in order to generate accurate representations of the capture subjects' physical actions and forms.<sup>93</sup>

Teresa Marrin Nakra is no stranger to research that involves the application of computer technology to the conductor's task. Her earlier project, the Digital Baton (1997), was a "hand-held gestural interface that was designed to be wielded like a traditional conducting baton by practiced performers."<sup>94</sup> She described the baton as "a ten-ounce molded polyurethane device that incorporated eleven sensory degrees of freedom: 3 degrees of position, 3 orthogonal degrees of acceleration, and 5 points of pressure."<sup>95</sup> Not a true conductor's baton because it was not tied to traditional conducting gestures, it instead "made use of musical behaviors that lay in the continuum between actuating individual notes and shaping their higher-level behaviors."<sup>96</sup> Despite measured success in a number of performances in which the researcher "played" the Digital Baton, she was left unsatisfied with the results because, there was "a lack of expressiveness in the mappings." In layman's terms, she recognized that the existing hardware and software were unable to effectively account for the complexity of human gesture. These challenges and her continued interest in conducting gesture motivated her to try a new approach that resulted in the creation of the Conductor's Jacket.<sup>97</sup>

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<sup>93</sup> Vicon Peak press release, 22 Mar 2005 ([www.vicon.com/company/releases/032205.html](http://www.vicon.com/company/releases/032205.html)).

<sup>94</sup> This device is a precursor to the Conductor's Jacket and *not* the motion capture baton mentioned earlier. Teresa Marrin Nakra, "Inside the Conductor's Jacket: Analysis, Interpretation and Musical Synthesis of Expressive Gesture." (Ph.D. diss., Massachusetts Institute of Technology, 2000), 19.

<sup>95</sup> *Ibid.*

<sup>96</sup> Teresa Marin Nakra, "Synthesizing Expressive Music Through the Language of Conducting," *Journal of New Music Research*, 31, no. 1 (Mar.2002): 14.

The first “jacket” was actually a fitted shirt equipped with sixteen physiological and positional sensors that constantly measured heart rate, skin conductivity, temperature, muscular activity and motion. Following a test period with six local orchestra conductors who wore the device in both rehearsal and performance, the jacket was redesigned to emphasize data collection for muscular tension and respiratory patterns. The final configuration of sensors included seven electromyogram measurements (right and left biceps, right and left forearm extensors, right and left hands, and right shoulder) plus an additional sensor to record correlations between respiration and phrasing. Data from the jacket was fed into the computer through a cable that plugged into the sensor interface attached to the wearer’s belt. The system included the jacket and connections as described above, the proprietary software, and two networked computers: one to filter, process and stream data and the second to accept and read the incoming data streams and map them to algorithms that ultimately generated output to a MIDI-controlled sound production system.<sup>98</sup>

Nakra was able to develop a number of real-time expressive controls for the Conductor’s Jacket including: “beat detection, tempo tracking, cues, cutoffs, holds, pauses, note volumes, channel volumes, articulations, panning, octave doublings, triggers, pitch choices, accents, timbre morphing, balances, meter, and number of voices.” Armed with these expressive controls and their corresponding C++ algorithms

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<sup>97</sup> Nakra, “Inside the Conductor’s Jacket,” 19-21.

<sup>98</sup> Nakra, “Synthesizing Expressive Music,” 15-7. The Conductor’s Jacket is an extremely complex project that is far beyond the capabilities of the present author to completely explain, let alone understand. This brief description is intended only to give the reader an overview of the nature and goals of the project and its relevance to the present study.

that she called the “Gesture Construction,” she developed several gestural etudes to test and demonstrate the capabilities of the system.<sup>99</sup> She also wrote and prepared an orchestration of J.S. Bach’s (1685-1750) *Toccatà and Fugue in D Minor*, BWV 565 (1708) and her own composition, “Song for the End,” written especially for the Gesture Construction. In addition to a performance given as part of her doctoral defense, Nakra had numerous opportunities to demonstrate the Conductor’s Jacket system at the MIT Media Lab and at several public performances given at various locations in Metropolitan Boston including the Computer Museum, and the Middle East Club in Cambridge.<sup>100</sup> Since the publication of Nakra’s thesis, composer John Oswald (b. 1953) received a commission for a *Concerto for Conductor* that received its world premiere in a May, 2001 concert with conductor Gil Rose and the Boston Modern Orchestra Project at Symphony Hall.<sup>101</sup>

Nakra claimed that the analytical results “demonstrate the merits of a quantitative approach (to mapping conducting gesture) and its potential to deliver important future contributions to our knowledge about expressive, emotional, and musical communication between human beings.” At the same time she acknowledges that the final system failed to effectively reflect “the character and quality of each gesture.” Admitting that “truly expressive instruments are possibly still decades away,” she nonetheless points to the success of her Gesture Construction as a “proof-of-concept of the method that was used

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<sup>99</sup> Nakra, “Inside the Conductor’s Jacket,” 124-5.

<sup>100</sup> *Ibid.*, 129-30.

<sup>101</sup> Nakra, “Synthesizing Expressive Music,” 21.

to develop it.”<sup>102</sup> She listed several avenues for additional research with her system such as investigations of the connections between music and emotions, studies that use jackets to record the effects of conducting on the musicians in the ensemble, and a process through which conductors using the system would be interviewed to supply an additional channel of qualitative analysis regarding the relevance and significance of the data.<sup>103</sup> She also noted that the Conductor’s Jacket is already showing promise as a tool for helping conducting students sharpen their skills, and it is in this capacity that the system reveals its fundamental limitations.<sup>104</sup>

Nakra’s results are undeniably impressive, but the present researcher maintains that conducting is a physical endeavor that demands the participation of the whole body—not just the arms and hands. Without additional sensors on the legs, around the waist, across the upper back and even on the feet, data collected from a sensor-based instrument and streamed into a software system, no matter how sophisticated, will be incomplete and, therefore, invalid. Conducting is also an intensely personal system of gestural communication. While most conductors and teachers continue to believe that beat patterns are universal (an issue worthy of debate apart from the present study), these same individuals must ultimately admit that each conductor’s movement preferences, and, most importantly, choices involving the qualitative characteristics of movement

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<sup>102</sup> Nakra, “Inside the Conductor’s Jacket,” 131-2.

<sup>103</sup> *Ibid.*, 147-8.

<sup>104</sup> Arizona State University is using the Conductor’s Jacket system in its Digital Conducting Laboratory to “enable students to practice their assignments with a simulated orchestra response.” Nakra, “Synthesizing Expressive Music,” 24.

(Effort and Shape) that communicate musical content are not. Stressing the view that conducting gestures are entirely personal, French composer and conductor Pierre Boulez (b. 1925) explains:

You can't try to impose them on someone else. They're as personal as a voice: you can't make a baritone sing like a tenor, nor a tenor sing like a bass. The relationship between music and gesture has a physiological aspect that depends on each individual.<sup>105</sup>

These characteristics of conducting gesture that Boulez insists are unique to each individual conductor raise two insurmountable challenges for any computer programmer attempting to interpret and map conducting gesture in order to produce a real-time, expressive response that accurately reflects the conductor's intentions.

- 1) The programmer must choose what signals from which sensors reference which elements of musical expression to what degrees, shades and colors. Once made these choices must, by definition, apply to all conductors who use the system unless the programmer changes the parameters to reflect each user's distinct movement preferences for every piece performed.
- 2) Conductors may not activate their muscles with similar (let alone identical) amounts of tension or use them for the same purposes or to achieve the same effects. They may also use muscles and parts of the body that are totally excluded from quantitative measurements made by the jacket sensors.

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<sup>105</sup> Jean Vermeil, *Conversations with Boulez: Thoughts on Conducting*, trans. Camille Naish (Portland: Amadeus Press, 1996), 64.



An examination of Nakra's implementation process for her Conductor's Jacket performance of Bach's Toccata and Fugue in D Minor illustrates these contradictory factors.

In the performance of this piece the action of the right biceps muscle determines the beats, tempo, beat volumes, and cutoffs. The right forearm gives articulations; sustained contraction of the muscle yields longer notes and therefore a legato quality, whereas shorter contractions of the muscle yield shorter notes with a staccato quality. The use of the left biceps muscle causes octave doublings to fill out the bass and the aggregate values of the left arm muscles versus the right arm muscles determines the panning of all the voices.<sup>106</sup>

Her description provides sufficient evidence to conclude that the jacket is teaching its wearer how to achieve specific results by activating certain muscle groups. Such a system will ultimately hinder a conductor's ability to act and react spontaneously and naturally to the environment, circumstances and sounds around him. Yet these difficulties in no way diminish the achievements of one diligent and tenacious investigator who was able to combine her musical talents with her computer science abilities to imagine and create a new device for expressive musical performance. In fact, these limitations suggest that there is much to learn from an application of Laban's theories to the development of future algorithms for the Conductor's Jacket.

Motion capture technology exchanges the physiological sensors and software filters associated with the Conductor's Jacket for multiple infrared cameras that track and record the changing positions of small, lightweight reflective markers affixed at specific points or joints of the body. Data from the cameras is then fed through proprietary

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<sup>106</sup> Nakra, "Synthesizing Expressive Music," 21.

hardware and software that synchronizes the signals to form a three dimensional video representation of the recorded motion in real-time.<sup>107</sup> Conductors and researchers have used earlier versions of this system with pre-recorded music to study the benefits of motion capture rendering for conductors. These efforts led Jessica Kun to create a “responsive, interactive system for conducting and conducting pedagogy” in 2004 by combining motion capture technology with live MIDI playback driven by a Max/MSP graphical programming environment for audio, music and multimedia.<sup>108</sup>

Through analysis of changes in trajectory, velocity, size of gesture and the angles, the motion capture system processes and interprets conductor movements to supply “immediate auditory feedback in relation to beat points, tempo, dynamics and, to some extent, articulation.” The collected data can be processed to isolate the baton, focus on certain parts of the body or the whole body depending on the goals for any given session.<sup>109</sup> Kun cites several advantages of motion capture technology including the ability to practice conducting gestures and receive live audio feedback plus the capability to review and analyze the movements from any angle in three-dimensional space. She believes motion capture applications for conductors “promise to enhance metacognition, movement efficiency and proprioception” and she recognizes that “the rendering of motion in the conductor’s full body is paramount for evaluation of proper conducting technique.”<sup>110</sup>

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<sup>107</sup> Jessica V. Kun, “A Real-Time Responsive/Interactive System for Musical Conducting Using Motion Capture Technology” (D.M.A. diss., Arizona State University, 2004), 11-12.

<sup>108</sup> *Ibid.*, 8-10.

<sup>109</sup> *Ibid.*, Abstract.

At first blush, this technology appears to offer a more comprehensive approach to conducting gesture than the Conductor's Jacket in some respects, but it remains subject to the limitations inherent in any computer driven system. The short list of musical effects that can be controlled and adjusted by the system in Kun's study confirms that computers (at least today's computers) can neither make intuitive decisions nor interpret movements that lie outside the parameters established by programming. If a conductor using this technology moves in ways that the computer program cannot recognize or interpret, then the MIDI-generated response will not reflect the intent of the conductor even if the movement is perfectly suited to the occasion in question. As with the Conductor's Jacket, the conductor may be forced to adapt to the programming in order to achieve a desired result. Rather than teaching conductors how to equate the expressive qualities of movement with the sounds of music, this application of motion capture technology may instead teach conductors how to equate musical sounds with a limited set of prescribed motions.

### **Closing Thoughts**

Nearly three decades have passed since Bartee presented his theoretical position on an approach to conducting that incorporated the principles of Laban Movement Analysis. Since that time two additional theoretical studies that explored alternative methods for teaching or better understanding conducting technique considered the discipline only to minimize or discard it while numerous studies have been undertaken to determine the effectiveness of LMA for conductors as both an observational and

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<sup>110</sup> Kun., 2.

pedagogical tool. Bengé and Hibbard arranged for Certified Movement Analysts to observe experienced conductors in rehearsal and/or performance. Results from their analyses revealed several possible connections between the conductors' gestures and the expressive qualities of the music they were conducting. The remaining studies used various research models—some experimental and some descriptive—to investigate the effect of LMA training on conductors or ensemble members.

Billingham used the eight Basic Effort Actions as the basis for a vocabulary of conducting gestures that proved to be partially successful. After preparing one choir with LMA training and the other with traditional rehearsal technique, Holt found that the LMA-trained choir performed better than the traditionally prepared choir. Miller split two populations of conducting students into two treatment groups and two control groups respectively. The treatment groups were given a combination of LMA training and traditional instruction while the control groups received only traditional training (beat patterns, expressive gestures, preparations, releases, fermatas, dynamics, etc.). The results showed that the treatment groups' scores were consistently higher than those of the control groups. Yontz's repeat of Miller's study added some important refinements and produced results that clarified and confirmed Miller's findings. Neidlinger combined pedagogical and observational approaches to study the effects of LMA training on young conductors' ability to perceive expressiveness in movement. Although her findings were somewhat inconsistent, she was still able to conclude that LMA training for young conductors did help them improve their observational skills.

Though not directly related to the present study, three tangential projects offered additional insight into the methods and processes by which musical performers and conductors are able to connect movement with musical expression. Frey used originally composed Effort phrases to create *Arcade*, a piece for three musicians and silent film that challenged performers to find equivalence between Effort and musical expression. He deemed his project a success and claimed that Effort phrases can be used as the basis for musical composition. The Conductor's Jacket and motion capture rendering systems offer alternative methods for improving conductor performance, and both supply novel opportunities for observation and analysis beyond the capabilities of more familiar conventional techniques.

The cumulative results of these studies seem to indicate that conductors, teachers, and researchers have yet to devise a method or system that provides a comprehensive explanation of the process by which conductors are able to communicate musical events and expression through the medium of gesture. Several investigators used narrow, largely prescriptive applications of LMA to determine the benefits of movement-based instruction for conductors and/or ensemble members. Others used advanced technology to construct systems for controlling musical performance by activating specific muscle groups or moving specific parts of the body in accordance with pre-programmed parameters. Although each approach achieved partial success, none of them was able to produce a set of tools that would enable conductors to create gestures based on informed, intelligent movement choices that reflect an understanding of the underlying equivalence between the sounds of music and movements conductors use to represent those sounds.

The remaining chapters of this study introduce and test the effectiveness of a unique interdisciplinary approach to conducting gesture. After providing conductors with a strategy for discovering the point within themselves where “movement thinking” and “music thinking” converge, the researcher will explain how conductors can use the principles of LMA to construct more efficient, meaningful and compelling gestures that effectively communicate their musical intentions to the ensembles they lead.

## CHAPTER IV

### CREATING A FRESH APPROACH TO CONDUCTING GESTURE

The music of sounds and the music of gesture should be animated by the same emotion. Music should so transfigure the body that it becomes visible sound.

Claire-Lise Dutoit, *Music Movement Therapy*

#### **The Confluence of Physical and Musical Expression**

Author and Eurhythmics educator Claire-Lise Dutoit's vivid description of the union of music and movement acknowledges an emotional equivalence between the two that is essential to the art of musical performance. Readers familiar with Eurhythmics may have already noted some similarities between the systems created by Emil Jaques-Dalcroze (1865-1950) and Rudolf Laban.<sup>1</sup> However, there is an important distinction that explains why music performance in general and conducting in particular are better understood through the principles of Laban Movement Analysis. Comparing the two disciplines Maletic observes that "for Dalcroze movement and dance are stimulated through music; for Laban music originates from rhythmical movements of the body."<sup>2</sup> In other words Eurhythmics encourages the integration of kinesthetic and musical intelligences through bodily movements made in response to *external* musical stimuli

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<sup>1</sup> The two men were not well acquainted, and if they ever met it was only briefly. Hodgson believes that the common thread running through the theories of both Dalcroze and Laban can be found in François Delsarte's principles of 'applied aesthetics.' It is worth reporting that Dalcroze lost two of his star pupils, Suzanne Perrottet and Mary Wigman, to Laban. John Hodgson, *Mastering Movement: The Life and Work of Rudolf Laban* (New York: Routledge, 2001), 66-71.

<sup>2</sup> Vera Maletic, *Body - Space - Expression: The Development of Rudolf Laban's Movement and Dance Concepts*, *Approaches to Semiotics* 75 (Berlin and New York: Mouton de Gruyter, 1987), 159-60.

while LMA reaches beyond the stimulus/response model to recognize that movement is also the channel through which *internal* musical abstractions become transformed into audible musical expression.

Edwin Gordon (b. 1927) coined the term “audiation” in 1976 to define the ability to experience these internally generated musical forms.<sup>3</sup> According to Gordon, this *inner* sense of hearing “is not the same as aural perception which occurs simultaneously with the reception of sound through the ears.” It is instead a “cognitive process by which the brain gives meaning to music.” Simply put, audiation is *music thinking*.<sup>4</sup> Twenty years earlier Laban had already used the phrase “thinking in terms of movement” to describe a similar *inner* kinesthetic sense. Like its aural counterpart, *movement thinking* involves an inner experience of remembered or imagined movements (including the physical and affective sensations associated with them) that have either already occurred or have yet to be observed or experienced through the body.<sup>5</sup>

Gifted instrumental and vocal performers have long understood the connection between *music thinking* and *movement thinking* intuitively if not consciously. Gordon obviously recognized it because five of his eight types of audiation involve some kind of performance.<sup>6</sup> Laban confirmed such a connection as well on several occasions including his 1958 address to the Annual Conference of the Laban Art of Movement Guild.

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<sup>3</sup> Date obtained through personal communication with Edwin Gordon, 6 June, 2005.

<sup>4</sup> Gordon Institute for Music Learning website (<http://www.giml.org/frames.html>). Select “Music Learning Theory/Audiation” and “Resources/Frequently Asked Questions” from the menu.

<sup>5</sup> Rudolf Laban, *The Mastery of Movement*, 4<sup>th</sup> ed., revised by Lisa Ullman (London: Macdonald and Evans, 1980; reprint, Plymouth: Northcote House 1988), 15.

<sup>6</sup> Gordon Institute for Music Learning website; select “Resources/Audiation” from the menu.



Many people will associate this world, in their minds, with the realm of music. This is quite right so far as one considers the branch of the art of human movement resulting in the production of works which become audible to the ear. Few people realize that all music, vocal or instrumental, is produced by movements of the body.<sup>7</sup>

It is precisely this correlation between physical and musical expression, as defined by acknowledged authorities in both the fields of music and human movement, that sparked the present researcher's original interest and fuels his continuing study of Laban Movement Analysis.

#### Moving Beyond Analogy and Metaphor to Equivalence

Teachers of all stripes and in all disciplines use analogy and metaphor to enrich their students' learning experience and enhance the quality of their instruction. During rehearsal conductors sometimes resort to communicating their musical intentions to the ensemble verbally through analogy or metaphor, especially if their gestures fail to elicit the desired response. When conductors are unable to demonstrate their realization of the score to the ensemble through gesture, they may perceive verbal imagery as the best or their only course for describing musical events. This 'do as I say and ignore what I show' strategy is usually more a hindrance than a help because such verbal instructions often contradict the conductor's gestures. If an ensemble is already struggling to decipher its conductor's gestural representations of the music, then additional verbal directions (accurate or not) may only increase the levels of confusion and frustration on both sides

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<sup>7</sup> Rudolf Laban, *Rudolf Laban Speaks about Movement and Dance*, ed. Lisa Ullmann (Addlestone: Laban Art of Movement Centre, 1971), 40.

of the podium. Wis suggests, for instance, that ensemble members may “misunderstand the metaphor of choice or be mistakenly led away from the original goal” when conductors resort to verbal instructions.<sup>8</sup>

Conducting teachers regularly use analogy and metaphor to compensate for deficiencies in the systematic approach to conducting espoused in conducting texts and manuals. Poch maintains that these shortcomings persist because “texts on conducting deal only with the spatial reproduction of patterns [plus a] minimal introduction to cueing, dynamics, phrasing, etc.”<sup>9</sup> Granted, a number of teachers and authors may be aware of the fundamental equivalence between music and movement at some level, but this awareness alone is not enough. When imagery, simile or demonstrations of gestures fail to produce results, teachers need alternative tools and terminology that would allow them to impart more precise instruction. Absent those tools and terms, instructors resort to metaphor and analogy to encourage more communicative gestures from their students. Green, for example, offers the following guidance regarding the size of legato gestures.

The legato gestures lend themselves easily to variation in size. The larger gestures are usually associated with the louder passages, although it is possible to perform large gestures so gently that the texture of the resulting sound will be as fine as a delicate silk veil and correspondingly soft.<sup>10</sup>

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<sup>8</sup> Ramona M. Wis, “Physical Metaphor in the Choral Rehearsal: A Gesture-Based Approach to Developing Vocal Skill and Musical Understanding,” *Choral Journal* 40, no. 3 (October 1999): 25.

<sup>9</sup> Gail B. Poch, “Conducting: Movement Analogues through Effort Shape,” *Choral Journal* 23, no. 3 (Nov 1982): 21.

<sup>10</sup> Elizabeth A. H. Green, *The Modern Conductor*, 6<sup>th</sup> ed. (Upper Saddle River: Prentice-Hall, 1997), 45.

Her observations are sound; the simile is beautifully descriptive, and a full reading would include directions that specify which parts of the arm and hand to use and when to mark beats, but nowhere does Green tell readers precisely how to execute a legato stroke “as fine as a delicate silk veil.” Even assuming that every reader can conjure up the image of a silk veil—its appearance, composition, texture, weight, and purpose—vital information regarding the dynamic qualities of movement (Effort combinations) that would produce this effect is conspicuously absent.

Recognizing the inherent limitations of verbal imagery, Wis challenges conductors to expand the concept of metaphor from the linguistic to the physical domain. She defines physical metaphor as “any gesture or movement that is able to get to the essence of the musical idea and involve singers in a concrete bodily way.”<sup>11</sup> Like Hibbard she views movement primarily as a shared experience during which a conductor directs her choir to participate in specific movement behaviors intended to “facilitate learning and to enhance musical experience.”<sup>12</sup> Wis lists several applications of physical activities as remedies for musical problems including the action of throwing a baseball into the outfield in order to encourage better vocal projection and lifting the hand to improve intonation.<sup>13</sup> While she does suggest that conductors “can easily find ways to incorporate scaled down versions of [these] rehearsal gestures into their own conducting,” Wis

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<sup>11</sup> Wis, “Physical Metaphor in the Choral Rehearsal,” 25.

<sup>12</sup> Wis, “Gesture and Body Movement as Physical Metaphor to Facilitate Learning and Enhance Musical Experience in the Choral Rehearsal” (Ph.D. diss., Northwestern University, 1993), iii. Hibbard’s research is reviewed in this study, pp. 54-7.

<sup>13</sup> Wis, “Physical Metaphor in the Choral Rehearsal,” 26-7.

ultimately exchanges linguistic imagery for a type of physical imagery akin to pantomime without truly establishing any equivalence between music and movement.<sup>14</sup>

Poch's method for creating conducting gestures that merge musical and physical intentions into a single unified entity involves the development of movement analogues.

Explaining his proposal, he reasons:

Music has movement analogues—music originates from movement: the flow of a line, the weight of *maestoso*, the quickness of a *staccato*, the relaxation of a cadence, the irregularity of a *recitativo*, or the ease of jazz. What a conductor must accomplish through his gesture is the recovery of these movement analogues in order to represent the expressive origins of the music. This quality of the gesture must convey the inherent movement in the music.<sup>15</sup>

Adding clarity to Poch's description, Koch maintains: "Analogous gestures look like the motion used to produce the sound (i.e. bowing) or look like the sounds themselves (i.e. fluidity for sustainment or choppy for clipped)."<sup>16</sup> Movement analogues are more convincing than linguistic or physical metaphor, and they are undeniably closer to genuine equivalence between music and movement, but three central issues remain unresolved.

- 1) All of the musical events Poch and Koch mention possess more than the single quality they use to illustrate the concept of movement analogues. Most gestural representations of sound require combinations of at least

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<sup>14</sup> Wis, "Physical Metaphor in the Choral Rehearsal," 32.

<sup>15</sup> Poch, "Conducting: Movement Analogues through Effort Shape," 21.

<sup>16</sup> Christopher Jason Koch, "Towards a Theory of Conducting Motion" (Ph.D. diss., University of Washington, 2003), 123-4.

two, sometimes three, and on rare occasions even four Effort qualities. A *maestoso* may be strong, direct and controlled or strong, indirect and more fluent. Light, bound staccatos are just as likely as light, quick staccatos.

- 2) Considering Effort choices made by individuals, one conductor may use strong Weight to represent a *maestoso* while the next might show neither strong nor light Weight in his gesture for the same *maestoso* and yet still produce a good result. Movement analogues do not appear to allow for naturally occurring differences in personal movement preferences.
- 3) If music and movement are truly equivalent, then they must flow from the same source. Although Poch acknowledges that “a conductor’s interpretation shares the same origin” as his movements, he stops short of providing a roadmap that leads to the single nexus from which both a conductor’s musical vision and conducting gestures spring forth.

Poch would agree with music educator and Eurhythmics advocate Jane Palmquist’s claim that “movement emanates from the same musical thence as the sound.”<sup>17</sup> Her choice of terms is intriguing because *thence* can be used to denote a place, a time or a source. The present researcher is neither a neurobiologist nor a neurosurgeon so he cannot map the brain in order to identify the specific locations responsible for music and movement. He can, however, combine his own musical expertise with definitions and descriptions provided by Laban, Gordon and others to reveal a point

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<sup>17</sup> Jane E. Palmquist, “Dalcroze Instruction: It's Not Just for General Music Teachers,” *American String Teacher* 48, no. 1 (winter 1998): 60. Laban would, perhaps, argue conversely that music emanates from the same kinesthetic thence as movement.

during the process of transforming mental forms of music and movement into a live performance that represents the source for both *music thinking* and *movement thinking*.

### Revealing the Psychosomatic Convergence of Music and Movement

Most modes of live musical performance require the synchronized participation of mind and body. Some certainly require greater physical activity than others, but all traditional instrumental and vocal music performance endeavors share the same direct link between the movements required to generate sounds and the sounds themselves.<sup>18</sup> Upon producing sounds, musicians receive simultaneous aural feedback that informs them of the level of congruency between their imagined or audiated performance and the external, aurally experienced performance. Continuous comparison of that external flow of musical events with the interior flow of audiation enables performers to make adjustments to their movements (including the breath) and to the physical relationships with their instruments in order to maintain control over all elements of their performance. Such adjustments might include fingering changes, embouchure adjustments, adding or ceasing a vibrato, postural shifts and changing the qualities of bow strokes or tonguings. Where Gordon may insist that these and other aspects of a performer's bodily execution are stimulated and governed by tonal and rhythmic audiation, Laban would argue that

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<sup>18</sup> The advent of computer-based performance of music (i.e. electronic composition or the use of synthesizers and sequencers) has admittedly introduced the possibility of performances without movements that correspond directly to the *live*, concurrent production of sounds. Yet even music composed for these media still depends on physical activity at some point between the creation and performance of such works. For example, using a MIDI controller to enter notation in real-time entry would require a direct rhythmical correspondence between movement and sound while notating music from the computer keyboard for a later synthesizer-driven performance would not result in the same kind of relationship between movement and sound.

“all sound productions . . . spring forth from physical actions or in other words, from movements.”<sup>19</sup> <sup>20</sup> Each point of view is likely correct” depending upon the musical and kinesthetic aptitudes of any given musician. More importantly, both men would probably agree that audiation represents unmanifest musical expression and movement thinking represents unmanifest physical expression. When these two thought constructs converge within an individual possessing the prerequisite talents and skills, their union creates a continuum of specific movement behaviors that result in a musical performance.

This convergence of audiation and movement thinking is especially important to conductors because, unlike other musical performers, they have no direct physical contact with an instrument that produces musical sounds. As conductor Frederick Fennell (1914-2004) points out, “the body is the conductor’s instrument, not the people making the music in front of [him].”<sup>21</sup> Effective conductors, like the musicians under their direction, know the precise musical effects their movements will produce *before* they execute them. Yet, in contrast with their collaborators in the ensemble who wed movement to sound through the context of an instrument, conductors must acquire and master a repertoire of gestures that convey musical content without benefit of the contextual framework that an instrument provides. This apparent disconnect challenges conductors more than all other

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<sup>19</sup> Edwin E. Gordon, *Learning Sequences in Music: Skill, Content and Patterns* (Chicago: GIA Publications, Inc., 1980), 4-5.

<sup>20</sup> Rudolf Laban, *A Life for Dance*, trans. Lisa Ullmann (New York: Theatre Arts Books, 1975), 87.

<sup>21</sup> Frederick Fennell, “The Calisthenics of Conducting,” *The Instrumentalist* 33, no. 4 (Nov 1978): 16. Bartee makes much the same assertion when he declares: “The conductor’s contact instrument is his body—not his baton, not his ensemble.” Neale King Bartee, “The Development of a Theoretical Position on Conducting Using Principles of Body Movement as Explicated By Rudolf Laban” (Ph.D. diss., University of Illinois at Urbana-Champaign, 1977), 56.

musical performers to cultivate within themselves the confluence of musical and physical expression to such a degree that they are able to “audiate” sound *and* movement together as a single gestalt. The resulting condition of mind and body suggests a consciously induced state of Synesthesia wherein an individual seems to *hear* movements and *touch* sounds. A conductor who has so merged his kinesthetic and musical abilities has found the genuine equivalence between music and movement.

Though it seems inconceivable, the notion that a conductor can develop the abilities to hear movement and touch sound is hardly radical. Green, in fact, echoes the present researcher’s assertions with her final advice to conductors in the third edition of *The Modern Conductor*. She urges students to “feel the texture of the tone as you call it forth. Sense that the hands and baton are molding, shaping, sculpturing a living thing, for Music is an Art that exists only while it is being performed.”<sup>22</sup> Like her earlier commentary on legato gesture (p. 93), these recommendations create beautifully descriptive and arguably useful images, but Green again fails to follow up with specific instructions for conductors seeking to develop gestures that reflect the underlying unity of physical and musical expression. The application of LMA presented in this study fills that gap by introducing an approach to conducting gesture that supplies every conductor with the tools and terminology he needs to discover and traverse his own *personal* path towards the convergence of music thinking and movement thinking that is the essence of the art of conducting.

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<sup>22</sup> Green, *The Modern Conductor*, 3<sup>rd</sup> ed. (Upper Saddle River: Prentice-Hall, 1981), 241.



### **Two Additional Confirmations of Effort/Shape**

Nearly ninety years have passed since Bartee first introduced conductors to Laban's theoretical framework with his groundbreaking thesis. Interest in LMA training for conductors has since waxed and waned in cycles that seem to follow the publication of new research studies and the introduction of LMA workshops and seminars at academic and professional conferences. A growing but still surprisingly small cadre of conductors and teachers now integrate the principles of LMA into their performance and teaching activities, but the discipline has yet to gain the widespread acceptance it deserves. Some resistance may stem from continuing mistaken perceptions of LMA as a specialized field for dancers only. Additional skepticism likely flows from confusion created by flawed research and from the belief that the validity of Laban's theoretical framework has yet to be confirmed outside as well as inside the field of music. The results of the present study eliminate any remaining uncertainty regarding the efficacy of LMA for conductors, and the following extra-musical validations of Effort present both quantitative and qualitative evidence that LMA is an effective and reliable tool used across a wide range of artistic and practical human endeavors.

#### **A Physiological Confirmation of Effort**

Researchers Bernstein and Cafarelli describe Effort/Shape as "a clear, concise method" for describing and analyzing the qualities of movement from the perspectives of mover and observer. The purpose of their study was to "establish a firm physiological basis for Effort concepts." They hoped to demonstrate that "there are quite distinct and predictable muscle response data produced by various effort-flow combinations" and that

trained observers “can and do accurately identify these physiological changes . . . without the need of technological equipment.”<sup>23</sup> Electromyographical (EMG) data was collected from two sensors positioned on the biceps and triceps muscles of one subject’s right arm. A filmed record of the test subject’s sixteen prescribed movements was viewed by a panel of five trained Laban specialists who were instructed to identify Effort actions. The researchers’ results demonstrate that “the components of space, force, time and tension flow are readily discernable” on the EMG tracings. Moreover, reviews of the panel’s analyses revealed that “each of the observers was 90% correct in interpreting the 16 movement combinations of film.”<sup>24</sup> Bernstein and Cafarelli are quick to point out that their study was performed under controlled conditions, but the results nevertheless confirm that observers and movers can depend on the validity of assessments made with the Effort/Shape system.

### The Kestenberg Movement Profile

Developmental psychoanalyst Judith Kestenberg (1910-1998) was introduced to Laban students Bartenieff and Lamb in 1953 after completing a longitudinal study of three newborn infants that she undertook to develop an improved method for notating movement. Recognizing that the set of tracings from her study “captured some aspect of movement [but lacked] a theoretical framework with which to interpret the lines,” she realized that Effort/Shape would supply a set of “clear symbols with which to notate a

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<sup>23</sup> Penny Bernstein and Enzo Cafarelli, “An Electromyographical Validation of the Effort System of Notation,” in *American Dance Therapy Association Monograph 2* (1972): 79-80.

<sup>24</sup> *Ibid.*, 84.

structured way of looking at movements.” With assistance from colleagues in the fields of psychology and LMA, Kestenbergs was able to extend the framework developed by Laban and Lamb “into the realm of child development.”<sup>25</sup> The product of that collaborative effort, the Kestenbergs Movement Profile (KMP), is “a multi-tiered system for the notation of observed movement patterns, classification of these patterns, and analysis of an individual’s movement repertoire.”<sup>26</sup> Once completed the KMP is used to make assessments of an individual’s learning styles, cognitive preferences, creative intelligence, styles of relating, defense and expressing needs and feelings. These results provide a framework for the prevention and treatment of a wide variety of psychological physical and cognitive problems. Mounting evidence from a number of recent studies supports “specific lines of developmental sequencing postulated under the KMP,” as well as some “formulations of correspondences between cognitive processes and body gestures.” Working with experienced raters, KMP researcher Sossin (1987) also documented satisfactory inter-observer reliability ranging from 0.70 to 0.80.<sup>27</sup>

While validations of Effort from outside the field of music do not automatically guarantee that conductors will have the same success with LMA that physiologists or Freudian psychoanalysts have reported, they nonetheless demonstrate the extraordinary flexibility and adaptability of Laban’s theoretical framework. If practitioners in these and

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<sup>25</sup> Janet Kestenbergs-Amighi, Susan Loman, Penny Lewis and K Mark Sossin, *The Meaning of Movement: Developmental and Clinical Perspectives of the Kestenbergs Movement Profile* (Amsterdam: Gordon and Breach, 1999), 5-9.

<sup>26</sup> *Ibid.*, vii.

<sup>27</sup> *Ibid.*, 9-10.

many other disciplines recognize the benefits derived from applications of LMA for both observational and instructional purposes, then it stands to reason that conductors owe it to themselves, their students and their collaborators in the ensembles they lead to thoroughly investigate an avenue that may offer them the opportunity to become better movers and more effective conductors. The exploration of LMA that follows lays the foundation for a fresh approach to conducting gesture that firmly establishes the genuine equivalence between movement and music and confirms the preeminence of musical events and phrasing rather than meter as its primary organizing principles.

### **Effort: The Inner Source of All Movement**

Considering Body, Space, Effort and Shape, the four constituent parts together with Relationship that serve as the basis for Laban Movement Analysis, Effort is arguably the most useful for conductors because, according to Maletic, “it constitutes the interface between mental and physical components of movement.”<sup>28</sup> She also stresses that “it is only the fusion of the three factors of movement—the sequentiality of time, strength of force, and extension in space, which gives movement the intended expression.”<sup>29</sup> In other words, conducting gestures may exhibit visual clarity and transmit a metric pulse, yet absent the appropriate Effort elements, the most accurately traced conducting gestures fail to convey a conductor’s musical intentions, his personal inner experience of the

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<sup>28</sup> Vera Maletic, *Dance Dynamics Effort and Phrasing Workbook* (Columbus: Grade A Notes, 2004), 9.

<sup>29</sup> Maletic, *Body – Space – Expression: The Development of Rudolf Laban’s Movement and Dance Concepts*, *Approaches to Semiotics* 75 (Berlin and New York: Mouton de Gruyter, 1987), 98. Flow is absent in the above description because Maletic was addressing an earlier, less involved conception of Effort theory that Laban called Eukinetics.

expressive essence of the music to the orchestra. Bartee makes the same point more succinctly when he writes: “An external trace form is useless without the connection to feeling.”<sup>30</sup>

Recognizing Effort as the source from which all movement springs and the means through which performers and observers are able to share physical sensations, mental impressions and emotive feelings connected with movement, Laban insists:

Every human movement is indissolubly linked with an *effort*, which is, indeed, its origin and inner aspect. Effort and its resulting action may be both unconscious and involuntary, but they are always present in any bodily movement; otherwise they could not be perceived by others, or become effectual in the external surroundings of the moving person. Effort is visible in the action movement of a worker, or a dancer, and it is audible in song or speech. If one hears a laugh or cry of despair, one can visualize in imagination the movement accompanying the audible effort.<sup>31</sup>

He also reemphasizes the significance, for conductors and others, of the equivalence between audiation and movement thinking by pointing out “the fact that effort and its various shadings can not only be seen and heard, but also imagined is of great importance for their representation, both visible and audible.”<sup>32</sup>

#### The Four Motion Factors and Eight Effort Elements

Laban student Marion North acknowledges that the four Motion Factors common to all movement can be used quantitatively to measure the *amounts* of weight, space, time

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<sup>30</sup> Bartee, 158.

<sup>31</sup> Laban, *The Mastery of Movement*, 21.

<sup>32</sup> *Ibid.*, 21.

and control present in a movement or qualitatively to determine a mover's *attitude* towards Space, Weight, Time and Flow.<sup>33</sup> While a mover's quantitative choices relate to mechanical concerns and practical actions—the strength required to move a piano or the precision needed to thread a needle, for example—his qualitative decisions “result from bi-polar *inner attitudes* of accepting, yielding to the physical conditions influencing movement or resisting, fighting against them.”<sup>34</sup> These two possibilities, accepting and resisting, produce the eight Effort elements represented in the Effort Graph [fig. 4.1].

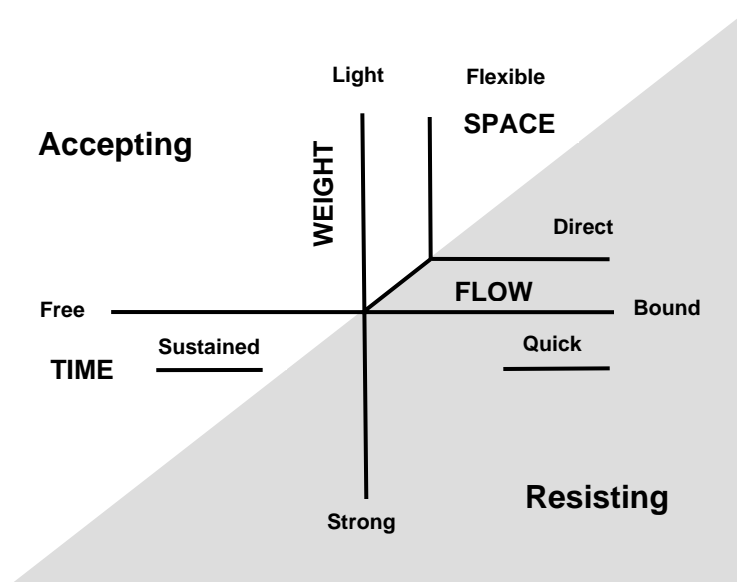


Figure 4.1. The Effort Graph Elaborated.

<sup>33</sup> Marion North, *Personality Assessment through Movement* (London: MacDonald and Evans, 1972), 231. Dr. North was Principal and Chief Executive of Laban Centre London from 1972 to 2003 and was appointed Honorary Lifetime President upon her retirement in 2003.

<sup>34</sup> Maletic, *Dance Dynamics Effort and Phrasing Workbook*, 9.

Laban links the Motion Factors to four phases of inner participation or mental effort that both precede and accompany visible purposeful actions, and he identifies additional connections to man's cognitive and affective faculties that suggest some correspondence with C. G. Jung's (1875-1961) *Psychological Types* (1923) [Table 4.1].<sup>35</sup>

Table 4.1. Effort: The Phases of Inner Participation

<b>Motion Factor</b>	Space	Weight	Time	Flow
<b>Inner Participation</b>	Attention	Intention	Decision	Progression
<b>Concerned with</b>	Where	What	When	How
<b>Affecting man's power of</b>	Thinking	Sensing	Intuiting	Feeling

Space relates to the power of thinking, and one's *attention* to space may be flexible, showing a multi-focused, encompassing quality or direct, indicating a linear, single point of focus. Weight relates to the power of sensing and reveals one's *intention* to act with lightness and delicacy of touch or with firmness and strength. Time relates to the power of intuiting, and one makes the *decision* to move with a sustained, indulgent, lingering quality or with quickness, urgency and acceleration. Flow relates to the power of feeling, and the *progression* of one's movement may be either precise and bound or unrestricted and free. Additional examples from the descriptive vocabulary associated with the Effort elements that help further enliven movement experiences are included in Table 4.2.

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<sup>35</sup> Laban, *Mastery of Movement*, 114-5. Both Hodgson and Maletic acknowledge that Laban was influenced by Carl Jung's work. Hodgson cites an interview with a Laban acquaintance. Hodgson, *Mastering Movement: The Life and Work of Rudolf Laban* (New York: Routledge, 2001), 75. Maletic suggests contact with Jungian psychologists during his years in England. Maletic, *Dance Dynamics Effort and Phrasing Workbook*, 55.

Table 4.2. Descriptive Vocabulary Examples for Effort Elements

<b>SPACE</b>		<b>WEIGHT</b>	
<b>Flexible</b>	<b>Direct</b>	<b>Light</b>	<b>Strong</b>
indirect	linear	delicate	forceful
multi-focused	single focus	fine touch	impactful
roundabout	targeted	gentle	vigorous
plastic	threadlike	airy	firm
pliant	inflexible	feathery	powerful
all-encompassing	restrictive	buoyant	assertive
meandering	pinpointing	soft	solid
circuitous	accurate	decreasing pressure	increasing pressure
wavy	straight line	rarified	robust
expansive	narrowing	wispy	potent
scanning	zeroing in		

<b>TIME</b>		<b>FLOW</b>	
<b>Sustained</b>	<b>Quick</b>	<b>Free</b>	<b>Bound</b>
lingering	sudden	fluent	controlled
decelerating	accelerating	ready to go	ready to stop
unhurried	hurried	carefree	carefully
leisurely	urgent	letting go	holding back
stretching time	compressing time	released	tense
drawn out	instantaneous	streaming out	streaming in
prolonged	immediate	abandoned	withheld
lingering	abrupt	uncontrolled	cautious
indulging time	condensing time	unrestrained	restrained
slowing down	speeding up	easy	resistant



Although the four Motion Factors, eight Effort elements and phases of inner participation are fundamentally important, understanding them as single entities is hardly sufficient. North explains: “Single elements of movement rarely appear over a prolonged period of time.” Continuing she adds: “Isolated elements often appear momentarily as one kind of preparatory or recovery movement.”<sup>36</sup> Her observations emphasize the need for a more complete understanding of Effort; yet they underscore the importance of individual Effort elements for conductors because, as Leonard Bernstein (1918-1990) insists, “the chief element in the conductor’s technique of communication is the preparation.”<sup>37</sup>

#### The Eight Basic Effort Actions

Combinations of three Effort elements, one each from the Motion Factors of Space, Weight and Time, produce the eight *complete efforts* or Basic Effort Actions that are referred to as the Action Drive. Often related to work, these movement patterns were originally observed by Laban and his colleagues during wartime studies of industrial efficiency, but they apply universally to all movement regardless of purpose or intent.<sup>38</sup> A combination of all indulgent or accepting Effort elements, flexible Space, light Weight and sustained Time, results in a floating movement while an admixture of all resisting efforts, direct Space, strong Weight and quick Time yields a punching, thrusting

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<sup>36</sup> North, *Personality Assessment through Movement*, 246.

<sup>37</sup> Leonard Bernstein, “The Art of Conducting,” in *The Conductor’s Art*, ed. Carl Bamberger (New York: McGraw Hill, 1965; reprint, New York: Columbia University Press, 1989), 272.

<sup>38</sup> Irmgard Bartenieff and Dori Lewis, *Body Movement: Coping with the Environment* (New York: Routledge, 2002), 58.

movement. Exchanging one Effort element for its opposing quality—sustained for quick Time as in the float and flick, for example—produces the six remaining BEAs [Table 4.3]. These eight movement behaviors are easily understood by grouping them in pairs that reflect such substitutions of the three Effort elements.

Table 4.3. The Eight Basic Effort Actions in Contrasting Pairs  
(Elements in italics indicate substitutions.)

<b>BEA</b>	<b>Space Weight Time</b>	compared with	<b>BEA</b>	<b>Space Weight Time</b>
Punch	Direct Strong Quick	its opposite	Float	Flexible Light Sustained
Press	Direct Strong <i>Sustained</i>	its opposite	Flick	Flexible Light <i>Quick</i>
Glide	Direct <i>Light</i> Sustained	its opposite	Slash	Flexible <i>Strong</i> Quick
Dab	Direct Light <i>Quick</i>	its opposite	Wring	Flexible Strong <i>Sustained</i>

Across each *row* of BEAs, all three Effort elements are opposed while moving up or down one rung in either *column* of four BEAs reveals a change in only one Effort element. Logically, consecutive movements that require the maximum contrast of three Efforts *across* the table are most severe. Those with changes in two, such as moving through a press to a float, are less intense, and those involving a single change, from a glide to a dab for example, are least taxing.

Laban devised a series of exercises called Effort Training because he was convinced that people perform better and more efficiently when “they understand the relationship and proportionality of motion factors.” Continuing, he explains:

People trained in the performance of the eight basic actions, combined with bound and fluent flow, will be more able to choose the appropriate movements for any tasks they face than those who rely entirely upon their natural gifts or intuition. . . Moreover, complicated tasks contain combined efforts, and the person facing such tasks must be able to connect various movements and actions in unexpected ways.<sup>39</sup>

He also created the Effort Cube to illustrate the different connections between the Basic Effort Actions and to provide structure for their practice and mastery [Fig. 4. 2].<sup>40</sup>

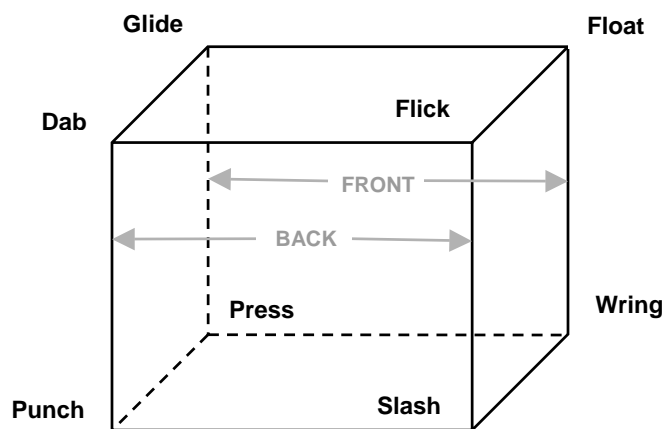


Figure 4.2. The Effort Cube.

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<sup>39</sup> Rudolf Laban and F.C. Lawrence, *Effort: Economy of Body Movement*, 2<sup>nd</sup> ed. (Boston: Plays, Inc., 1974), 25.

<sup>40</sup> *Ibid.*, 31.

The space inside the cube corresponds roughly to the limits of the kinesphere. A person standing at the center of the cube is able to reach all points inside and along the tops, sides and edges of the cube by traversing any number of pathways. Each corner where three lines intersect represents one of the BEAs. Closely related actions with only one differing Effort element between them are connected by the edges of the cube, those with one Effort element in common by planar diagonals, and the most distantly related with all three Effort elements opposed by cube diagonals. These cube and planar diagonals can be used to construct a Diagonal Scale that connects the BEAs in the following sequence: float, punch, glide, slash, dab, wring, flick and press.<sup>41</sup> A firm grasp of such scales and the consistent practice of BEAs in every conceivable order are essential components of Effort Training because they help students develop an awareness of the connections between Effort elements. For conductors this awareness leads to the conception and creation of appropriate, efficient gestures that communicate musical events to ensemble members with complete conviction and unmistakable accuracy.

#### The Six States or Inner Attitudes

When Effort elements appear in pairs rather than threes, the resulting movement qualities reveal the “inner states of mind” of the mover. The six possible combinations of two Motion Factors that produce these *inner attitudes* are called States or *incomplete efforts*. North confirms that “many sequences and series of [incomplete efforts] occur in all our movement phrases used in everyday life.” They often present themselves as

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<sup>41</sup> See Chapter 2, 35-6 for an explanation of movement scales.

transitions between BEAs or sometimes in place of them when specific environmental factors like workplace situations or purely expressive endeavors such as conducting cause one of the three Effort elements normally at play in Action Drive to recede.<sup>42</sup> For example, a piece of machinery might require its operator to use strong Weight and Quick Time, but neither direct nor flexible Space. North refers to such work or action-related instances of incomplete efforts as depleted external actions, but she quickly stresses that when they are considered “as mental or emotional inner attitudes, these combinations of two elements [represent] complete states of mind.” Just as the BEAs were grouped in four contrasting pairs with no Effort elements in common, the six States can be arranged in three opposing pairs that share no Motion Factors between them [Table 4.4]. Each includes four possible variations of accepting/resisting Effort elements to create a total of twenty-four possible inner attitudes, and all six are of “equal though differing significance.”<sup>43</sup>

Table 4.4. The Six States or Inner Attitudes

<b>Motion Factors</b>	<b>State</b>	coupled with	<b>Motion Factors</b>	<b>State</b>
Space Time	Awake	its opposite	Weight Flow	Dreamlike
Space Flow	Remote	its opposite	Weight Time	Near
Space Weight	Stable	its opposite	Time Flow	Mobile

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<sup>42</sup> North, 246.

<sup>43</sup> Ibid, 247.

The Motion Factors of Space and Time that relate respectively to the powers of thinking and intuiting combine to produce an *awake*, alert attitude while opposing combinations of Weight and Flow related to sensing and feeling create a more *dreamlike*, unaware state. When Space and Flow, the Motion Factors associated with thinking and feeling combine, the resulting mood is *remote* and abstract. Conversely combinations of Weight and Time that correspond to the powers of sensing and intuiting suggest an inner attitude of rhythmical earthiness or a *near* state. While pairs of Effort elements derived from the Space and Weight Motion Factors and related to the powers of thinking and sensing promote a steadfast, *stable* state, contrasting pairs of Time and Flow elements that connect with intuition and feeling manifest a malleable, *mobile* attitude.<sup>44</sup> A conductor armed with this knowledge can begin to make conscious choices about the moods he wishes create with his gestures, and the character, style and feel—every nuance of any sequence of musical events he needs to convey to the orchestra—is confirmed by the inner attitudes that his gestures project into the orchestra.

#### Transformational Drives

When Flow Effort replaces any of the three elements that combine to create the Basic Effort Actions, the resulting effect “produces a profoundly different experience.” Such movements are *transformed* through the “intensification of the remaining two Effort elements” (that constitute inner attitudes or States) and their combination with either free or bound Flow.<sup>45</sup> Transformational Drives are every bit as potent as the BEAs in terms of

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<sup>44</sup> Maletic, *Dance Dynamics Effort and Phrasing Workbook*, 23.

Effort life and expressive quality, and often more affectively charged because Flow is related to the power of feeling; but their appearance is typically more fleeting, frequently materializing in movement sequences as *transformational* moments. Like the Action Drive, each of these drives encompasses eight combinations of three Effort elements [Table 4.5]. Thus the four drives together produce a total of thirty-two distinct movement qualities that movers can call upon to create an endless variety of movement possibilities.

Table 4.5. The Transformational Drives

<b>DRIVE</b>	<b>EFFORT ELEMENTS IN COMBINATION</b>	<b>TRANSFORMATIONAL ASPECT</b>
Passion Drive	Flow Weight Time	Spacelessness
Vision Drive	Space Time Flow	Weightlessness
Spell Drive	Space Weight Flow	Timelessness

A spaceless or Passion Drive appears when the power of feeling overtakes the power of thinking to produce combinations of Flow, Weight and Time. A mover in Passion Drive has ceased attending to Space in favor of the Flow or progression of Weight through Time. When Flow overrides Weight to combine with Space and Time, the resulting Vision Drive creates a sense of weightlessness. The power of feeling rises to overshadow the power of sensing, and “the physicality of strong and light [Weight]

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<sup>45</sup> Bartenieff and Lewis, *Body Movement: Coping with the Environment*, 61.

is transcended by the binding and freeing control of Flow.”<sup>46</sup> Movers in Vision Drive consistently attend to Space and display a precision of timing that stems from the mixture of Time and Flow. The hypnotic quality or sense of timelessness produced by the Spell Drive arises when Time, with its attendant mental aspect of decision and power of intuition, is overcome by the aspect of progression and power of feeling associated with Flow. The remaining Weight and Space elements create a sense of stability (owing to the Stable State), and the addition of Flow seems to suspend the passage of time.

The conductor who possesses a command of the three Transformational Drives has also deepened his understanding of the States because they are embedded within the Passion, Vision and Spell Drives. Just as depleted external actions (also known as States) result if one of three Effort elements that combine to form an Action Drive falls away, the same States remain if the Flow Effort element recedes from a transformational drive. Conductors who understand these relationships can exploit the States effectively for any purpose. They are often used (consciously or unconsciously) to effect transitions between Action Drives that often mark arrival points and specific events in a musical score and Transformational Drives that conductors frequently use to control the progression and flow of musical expression connecting those events.

#### Effort/Space and Effort/Shape Affinities

As Laban developed his Effort theory, he noticed that “the body and its limbs are able to execute certain dynamic nuances in movements towards certain areas in space

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<sup>46</sup> Maletic, *Dance Dynamics Effort and Phrasing Workbook*, 48.



better than towards others.”<sup>47</sup> He observed that lightness favors upward movement while strong movements correlate to downward directions. Movements across the body exhibit an affinity with the quality of directness or narrow focus, and roundabout, indirect movements favor flexible directions that open outward. Quick or sudden movements relate to backwards directions while sustained movements tend to favor reaching forward. Further experimentation with these six Effort/Space affinities in groups of three and the continued refinement of his Effort theory eventually helped Laban develop the eight Basic Effort Actions and the Effort Cube.<sup>48</sup> Lamb validated Laban’s discovery of the connections between the Effort elements and specific spatial tendencies and adopted them as the basis for his more detailed system of Effort/Shape affinities. After pointing out the correspondence between Space and the horizontal dimension, Weight and the vertical and Time and the sagittal dimension, he used these three Effort/Space affinities as the organizing principle for his Effort/Shape affinities [Table 4.6].<sup>49</sup>

Table 4.6. The Effort/Shape Affinities

<b>Motion Factor</b>	<b>Accepting Effort Element</b>	<b>Shape Affinity</b>	<b>Resisting Effort Element</b>	<b>Shape Affinity</b>
Space	Flexible	Spreading	Direct	Enclosing
Weight	Light	Rising	Strong	Sinking
Time	Sustained	Advancing	Quick	Retreating

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<sup>47</sup> Rudolf Laban, *The Language of Movement: A Guidebook to Choreutics*, ed. Lisa Ullman (Boston: Plays, Inc., 1974), 30-2.

<sup>48</sup> Maletic, *Dance Dynamics Effort and Phrasing Workbook*, 37. (The Effort Cube is displayed in Fig. 4.2 on p. 110 of this study.)

<sup>49</sup> Warren Lamb, *Posture and Gesture*, (London: Gerald Duckworth and Company, 1965), 63-4.

These relationships provide conductors with the bond that joins the qualities of their gestures (their Effort choices) to the shapes their limbs and bodies create as they carve pathways through space. Affinities frequently reinforce musical events like the downward stroke that may accompany a strong, direct, quick accent. “Disaffinities” (movements that contradict natural tendencies) often support some kind of musical tension, and they can appear simultaneously with additional affinities or disaffinities. An extended diminuendo, for example, might require a light, direct, sustained gesture with the left arm that sinks (a disaffinity), encloses (an affinity) and retreats (a second disaffinity).

With the introduction of the Effort/Shape affinities, conductors who choose to master the principles of Laban Movement Analysis presented in this study have at their disposal a comprehensive set of tools for conceiving and executing potent, compelling gestures that display genuine equivalence with the sounds of music. The Motion Factors, Effort elements and Effort/Shape affinities are the raw ingredients that conductors can combine to create “recipes” for gestures that perfectly reflect both the conductor’s own personal movement style and the musical and technical demands present in the score. His movements illumine the music and inspire the performers under his direction because he has firmly, irrevocably fused his musical intentions with his force of will and body by grounding himself at the point of convergence between his powers of audiation and movement thinking.

### **Uniting Conducting Gesture with the Sounds of Music**

Revealing the convergence and resulting confluence of audiation and movement thinking is undeniably useful for conductors (and, of course, composers and performers). The introduction of a set of tools and techniques that exposes conductors to a more expansive range of movement possibilities that may stimulate them to explore their own potentials as movers is beneficial as well. Yet without a plan for applying these concepts to their gestures, many conductors will fail to grasp the significance of this approach because they will be overwhelmed by the number of choices available to them at every turn. Instrumentalists and vocalists avoid this predicament because they develop their cognitive skills, aural sensitivities and specialized kinesthetic abilities over an extended period of time through a regimen of consistent practice. This process allows mastery of the equivalence between sounds and the movements required to produce them to evolve so gradually that most musicians are unaware of its existence. They learn to operate from the point at which audiation and movement thinking converge below the threshold of conscious thought. Unfortunately conductors, with rare exception, are not permitted the luxury of subconscious execution—at least until they, like other musical performers, accrue the prerequisite years of experience.<sup>50</sup> The following simple guidelines help all conductors, even novices, quickly direct their combined powers of audiation and movement thinking to the most effective and appropriate movement qualities for any given musical event or expression.

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<sup>50</sup> The researcher is an example of a conductor who possessed both a highly developed ear and significant kinesthetic and athletic abilities. As a bassist, the connections between sound and movement seemed perfectly natural, but he struggled with conducting gesture because he was not able to connect his powers of movement thinking and music thinking in the context of conducting.

### From Theory to Practice

The common thread that unites a conductor's body and mind with his musical and artistic intentions is an awareness of the paired oppositional forces or qualities that permeate both movement and music. The concept of bi-polar opposites was introduced earlier in the context of Laban's Effort theory in which he describes eight Effort elements that arise from inner attitudes of accepting or resisting the four Motion Factors: Space, Weight, Time and Flow.<sup>51</sup> In similar fashion, a conductor's gestures should be governed by his inner or *audiated* attitudes towards pairs of opposed musical qualities or *elements of musical expression* that coalesce with equivalent qualities of movement to produce the desired gestural representation of musical signals in the score. A list of these paired musical "elements" is easy to begin but difficult to complete because it is so extensive, and it will differ from one piece to the next and from one individual to the next. A generic list might include: loud/soft, fast/slow, long/short, high/low, sound/silence, thick/thin, firm/gentle, connected/detached, heavy/light, small/large, agitated/calm, consonant/dissonant, tension/resolution, complex/simple, expressive/plain, tender/brutal, etc. Borrowing from Laban and Lamb, the researcher has assembled and organized an introductory set of affinities between the Effort elements and elements of musical expression in Table 4.7.

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<sup>51</sup> Though far beyond the limits of the present study, a more thorough examination of LMA would lead to an understanding of "Laban's fundamental views of movement as a dynamic process on a continuum between polarities." Maletic, *Body - Space - Expression*, 52. Apart from Effort, for example, Laban organized his "concept of bodily rhythms . . . in terms of polarities." Preston-Dunlop and Perkins explain: "He had developed two sources, Ionian opposites (hot/cold, right/left, big/small, etc.) and the colour contrast theory described in Kandinsky's work." Valerie Preston-Dunlop and Charlotte Perkins, "Rudolf Laban – The Making of Modern Dance: The Seminal Years in Munich 1910-1914" *Dance Theatre Journal* 7, no. 3 (winter 1989): 10-13.

Table 4.7. The Effort/Conducting Affinities

<u>Efforts</u>	<u>Elements of Musical Expression</u>					
	TEMPO	DYNAMICS	ARTICULATIONS	CHARACTER	PRECISION	PHRASING
Light Weight	Increase	Decrease	Less Intensity	Light	Neutral	Neutral
Strong Weight	Decrease	Increase	More Intensity	Heavy	Neutral	Neutral
Flexible Space	Neutral	Neutral	Longer	Broad	Less	Pliant
Direct Space	Neutral	Neutral	Shorter	Focused	More	Strict
Sustained Time	Decrease	Neutral	Less Accented	Calm	Neutral	Stretched
Quick Time	Increase	Neutral	More Accented	Hurried	Neutral	Condensed
Free Flow	Neutral	Increase	Neutral	Carefree	Less	Fluent
Bound Flow	Neutral	Decrease	Neutral	Restrained	More	Controlled

The table is self-explanatory, but a brief description of its organizational scheme will enable readers to establish and understand connections more quickly. Effort elements are listed in pairs in the first column, and six “elements of musical expression” extend across the top of the table. Tendencies for each Effort are listed across its corresponding row underneath each **musical term** so readers can choose to consider the affinities in relation to any given Effort or musical characteristic. For example, light Weight tends to increase tempo and decrease dynamic intensity; but strong Weight tends to decrease tempo and increase dynamic intensity. The table is limited to six elements of music that can be expressed as opposing or contrasting pairs to reflect the topics covered in the five sessions of LMA training. Cues, fermatas, releases and processes that occur over an extended period of time such as crescendos, diminuendos, accelerandos, ritardandos, etc. were purposefully left off the list. These types of events cannot be considered or properly

represented in the context of a single Effort because, by definition, they normally appear together with one or more additional elements of musical expression. Since nearly all musical events require at least two Efforts, these more complex events are beyond both the scope of the introductory LMA training the participants received and the limits of this study. The resulting list, although far from complete, helps conductors establish rudimentary connections between their powers of audiation and movement thinking.<sup>52</sup> With practice and continued study these connections can ultimately lead to a genuine experience of the equivalence between movement and music.

Examining the Effort elements and their relationships with the six categories across the top of the table, a curious pattern emerges. Each Motion Factor (or pair of Effort elements) is active in four of the six categories and “neutral” for the remaining two. This neutrality applies only when the Motion Factors are considered singly. Its explanation helps illustrate how the Effort elements combine to emphasize specific qualities of musical expression.<sup>53</sup> The tendency for any single Motion Factor to affect any of the six categories of musical expression is neutral if: 1) it exerts little or no obvious influence upon the considered musical quality, or 2) it is equally capable of communicating the effects at either end of the spectrum. For example, because Flow

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<sup>52</sup> The researcher has been developing this approach for nearly ten years and has expanded the list of affinities to include combinations of two and three Effort elements. The introduction of these more complex relationships would serve neither the study, the participants nor the reader as the concepts and theories presented in Chapter 4 reflect the introductory LMA instruction the study participants received.

<sup>53</sup> While all four Motion Factors are not visible in States and Drives, the absent Efforts in such cases result from conscious or unconscious choices made by the mover. In contrast, the neutrality associated with Effort/Conducting affinities is not the result of choice. Just as an Effort/Shape affinity exists between lightness and rising but not lightness and retreating, an Effort/Conducting affinity exists between Weight and dynamics but not Weight and precision.

by itself suggests little or no sense of pulse, it is difficult to imagine the representation of tempo with Flow alone. Simply put, free or bound flow may be applied to slow or fast tempos. Once it combines with Time or Weight (or both) the pulse emerges and tempo can be established. Conversely, even though it may difficult to conceive a tempo with Time Effort alone, it is equally obvious that accelerating or quick movements favor faster tempos while sustained, drawn out movements favor slower tempos. The tendency for each Time Effort is clear so those affinities are justified.

Using the six States as his guide, the researcher consistently applied this line of reasoning to complete his introductory list of Effort/Conducting affinities. However, these evidently rational decisions ultimately reflect one conductor's bias and preferences. While one conductor may perceive Weight as a neutral factor when considering its effect on phrasing, another may argue that Weight alone does suggest an affinity with phrasing. The researcher is not interested in such debates because, in the end, these relationships are neither unbreakable rules nor prescriptive solutions. They represent only tendencies for a given Effort element to affect a specific category of musical expression in predictable ways. Like Effort/Shape affinities, Effort/Conducting affinities can be ignored or actively contradicted if musical circumstances so dictate. The researcher intentionally avoided any specific solutions or prescriptive applications in his approach to conducting gesture because, as Farberman insists:

A single "correct" musical/physical solution to a musical problem **does not exist**. The very thought that any measure of music must be performed in a preordained "correct" manner robs music of one of its greatest attributes: allowing the same succession of sounds to speak differently to different people.<sup>54</sup>

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Providing explicit instructions would have put the purpose and goals of this study at risk and confounded the researcher's attempts to encourage the participating conductors to discover their own personal solutions to technical challenges that reflect their individual movement styles. Further, pursuing such a course would imply that LMA training is another conducting method rather than an associated discipline that transcends all methods.

Lamb describes Effort and Shape as “the two processes from which movement is created.”<sup>55</sup> From the evidence presented in this chapter, it is also abundantly clear that Effort and Shape together with audiation are the three processes from which music and (most germane to the present study) effective, compelling conducting gestures are created. The first four chapters of the text have introduced and examined a unique, interdisciplinary approach to conducting based on an application of Laban Movement Analysis developed by the researcher to explore, explain and describe the relationships between elements of musical expression and the movements conductors use to represent them. The final three chapters of the text will follow four conductor participants and two expert panels through a descriptive study to determine whether or not the researcher's approach to conducting gesture is as helpful to others as it has been for him.

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<sup>54</sup> Harold Farberman, *The Art of Conducting Technique* (Miami Beach: Warner Bros., 1997), 72.

<sup>55</sup> Warren Lamb and Elizabeth Watson, *Body Code: The Meaning in Movement* (London: Routledge and Kegan Paul, 1979), 81.



## CHAPTER V

## A DESCRIPTIVE STUDY OF LMA TRAINING FOR CONDUCTORS

If the conductor's gestures are to inspire the musicians with the proper expression, then the expression should in some way be found in the gestures themselves.

Peter Paul Fuchs, *The Psychology of Conducting*

This test of the researcher's application of LMA for conductors differed from most prior evaluations of conducting gesture because it was designed to recognize and evaluate specific changes in the conductors' gestures that reflect improvement in the connections between those gestures and the musical events the conductors intended to represent. Rather than tabulate successful or unsuccessful beat patterns, tempo changes, preparations, cues, etc., the expert conductor panelists who took part in the present study reviewed the participants' performances in order to make assessments regarding the quality and accuracy of their gestures as they related to tempo, dynamics, articulations, style, character, phrasing, shape and preparation, from both global (the complete performance) and local (specific moments in the performance) perspectives. Similarly, the CMA panelists used the tools and terminology of LMA to describe each participant's movement preferences and choices as represented in his/her pretest conducting gestures and to identify changes in and additions to that repertoire of movements in the posttest.

### **Research Study Design**

The study design was largely the product of careful consideration of contributions made by earlier investigators. Each step in the development and implementation of the study was inspired by one or more researchers whose work was reviewed in a previous, chapter and the resulting project emerged as an amalgam of the strongest features and most effective methods from those investigations and the present researcher's extended experience with LMA. The pretest/posttest research model used in the present study was adopted from models by Miller and Yontz. The five-hour LMA mini-course curriculum was designed after a review of similar courses administered by Yontz and Neidlinger. Complementary analysis and evaluation of conductor movement behaviors by expert panels of conductors and Laban movement specialists was borrowed from Bengé's study of two experienced conductors, and the decision to test a small rather than a large number of conductor participants was reinforced by Bengé as well. The evaluation instruments used by the conductor panel evolved from those created by Miller and Yontz while the CMA panel's analytical assignments were developed from parameters set by Bengé and Hibbard. Musical selections used in several earlier studies influenced the present researcher's choice of repertoire, and conductor interviews included in studies by Nakra and Bengé led to the addition of post-study participant interviews in this study.

### **The Participants**

The four conductors who participated in this study were selected from a pool of graduate and undergraduate music majors at the University of North Carolina School

of Music who had taken at least two semesters of private and/or classroom conducting.<sup>1</sup> Invitations that included a description of the study and instructions for interested parties to contact the researcher were given to conducting teachers who, in turn, shared the information with their students. Eligible students were interviewed and accepted as participants on a first come/first served basis until four slots were filled. Each participant signed a release and consent agreement, a copy of which was filed with the University of North Carolina at Greensboro Institutional Review Board before the commencement of the study.<sup>2</sup>

The group included one student working towards a Master of Music degree in instrumental conducting, two master's level instrumental performance majors and one fourth year undergraduate music education major. Their backgrounds as performers were equally as diverse: two brass players, one clarinetist and one violist/vocalist. Any variance within the group with respect to age, experience or conducting proficiency was of no consequence to the research because this study was not a comparison between participants but rather the comparison of a standard set by each participant's pretest with results of his/her posttest.

### **Study Repertoire and Score Preparation**

The researcher consulted with two conductors to compile a list of requirements for the musical selection that participants would conduct for both pretest and posttest

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<sup>1</sup> This provision established a minimum proficiency standard to ensure that all participants were sufficiently prepared for all aspects of the study.

<sup>2</sup> A copy of the release and consent form can be reviewed in Appendix B.

sessions. The conductors agreed that the piece need not be a complete musical opus or movement. There was additional consensus that the chosen composition needed to provide participants with a large number of opportunities for gestural expression over a relatively short span of time (less than four minutes) and that technical difficulties should favor musical expression (changes in dynamics, tempo, articulations, phrasing, etc.) over challenges associated with meter (beat patterns). After completing an extensive survey of the standard orchestral literature and reviewing strategies for choosing repertoire used in earlier studies, the researcher chose the opening 154 measures of Beethoven's Overture to *Coriolanus*, Op. 62 as the study repertoire because it met or exceeded all the necessary criteria.<sup>3</sup>

The participants received their conducting assignment approximately three weeks before the pretest. The researcher supplied each participant with a clean copy of the Dover reprint of the Overture to *Coriolanus* extracted from Series 3 of *Ludwig van Beethoven's Werke* published by Breitkopf & Härtel (ca. 1864). No additional assistance or instruction of any kind was offered to the participants prior to the pretest because this test was an assessment of the researcher's application of LMA *apart* from any teaching style or instructional techniques related directly to teaching conducting and because issues related to score preparation and interpretation were not part of the study. The participants were permitted to seek guidance from other teachers to prepare for the pretest but were directed not to discuss the repertoire with teachers or peers from the pretest until the conclusion of the study.

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<sup>3</sup> The score used in this study is considered part of the public domain, and a reproduction of the first 160 measures is included in Appendix A.

### **The Laboratory Orchestra**

The members of the Philharmonia of Greensboro, a civic orchestra in Greensboro, North Carolina, donated their time and talents to this study. Although every attempt was made to ensure that conditions in all performances were identical, the number of persons involved in this laboratory (the orchestra membership) created some challenges for the researcher and the conductor participants as well. The orchestra read through the study repertoire a total of three times before the pretests. No additional rehearsal or run-through of the study repertoire took place between the pretests and posttests. An additional rehearsal before the posttest would have been desirable, but no time to refresh the orchestra's memory was available. There were two vacant chairs, one horn and one flute, for the posttest and several players (two bassoonists, one horn, the timpanist and two double bassists) who participated in the posttest were not present for the pretest. A trumpet player covered the first horn part, but the second trumpet and second flute parts were not covered in the posttest. The second horn was sight-reading as well. The string sections were fairly consistent with an absence or two that did not impact the overall quality of either pre or posttest performances.

### **The Conducting Sessions and Documentation**

Both pretest and posttest conducting sessions were treated as performances. The participants were not permitted to give the orchestra any verbal instructions or warnings about specific interpretive issues or gestural representations before starting, and they were instructed not to stop for any reason. Once the downbeat was given, orchestra and conductor were committed to a continuous, uninterrupted rendition of the repertoire.

There was no predetermined order of appearance for the participants during either session, and the order changed between pretest and posttest to minimize any advantage associated with conducting later in the order. The pretest sessions took place during regularly scheduled rehearsals of the Philharmonia on the evenings of 16 and 23 September 2004, and the posttests were completed in a single session on 4 November 2004.

A Samsung model SCD23 MiniDV camcorder with a single-point stereo microphone placed in front of the orchestra was used to document all conducting sessions. The audio balance is representative although the dynamic range is somewhat limited by the camcorder's internally powered preamp and the absence of any controls for panning or mixing. All resulting video recordings were transferred to DVD in their entirety. No changes were made to the content, and any editing was confined to re-ordering segments so the progression of data flows logically from pretest to posttest and from one participant to the next. Five brief clips lasting from three to five measures each were copied from the complete performances and added to the DVD to facilitate more detailed analysis required in the second expert panel assignments. The researcher also created custom DVD menus and inserted chapter markers at the beginning of each complete performance and each short clip to make review and study of the participants' performances easier. A DVD recording of the conducting sessions and the excerpted clips is included with this study as Appendix K.

### **The Laban Movement Analysis Mini-Course**

In order to complete an authentic test of the researcher's approach to conducting gesture that measured improvements in the participants' conducting gestures specifically related to the addition of new movement skills, it was necessary to introduce participants to the principles of Laban Movement Analysis and the methods for using these principles to create, analyze and understand conducting gestures *apart* from actual conducting instruction. To that end, the researcher designed and presented a five-hour introductory course in LMA to the participants during the intervening weeks between the pretest and posttest conducting sessions. The participants met with the instructor weekly for one hour to explore and experiment with concepts associated with the components of Body, Space, Effort and Shape as elaborated by Laban's theoretical framework and Chapter Four of this study. The course curriculum was a blend of themes and instructional materials largely drawn from two sources: Vera Maletic's *Dance Dynamics Effort and Phrasing Workbook* (2000) and *Modern Educational Dance* (1990) by Valerie Preston-Dunlop.

The four Motion Factors (Weight, Time, Space and Flow), the corresponding pairs of Effort Elements as observed or experienced in movements wherein these factors are active and the fundamental equivalence between these characteristics of movement and musical expression received special emphasis through a set of exercises that apply to all types of human movement. Several of these activities were designed to help participants integrate the course contents into their conducting gestures, but the course was not a conducting class. The teacher neither worked on the study repertoire nor showed the participants how to apply the concepts learned in class to any repertoire.

Throughout the course participants were consistently instructed to make their own individual movement choices and to devise their own methods for integrating this newly acquired understanding of LMA into their conducting gestures. The following summary clearly demonstrates the instructor's commitment to abstain from teaching conducting technique in order to focus solely on helping participants discover the relationships between musical expression and the dynamic qualities of movement for themselves.

### Session One

The first session commenced with an explanation of the purpose and goals of the study, a review of the mini-course syllabus, a brief discussion of the researcher's personal experiences as a student of LMA, a biographical sketch of Rudolf Laban and an introduction to his theoretical framework.<sup>4</sup> The researcher then opened a dialogue with the participants by asking each of them what attracted them to the course. In every case the answer was in some manner related to opportunities to improve their movement skills and to expand their repertoire of gestures. The conversation shifted to a collective assessment of traditional conducting instruction. All agreed that the prevailing systems were primarily organized around applications of prescriptive beat patterns and styles of beating (i.e. legato staccato, marcato, etc.). While issues of baton speed, size of beats and trajectory were addressed, the class recognized that the composition of gestures—what parts of the body are used, how the body is used, how the movements feel and how they connect with the music—had not been explained to them.

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<sup>4</sup> A copy of the mini-course syllabus is included in the document as Appendix D.



The instructor then described an alternative method for creating effective conducting gestures organized around the point at which movement and musical expression converge.<sup>5</sup> He explained that the principles of LMA taught in the course may help them find that point within themselves. This new understanding would, in turn, lead to a greater variety of gestures that display stronger connections with the flow of musical events in the score. The class concluded with an introduction to the Effort Element as inner attitudes towards the four Motion Factors of Space, Weight, Time and Flow. Using an Effort Grid to present the Effort elements as four pairs of bipolar extremes, the instructor explained that an individual's Effort patterns result from inner attitudes of accepting, indulging or resisting, struggling against the Motion Factors. Weight and Space were examined in detail through a series of participatory exercises intended to help the class experience direct and flexible Space as well as strong and light Weight.<sup>6</sup> Before departing participants were given homework assignments that included reading Chapter Two of this study, completing an introductory set of take-home exercises related to Space and Time and swinging on a swing to experience the sensations of Weight and Time.

### Session Two

The opening discussion centered on a review of the homework assignments and a reminder that while the Motion Factors can be used to make quantitative measurements (how much space, exertion or time are required to complete a particular movement), Laban stresses them as tools to describe the *qualities* of directness and flexibility or

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<sup>5</sup> See Ch. 4, 90-9.

<sup>6</sup> See Ch. 4, 103-8.

lightness and strength. The two remaining Motion Factors, Time and Flow, were introduced followed by a movement session designed to stimulate the participants' bodily experience of the Effort Elements in pairs. Standing at arm's length from one another, the class moved their arms, one at time, in large circular motions, first across and in front of the body and then to each side. They were asked to approximate the sensations they felt on the swing—moving with increasing strength and acceleration toward the lowest point in their circles and with increasing lightness and sustainment as they approached the highest point. The next sequence reversed the process so strength and quickness were greatest at the apex while lightness and sustainment increased during the decent to the nadir. Afterwards, the instructor initiated a discussion of the movement session that served as an introduction to the Effort/Shape and Effort/Space affinities.<sup>7</sup>

The six possible combinations of two Effort qualities, also known as states, were introduced during the closing segment of the class.<sup>8</sup> Once the states had been explained, the instructor brought out a basketball and had the class form a circle near the center of the rehearsal hall. Each person was asked to use the ball (either bouncing or passing it) to demonstrate one of the six combinations of two Effort qualities. It was then up to the rest of the class to identify the two Effort elements used. The process was repeated to give each student an opportunity to attempt several different states. The class was given three homework assignments: 1) apply the six states to whatever repertoire they were studying (including the Coriolan Overture); 2) find three musical examples for which one of the

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<sup>7</sup> See Ch. 4, 115-7.

<sup>8</sup> See Ch. 4, 111-3.

six states would serve as a possible solution; and 3) prepare four different approaches to the first three measures of the Coriolan Overture.<sup>9</sup>

### Session Three

Continuing the exploration of Effort/Shape affinities begun the week before, the instructor demonstrated the dimensional or defense scale and then asked the class to move through the scale with him, modifying it to reflect the space conductors normally use.<sup>10</sup> Each dimension was explored separately to emphasize the experience of affinities as they relate to conducting (i.e. a *strong* downbeat, the comparative *lightness* of an upward preparation or the *quickness* of a subito piano). Afterwards the instructor showed the class how a conductor might combine an affinity with a “disaffinity” to represent musical tensions. For example, a conductor might move his arm forward (advance) using sustained time (an affinity) to elicit an extended crescendo and, at the same time, rise with strong weight (a disaffinity) to emphasize its increasing intensity.

To further expand the concept of connecting qualities of movement with qualities of sound, the instructor introduced the class to combinations of three Effort elements called drives or complete efforts. After introducing the eight BEAs that comprise the Action Drive by demonstrating the Diagonal Scale, participants tried each of the actions

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<sup>9</sup> The instructor gave no instructions to the class regarding the musical interpretation or technical solutions the participants were asked to prepare for these three measures. When the participants presented their four solutions, the instructor offered neither counsel nor criticism. The class engaged in discussions of the Effort Elements they observed and why the solutions worked or failed based on the Effort choices. The sole object of the exercise was to experiment with Effort Elements in the context of a short sequence of musical events in order to awaken the students to the concept of “thinking in terms of movement.” This brief excerpt constitutes the **only** reference to the study repertoire over the course of the entire study.

<sup>10</sup> The basis for the defense scale is the Dimensional Cross of Axes [Fig. 2.3], 35.

and then the scale for themselves.<sup>11</sup> The instructor then explained that substituting free or bound Flow for the Space, Weight or Time elements of the Action Drive produced one of three Transformational Drives: the *spaceless* or Passion Drive, the *weightless* or Vision Drive and the *timeless* or Spell Drive.<sup>12</sup> These thirty-two combinations of three Effort qualities together with the twenty-four combinations of two Effort qualities within the six States and the Effort/Space and Effort/Shape affinities help conductors develop an understanding of the fundamental equivalence between movement and music. Laban goes so far as to call them “the alphabet of the language of movement,” and he maintains: “It is possible to observe and analyse movement in terms of this language.”<sup>13</sup> The participants tried these newly acquired skills for themselves when they presented their four different versions of the three-measure figure that was assigned the prior week. While each conducted, the class observed and reported what Efforts qualities were used.

The instructor completed his presentation on the equivalence between music and movement by explaining Laban’s four phases of mental effort or inner participation that precede visible, actions.<sup>14</sup> Taken together these processes and techniques clearly illustrate that it is possible for a conductor to consciously choose which movements best represent his musical intentions just as an instrumentalist or vocalist can choose which fingerings, bowings, etc. are best suited to a particular sequence of musical events. For the following

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<sup>11</sup> See Ch. 4, 108-11.

<sup>12</sup> See Ch. 4, 113-5.

<sup>13</sup> Rudolf Laban, *The Mastery of Movement*, 4<sup>th</sup> ed., rev. Lisa Ullman (London: Macdonald and Evans, 1980; reprint, Plymouth: Northcote House 1988.), 103.

<sup>14</sup> See Ch. 4, 108-11.

week, participants were asked to incorporate their new movement skills into their conducting by preparing the first sixteen measures of Berlioz's "March to the Scaffold" from *Symphonie Fantastique*, Op. 18 (1830). The only instruction the participants received was a reminder that they should focus their efforts in this and all other assignments on discovering their potential as movers and developing their own personal movement styles.

#### Session Four

The fourth class began with a review of the Basic Effort Actions followed by a movement session that Laban uses to demonstrate the correspondence between sound and movement. The participants were instructed to say the word "no" while performing each of the BEAs making sure that the vocal inflection and expression reflected the Effort elements of the movement being performed (i.e. strong, quick, direct punch or light, sustained, flexible float). Laban insists: "By accompanying each of these sound expressions with a gesture of the quality indicated, the [student] will become aware of the connection between audible and visible movement."<sup>15</sup> After two group practice runs, each participant performed the BEAs as described above while the class observed and the instructor provided corrective advice when required. Once everyone had completed the task, the instructor asked the class to use this strategy of matching sound with Effort qualities for the rest of the course to look for places in their scores where musical events could be represented with one or more of the eight BEAs.

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<sup>15</sup> Laban, *Mastery of Movement*, 94.

The remaining class time was devoted to a practical application of the principles of LMA to the introduction of “March to the Scaffold” that was assigned the previous week. While each participant conducted, the rest of the class observed and, following the performance, commented on the Effort elements their classmates used in the excerpt. Before dismissal the class was given its final assignment. They were asked to use the principles of LMA learned in class to prepare the opening measures of the first, third and fourth movements of Beethoven’s Symphony No. 5 in C Minor, Op. 67 (1805).

#### Session Five

The final class commenced with an exploration of the influence different Effort elements exert upon musical events in any given score. Using a didactic approach, the instructor supplied topics (specific elements of musical expression such as tempo, dynamics, articulations, etc.), and guided the class as they described how the presence of Effort elements in conducting gesture affect musical content in the context of the selected topic<sup>16</sup>. The instructor also explained that the outcomes discussed were guidelines rather than hard and fast rules because each situation presents its own unique set of circumstances and environment that need to be considered in addition to the composer’s notation. Even the same conductor seldom does things exactly the same way twice so it should come as no surprise that there are multiple solutions for any technical challenge.

The course concluded with a demonstration by each participant of how they would choose to use the materials covered in class to conduct the opening measures

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<sup>16</sup> See Ch. 4, 119-23.

of the first, third and fourth movements of Beethoven's Symphony No. 5. After each participant finished the excerpts, the class shared comments and observations, and the instructor questioned the demonstrating participant regarding his or her choices of Efforts. This process helped the participants better understand and embrace alternatives to their personal Effort choices by providing several different perspectives that reflected the personality and musicianship of each conductor in the class.

### **Conductor Assessments and Movement Analyses**

The researcher developed three complementary channels of assessment and analysis to measure the effect of LMA training on the participants' abilities to connect conducting gesture with musical expression. Expert panels of two Certified Movement Analysts and two professional conductors respectively used instruments and rubrics designed by the researcher specifically for this study to make assessments of the participants' pretest and posttest performances. The CMA panel applied the tools and terminology of LMA to describe and analyze each participant's pretest movements and to look for additions to and changes in his/her repertoire of gestures in the posttest. The conductor panel made assessments of the participants' pretest and posttest gestures both in terms of the degree of accuracy and the frequency with which said accuracy was achieved in order to pinpoint any changes or improvements in the connections between the participants' gestures and corresponding musical events in the score.

In the weeks following the posttest conducting session, the researcher completed a three-part interview with each participant that can be reviewed in Appendix J. Part 1 recorded the participants' musical training, conducting experience and training and prior

movement training. Part 2 addressed their experiences and impressions of the mini-course—the structure and content of the course, the quality of instruction and the concepts that were easiest and most difficult for them to incorporate into their gestures. Part 3 asked them to evaluate the benefits derived from the LMA training they received based on their experiences both during and after the study.

### The Expert Panels

The researcher enlisted the services of two veteran professional conductors with several decades of experience between them, and two nationally recognized LMA practitioners completed the assessments of the participants' movement behaviors. Both conductors enjoy national reputations as performers, and they each direct an orchestral program and teach conducting in their respective posts at major state universities in North Carolina. The Laban experts are Certified Movement Analysts who have completed extensive training at the Laban/Bartenieff Institute of Movement Studies (LIMS) in New York. One teaches at a large Midwestern state university and the other teaches regularly at LIMS as well as several colleges and universities in the Northeast.

### Instruments and Assignments

The researcher developed one set of instruments for the LMA panel and another for the conductor panel in order to ensure structural validity between two entities working on parallel yet independent tracks. Because the CMAs had not studied conducting and the conductors had no experience with LMA, the analytical assignments were tailored to direct members of both panels to look for the same kinds of qualitative changes in the



participants' gestures and movements using tools and techniques traditionally associated with practitioners of each respective discipline.<sup>17</sup> Instruments developed for the conductor panelists relied on their training and experience as musicians and conductors to establish the context and determine the effectiveness of each participant's gestures and the connections between those gestures and musical events in the score. The CMA panelists used their highly specialized training as observers of movement and their command of LMA terminology to identify, describe and compare each participant's pretest and posttest movement behaviors. This complementary, parallel analysis provided independent corroboration of the observable changes in the participants' movement behaviors and specific evidence that they had absorbed and applied the concepts and tools introduced in the mini-course.

The conductor panelists' assignments were broken down into two tasks that directed them to: 1) look for and record any changes in the participants' conducting gestures between the pretest and posttest conducting sessions, 2) determine whether or not such changes resulted in improved connections between the participants' gestures and musical events in the score, and 3) decide whether or not the changes translated into a better connection between conductor and ensemble. For Assignment One the conductor panelists were instructed to review each participant's complete pretest performance a total of three times. During this process, they used an instrument designed by the

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<sup>17</sup> Many CMAs have either worked with conductors or participated with researchers in earlier investigations of LMA for conductors as cited in Chapter 3. This kind of experience does not constitute specialized instruction or training in the art of conducting.

researcher, the Conductor Evaluation Questionnaire (CEQ), to facilitate assessments of the participant’s gestures.

The first six questions required a two-part response consisting of a continuous five-point rating scale with corresponding anchors to record the degree to which the gestures accurately represented tempo, dynamics, articulations, etc. and a seven-point Likert scale to document the frequency with which the participants were able to maintain that degree of accuracy [Figure 5.1]. The final four questions included only the Likert response because they addressed summative impressions of the participant’s gestures pertaining to confidence, control, connections to musical events in the score and with the members of the orchestra. All questions also required a written justification to explain the rationale behind the panelists’ responses. After completing the pretest evaluation, the panel repeated the process for each participant’s posttest performance to look for changes in or additions to his/her conducting gestures.

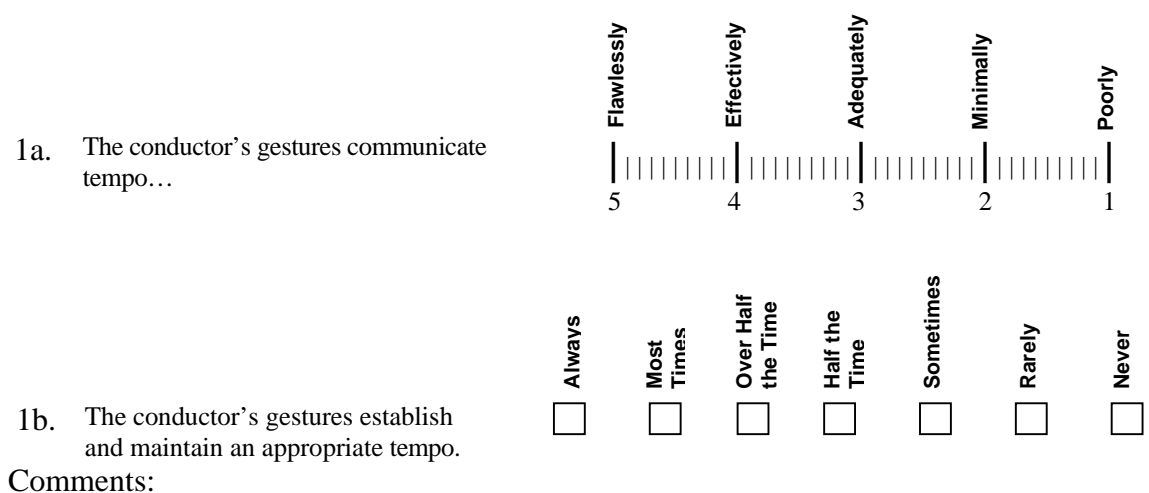


Figure 5.1. Conductor Evaluation Questionnaire Example.

Assignment Two asked the panelists to compare five brief excerpts, each approximately two to five measures long, from the participants' pretest and posttest performances.<sup>18</sup> This contrasting strategy gave panelists opportunities to make side-by-side comparisons of conducting gestures in five instances where changes in the flow of musical events necessitated changes in the dynamic qualities of movement in order to produce gestures that would effectively communicate the events in question to the orchestra. Because the expert conductors were observing specific transformational moments in the score, the CEQ response was limited to one five-point scale with anchors for this assignment. While the conductor panelists were well qualified to observe and evaluate changes in the participants' *conducting* gestures, they were not equipped to determine whether or not any of the changes they observed may have been the result of LMA training the participants received during the study. That task was among those delegated to the two Laban specialists.

The CMA panel was given two analytical tasks designed to complement and confirm the work done by the conductor panel. The panelists were instructed to:

- 1) compare each participant's pretest and posttest performances in order to document and describe changes in Effort phrasing, patterning and intensity as well as other new movement choices and any changes in relationship to BESS, and

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<sup>18</sup> A simple set of qualifications was used to choose the excerpts for assignment 2. Beginning with the initial preparation and downbeat, each was the earliest non-repeated instance of a musically expressive peak in the score. For example, after the opening four measures, the same type of musical gestures repeats two more times. Selecting these measures as one of five examples would have demonstrated less variety than looking beyond them for different varieties and shades of expression. Two practical considerations fueled this selection process as well. Because the selected excerpts were confined to the first 105 measures, they were less challenging to edit, and they were easier for the CMA panelists to locate in the score.

- 2) complete Effort analyses for each pair of brief pretest/posttest clips and compare them to identify observable changes in the Efforts used by each participant.

Armed with this information, the CMAs were then directed to discuss the additions and changes in the participants' movement behavior and to conclude, based on their observations and experience, whether or not those changes may be the result of the LMA training that the participants received.

Before sending assignments to the expert conductor panel, the researcher obtained the assistance of two conductors (one college-level composition teacher and one graduate student conductor) to complete a trial. Each was given a copy of the CEQ and a DVD that included one of the four participant's pretest and posttest performances. The researcher explained the process and the instruments before the DVD was started. The trial observers were directed to view the DVD once and complete the ten questions for Assignment One.<sup>19</sup> They were permitted to pause the DVD to consider their responses before recording them, but, the schedule allowed for only a single review of the conductor's performances. When compared the trial observers' responses were consistently within one rating point of each other on both the five-point continuous scale and the seven-point Likert scale.

Although the CMA panel analytical assignments included no rating scales, the assignments and instructions were reviewed by a CMA to ensure conformation with

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<sup>19</sup> Because Assignment Two used the same five-point scale, only the questions from the first assignment were used for this test. Additionally, the two trial observers did not add comments because such content is, by definition, subjective rather than objective. Even on occasions when scores agree, each rater may reveal completely different justifications for his score.

prevailing techniques and vocabulary used by Laban practitioners. The researcher explained the goals of the study as defined by the research questions, the conductor panel assignments and the rationale behind specific observational tasks that the CMA panel had to complete. The trial observer was then instructed to review a DVD of the researcher in “pretest” and “posttest” performances of the study repertoire and to complete a “dry run” of the analytical assignments to check for consistency and accuracy.<sup>20</sup> Results of the trial were discussed at length, and the assignments were fine tuned according to the recommendations of the trial observer.

The researcher was convinced that a truly valid test of the effectiveness of LMA training for conductors required an environment where the principles and techniques of LMA were introduced to the participants apart from any specific conducting instruction. The mini-course was therefore designed to clearly present the relevant concepts and the rationale behind their application to conducting without prescribing any specific solutions for the study repertoire or any other score examined in the class. The instructor resisted the temptation to demonstrate for the participants how he used LMA in his conducting and instead consistently encouraged them to find their own personal methods for incorporating the principles of Effort/Shape into their conducting gestures.

Several additional steps were undertaken to help ensure the validity of this study.

The researcher consulted with several LMA specialists regarding the mini-course content

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<sup>20</sup> The researcher provided the conducting video for the CMA trial because his knowledge of and extensive experience with LMA allowed him to create two performances with significantly differing movement solutions throughout the course of the work. These differences made it easier for the trial observer to grasp the purpose of the study, and they also better confirmed the validity of the CMA questionnaire.

and had the syllabus approved by a CMA before the first class session. The instruments used for conductor assessments were developed with guidance from experienced LMA and conducting professionals respectively, and rubrics were added to specify the parameters and targeted competencies for each assessment. The panelists then used their specialized skills and talents to observe the same raw data, look for the same kinds of changes and describe and evaluate their observations using terms and tools familiar to them. The results of this process of complementary analysis and assessment reveal a unique intersection of two perspectives that produced a dynamic and comprehensive review of the changes observed in the participants' gestures between the pretest and posttest.

CHAPTER VI  
THE FINDINGS

Time becomes real to us through movement, which I have called its expressive essence.

Roger Sessions, "The Composer's Craft"

**Fulfillment of Purpose and Achievement of Goals**

This descriptive study was undertaken to test the effectiveness of a unique, interdisciplinary approach to conducting gesture that was introduced and thoroughly examined in the first five chapters of the text. The researcher based his approach on an application of key principles of Laban Movement Analysis that he developed in order to explore, explain and describe the relationships between elements of musical expression and the movements conductors use to represent them. The test was completed, and the purpose of the study was fulfilled when the expert panels returned their assessments and the last participant was interviewed. What remains for the researcher is the task of interpreting these data to ascertain what changes, if any, the expert panels and the participants themselves were able to observe in the posttest performances and to determine whether or not those changes indicate that the introductory LMA training (as presented within the context of the researcher's fresh approach to conducting gesture) translated into a positive outcome for the four participant conductors.

## The Research Questions

The three sub-questions will be addressed first to lay a foundation for the discussion of the expert panels' assessments and the post-study participant interviews. The main research question will be thoroughly covered over the course of that discussion.

### Sub-Question No. 1: The Conductor Panel

1. Focusing on the ability to accurately represent elements of musical expression through conducting gesture, what differences does a panel of expert conductors observe between each participant's pretest and posttest conducting performances?

Both conductor panelists were able to cite several significant changes in the participants' conducting gestures between the pretest and posttest performances. Panelist Y found that "overall, all four participants' general performance improved significantly in the posttest compared to the pretest. All four used a wider range of motion and involved different gestural solutions to inherent problems in the score." He also reported that the participants "were more relaxed in the posttest." As a result, "the ensemble was more relaxed and responded with overall better execution of the piece."<sup>1</sup> Panelist Z noted: "In general, the four conductors exhibited greater control of body language in their posttest performances as compared to the pretests. They seemed more poised and relaxed physically and more self-confident both physically and mentally." Zeroing in on changes in the participants' gestures, he added:

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<sup>1</sup> Appendix I, 306.



Their gestures were more focused and more purposeful, with fewer extraneous motions in their arms or bodies. Contrasts of dynamics were more vividly delineated, as were certain, but not all, changes of character. Shaping of phrases also benefited from the greater physical focus, and, in some cases, eye contact with the players improved.<sup>2</sup>

#### Sub-Question No. 2: The Certified Movement Analyst Panel

2. Focusing on the diversity, range and phrasing of Effort-Shape possibilities, what differences does a panel of LMA professionals observe between each participant's pretest and posttest conducting performances?

The CMA panel unanimously agreed that the participants posttest performances revealed a number of changes that could be attributed to the LMA instruction they received in the course. Panelist X observed: "All conductors in the study seemed to be able to use shape change affinities to help crystallize Efforts better in the posttest than the pretest." She explained:

In the pretest many were working in a different plane of motion, which often seemed to counteract the chosen Effort: e.g. sinking with quickness or advancing with strength in the posttest versus retreating or advancing with quickness, and sinking with strength in the posttest.<sup>3</sup>

Focusing on the participants overall presentation, Panelist W noticed that: "In general the participants were more grounded (i.e. connected to their own bodies and aware of their potential power to communicate through movement) in the posttests than they were in the pretests." Further elaborating these changes, she continued:

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<sup>2</sup> Appendix I, 332.

<sup>3</sup> Appendix H, 280.

Each participant in the beginning of his/her posttest, standing in preparation to begin the music, had an awareness of his/her ability to communicate through the choices (s)he made in his/her inner attitude toward Space, Weight, Time and Flow Effort. This awareness of how those choices would affect the music produced by the orchestra was not as apparent . . . in the pretest.<sup>4</sup>

### Sub-Question No. 3: The Participant Interviews

3. What changes and improvements do the participant conductors report in their experience of the connection between musical expression and conducting gesture after five hours of LMA training?

The four participants concurred that the course made a lasting impression, that taking the course was beneficial for them, and that they considered themselves better observers and conductors after the course. They also expressed unanimous approval regarding the quality of the course content and instruction, and all agreed that they would eagerly recommend LMA training to their colleagues and peers. Participant 1 reported: “I find that I am much more confident with my movement choices,” and he recognized that “musicians react a lot more to a conductor’s gestures than most of us realize.”<sup>5</sup> The course has helped participant 2 develop “a better understanding of the connection between what I do and the sound I get and exactly how to describe that connection.” She plans to continue to use the skills she acquired during the course because LMA has, for her, “become a very useful framework to analyze [her] movements, analyze what other people are doing and what works versus what doesn’t.”<sup>6</sup>

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<sup>4</sup> Appendix H, 269-70.

<sup>5</sup> Appendix J, 336-7.

<sup>6</sup> Appendix J, 341-2.

Before taking the course participant 3 “didn’t think of conducting in terms of gesture.” Through the LMA training she has developed “much more appreciation for the art and the difficulty of conducting as well as the ability to convey a lot of things that, previously, I just couldn’t figure out.” When asked how the course had improved the connection between her gestures and elements of musical expression she replied:

At the most basic level, I now have choices to make. Before the class I felt like I was lost in the music with no tools or system to help me connect my gestures to the music. After the course I am able to look at a score and know that I can quickly find a solution to almost any problem or challenge I encounter.<sup>7</sup>

After the study participant 4 realized: “many of the things I already believed have been reinforced,” and he added that the LMA training had provided him with “some very useful terminology to describe movements [he is] already using.” He reported that since the course, he is “definitely watching conductors more closely to try to see if their Effort choices match their musical intentions.” When asked whether or not he would encourage friends and colleagues to add LMA to their studies he answered: “I’m convinced that LMA training . . . should almost be a requirement for conductors.”<sup>8</sup>

### **Discussion**

The preceding explorations of the sub-questions are, by themselves, sufficient to confirm that this test of the researcher’s application of LMA for conductors has been a success. Yet the remaining data is brimming with additional observations that impart a

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<sup>7</sup> Appendix J, 346.

<sup>8</sup> Appendix J, 351-3.

truly comprehensive response to the main research question: What effect does five hours of introductory LMA training have on four participant conductors' ability to accurately represent elements of musical expression through conducting gesture? There are dozens of comparisons to make between the expert conductors' assessments and the CMA's analyses that would provide explanations of the root causes for many of the pretest difficulties and posttest improvements reported by the conductor panel. Such an endeavor is far beyond the scope of this study, but one of these comparisons selected from each participant's performances will produce additional evidence that the test was successful and help readers better understand the researcher's fresh approach to conducting gesture.

Conductor panelist Y was impressed with participant 1's improvements in his ability to set and control tempo in the posttest. Referring to the pretest, he wrote: "The tempo is not *con brio*, but he shows his tempo with good use of heavy *ictus*. The gestures appear to keep the ensemble reasonably together but not consistently." In contrast "Y" submits the posttest tempo "is consistently *allegro con brio*. It is faster than the pretest and therefore makes the whole performance more convincing."<sup>9</sup> Observing participant 1's pretest, both CMA panelists recorded the prevalence of bound Flow combined with little attention to Space or Time. Panelist W observed that "he gestures down with bound flow and strength" in the pretest, and she lists "bound/strong" as one of predominant states.<sup>10</sup> Panelist X specifies that "Space and Time Efforts [are] phrased in more often," in the posttest, and she points out that the strong, upward disaffinities appearing in the

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<sup>9</sup> Appendix I, 282.

<sup>10</sup> Appendix H, 253-4.

pretest have largely been replaced with “some strength in the downbeat.”<sup>11</sup> Commenting on the posttest, Panelist W cites an increased use of Free Flow and includes many more references to Time Effort as well.<sup>12</sup>

The CMA panel’s analyses suggest that participant 1 was having difficulty with tempo in the pretest because of his use of bound Flow combined with downward strokes. He binds the Flow at the top of his preparatory gesture and continues in bound Flow as he begins his descent towards the downbeat. He is often effectively “out of time” until about one quarter to one third of the way through the stroke towards the ictus when he finally begins an acceleration (Quick Time), and he actually slows down (Sustained Time) his descent towards the ictus on several occasions between mm. 15 and 34. Such combinations establish tempo with the upward gesture only to break it in the downward stroke. Because this particular sequence or movement phrase impedes the progress of the tempo, the orchestra is not really sure when to make its attacks. Watching the opening measures of the pretest, the musical outcome is clearly audible. The orchestra in fact begins the piece before participant 1 reaches the ictus because his preparation is in conflict with his downbeat. In other words, the Efforts he uses for the preparation are incompatible with the Efforts he uses for his downbeat. A review of the posttest performance reveals that the ensemble and tempo problems at this point in his pretest performance have nearly disappeared because he changed the Effort qualities he used

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<sup>11</sup> Appendix H, 271-2.

<sup>12</sup> Appendix H, 254.

for these passages. More to the point, his new understanding allowed him to *choose* appropriate Efforts.

Observing participant 2 in clip no. 4, the conductor panelists both focused on problems with her gestural representation of the subito piano in m. 64. Panelist Y noted: “She shows the overall shape of the phrase with her gesture but misses the finesse of the subito piano.”<sup>13</sup> Enlarging on “Y’s” comments, panelist Z added: “The fortissimo seems quite weak visually; the subito piano is not dramatically different enough. The left hand is not independently helpful, and the difference of character in this material is not shown.” In the posttest “Z” observed “much better contrasts in both directions. The fortissimo had real energy, and the piano was well prepared.”<sup>14</sup> Confirming “Z’s” posttest assessment, “Y” detected “a more subtle range of motion. She is more relaxed physically, and this is evident in the sound of the orchestra.”<sup>15</sup> CMA panelist X reported “binding and freeing [Flow in the pretest that] changes in the posttest to marked strong, free downward gestures for mm. 62-3. In m. 64 the indirectness of the pretest changes to light sustained movement with slight binding.”<sup>16</sup> For CMA W participant 2’s posttest is marked by “sweeping into the horizontal dimension in Passion Drive (free, strong with some quicks) . . . She also moves immediately from one drive to another in [the posttest] from passion [strong, free, quick] into a BEA glide.”<sup>17</sup>

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<sup>13</sup> Appendix I, 293.

<sup>14</sup> Appendix I, 319.

<sup>15</sup> Appendix I, 293.

<sup>16</sup> Appendix H, 278.

The problematic fortissimo that Panelist Z reports in pretest clip no. 2 stems from the absence of Weight in her gesture as noted by CMA X. This circumstance leads to an ineffective subito piano because there is little contrast for the orchestra to read when she changes to light Weight in m. 64. Both the fortissimo and subito piano are successful in the posttest because, as “W” points out, she moves directly from a strong, free, quick “passion punch” (Transformational Drive) to a direct, light, sustained glide (one of the BEAs).<sup>18</sup> The orchestra clearly understands her intent and delivers a much more dramatic shift from forte to piano.

Participant 3 was obviously flustered as she stood in front of an orchestra for the first time at her pretest. She gave a double preparation for the initial downbeat, and the orchestra, responding to the first movement, entered at the end of the fall towards the second superfluous upbeat. In spite of this setback, she quickly recovered and forged ahead in accordance with the parameters of the study. Her posttest preparation was greatly improved and exhibited the results of a sincere, determined attempt to try something totally unfamiliar and foreign to her. The conductor panelists’ pretest assessments were not very informative because they correctly identified the mistake but did not explain the underlying cause of her error. Their posttest comments were more generous. Panelist Y credited her with a preparation that, “although slightly awkward and out of time, nevertheless had power and enough shape for the group to play together.”<sup>19</sup>

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<sup>17</sup> Appendix H, 264.

<sup>18</sup> Appendix H, 264.

<sup>19</sup> Appendix I, 298.

“Z” thought the posttest result was a “much better beginning. The preparatory beat has a bit of hesitation at the top, followed by a downward push.”<sup>20</sup>

The CMA panelists were able to provide several insights that help explain the problems in the pretest and improvements in the posttest. Both identified the dominance of *shape flow* (one of the Modes of Shape Change mentioned in Chapter 2) and Flow Effort in the pretest. CMA W was more precise, specifying *shape flow* and Mobile State in the pretest. Among the most significant changes, “W” reported that participant 1 held her breath before she started in the pretest (bound Flow) but was “breathing with her movement” in the posttest. She also pinpointed the emergence of drives that were not present in the pretest, most notably in her description of the initial preparation and first measure where participant 3 moves through Rhythm State and Passion Drive to Mobile State.<sup>21</sup> Supporting that analysis, “X” observed “clearer efforts, with some lightness and sustaining, timed more clearly with the measures” in the posttest.<sup>22</sup>

This example illustrates the kinds of impressive changes that LMA training can produce in a relatively short time. After receiving five hours of instruction over the course of six weeks, participant 3 was able to imagine, formulate and physically execute Effort choices that were, by her own admission, totally foreign to her before the course. Her pretest performance (aside from the double preparation that tends to distract from the real issues) was devoid of passion and conviction because she was unable to use strong

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<sup>20</sup> Appendix I, 320.

<sup>21</sup> Appendix H, 265.

<sup>22</sup> Appendix H, 278.



Weight effectively. Her sense of rhythm and timing was much more convincing in the posttest because she was able to replace the Remote State (Space and Flow) with Rhythm State (Weight and Time). Summarizing participant 3's improvements, Panelist W submits: "She is grounded and centered, and *each movement is purposeful* i.e. clear in Space, Effort, Shape and Body organization."<sup>23</sup>

Participant 4 came to the study with the most conducting experience and, as panelist W surmised, "the largest movement vocabulary of the four participants."<sup>24</sup> Individuals with more highly developed movement skills that translate into more deeply ingrained movement patterns often struggle when they attempt to make adjustments or changes to those established patterns. Participant 4's posttest performance showed marked improvement in some areas but was less consistent in others. An examination of clip no. 5 reveals some of the challenges he encountered as he tried to incorporate new or different movement qualities into his conducting gesture.

Both expert conductors rated participant 4's clip no. 5 pretest performance higher than the posttest. Panelist Z observed "good contrasts . . . with conviction and good timing in the pretest. Subito piano was in place and the subito forte occurred without hesitation."<sup>25</sup> Panelist Y noted a "consistency of rhythm [that] is evident in solid downward strokes. The preparation for the winds and brass is clear." Discussing participant 4's posttest "Y" concluded: "The rhythm is not as clearly established, and the

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<sup>23</sup> Appendix H, 265.

<sup>24</sup> Appendix H, 259.

<sup>25</sup> Appendix I, 331.

downbeats are less convincing, although the preparation for the winds and brass remains accurate.”<sup>26</sup> “Z” agreed with “Y” that participant 4’s posttest in this case “was not as well done. The subito piano was not well timed, and the forte seemed a bit casual compared to the first performance. Greater restlessness visually as well.”<sup>27</sup>

The CMA panel’s analyses accurately reflected the conductors’ assessments and independently confirmed that participant 4’s performance at this point in the posttest was not as effective as his pretest. In the pretest clip, panelist “W” reported shifts between Rhythm State (Weight and Time) and Passion Drive (Flow, Weight and Time) “with an occasional Awake [Space and Time] or Stable State [Space and Weight] in his focus.” In the posttest she noticed that “the music was quicker; he is more grounded, and he is more attentive to Space so the combination of Space and Weight gives him stability.” She detected: “more Mobile States [Time and Flow] interspersed with the Rhythm States,” and observed “a minimum of excess movement” in the posttest. This description seems to counter conductor panelist’s “Z’s” observation of greater restlessness in the posttest, but “W” adds: “I [also] noticed that he weight shifts without as many postural changes.”<sup>28</sup> Perhaps this weight shifting is the restlessness that “Z” referenced in his comments.

CMA “X” provides a ‘play-by-play’ analysis of participant 4’s Effort/Shape sequence in this pretest clip. She recorded: “strong bound elastic advancing [in m. 100 and] strong elastic bound retreat into rising sudden bind [in m.101]. M. 102 light sudden

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<sup>26</sup> Appendix I, 305.

<sup>27</sup> Appendix I, 331.

<sup>28</sup> Appendix H, 269.

retreating to sinking through m. 103. Then m. 104 returns to the pattern in m. 100.” Her review of the posttest revealed that the “Time element was clearer with sudden Effort consistent throughout except for a moment in m. 103.” Like “W” she also observed that participant 4 was more attentive to Space (Effort) in the posttest noting directness in mm. 100-01. “M. 102 keeps the lightness and suddenness of pretest, adding diminished binding, and the right hand shows a moment of directness in m. 103”.<sup>29</sup>

These observations confirm the conductor panel’s assessments, and they clearly indicate that participant 4 was experimenting with his new movement skills, but he was not always successful with his attempts to incorporate them into his gestures. The more “casual” forte strokes both expert conductors cited in the posttest were less convincing because he chose combinations of Time and Flow for the posttest while he used combinations of Weight and Time (sometimes with Flow added) in the pretest. Time and Flow combined may convey rhythm to some degree, but without strong Weight, the posttest forte passages were simply less forceful. The subito piano in m. 102 was a problem for him in the posttest because he failed to help the orchestra prepare for it. In his pretest preparation for m. 102, strong Weight receded, leaving a combination of sustained Time and bound Flow that gave the orchestra an opportunity to prepare for the piano. The same point in the posttest clip shows him initially rising with quick instead of sustained Time, and neither Time element is present in his fall towards the downbeat

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<sup>29</sup> Appendix H, 280. Panelist “X” explained that Laban protégé Knust uses the term “elastic” to characterize an “initial impulse downward.” Personal communication with “X,” 15 July 2005.

of m. 102. With no “time” to prepare, the orchestra is essentially left to make its own decision regarding the attack and dynamic contrast.<sup>30</sup>

Although this clip clearly illustrates that participant 4 was sometimes struggling to incorporate the principles of LMA into his conducting gestures, it by no means indicates that his entire posttest was devoid of positive changes. Conductor panelist Z points out: “This conductor’s second performance was an interesting mix of some things getting better and others not going so well. He seemed slightly more open physically and less tight, but he also did not control the tempo and rhythm as well.”<sup>31</sup> Panelist Y likewise concluded that “there are slight and subtle changes for Conductor 4. These changes are reflected in a better overall posture, less hunched over and more positive strokes in both forte and piano.” His summary of the complete posttest was more complimentary. “The conductor showed more control of the tempo in the posttest and had the right energy and conviction for this piece.”<sup>32</sup> The researcher essentially agrees with “Z’s” appraisal of 4’s posttest performance. “Perhaps, being more experienced to start with, he was less flexible with respect to changing his approach.”<sup>33</sup> He may have been “less flexible,” but his performance also displays his openness, acceptance and determination as well.

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<sup>30</sup> The researcher remains convinced that the bad preparation in m. 101 was actually a technical error. The conductor’s gestures indicate that he either overlooked the piano or jumped ahead two measures expecting the forte at the end of m. 103 instead of the subito piano in m. 102.

<sup>31</sup> Appendix I, 329.

<sup>32</sup> Appendix I, 305, 303.

<sup>33</sup> Appendix I, 331.

### **Post-Study Observations**

The preceding findings are the product of three incredibly rich streams of data. Each of these streams provided specific information that examined the effects of the researcher's application of LMA for conductors from a different point of view. The expert conductor panel was assigned the task of examining the participants' pretest and posttest performances in order to look for changes or improvements in the connections between the participants' gestures and corresponding musical events in the score. The CMA panelists used their observational and analytical skills to compare the participants' pretest and posttest performances in order to identify and describe changes in or additions to the participants' movement behaviors that may be attributed to the LMA training they received. The participants completed a post-study interview to document their estimation of the course content, the quality of instruction and the value of the changes they noticed in their conducting as a result of their participation in the study. Together these three viewpoints produced a comprehensive set of results that seem to confirm the positive effects of LMA training for these four student conductors and enabled the researcher to make several salient observations concerning the design and implementation of the study.

The conductor panel's assessments were extremely accurate, and they demonstrated a surprising level of agreement. Their ratings on the five-point scale for both the complete performances and the excerpted clips were frequently within .5 of each other. Occasional larger disagreements seemed to reflect an increased emphasis for one panelist or the other on specific types of musical events. For example, Panelist Y's ratings seemed to indicate a greater interest in issues related to tempo while "Z" was

frequently more critical of the participants' abilities to represent dynamics. The seven-point Likert scale ratings showed the same (or greater) levels of agreement as the five-point scale with larger discrepancies again illustrating the same emphasis on certain elements of the score that each demonstrated with the five-point scale. The summaries and comments further confirmed the general consensus established with the ratings and ultimately reinforced the areas of greatest interest for each panelist.

Although the expert conductors both reported improvements in the participants' posttest performances, they seemed somewhat reluctant to conclude that these changes produced improved connections between the participants' gestures and musical events in the score. Panelist Y noted that "their wider range of physical motion" enabled them to "demonstrate more dynamic control as well as control of the many rhythmic demands of the score." At the same time he questioned whether or not the changes were "due to their work in the Laban workshops or from the fact that they were more comfortable and more relaxed physically from the additional experience before this ensemble."<sup>34</sup> Focusing on the necessity for conductors to be mentally as well as physically prepared, Panelist "Z" attributed "part of the greater success in the posttest to a better knowledge of the score."<sup>35</sup>

The researcher tends to agree with both possibilities to some degree. Additional experience may indeed translate into a greater sense of confidence, and a more thorough

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<sup>34</sup> Appendix I, 306.

<sup>35</sup> Appendix I, 332. Panelist Z's response ultimately addressed the question regarding improved connections between conducting gestures and musical events in the context of improved "inner musicality." Even though issues related to improving musicianship were excluded from this study, the rationale he used to reach his conclusion is both useful and relevant.

grasp of the score undoubtedly contributes to any conductor's overall effectiveness. However, both CMA panelists point to changes in the participants' Effort lives that additional experience or score study alone—especially over the course of weeks, not months or years—can explain. “X” pointed out earlier that all participants were using shape change affinities to better “crystallize Efforts” in the posttest.”<sup>36</sup> “W” was more direct, concluding that “some of the changes I saw can be attributed to the participants’ LMA training. More specifically, she observed that “the participants in the posttests were more grounded, i.e. connected to their own bodies and aware of their potential power to communicate through movement than they were in the pretests.”<sup>37</sup> Ultimately the conductor panelists agreed that the participants’ gestures were sometimes better connected to musical events in the score, and the CMA panel’s comments tend to confirm that the participants were consciously applying their newly acquired movement skills to effect these improved connections.

Although the CMA panelists’ findings exhibited a great deal of similarity, levels of inter-observer agreement were more difficult to extract from their reports because each chose a different format for presenting her findings. “W” used a detailed narrative style to present her observations while “X” preferred a more concise outline format for her analyses. The researcher now realizes that the CMA panelists may have appreciated a more finely tuned set of parameters that included an evaluation instrument similar to the Conductor Evaluation Questionnaire developed for the conductor panel. Fortunately this

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<sup>36</sup> Appendix H 280-1.

<sup>37</sup> Appendix H, 270.

unintended difference in reporting styles had no negative impact on the study and may have enriched it some respects because the broad scope of the LMA analysis permitted each CMA to focus on areas that were of greatest interest to her.

Combining the data submitted by both expert panels creates a surprisingly complete assessment of each participant's overall achievements in this study. The conductor panel's artistic evaluations and subsequent comparisons of each participant's pretest and posttest were extremely valuable because those findings helped confirm the effects of the researcher's application of LMA specifically related to conducting. The CMA panels' analyses supported and confirmed the expert conductor's assessments, and they clearly established that all four participants were engaged in the experimentation with and application of the principles of LMA presented in the mini-course to their conducting gesture. Taken together, these findings leave little doubt that the researcher's application of LMA was a remarkably positive and beneficial experience for all four participants in this study.



## CHAPTER VII

## THE END OF A MOVING EXPERIENCE FOR ALL

The person who has learnt to relate himself to Space and has physical mastery of this, has Attention. The person who has mastery of his relation to the Weight factor of effort has Intention, and he has Decision when he is adjusted to Time. Attention, intention and decision are stages of the inner preparation of an outer bodily action. This comes about when, through the Flow of movement, effort finds concrete expression in the body.

Rudolf Laban, *Mastery of Movement*

This study was undertaken to introduce and test an interdisciplinary approach to conducting gesture based on the principles of Laban Movement Analysis. Either of these tasks—introducing the approach or testing it—would have been a worthwhile endeavor by itself, but, in this instance, the researcher was compelled to complete both of them within the confines of a single project. Since this application of LMA was specifically designed by the researcher, introducing and explaining it without testing it would have offered no evidence it has been of benefit to anyone other than its creator. Conversely, testing the application without first explaining it would have left readers confused and discouraged by the absence of any practical architecture to support the outcome of the test. By combining the two processes, the researcher was able to share his own journey of discovery and growing understanding of LMA with readers before embarking on the test, and the test was invested with greater credibility because the researcher's application of LMA was thoroughly explained before presenting the test.

### **A Tale of Two Studies**

The text was organized in three sections. The first three chapters framed the purposes and goals of the study and prepared readers for the introduction and elaboration of the researcher's approach to conducting gesture. Chapter Four, the pivotal section of the document, provided a detailed examination of this approach including a confirmation of the fundamental equivalence between movement and musical expression and a thorough explanation of the researcher's application of LMA for conductors. The final three chapters described the methods and procedures used in the research study, reported the findings, and listed the resulting conclusions and implications.

Chapter One began by pointing out the unique status of conducting as the only musical performance specialty that is practiced in silence and by explaining the root cause for the persistent disparity between conducting pedagogy and teaching systems used for other modes of musical instruction. Instrumental and vocal methods and practices were compared with conducting to demonstrate that conductors, unlike other performers, must develop equivalence between their gestures and elements of musical expression without benefit of the direct physical connection between movement and sound that other musicians often take for granted. A brief review of twentieth century conducting pedagogy highlighted the ongoing search for a method or approach that would help conductors meet this challenge, and earlier studies of LMA training for conductors were introduced to establish a context for the researcher's new application. The foundation for the second part of the study, the test, was laid with the presentation of one main research question and three supporting sub-questions that combined to make a

comprehensive inquiry regarding the effects upon four student conductors of a five-hour mini-course based on the researcher's application of LMA.

The second chapter commenced with a biographical sketch of Rudolf Laban and concluded with an introduction to Laban Movement Analysis that stressed the flexibility and effectiveness of the system across a wide range of practical, clinical and expressive endeavors. Abbreviated discussions of the four components of Body, Space, Effort and Shape, equipped readers with the knowledge required to appreciate the review of research related to applications of Laban's movement theories for conductors.

The opening of Chapter Three traced the development of conducting scholarship from the beginning of the eighteenth through the end of the twentieth century to underscore the boom in research related to conducting gesture that started in the 1970s. Advances in technology, the proliferation of conducting programs in American higher education and an expanding search for alternatives to the conventional primacy of beat patterns as the dominating organizing principle for conducting technique were credited with fueling the boom and spurring the search for new approaches to conductor training. Ten projects that either proposed or examined one such alternative approach, applications of Laban Movement Analysis for conductors, were included in the review of related literature. Among those studies, Bartee's groundbreaking theoretical position on LMA training for conductors received high marks for its originality and thoroughness. Miller's quasi-experimental study of LMA training for student conductors was recognized as the first test of Bartee's theories, and Yontz's study received praise for the improvements and refinements he included in his repeat of Miller's study. Observational studies by Bengé

and Hibbard demonstrated some generalized correlation between Effort qualities and types of musical expression while Billingham met with partial success when she tested a vocabulary of conducting gestures based on the Basic Effort Actions. Three tangential projects involving related or parallel lines of investigation were added to the end of the chapter. Composer Frey used Effort as the basis for an original composition for three musicians and film, and computer scientists Nakra and Kun each developed computer-based systems for interpreting and translating conducting gesture into musical expression.

Chapter Four opened with a confirmation of the fundamental equivalence between movement and music that revealed the psychosomatic convergence of physical and musical expression by linking the powers of inward hearing or audiation with Laban's concept of thinking in terms of movement. The researcher then revisited two components of BESS, Effort and Shape, in order to thoroughly explain his application of LMA for conductors as the means through which they are able to establish and maintain a direct physical connection between their gestures and the musical events those gestures are intended to represent. The closing section of the chapter supplied conductors with a set of practical guidelines for incorporating these qualities of movement into their gestures.

Beginning with a brief introduction that distinguished the descriptive emphasis of the present study from earlier quantitative and qualitative investigations, Chapter Five provided a detailed description of the methods, procedures and tools used to complete the test of the researcher's application of LMA. The expert panels' findings were reviewed and discussed in Chapter Six to document the effects of five-hours of introductory LMA training on the participants' abilities to accurately represent elements of musical

expression through conducting gesture. The two panels' assessments and analyses together with the participant interviews established that:

1. The researcher's approach to conducting had a significant positive effect on the participants' abilities to connect gestures with the sounds of music.
2. The conductor panel observed changes in several key areas including enhanced poise and self-confidence, better representation of musical events and improved connections with members of the orchestra.
3. The CMA panel agreed that some of the changes they observed in the participants' movement qualities and Effort choices can be attributed directly to their participation in the LMA mini-course.
4. The participants collectively endorsed the conductor's fresh approach to conducting gesture by agreeing that the training they received in the course was both valuable and beneficial.

Chapter Seven completes the text with the present summary followed by a discussion of the conclusions reached from the results of the study, the implications that stem from those conclusions, a list of suggestions for future investigations of applications of LMA for conductors and an epilogue.

### **Conclusions**

The results of this presentation and subsequent test of the researcher's approach to conducting gesture strongly suggest that his application of LMA has been effective for a group of four student conductors. By successfully insulating the LMA training from any unintended interference or outcomes related to conducting instruction (specific musical,

theoretical and technical issues), the researcher was able to clearly demonstrate that LMA training produces results even when presented apart from any conducting course. It is impossible to verify that every improvement or change in the participants' movements noted by the expert panels was a direct result of the instruction they received, but the fact remains that the only experience common to all four was their participation in the study. It stands to reason that the manifestation of similar types of changes in the movement behaviors of these four student conductors, confirmed by the CMA panel as products of the LMA training, indicate that they could have only effected those changes as participants in the mini-course. This primary conclusion validates the study, and it enables the researcher to present three additional conclusions that flow logically from the first.

1. Because the participants came to the study possessing extremely diverse educational backgrounds, exceptionally varied levels of proficiency and widely differing amounts of experience, it seems logical to conclude that the results they achieved may be generalized to a broad population of conductors. In other words, this approach should work for all conductors regardless of background, skill level or experience.
2. Although the participants were far from mastering the tools and techniques of LMA at the end of the study, they were nonetheless able to comprehend the course material and begin applying these new skills after five hours of instruction they received over the course of six weeks. This quick assimilation and application of the principles of LMA leads the researcher to conclude that

virtually any conductor could achieve similar results in a relatively short period of time.

3. Changes in the participants' gestures that led to improvements confirmed by the expert conductor panel produced significant (though admittedly not universal) corresponding improvements in the orchestra's response to those gestures that were likewise confirmed by the conductor panelists. This correlation between the orchestra response and the participants' conscious attempts to apply the concepts learned in the mini-course suggests that orchestras (and perhaps ensembles of all types) would respond positively to conductors who are able to incorporate Effort choices into their conducting gesture that more accurately reflect their musical intentions.

These conclusions give rise to three far-reaching implications for practitioners, students and teachers of the art of conducting.

### **Resulting Implications**

1. This successful introduction of the researcher's fresh approach to conducting gesture puts an end to one long-standing disparity between conducting and other music performance endeavors.

Until the introduction of the researcher's approach to conducting gesture, there was little evidence to counter the prevailing wisdom as expressed by Koch in his recent study. "While all other forms of musical performance practice have a direct visceral connection through sound to the art of music, conducting does not."<sup>1</sup> The tools and

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techniques presented in this study make available to conductors just such an experience of the direct connection between movement and the sounds of music that all other performers enjoy. By drawing from Laban's Effort theory and Gordon's theory of audiation, the researcher was able to clearly delineate the point at which music thinking and movement thinking converge to produce a confluence of physical and musical expression. Once this connection is established, the researcher's application of LMA facilitates the development of an inner sense of equivalence between conducting gestures and elements of musical expression. These new skills help conductors better connect their gestures with musical events in the score. Should they be gifted musicians as well, conductors who consistently practice and apply these concepts may eventually achieve the synthesis of music and movement described by Boulez as "the accuracy of . . . gesture [that] resides in a perfect coincidence between arm, hand, and intention."<sup>2</sup>

2. The researcher's application of LMA establishes a truly viable alternative to the methodical use of metrically based beat patterns as the dominant organizing principle of conducting technique.

Conductors cling to beat patterns because they are widely taught and because they create a convenient physical context (not a connection) for musical events in the absence of a richer, more effective framework for the conception and execution of conducting gestures. Beat patterns work to some extent, but in the hands of conductors

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<sup>1</sup> Christopher Jason Koch, "Towards a Theory of Conducting Motion" (Ph.D. diss., University of Washington, 2003), 147.

<sup>2</sup> Pierre Boulez; quoted in Jean Vermeil, *Conversations with Boulez: Thoughts on Conducting*, trans. Camille Naish (Portland: Amadeus Press, 1996), 67.



with little or no connection between the expressive qualities of their gestures and elements of musical expression, they rob music of its breath, its continuity, its very life. No fan of traditional patterns, Farberman insists: “Constant repetition of patterns has no musical value and must be rejected. A repeated formula pattern imposed upon music that is constantly changing quickly divorces itself from the content of the music.”<sup>3</sup>

North similarly understood that “a conductor conveys not only measurable beat, phrasing and strength, but the quality of the music, the inner content which colours the technical skill.”<sup>4</sup> The “inner content” she refers to is Effort—Effort Elements appearing in combinations of twos and threes, constantly shifting, transforming, rising and falling to convey the expressive quality and character of the music. Effort training exorcises the unhealthy attachment to beat patterns and replaces it with an enlarged “understanding and appreciation of a wider range of movements together with the feeling and comprehension of human action which such movements stimulate.”<sup>5</sup> When combined with a growing awareness of the fundamental equivalence between movement and music, this training builds within conductors a sense of confidence that encourages them to let go of beat patterns in favor of gestures that represent the entirety of musical content instead of the meter alone.

Conductors who acquire these new movement skills do not completely abandon beat patterns. They simply learn to appreciate and fully exploit their logical and proper

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<sup>3</sup> Harold Farberman, *The Art of Conducting Technique* (Miami Beach: Warner Bros., 1997), 39.

<sup>4</sup> Marion North, *Personality Assessment through Movement*, (London: MacDonald and Evans, 1972), 231-2.

<sup>5</sup> Rudolf Laban, *Modern Educational Dance*, 3<sup>rd</sup> ed., revised and ed. Lisa Ullmann (Boston: Plays, Inc., 1975; reprint Plymouth: Northcote House, 1988), 53.

connection with meter. For example, when musical events in the score such as rapidly changing meter or rhythmically complex passages indicate the primacy of metric concerns, the conductor armed with an understanding of Effort can still call upon the appropriate pattern to help the orchestra navigate through these challenges. If, however, expressiveness and phrasing surpass metric considerations, then the conductor can choose to defer patterns in favor of gestures that more effectively communicate the desired pace, feeling and character of the passage in question. Under these circumstances beat patterns actually rise in importance because the conductor reserves them for appropriate occasions. What's more, the ensemble appreciates them more as useful signals because the players no longer see the same repetitive signals coming from the podium in every measure or musical circumstance. As a result the performers turn off the orchestra "autopilot" and actively engage the conductor through his gestures.

3. The principles of LMA supply conducting teachers with an extensive set of pedagogical tools that will improve their skills as instructors and accelerate their students' progress and development as conductors.

Aside from the now obvious advantages that accrue to any conductor who incorporates a program of LMA training into her studies, perhaps the most powerful benefit for teachers is the ability to awaken students to their own unique potentials as movers and conductors. Labuta insists that: "your conducting must 'look like' the music," yet he offers little advice to students that would help them achieve this goal.<sup>6</sup> He also

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<sup>6</sup> Joseph A. Labuta, *Basic Conducting Techniques*, 3<sup>rd</sup> ed. (Englewood Cliffs: Prentice-Hall, 1995), 31.

fails to add that a conductor's gestures should feel like the music as well. According to Bartee, LMA training "provides a framework from which exercises can be devised that increase the student's awareness of the Effort and Shape variables that determine the expressive nuance of the moving body."<sup>7</sup> The exercises presented in the researcher's application of LMA seem to confirm Bartee's proposition. Participants were able to experience the Effort Elements, States, Drives and Effort/Shape affinities both apart from and in the context of musical events through the researcher's explanation of the fundamental equivalence between music and movement. Even though the exercises were simple and easy to perform and required no special skills or equipment (other than a basketball), they still produced impressive results for the participants.

In addition to awakening students to a greater range of movement possibilities, conducting teachers who have completed an introductory LMA course can begin to use newly acquired observational skills to improve their diagnostic and remedial teaching skills. To their credit, the conductor panelists in this study were extremely accurate with their assessments of the participants' pretest and posttest performances. Yet as adept as they were at spotting problems and improvements, the panelists' written comments reveal that they were not equipped to make the kind of qualitative observations that the CMA panel was able to provide. As they are not conductors, the CMA panelists were neither asked nor expected to use their observations as the basis for diagnostic and remedial

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<sup>7</sup> Neale King Bartee, "The Development of a Theoretical Position on Conducting Using Principles of Body Movement as Explicated By Rudolf Laban" (Ph.D. diss., University of Illinois at Urbana-Champaign, 1977), 198.

purposes, but conductors familiar with the LMA vocabulary and observational techniques *can* help their students address problems and find solutions more quickly.

Poch confirms that LMA has “proven to be extremely useful as a remedial tool for those who do not possess an innate flair, or a natural inclination for conducting.”

Drawing on his own experience as a conducting teacher who uses LMA, he continues:

Many of these students are vitally interested in developing effective communication skills, but they are inhibited by their apparent awkwardness. Once they have experienced the movement efforts and realize how a gesture is shaped so that it connects with the music, they gain confidence in their abilities and improve rapidly. Often it is these students who become the most compelling conductors.<sup>8</sup>

Laban further explains how any teacher trained in the techniques of LMA can use these observational skills to diagnose problems and offer remedial instruction to students who need this kind of assistance. “Once correctly assessed, individual effort can be changed and improved by training, because in the end, all education is based on effort-training. The conscious penetration into our effort life can be used, and, what is more, it is needed for many purposes.”<sup>9</sup> This penetration into one’s Effort life that is so vital for conducting teachers and their students is enabled by the specific terminology and rich descriptive vocabulary associated with Laban’s theoretical framework.

Conducting teachers are sometimes at a loss for words when they try to describe for their students the qualities and characteristics of conducting gesture. Discussing this

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<sup>8</sup> Gail B. Poch, “Conducting Movement Analogues through Effort Shape,” *Choral Journal* 23, no. 3 (Nov 1982): 22.

<sup>9</sup> Rudolf Laban and F. C. Lawrence, *Effort: Economy of Body Movement*, 2<sup>nd</sup> ed. (Boston: Plays, Inc., 1974), 3.

dilemma, Boult declares: “It is not easy to describe how the movements of a stick can be made expressive.”<sup>10</sup> Author Brock McElheran likewise concludes: “describing motions in words is difficult.”<sup>11</sup> To meet this challenge, many authors and teachers have adapted musical terms to describe the various qualities of conducting gestures and strokes. Max Rudolf lists six styles of beating in his text: non-espressivo, light-staccato, full-staccato, espressivo-legato, marcato and tenuto.<sup>12</sup> Green takes a similar course making additional distinctions between active and passive or “dead” gestures depending on the intended function of the gesture as determined by musical requirements.<sup>13</sup> This strategy is terribly confounding, especially for novice conductors, because there are myriad shades and colors within each musically descriptive term. Legato passages can be soft or loud; shimmering or powerful, gay or mournful, for example. Musical events may also exhibit more than one style or character that requires the conductor to demonstrate a quality of gesture totally apart from any of the above categories. These labels may therefore confuse students on occasions when the style of beating is incongruous with the character of the music. Rudolf confirms this assertion himself by noting: “In actual conducting it occurs frequently that the beat pattern does not conform to the notation.”<sup>14</sup> Conducting teachers who have at their disposal the terms and vocabulary of LMA can avoid this confusion.

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<sup>10</sup> Adrian Cedric Boult, *Thoughts on Conducting* (London: Phoenix House, 1963), 5.

<sup>11</sup> Brock McElheran, *Conducting Technique for Beginners and Professionals* (New York: Oxford University Press, 1966), x.

<sup>12</sup> Max Rudolf, *The Grammar of Conducting; A Comprehensive Guide to Baton Technique and Interpretation*, 2<sup>nd</sup> ed. (New York: Schirmer Books, 1980), 1-8, 11-18, 19-26, 86-92, 152-59.

<sup>13</sup> Elizabeth Green, *The Modern Conductor*, 6<sup>th</sup> ed. (Upper Saddle River: Prentice-Hall, 1997), 43-64.

Bartee claims that Laban's theories supply teachers and students alike with a specific "terminology for communicating verbally about the effectiveness of movement," and he maintains that the Effort/Shape "terms permit the conductor to describe how a movement feels."<sup>15</sup> Because the vocabulary used to identify the Motion Factors, Effort Elements, States, Drives and Effort/Shape affinities consists of clearly defined extra-musical terms, conducting teachers with proper training can use this language to precisely communicate qualities of conducting gesture to their students. Associations between different Effort Elements and the possible effects they exert upon musical events become clear because students and teachers share both the physical sensations of the movements at the body level and an empirical understanding of the significance of the terms used to describe the movements. While the researcher may agree with Max Rudolf's contention that no one "could hope to pinpoint the endless diversity of motions used in conducting," he would quickly counter that LMA training provides teachers and students with the tools to accurately describe *any* conducting gesture.<sup>16</sup>

### **Recommendations for Further Research**

Research possibilities in this field are limited only by the imaginations and creativity of those involved in the design and direction of future projects. A repeat of the present study, possibly with a larger population and a lengthier, more comprehensive curriculum of LMA instruction, would certainly be worthwhile. However, since the

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<sup>14</sup> Rudolf, 2<sup>nd</sup> ed., 222.

<sup>15</sup> Bartee, 198, 166.

<sup>16</sup> Rudolf, 2<sup>nd</sup> ed., xii.

validity of LMA training for conductors apart from specific conducting instruction has already been confirmed by this study, future researchers may choose to study the effects of a fully integrated movement-based curriculum of conducting study that includes both LMA and conducting instruction. The results of the present study also suggest that additional investigations of LMA applied as an observational tool would be fruitful as well. For example, using LMA to describe and analyze the movement patterns of selected prominent conductors, both past and present, in order to document their Effort choices and gestural styles may lead to a better understanding of conducting gesture. Researchers could also tailor their observational studies to address specific perennial technical challenges such as instrumental accompaniment (i.e. conducting an orchestra with one or more soloists) and operatic conducting (especially accompanied recitatives). The gestures that several leading conductors known for their accompaniment or operatic talents use for the same passages could be analyzed and compared to provide students and teachers with several equally valid yet divergent approaches to the same problems.

A case can also be made for studies that record performer approval levels of gestures used by multiple conductors for the same musical events through classification of the gestures according to Effort/Shape qualities. Conductor Eugen Jochum (1902-1987) insists that players respond to a conductor's movements "with a physical perceptiveness far below the level of rational understanding."<sup>17</sup> Researchers could compare subjects' written or verbal assessments with electroencephalographic and/or

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<sup>17</sup> Eugen Jochum, "About the Phenomenology of Conducting," in *The Conductor's Art*, ed. Carl Bamberger (New York: McGraw Hill, 1965; reprint, New York: Columbia University Press, 1989), 263.

electromyographic data recorded while subjects are performing to plot differences between performers' cognitive (the surface level appropriateness and communicative impact) versus their subconscious or "gut-level" reactions to the same gestures. The results of such an undertaking would be both enlightening and fascinating. Comparisons between two groups, one schooled in LMA and the other not trained, would be even more interesting.

Perhaps the most exciting opportunities for future researchers involve blending LMA training with leading-edge technologies like those used by Nakra and Kun in their respective studies. By replacing the prescriptive algorithms both researchers developed for their experimental trials with systems that define associations between movements and sound through Effort/Shape, either system may yield a truly responsive instrument for both live performance and conductor training purposes. Creating algorithms that equate the complexities of Effort/Shape with musical expression would be a daunting task, but a group of animators is already using a computer-based application of LMA called the EMOTE (Expressive MOTion Engine) system that produces more lifelike movement qualities in animated characters.<sup>18</sup> According to researchers Chi, Costa, Zhao and Badler:

Our EMOTE computational model for Effort and Shape components allows the animation of characters with natural-looking gestures through the usage of high-level parameters that represent qualitative aspects of movements.<sup>19</sup>

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<sup>18</sup> Liwei Zhao, "Synthesis and Acquisition of Laban Movement Analysis Qualitative Parameters for Communicative Gestures" (Ph.D. diss., University of Pennsylvania, 2001), 3-5.

<sup>19</sup> Diane Chi, Monica Costa, Liwei Zhao and Norman Badler. "The EMOTE Model for Effort and Shape" ([www.cis.upenn.edu/~graphics/badler/siggraph00/emote.pdf](http://www.cis.upenn.edu/~graphics/badler/siggraph00/emote.pdf)), 8.



It stands to reason that if animators can adapt Laban's framework to achieve their goals, computer scientists and musicians should be able to combine their talents to create an interactive system for conductors.

### **Epilogue**

All the theories have been explained, and every term has been defined. The participants worked diligently to comprehend and absorb the principles of Effort/Shape presented in the mini-course. They have applied these techniques to their conducting gesture to the best of their abilities and personally confirmed the value and benefits of LMA training for them. All the data has been collected, and the expert panels have completed their analyses and assessments. The findings are in; the research questions have been answered, and the researcher has reached his conclusions and offered several exciting possibilities for continued research. This study has run its course, but the journey has just begun. To complete the journey and share in the benefits that four participating conductors derived from the tools and techniques presented in the researcher's fresh approach to conducting gesture, conductors—artists, students and teachers—need to try it for themselves. Readings are an excellent place to start, but reading alone is not sufficient. Any genuine understanding of the transformational power of movement arises only through the experience of the movements themselves at the body level. Conductors must imbibe the physical, cognitive and affective sensations of the movement qualities by moving through them before they attempt to integrate them with their powers of audiation and movement thinking.

When covering any uncharted territory, it is always advisable to travel in the company of an experienced guide. Those who wish to incorporate Effort/Shape into their studies should therefore retain the services of a qualified teacher because such journeys are filled with surprises and challenges. Every student of LMA soon discovers that some concepts are easily mastered while others seem totally confounding. Be patient and trust your guide to help you overcome these obstacles because the most difficult to master skills often become your most valuable assets. Also remember that the principles of LMA discussed in this study constitute only a brief introduction to a system of description and analysis that encompasses the entirety of human movement experience. After nearly ten years of study and practice, the researcher still feels like a novice, but he continues to learn and grow as an artist largely through his unwavering commitment to the study of Effort/Shape, and he is ceaselessly amazed by the remarkable ways in which human movement enriches his life and his art.

Those who label Laban's theories of human movement as a technique or method that may or may not apply to conducting are mistaken. Bartee contends: "Laban did not set down a definite method of teaching."<sup>20</sup> In fact, LMA is more than method because it complements, enlivens and transcends whatever discipline it touches. This transcendent quality is among LMA's greatest strengths, and it is certainly of supreme importance to conductors because, as Bamberger observes: "The methods, techniques, and approaches expounded by the experts, the conductors themselves, probably have as many variations

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<sup>20</sup> Bartee, 180.

as there are practitioners of this most intangible of interpretive functions.”<sup>21</sup> With so many alternatives to choose from conducting students should find it comforting to know that LMA training can be added to any course or method without fear of incompatibility or conflict. Of course the effectiveness of any method or approach is ultimately determined by the success (or lack of it) demonstrated by those who have practiced it. The participants in this study seem to confirm that LMA training is effective for all conductors regardless of what methods or techniques they may have used in the past.

Conductors who share Koch’s view that “the physical act of conducting . . . is not itself an art” may, like Koch, fail to recognize the extraordinary benefits that a program of LMA training for conductors can provide.<sup>22</sup> The researcher, already firmly established in his own experience of the equivalence between conducting gestures and the sounds of music, finds himself in agreement with conductor and author Charles Blackman’s assessment of conducting gesture: “Technique is thus not a choice of method within the art of conducting, but it is the art itself.”<sup>23</sup>

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<sup>21</sup> Carl Bamberger, ed., *The Conductor’s Art*, 3.

<sup>22</sup> Koch, 147.

<sup>23</sup> Charles Blackman, *Behind the Baton* (New York: Charos Enterprises, 1964.), 70.

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APPENDIX A  
STUDY REPERTOIRE

Beethoven, Ludwig van. Overture to *Coriolanus*, Op. 62. In *Six Great Overtures in Full Score by Ludwig van Beethoven*. New York: Dover, 1985.

The Dover edition score was originally published in *Ludwig van Beethoven's Werke*; Ser. 3. Leipzig: Breitkopf & Härtel, ca. 1864. This reproduction includes only the first 163 measures because the participants prepared and conducted mm. 1-154. Measure numbers have been added to the bottom of each system, and the clips selected for detailed analysis have been shaded and labeled. The specific beginning and ending points of the clips are:

Clip 1: Initial preparatory beat to end of beat 1, m. 3

Clip 2: Fall to beat 1, m. 19 to end of beat 1, m. 22

Clip 3: Fall to beat 1, m. 50 to end of beat 1, m. 52

Clip 4: Fall to beat 1, m. 62 to end of beat 1, m. 64

Clip 5: Fall to beat 1, m. 100 to end of beat 1, m. 104



Overture to *Coriolanus*, Op. 62

Allegro con brio.

The image displays the first measure of the Overture to *Coriolanus*, Op. 62, for a full orchestra. The score is written in 2/4 time with a key signature of two flats (B-flat and E-flat). The tempo is marked "Allegro con brio." The instruments listed on the left are: Flauti, Oboi, Clarinetti in B., Fagotti, Corni in Es., Trombe in C., Timpani in C.G., Violino I., Violino II., Viola, Violoncello, and Basso. The woodwinds and strings play a rhythmic pattern of eighth notes, while the brass instruments play a series of chords. The first measure is marked with a forte dynamic (ff).

Flauti.

Oboi.

Clarinetti in B.

Fagotti.

Corni in Es.

Trombe in C.

Timpani in C.G.

Violino I.

Violino II.

Viola.

Violoncello.

Basso.

Clip 1

The image shows a page of a musical score for the Overture to Coriolanus. The page is numbered 15 and is labeled as 'Clip 2'. The score consists of several staves. The top four staves are for woodwinds (flute, oboe, clarinet, and bassoon), each with a 'p cresc.' marking. The next two staves are for strings (violin and viola), with 'p' and 'cresc.' markings. The bottom four staves are for the piano, with 'p', 'cresc.', and 'ten.' markings. A shaded vertical bar highlights a section of the score from approximately measure 10 to measure 14. The key signature is B-flat major, and the time signature is 3/4. The score includes various musical notations such as notes, rests, and dynamic markings.

15

Clip 2

Musical score for Overture to Coriolanus, page 3. The score is arranged in 12 staves, divided into four systems of three staves each. The top system contains the string parts (Violins I, Violins II, Violas, Cellos/Double Basses). The bottom system contains the woodwind parts (Flutes, Oboes, Bassoons, and Clarinets). The score includes dynamic markings such as *p*, *cresc.*, and *f*, and articulation like *ten.* (tutti).

Musical score for Overture to Coriolanus, page 31. The score consists of 12 staves. The top four staves are for woodwinds (flute, oboe, clarinet, bassoon). The next four staves are for strings (violin I, violin II, viola, cello). The bottom four staves are for piano (right hand, left hand). The music is in 3/4 time and features complex rhythmic patterns, including sixteenth-note runs and triplets. Dynamics include piano (p) and fortissimo (ff).

The musical score is arranged in 12 staves. The top four staves are for vocal parts: Soprano (Soprano), Alto (Alto), Tenor (Tenor), and Bass (Bass). The bottom eight staves are for piano accompaniment: Treble Clef (Right Hand), Bass Clef (Left Hand), and a grand staff (Treble and Bass Clef). The music is in 3/4 time and features complex harmonic textures with many accidentals and dynamic markings.

This musical score is for the Overture to Coriolanus, starting at measure 46. It features a complex arrangement of instruments including strings, woodwinds, and brass. The score is written in a key signature of two flats and a common time signature. A vertical grey bar highlights measures 46 through 51. The music includes various dynamics such as *mf* (mezzo-forte) and *p* (piano), and features melodic lines with slurs and ties. The bottom left of the score is marked with the number 46.

Clip 3

The musical score is arranged in 12 staves. The top four staves are for woodwinds: flute, oboe, clarinet, and bassoon. The middle two staves are for strings: violin I and violin II. The bottom six staves are for the piano, split into right and left hands. The score includes various dynamic markings: *p cresc.*, *cresc.*, *poco a poco*, and *poco*. The music is in 3/4 time and features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. The overall texture is complex, with multiple melodic lines and a strong harmonic foundation.

This musical score page, numbered 203, contains a clip of the Overture to Coriolanus. The score is arranged in a system of ten staves. The top four staves are for individual instruments, each with a treble or bass clef and a key signature of two flats. The bottom six staves are for a grand piano, with a brace on the left side. The music is written in a common time signature. Dynamics include *ff* (fortissimo), *p* (piano), and *cresc.* (crescendo). A vertical grey highlight covers the first four measures of the score. The number '61' is printed at the bottom left of the page.

61

Clip 4



The musical score is arranged in 11 staves. The first four staves represent the string section: Violins I, Violins II, Violas, and Cellos/Double Basses. The last four staves represent the woodwind section: Flutes, Oboes, Clarinets, and Bassoons. The score is written in a key signature of two flats (B-flat and E-flat) and a 3/4 time signature. It features a variety of dynamic markings, including fortissimo (ff), piano (p), crescendo (cresc.), and sforzando (sf). The notation includes slurs, accents, and articulation marks, indicating phrasing and emphasis. The piece is marked with a tempo of 'Allegro'.

Musical score for Overture to Coriolanus, page 205. The score consists of 11 staves. The top two staves are for strings (Violins I and II), the third is for Woodwinds (Flutes), the fourth is for Bassoon, the fifth is for Clarinet, the sixth is for Trumpets, the seventh is for Trombones, the eighth is for Percussion, and the ninth and tenth are for Piano. The music is in 3/4 time and features a dynamic range from pianissimo (pp) to crescendo (cresc.).

77

This page of a musical score, page 11 of the Overture to Coriolanus, features a complex orchestral arrangement. The score is organized into two systems of staves. The first system includes a woodwind section (flutes, oboes, and bassoons) and a string section (violins, violas, cellos, and double basses). The woodwinds play melodic lines with various articulations, while the strings provide a rhythmic and harmonic foundation. The second system is dominated by the piano and cello parts, which play dense, textured chords and arpeggiated figures. The music is written in a key signature of two flats and a 3/4 time signature. The score is marked with a forte dynamic (ff) and includes various musical notations such as slurs, accents, and dynamic markings.

This page of a musical score, page 12, features a complex arrangement of instruments. The score is organized into two systems of staves. The upper system consists of six staves: the top two are for woodwinds (flute and oboe), the next two are for strings (violin and viola), and the bottom two are for woodwinds (clarinet and bassoon). The lower system consists of four staves for the piano, including the right and left hands. The music is written in a key signature of two flats (B-flat and E-flat) and a common time signature. The notation includes various rhythmic values, slurs, and dynamic markings such as *mf* and *ff*. The piano part shows a clear progression from a steady eighth-note accompaniment to a more active, sixteenth-note texture in the later measures.

This musical score page contains 13 staves of music. The top five staves are for woodwinds: Flute (1), Clarinet (1), Bassoon (1), Oboe (1), and Bassoon (2). The next five staves are for strings: Violin I, Violin II, Viola, Violoncello, and Contrabasso. The bottom three staves are for piano accompaniment: Right Hand, Left Hand, and Right Hand. The score includes various musical notations such as notes, rests, and dynamic markings like *p* (piano) and *f* (forte). A vertical grey bar highlights a section of the score from approximately measure 10 to measure 15.

This page of a musical score, numbered 105, features a complex arrangement of instruments. The score is organized into two systems of staves. The upper system consists of five staves: three treble clefs and two bass clefs. The lower system consists of five staves: two treble clefs and three bass clefs. The music is written in a key signature of two flats (B-flat and E-flat) and a 3/4 time signature. The notation includes various rhythmic values, including eighth and sixteenth notes, as well as rests and dynamic markings such as *mf* and *pp*. A large brace on the left side of the lower system groups the bottom four staves together. The page number '105' is printed at the bottom left of the score.

The musical score is arranged in 11 staves. The top five staves are for woodwinds and strings. The bottom six staves are for the piano accompaniment. The music is in 3/4 time and features complex rhythmic patterns and melodic lines. The score includes various musical notations such as notes, rests, beams, and dynamic markings.

Musical score for Overture to Coriolanus, page 118. The score consists of 12 staves. The top five staves are for woodwinds (flute, oboe, clarinet, bassoon, and horn). The next two staves are for strings (violin and viola). The bottom five staves are for piano accompaniment (right and left hand). The music is in 4/4 time and features a variety of rhythmic patterns and dynamics, including accents and piano markings.

118



The musical score is arranged in 12 staves. The top four staves are for woodwinds: Flute (1), Oboe, Clarinet, and Bassoon. The next four staves are for strings: Violin I, Violin II, Viola, and Cello. The bottom four staves are for piano and double bass. The score includes various musical notations such as notes, rests, and dynamic markings like "cresc." and "p cresc.".

The image shows a page of a musical score, page 133, from the Overture to Coriolanus. The score is written for four vocal parts and piano accompaniment. The vocal parts are arranged in four staves at the top, and the piano accompaniment is in the bottom system. The key signature is B-flat major (two flats), and the time signature is 4/4. The vocal parts have lyrics written below them. The piano part consists of a right hand with a complex rhythmic pattern and a left hand with a melodic line. The score includes dynamic markings such as *cresc.* and *p*. There are also some performance instructions like *2.* and *p*.

133

140

146

The musical score is arranged in two systems of six staves each. The top system includes woodwinds and strings, while the bottom system is for the piano. The score is written in a key signature of two flats and a 2/4 time signature. Dynamics such as *ff*, *p*, and *ten.* are used throughout. The piano part features a prominent melodic line in the right hand and a supporting bass line in the left hand.

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## APPENDIX B

### PARTICIPANT CONSENT AND AGREEMENT

You have been invited to participate in a research study in which you will be introduced to an interdisciplinary approach to conducting. Your name was included in the pool of possible participants because you have completed at least one year of conducting classes or private instruction. Please read this form and ask any relevant questions before signing the agreement to participate in the study.

Charles Gambetta is directing this research as part of the requirements for completing his Doctor of Musical Arts degree at the University of North Carolina at Greensboro. You may contact him by phone at 336.643.8730 or by email at [dirigent@bellsouth.net](mailto:dirigent@bellsouth.net).

#### **Purpose and Procedures:**

The purpose of this study is to propose and test the usage of the principles and language of Laban Movement Analysis as the means to confirm direct equivalence between musical expression and conducting gesture.

The study will begin with a pretest wherein each participant will conduct a performance of the assigned repertoire. These pretests will be documented by video recording and used to establish a standard against which the results of a posttest performance can be measured. Participants will then complete five weekly one-hour sessions of instruction in Laban Movement Analysis. This mini-course will neither address the assigned repertoire nor provide instruction on how to prepare and perform the score. It is designed to expand movement possibilities for conductors and help them better understand how the dynamic qualities of movement combine to represent elements of musical expression in any piece of music.

Following the course, posttest conducting performances of the same selection used for the pretest will be videotaped and compared with pretest recordings to reveal changes in and additions to each participant's collection of conducting gestures and to determine the impact of the mini-course on the participants' ability to connect conducting gesture to musical expression. After the posttests each participant will be interviewed by the researcher and asked to complete an evaluation of the LMA training and its impact on his/her conducting.

#### **Risks and Benefits for Participants:**

There are no known risks associated with participation in the study. Possible benefits include the acquisition of a new set of skills that will help you make better movement choices as a conductor and improve your understanding of the correspondence between musical expression and the dynamic qualities of movement.

#### **Confidentiality:**

Participants will be assigned numbers to maintain anonymity, but because the act of conducting is a physical behavior performed in public that involves the entire body, the video recordings will necessarily include participants' facial expressions. Pretest and posttest performances will be

reviewed by panels of three expert conductors and three Laban specialists. Video recordings, panel comments, participant interviews and evaluations included with the final publication will be coded by these numbers to protect participant privacy. Other documents will remain in confidential files maintained by the researcher for five years.

**No penalty for Withdrawal:**

This research is best served if all participants complete all phases of the project. However, should you choose to withdraw before the close of the project, there will be no penalty resulting from your decision beyond missing your participation in the conducting sessions and, therefore, your copy of the video recording of your conducting performances.

**As a participant in this study, you agree to:**

1. Study and prepare the score to Beethoven's Overture to Coriolanus, Op. 62 (mm. 1-154) before the scheduled conducting pretest.
2. Attend five weekly one-hour sessions of LMA training.
3. Commit to five hours of weekly practice of the techniques and skills learned in the seminar sessions and apply the skills learned in the seminar sessions to my conducting study of the repertoire assigned for this study.
4. Attend pretest and posttest conducting sessions during which I will be given a total of approximately eight minutes of podium time to conduct the assigned repertoire.
5. Agree to release any and all rights and royalties associated with your recorded performances. (You may request a copy of your tape for personal use.)
6. Complete an evaluation and interview at the conclusion of the study.

This research and this consent form have been approved by the University of North Carolina at Greensboro Institutional Review Board, which insures that research involving human participation follows federal regulations. Questions regarding your rights as a participant in this project can be answered by calling Mr. Eric Allen at 336.256.1482.

Your signature on this form indicates that you thoroughly understand the purpose of the study, the required time commitments and your contributions as a participant.

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Researcher's Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

## APPENDIX C

## RESEARCH CONFIDENTIALITY AGREEMENT

I have agreed to assist with participant conductor assessments for the research project entitled "Conducting outside the Box: Creating a Fresh Approach to Conducting Gesture through the Principles of Laban Movement Analysis" **IRB # 045037**.

I agree not to discuss or disclose any of the content or personal information contained within the data, tapes, transcriptions or other research records with anyone other than the Principal Investigator, Charles Gambetta, the Co-Investigator, Robert Gutter, or in the context of the research team. I agree to maintain confidentiality at all times and to abide by the UNCG Policy and Procedure for Ethics in Research and the UNCG Policy on the Protection of Human Subjects in Research.

Date:        /        /

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Signature

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Print Name

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Principal Investigator

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Print Name



## APPENDIX D

## LMA MINI-COURSE SYLLABUS

- I. Purpose of the Study
  - A. Testing an application of LMA developed by the researcher
  - B. What you will learn and how you can apply the information
- II. Introduction to LMA
  - A. Rudolf Laban
  - B. The Theoretical Framework
- III. Traditional Paradigm for Learning Conducting Gesture
  - A. Focus on prescriptive beat patterns, styles of beating
  - B. Little thought given to the composition of gestures
- IV. A New Perspective
  - A. An alternative method for organizing and creating effective gestures
  - B. The point of convergence for movement and music
  - C. Understanding the dynamic qualities of movement
- V. Effort Theory and Motion Factors
  - A. Space: attitude towards space direct or flexible (single or multi-focused)
  - B. Weight: attitude towards weight strong or light
  - C. Time: attitude towards time: quick or sustained
  - D. Flow: attitude towards the progression of movement free or bound
  - E. Indulging or surrendering vs. resisting or fighting against
- VI. States or Inner Attitudes
  - A. Weight and Time: Near State (rhythm)
  - B. Space and Flow: Remote State
  - C. Flow and Time: Mobile State
  - D. Space and Weight: Stable State
- VII. Effort – Space Affinities and Disaffinities and Dimensional/Defense Scale
  - A. Rising with lightness
  - B. Falling with strength
  - C. Enclosing with directness
  - D. Opening with flexibility
  - E. Advancing with sustainment
  - F. Retreating with quickness

- VII. Basic Effort Actions: Action Drive
  - A. Direct-Strong-Quick: punch, thrust, strike
  - B. Flexible-Light-Sustained: floating
  - C. Direct-Strong-Sustained: pressing
  - D. Flexible-Light-Quick: flicking
  - E. Direct-Light-Sustained: gliding
  - F. Flexible-Strong-Quick: slashing
  - G. Light-Quick: dabbing
  - H. Flexible-Strong-Sustained: wringing
  
- VIII. Diagonal Scale and the Effort Cube
  
- IX. Transformational Drives
  - A. Flow, Weight and Time: Passion-like Drive
  - B. Space, Time and Flow: Vision-like Drive
  - C. Space, Weight and Flow: Spell-like Drive
  
- X. Composing Gestures that Connect with Music
  - A. Tempo (steadiness, accelerating, slowing)
  - B. Dynamics (changes in force or amplitude)
  - C. Articulations (long, short, connected, detached, tenuto)
  - D. Starting and Stopping (preparation, cues, releases)
  - E. Style and Character (light, ponderous, lively, somber, etc.)
  - F. Texture and Registration (thick, thin, high, low)
  - G. Phrasing (showing shape, expressing mood, etc.)
  
- XI. The Test-Drive
  - A. Berlioz March to the Scaffold
  - B. Beethoven Symphony No. 5, movements I, III and IV.
  
- XI. Using LMA to Observe Conductors in Action
  - A. Art of Conducting Video Excerpts
  - B. Discussion
  
- XII. Closing Comments and Questions
  - A. Recommended Reading List
  - B. Where to Go for Instruction

## APPENDIX E

## CMA PANELIST ASSIGNMENTS

**Research Project Synopsis**

You will be observing four participant conductors in two performances, a pretest and posttest respectively, of the opening 154 measures of Beethoven's "Overture to Coriolanus," Op. 62. These sessions are not rehearsals so the conductors do not stop to correct errors—theirs or the orchestra's. The set of pretest performances took place on 16 and 23 September 2004. The posttests were all completed on 4 November 2004.

During the intervening weeks the participants completed a five-hour introductory course in Laban Movement Analysis, taught by the researcher, that focused on Effort/Shape theory. The curriculum included exercises that apply to all types of human movement and several that were designed to help participants integrate the material covered in class into their repertoire of conducting gestures. However, this course was not a conducting class. The teacher neither worked on the study repertoire with the participants nor showed them how to apply concepts learned in the class to the study repertoire. The participants were instructed to make their own movement choices and to use their own methods for integrating their newly acquired understanding of LMA into their conducting techniques.

A Samsung model SCD23 MiniDV camcorder with a single-point stereo microphone placed in front of the orchestra was used to document all performances. The audio balance is representative, but the dynamic range is somewhat limited by the camcorder's internal power amplification capabilities.

The resulting video recordings were transferred to DVD in their entirety. No changes were made to content, and all editing was confined to re-ordering clips so the progression of data flows logically from one conductor to the next. The researcher also created several menus for ease of viewing. Chapter markers are placed at the beginning of each complete performance and at the beginning of each short clip. These markers will save everyone a great deal of time and help facilitate navigation through the video clips.

The Philharmonia of Greensboro, a civic orchestra in Greensboro, North Carolina, was kind enough to donate their time and services to this study. Although every attempt was made to ensure that conditions in all performances were identical, the number of persons involved in this "laboratory" (the orchestra membership) created some challenges that require consideration.

- 1) The orchestra read the "Coriolan Overture" a total of three times before the pretests. No additional rehearsal or run-through of the study repertoire took place between the pretests and posttests. Additional rehearsal would have been desirable, but no time to refresh the orchestra's memory was available.

- 2) There were three absences (two horns and one flute) for the posttest, and several players (two bassoonists, a timpanist and two double bassists) who participated in the posttest who were not present for the pretest. A trumpet player covered the first horn part, but the second trumpet and second flute parts were not covered in the posttest. The second horn was sight-reading as well. The string sections were fairly consistent with an absence or two that did not impact the overall quality of either pre or posttest performances.

Even though these four conductors vary widely with respect to age, experience and proficiency, their diverse backgrounds present no challenges for your analyses because this study is not a comparison between individuals. It is instead a comparison of the standard set by each participant's pretest with results of his/her corresponding posttest. While not intentional, this variance may also produce results that can be generalized to a larger population than would have been possible otherwise precisely because the participants possess such different backgrounds.

This study differs from most prior evaluations of conducting because it attempts to recognize and measure qualitative changes in the conductors' gestures that reflect improvement in the connections between their movements and elements of musical expression. Rather than "keeping score" by counting successful (or unsuccessful) preparations, beats, tempo changes, cues, dynamics, etc., the conductor panel will be making critical assessments of tempo, dynamics, articulations, style, character, shape, intensity and expressive quality of conductor gestures from both global (the complete performances) and local (specific moments in the performances) perspectives.

The Certified Movement Analyst panel will use the tools and terminology of Laban Movement Analysis to describe and analyze the conductors' movements and to look for additions to and changes in the conductors' repertoire of gestures. This parallel, complementary channel of analysis will provide independent corroboration of the observable changes in the participants' movement behaviors and specific evidence that participants have absorbed and applied the study course materials.

Lastly, the participants themselves will supply a third channel of information through a post-study interview in which each participant will be asked to evaluate the benefits resulting from the coursework based on his/her personal experiences. This unique trilateral treatment of the data should encourage additional investigations because studies to date have yet to provide such a comprehensive confirmation of the value and benefits of LMA training for conductors.

## General Instructions

### Enclosures and Required Materials

In addition to the cover letter your package of materials includes:

- instructions for the analysis of the conductors' movement behaviors
- the UNCG IRB Confidentiality Agreement form and return envelope
- a 3 ½ inch PC formatted floppy disk with an electronic copy of this information
- excerpted pages from Beethoven's "Coriolan Overture" with the measures tagged for detailed analysis clearly marked
- two DVD video recordings (one DVD-R and one DVD+R) that include the four conductors' pretest and posttest performances plus five pairs of very brief clips extracted from each conductor's videos\*
- a stamped, pre-addressed Priority Mail envelope for returning the media and your analyses.

**\*NOTE:** The DVDs contain identical content. You received both formats because some players only read -R or +R formats. You should be able to play at least one of them in your computer DVD ROM drive or set-top DVD player. If you find that neither of the DVDs will play on your hardware, please contact the researcher immediately to receive an alternative compatible media (a VHS cassette). If you don't yet own a DVD player, they are now very inexpensive, regularly on sale for about \$40.00 at several national chains. Should you choose to purchase one, be sure to take both the enclosed DVDs with you to the store to confirm that the player you select will play at least one of them.

Please create a separate set of documents or files for each conductor clearly marked with the corresponding number, "Conductor No. 1, No. 2, etc.," in the **top right corner** of each page. Make sure your numbers match those on the DVD as the participants are identified only by number.

MS Word documents are preferred if possible, but versions of MS Works, Corel Word Perfect or MS WordPad **less than four years old** should work as well. Mac versions of software are fine, but they must be OS 9 or later, and you will need to save the documents to the enclosed PC-compatible floppy disk. Effort motif writing included in your analyses will likely be done with pencil and paper. You may scan your graphs and send TIFF, JPEG or PICT files, fax them or simply wait and return the originals to me in the return envelope.

The computer used in this study is a Dell Pentium 4 PC that runs Windows XP. It is equipped with both a floppy and DVD/CD ROM drives. If you are able to create word processing files, you can return the completed analyses on either the included floppy disk

or CD if you like. Those who return hand-written documents, please make sure they are clearly legible so they can be quickly transcribed.

Before beginning your analysis and assessments, please read through all instructions and questions. This initial reading is important because it will help you better understand the goals of this research and provide a solid framework for completing your portion of the project.

As you review the instructions, you will notice time limits for viewing the videos and completing the assignments. No need to worry; your contribution to the study is not a power test. If you need more time to complete the documentation of your analysis, please take it within reason. However, I ask that you adhere to limits placed on viewing and follow instructions to help ensure consistent analysis across membership of both panels and because your time is precious.

**NOTE:** Please take a few moments to complete the confidentiality agreement and return it to the researcher in the stamped, pre-addressed No. 10 envelope. Keep the second copy for your records.

### **Assignment One: Global Assessments or Initial Impressions**

#### Viewing Instructions

Review the pretest and posttest performances of each participant without interruption. You may pause the playback to write comments, but please refrain from replaying specific excerpts. Your goal is to gather generalized impressions of each participant's movement behaviors. *Opportunities for more detailed analysis will come in your second analytical assignment.*

If you like, you may begin by viewing the pretests and posttests "off the clock" one time to get the flavor for the music and to help pace the progress of your assignment.

You may view each conductor's pretest and posttest up to a maximum of three (3) times. (The "off the clock" preview does not count toward the maximum number of views.)

You can either take whatever notes you require to document your observations as the DVD runs and wait to compose your profile until you are finished viewing the pretests, or you may choose to write your actual comments while viewing the video.

Should you notice something on the posttest that you believe you may have missed on the pretest or that requires you to reference the pretest, you may return to the pretest to explore such possibilities.

You are not required to view all four conductors in one sitting, but you should plan to complete the assignment for each conductor in one session.

The clips are less than four minutes each so plan on about 20 to 30 minutes of viewing for each conductor (depending on number of views). Feel free to structure your review in the order that best facilitates your completion of the task. Some may like to watch the pretest three times and complete the first profile before moving on to the posttest. Others may choose to watch them in sequence three times. In either case, the DVD is tagged with chapters so you can easily find any location on the disc. If you choose the sequential option, remember to complete both profiles for each conductor before moving on to the next.

#### Procedures for Written Assessments

- 1) Based on your careful study of each conductor's pretest performance, compose a pretest movement profile, 300 to 500 words in length, for each conductor in the study. Your profiles should include descriptions of movement preferences, characteristic drives and states, notable preferences in Effort phrasing and Effort patterning, levels of intensity, Effort/Shape and Effort/Space affinities and commentary about relationship of BESS to what you observe on the videos. Remember that your comments should focus on more general impressions of the participants.

**NOTE:** Opportunities for detailed analysis will follow in the second assignment so save notes you take because they may be useful at that time as well.

- 2) Use the completed pretest profile as the basis for composing a corresponding posttest profile for each conductor. The former is a standard against which you can measure the changes that you observe in the latter. Describe any changes you observe in Effort phrasing, Effort patterning and intensity, additional new movement choices and any changes in relationship to BESS.

Do not begin a conductor's posttest profile until first completing his/her pretest profile. You may view them sequentially, but the written analysis for each pretest should be done before starting the posttest because one is used as a point of reference for the other. The posttest profile should address the same issues in the same order that were raised in the pretest profile. (This procedure will help the researcher keep track of things when he is looking at twelve analyses.) In other words, if you discussed states, drives, Effort phrasing and patterning, Effort/Shape and Effort/Space affinities in the pretest, then your posttest profile should cover those points **plus** any new developments not present in the pretest. Remember that you can return to the pretest to compare and confirm your impressions in the posttest.

The estimated time to complete assignment one is four hours.

## Assignment Two: Detailed Analysis

### Video Clip Content and Ordering

The DVD includes five (5) pairs of very short clips, numbered 1 through 5, that follow the complete uninterrupted pretest and posttest performances (at about thirty-two minutes into the DVD). You can find them by clicking “Clips for Detailed Analysis” on the Main Menu, or you can simply move through chapters on the DVD until you arrive at the second menu.

These clips contain no new data. You will quickly recognize that they are extracted from pretest/posttest sessions you have already viewed. Each excerpt was selected because the musical content at these particular moments in the score should compel the conductor to complete one or more transformations of Effort (and often additional changes in relation to Body, Space and Shape). For example, the first clip, mm. 1-3, requires a preparation, the initial forte downbeat, two measures of sustained C Minor followed by a quarter note F Minor chord on the downbeat of the third measure. The next clip, mm. 19-22, includes a crescendo for two measures followed by silence and a new preparation and downbeat. The three remaining clips are of similar length, and they all contain excerpts in which notation in the score should direct the conductor to show something other than time-beating. It is paramount that you remember that the clips are sequenced in corresponding pairs.

### Locations in the Score and Start/End Points for Analysis

Clip 1: initial preparatory beat to end of beat 1, m. 3

Clip 2: fall to beat 1, m. 19 to end of beat 1, m. 22

Clip 3: fall to beat 1, m. 50 to end of beat 1, m. 52

Clip 4: fall to beat 1, m. 62 to end of beat 1, m. 64

Clip 5: fall to beat 1, m. 100 to end of beat 1, m. 104

Every posttest clip immediately follows the corresponding pretest clip. This arrangement means that you must complete the process for **each pair** of clips before moving to the next pair. DVD chapter markers for pre and posttest clips are placed at the precise moment your analysis should begin so moving from clip to clip is simple and very clear.

To view a posttest clip you may either roll through the pretest clip at normal speed or use “Next Chapter” on your DVD player or remote. In either case, the clips are only a few seconds long. To move ahead to the next PAIR of clips, either let the DVD run or press the “Next Chapter” button on your DVD remote.

To repeat a clip you are viewing, use the “Last Chapter” button on the DVD player. The playback will return to the precise moment at which your analysis should begin. The screen fades to black as each clip ends so you will know when to hit the replay or “Last



Chapter” button if you want to repeat the clip. If all else fails, you can always return to the menu in order to find your place again.

Whether or not you read music, you can easily determine the exact point to begin your analysis of any clip begins by using the “Last Chapter” and “Next Chapter” buttons on your DVD remote (normally those showing arrows with a line next to them).

**NOTE:** All instructions and references to clips in Assignment Two apply **only** to the five pairs of clips described above. The menus are arranged so you cannot return to the complete performances unless you restart the DVD.

### Viewing Instructions

- 1) Review each pretest clip for each conductor from six (6) to a maximum of ten (10) times. Repeat the process for the corresponding posttest clip that follows.

**NOTE:** As with the viewing procedures in Assignment One, you may view each pair of clips sequentially (pretest and posttest together up to 10 times), or you may choose to complete up to 10 views of each pretest clip before viewing the corresponding posttest clip. In either case, **do not** move to the next pretest clip until you have completed your analysis of **both** pretest and posttest clips in **each pair** of excerpts.

- 2) If you read music, you are welcome to examine and follow the score at the locations that refer to the video clips. However, musical literacy is not required to complete the assignment. The researcher is well aware that most CMA’s work without the soundtrack, and you may work with or without sound for the present study as well.

### Viewing Tips

- You will see a new menu with ten buttons for each conductor’s clips.
- The “PRE” and “POST” chapter buttons appear beside the clip numbers.
- There are no titles for individual clips because they are so short.
- The conductors all dressed differently for the posttest than the pretest so it is easy to differentiate between pretest and posttest clips.
- Button functions differ from one DVD player to the next, but after a few tries, you will understand the button scheme for your player.

### Analysis Procedures

- 1) Complete an Effort analysis for each pretest clip. You should include traditional, horizontal Effort motifs with pluses and minuses to indicate levels of intensity and complementary LMA Effort/Shape terminology to support your motifs. You may also include additional motif writing and Space symbols if you wish. The researcher

- understands and reads the Space symbols but not Labanotation so please refrain from writing movement scores.
- 2) Once finished with each **pretest** analysis, proceed to the corresponding **posttest** clip. Create an Effort analysis for each posttest clip following the same procedures as the indicated by the instructions for the pretest clips in Analysis Procedure No. 1 above.
  - 3) Compare the analyses for **each pair** of pretest/posttest clips to identify and discuss observable changes in the Efforts used by each conductor in the posttest clips as well as changes in intensity of Effort indicated by the plus and minus signs used in your Effort motifs. Limit your comments to 150 words (about two paragraphs) of analysis (not interpretation) for **each pair** of clips.

The estimated time to complete Assignment Two is four hours.

### **Exit Question**

Based on your observations of the participants as an experienced LMA practitioner and teacher, comment on the changes you observed in the conductor participants' movement behaviors. Understanding that the participants specifically worked on expanding and refining Effort choices they make as conductors, do your observations lead you to conclude that some or all of these changes **may** be attributed to the participants' LMA training? Support your answer with examples from your analyses. (300-500 words)

### **Returning Your Analyses and Media**

Upon completing your assignments, please make a back-up copy of your computer files and/or hand-written documents before emailing or sending your results by mail and retain the copies until the researcher has notified you that they have been successfully retrieved and transcribed. Your package included a stamped, pre-addressed envelope to make the delivery of your analysis as easy as possible. The postage is sufficient to cover the cost of mailing up to two pounds anywhere in the US so you should not have to add postage. If unsure, weigh the envelope before sending it. If your work is done by hand, make and retain a second, backup hard copy of your analyses until notified as well.

You must enclose and return the DVDs with your completed analyses as required by UNCG research protocol. If you have not yet done so, **be sure to complete and include the Confidentiality Agreement before mailing the package.** You need not return the score, cover letter or questionnaire, but they do need to be kept confidential until I complete my defense and the dissertation is published.

THANK YOU!!

## APPENDIX F

## CONDUCTOR PANELIST ASSIGNMENTS

**Research Project Synopsis**

You will be observing four participant conductors in two performances, a pretest and posttest respectively, of the opening 154 measures of Beethoven's "Overture to Coriolanus," Op. 62. These sessions are not rehearsals so the conductors do not stop to correct errors—theirs or the orchestra's. The set of pretest performances took place on 16 and 23 September 2004. The posttests were all completed on 4 November 2004.

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- 1) The orchestra read the "Coriolan Overture" a total of three times before the pretests. No additional rehearsal or run-through of the study repertoire took place between the pretests and posttests. Additional rehearsal would have been desirable, but no time to refresh the orchestra's memory was available.

- 2) There were two absences (one horn and one flute) for the posttest, and several players (two bassoonists, one horn, the timpanist and two double bassists) who participated in the posttest who were not present for the pretest. A trumpet player covered the first horn part, but the second trumpet and second flute parts were not covered in the posttest. The second horn was sight-reading as well. The string sections were fairly consistent with an absence or two that did not impact the overall quality of either pre or posttest performances.

Even though these four conductors vary widely with respect to age, experience and proficiency, their diverse backgrounds present no challenges for your analyses because this study is not a comparison between individuals. It is instead a comparison of the standard set by each participant's pretest with results of his/her corresponding posttest. While not intentional, this variance may also produce results that can be generalized to a larger population than would have been possible otherwise precisely because the participants possess such different backgrounds.

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The Certified Movement Analyst panel will use the tools and terminology of Laban Movement Analysis to describe and analyze the conductors' movements and to look for additions to and changes in the conductors' repertoire of gestures. This parallel, complementary channel of analysis will provide independent corroboration of the observable changes in the participants' movement behaviors and specific evidence that participants have absorbed and applied the study course materials.

Lastly, the participants themselves will supply a third channel of information through a post-study interview in which each participant will be asked to evaluate the benefits resulting from the coursework based on his/her personal experiences. This unique trilateral treatment of the data should encourage additional investigations because studies to date have yet to provide such a comprehensive confirmation of the value and benefits of LMA training for conductors.

## General Instructions

### Enclosures and Required Materials

In addition to the cover letter your package of materials includes:

- the printed questionnaires with electronic copies on PC 3 ½ inch floppy disk+
- the UNCG IRB confidentiality agreement form and return envelope
- excerpted pages from Beethoven's Coriolan Overture with the measures tagged for detailed analysis clearly marked
- two DVD video recordings (one DVD-R and one DVD+R) that include the four conductors' pretest and posttest performances plus five pairs of very brief clips extracted from each conductor's videos\*
- a stamped, pre-addressed Priority Mail envelope for returning the media and your analyses.

**+NOTE:** The researcher has created and enclosed a separate set of forms for each conductor. The header of each page for each set of documents is clearly coded with "Conductor No. 1, No. 2, No. 3 or No. 4. As you begin and continue the assignments double check to make sure you are using the set of documents that matches the ID of the conductor you are evaluating.

**\*NOTE:** The DVDs contain identical content. You received both formats because some players only read -R or +R formats. You should be able to play at least one of them in your computer's DVD ROM drive or set-top DVD player. If you find that neither of the DVDs will play on your hardware, please contact the researcher immediately to receive an alternative compatible media (a VHS cassette). If you don't yet own a DVD player, they are now very inexpensive, regularly on sale for about \$40.00 at several national chains. Should you choose to purchase one, be sure to take both the enclosed DVDs with you to the store to confirm that the player you select will play at least one of them.

Your completed forms can be easily transcribed to MS Word using the files on the enclosed floppy disk. If you are not an MS Word user, it is best to return the hand-written copies for transcription. Please do not attempt to convert file formats because file corruption can destroy your data and analyses. If you send electronic files, you should also include a hard copy in your return package.

If you are able to use the electronic forms, you can return the completed analyses on either the included floppy disk or CD if you like. Those who chose to return hand-written documents, please make sure they are clearly legible so they can be quickly transcribed.

Before beginning your analysis and assessments, please read through all instructions and questions. This initial reading is important because it will help you better understand the goals of this research and provide a solid framework for completing your portion of the project.

As you review the instructions, you will notice time limits for viewing the videos and completing the assignments. No need to worry; your contribution to the study is not a power test. If you need more time to complete the documentation of your analysis, please take it within reason. However, I ask that you adhere to limits placed on viewing and follow instructions to help ensure consistent analysis across membership of both panels and because your time is precious.

**NOTE:** Please take a few moments to complete the confidentiality agreement and return it to the researcher in the stamped, pre-addressed No. 10 envelope. Keep the second copy for your records.

### Conductor Assessments and Rating Systems

The participants are all students, but for the purpose of this study you are to rate them against a **single standard**. That standard is your concept of a well executed, artistically and aesthetically valid performance of the study repertoire. Whatever the anchors and rating scale for any given question or statement, you are expected to use the **entire rating scale** as the basis for your ultimate assessment. The conductors are not competing against one another. In the pretest, they are measured against the standard you set as a rater. That standard is maintained in the posttest with the understanding that you are expected to rate for observable changes in movement behavior compared to the pretest performance.

### Important considerations for your evaluations-

Conducting is among the most intensely personal expressive arts. As such it is tempting for us, as judges and evaluators, to allow our personal bias to influence decisions we make regarding the effectiveness, successes and shortcomings of other conductors. This study is not asking you if these four conductors are interpreting and conducting the repertoire as you would. There are usually least several technical solutions a given musical challenge in any score. Five different conductors will likely make different movement choices to convey their intentions just as five accomplished violinists will finger or phrase the same passage of music differently. This work requires you to observe the participants from two points of view in order to come to your decisions: one as a conductor and the other as a performer in the ensemble watching the conductor. In other

words, even if the conductor is moving in ways that do not conform to your own sensibilities, do you find the gestures you observe to be helpful and accurate or not?

### Assignment One: Global Assessments and Initial Impressions

#### Viewing Instructions

Review the pretest and posttest performances of each participant without interruption. You may pause the playback to write comments, but please refrain from replaying specific excerpts. Your goal in Assignment One is to gather generalized impressions of each participant's conducting gestures. *Opportunities for more specific assessments will come in your second assignment.*

If you like, you may begin by viewing the pretests and posttests "off the clock" one time to get the flavor for the music and to help pace the progress of your assignment.

You may view each conductor's pretest and posttest up to a maximum of three (3) times. (The preview mentioned above does not count toward the maximum number of views.)

You can either take whatever notes you require to document your observations as the DVD runs and wait to complete the questions and summary until you are finished viewing the pretest, or you may choose to write your actual comments while viewing the video.

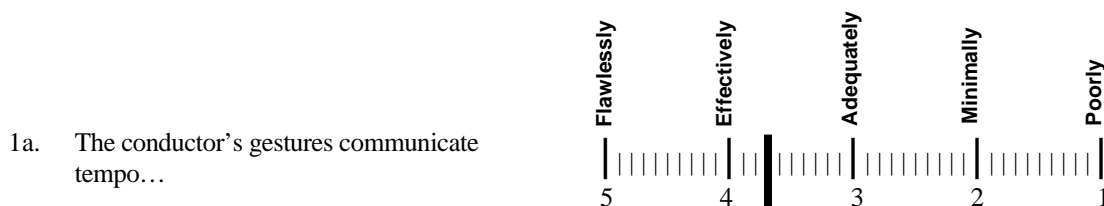
Should you notice something on a conductor's posttest that you believe you may have missed on his/her pretest, you may return to the pretest to explore such possibilities.

You are not required to view all four conductors in one sitting, but you should plan to complete your assignment for each conductor in one session.

The clips are less than four minutes each so plan on about 20 to 30 minutes of viewing for each conductor depending on number of views. Feel free to structure your review in the order that best facilitates your completion of the task. Some may like to watch the pretest three times and complete the first profile before moving on to the posttest. Others may choose to watch them in sequence three times. In either case, the DVD is tagged with chapters so you can easily find any location on the disc. If you choose the sequential option, remember to **complete both profiles** for each conductor **before** moving on to the next.

## Procedures and Documentation

**Assignment One** includes ten questions that address specific issues related to conducting gesture. The first six questions contain two parts, ‘a’ and ‘b.’ Nos. 1a – 6a require a *qualitative* assessment of the conductor’s gestures—how well his/her movements communicate the musical event(s) in question (flawlessly, effectively, adequately, minimally or poorly). Indicate your response by marking the 5-point decimal scale at the **precise** location that matches your assessment as shown in the example below.



Use the following rubric to assist in the evaluation process.

**Flawlessly:** absolutely convincing and compelling representation of the musical event(s) in question that consistently exhibits an undeniable physical connection between gestures and events in the score. The variety and originality of gestures reveal a thoughtful yet spontaneous approach. A deep and thorough understanding of the score is self-evident. The conductor’s force of will and musical intentions are clearly and consistently fused with his/her gestures.

**Effectively:** a credible performance wherein gestures typically confirm or reinforce the musical events in question. The conductor’s musical intentions are discernable from his/her gestures, but the physical connection or linkage between gestures and the sounds is sometimes less than totally convincing. The conductor uses a large variety gestures, and most look successful; they just don’t feel as potent.

**Adequately:** a perfunctory performance using a limited, if serviceable, repertoire of gestures that convey general impressions of the musical events in question without any genuine sense of conviction. The conductor’s movement choices seem to suggest that (s)he understands the score (or parts of it), but the gestures fail to transmit his/her musical intentions to the ensemble successfully because the connection between gestures and the events they represent is intermittent and tenuous.

**Minimally:** gestures transmit a sense of the meter, but seldom exhibit characteristics that would indicate a conscious physical connection to the musical events in question. The conductor’s musical intentions are rarely revealed in his/her gestures, which, as a result, fail to communicate knowledge and understanding of the score. Musical events are sometimes obscured by ambiguous movements that fail to provide useful information to the ensemble because they lack the proper character, energy velocity or muscle tension.



**Poorly:** gestures transmit little or no information that affirms the musical events in question. The conductor often appears to beat in order to keep his/her place in the score rather than to lead the performance. The gestures used are few in number, and they are sometimes in conflict with musical signals in the score so the orchestra must sometimes perform in spite of the conductor. If the conductor has knowledge of the score, it is not evident in the gestures.

Nos. 1b – 6b require an assessment of the frequency with which the conductor is able to produce gestures that represent the musical event(s) in question (always, most times, over half the time, etc.). Responses to part ‘b’ questions are completed by making a mark in the box that most closely matches your evaluation as demonstrated in the example below.

	Always	Most Times	Over Half the Time	Half the Time	Sometimes	Rarely	Never
1b. The conductor’s gestures establish and maintain an appropriate tempo.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Questions 7 – 10 address summative concerns and require a single ‘part b’ type response.

- 1) Based on your careful study of each conductor’s **pretest** performance, complete the enclosed **Pretest Questionnaire**. Answer each question by selecting the response that most closely matches your assessment of the conductor’s performance as it relates to the musical and technical concerns raised by each question.
- 2) Include a written justification (about 50 words) to support your answers in the space provided below each question. In other words, explain how and why you made your selection. Your comments should include information such as measure numbers, visual references, movement characteristics, apparent confluence or conflict between musical content and conducting gestures, etc.

The written justifications or analyses that come *after* you arrive at your decisions are as important as the decisions themselves. Typical criticisms such as: “The character of the beat is wrong, or he missed the tempo modification,” are insufficient. If the beat is wrong, explain why. If the conductor’s movements are not connected to the music or the ensemble, explain how and why.

- 3) Repeat the procedures 1 and 2 above to complete the corresponding **Posttest Questionnaire** for each conductor’s **posttest** performance. (**Do not** begin a conductor’s **posttest** questionnaire until first completing his/her **pretest**.)

Use the completed questionnaires as the basis for a **written summary** on last page of the questionnaire for **each conductor** (four conductors—four summaries) that compares his/her pretest and posttest (about 150 words). Remember that the pretest is a standard against which you measure the changes that you observe (for better or worse) in the posttest. The most fundamental questions that guide and direct your summaries are: what changes (if any) do you see in the posttest performance compared to the pretest, and what outcomes do these changes produce?

## **Assignment Two: Specific Evaluations**

### The Video Clips

The DVD includes five (5) pairs of very short clips, numbered 1 through 5, that follow the complete uninterrupted pretest and posttest performances (at about thirty-two minutes into the DVD). You can find them by selecting “Clips for Detailed Analysis” on the main menu, or you can simply move through chapters on the DVD until you arrive at the second menu.

These clips contain no new data. You will quickly recognize that they are extracted from pretest/posttest sessions you have already viewed. Each excerpt was selected because the musical content at these specific moments in the score should require the conductor to complete one or more transformational gestures.

For example, the first clip, mm. 1-3, requires a preparation, the initial forte downbeat, two measures of sustained C in unison followed by a quarter note F Minor chord on the downbeat of the third measure. The next clip, mm. 19-22, includes a crescendo for two measures followed by a measure of silence and a new preparation and downbeat. The three remaining clips are of similar length, and they all contain signals in the score that should direct the conductor to show something other than time-beating. It is paramount for you to remember that the clips are sequenced in **pairs** (pretest/posttest).

Every posttest clip is placed immediately after the corresponding pretest clip. This arrangement means that you must complete the process for **each pair** of clips before moving to the next pair. DVD chapter markers are placed at the precise moment the pretest and posttest clips begin so moving from clip to clip is simple and very clear.

To view a posttest clip you may either roll through the pretest clip at normal speed or use the “Next Chapter” button. In either case, the clips are only a few seconds long. To move ahead to the next PAIR of clips, either let the DVD run or press the “Next Chapter” button on your DVD remote. To repeat a clip you are viewing, use the “Last Chapter” button on the DVD player. The playback will return to the beginning of the clip you were viewing.

The screen fades to black as each clip ends so you will know when to hit the replay button if you want to repeat the clip. If all else fails, you can always return to the menu in order to find your place again. Please be assured that it is easier to navigate through the disc than it is to describe the process in writing.

**NOTE:** All instructions and references to clips in **Assignment Two** apply **only** to the five pairs of clips described above. Do not return to the complete performances once you complete Assignment One.

### Viewing Instructions

- 1) Examine the locations marked in the score that indicate the starting and ending points of the paired video clips and complete an analysis of each brief excerpt to determine what the conductor should be attempting to convey.

#### Start and End Points for Assessments

Clip 1: initial preparatory beat to end of beat 1, m. 3

Clip 2: fall to beat 1, m. 19 to end of beat 1, m. 22

Clip 3: fall to beat 1, m. 50 to end of beat 1, m. 52

Clip 4: fall to beat 1, m. 62 to end of beat 1, m. 64

Clip 5: fall to beat 1, m. 100 to end of beat 1, m. 104

**NOTE:** Direct your attention and limit your analysis to **only** the measures marked the score. Remember that the edited clips include a short fade-in and a fade-out to make them easier on the eyes and ears.

- 2) Review each pretest clip for each conductor from six (6) to a maximum of ten (10) times. Repeat the process for the corresponding posttest clip that follows.

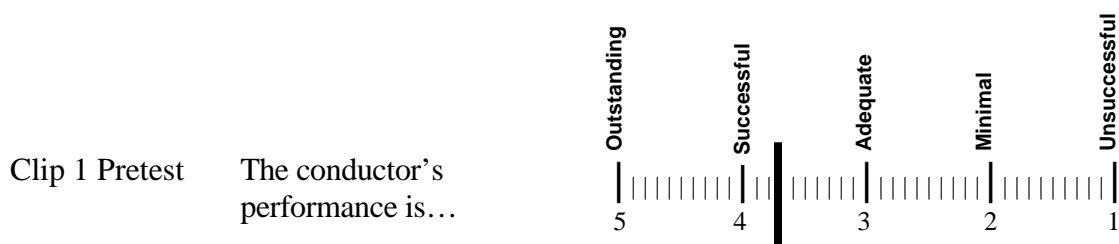
**NOTE:** As with the viewing procedures in Assignment One, you may view each pair of clips sequentially (pretest and posttest together up to 10 times), or you may choose to complete up to 10 views of each pretest clip before viewing the corresponding posttest clip. In either case, **do not** move to the next pretest clip until you have completed your analysis of **both** pretest and posttest clips in **each pair** of excerpts.

### Viewing Tips

- You will see a new menu with buttons for each conductor's Assignment 2 clips.
- Chapter buttons "PRE" and "POST" appear beside the clip numbers.
- There are no titles for individual clips because they are so short.
- The conductors all dressed differently for the posttest than the pretest so it is easy to differentiate between pretest and posttest clips.
- Button functions differ from one DVD player to the next, but after a few tries, you will understand the button scheme for your player.

### Procedures and Documentation

- 1) The object of your evaluation is to determine the degree to which the conductor's gestures accurately represent the musical events that take place within each of the five pretest and posttest clips.
- 2) Following careful review of each **pretest** clip, use the enclosed **Assignment Two Questionnaire** to rate the conductor's **pretest** performance on a scale of 1.0 (the lowest score) to 5.0 (the highest possible score). Enter your score by marking the 5-point decimal scale at the location that matches your assessment as shown in the example below.



- 3) After rendering your decision, use the space provided on the form to compose a written justification for your response (about 50 words). Include a discussion of the successes and/or deficiencies you observed that played a role in your assessment.

**NOTE:** Your evaluations should avoid discussions of interpretation or aesthetics and, instead, remain focused on whether or not the conductors' musical intentions are clearly visible in their gestures. While interpretation and aesthetics are undeniably important considerations, this study does not address either. For example, you may believe the silent measures in the opening of the "Coriolan Overture" are to be counted in strict tempo. Other conductors treat them as General Pauses or fermatas. For the purposes of this research project, such disagreements are not errors; they are differences of opinion. Conversely, what the conductor does physically during these measures *is* a point of analysis and should be a consideration.

Use the following rubric to assist in the evaluation process.

**Outstanding:** absolutely convincing and compelling representation of the musical event(s) in question that consistently exhibits an undeniable physical connection between gestures and events in the score. The variety and originality of gestures reveal a thoughtful yet spontaneous approach. A deep and thorough understanding of the score is self-evident. The conductor's force of will and musical intentions are clearly and consistently fused with his/her gestures.

**Successful:** a credible performance wherein gestures typically confirm or reinforce the musical events in question. The conductor's musical intentions are discernable from his/her gestures, but the physical connection or linkage between gestures and the sounds is sometimes less than totally convincing. The conductor uses a large variety of gestures, and most look successful; they just don't feel as potent.

**Adequate:** a perfunctory performance using a limited, if serviceable, repertoire of gestures that convey general impressions of the musical events in question without any genuine sense of conviction. The conductor's movement choices seem to suggest that (s)he understands the score (or parts of it), but the gestures fail to transmit his/her musical intentions to the ensemble successfully because the connection between gestures and the events they represent is intermittent and tenuous.

**Minimal:** gestures transmit a sense of the meter, but seldom exhibit characteristics that would indicate a conscious physical connection to the musical events in question. The conductor's musical intentions are rarely revealed in his/her gestures, which, as a result, fail to communicate knowledge and understanding of the score. Musical events are sometimes obscured by ambiguous movements that fail to provide useful information to the ensemble because they lack the proper character, energy velocity or muscle tension.

**Unsuccessful:** gestures transmit little or no information that affirms the musical events in question. The conductor often appears to beat in order to keep his/her place in the score rather than to lead the performance. The gestures used are few in number, and they are sometimes in conflict with musical signals in the score so the orchestra must sometimes perform in spite of the conductor. If the conductor has knowledge of the score, it is not evident in the gestures.

- 4) Following careful review of each **posttest** clip, use the **Assignment Two Questionnaire** and rubric to rate the conductor's **posttest** performance on a scale of 1.0 (lowest score) to 5.0 (highest score). Enter your score by marking the corresponding 5-point decimal scale (see example above).
- 5) After rendering your decision, use the space provided on the form to compose a written justification for your response (about 50 words). Include a discussion of the successes and/or deficiencies you observed that played a role in your assessment.
- 6) Use your assessments of each conductor's pretest and posttest clips to compose a summary on last page of the questionnaire (about 150 words) that discusses the changes and improvements you observed as recorded on your justifications (four conductors—four summaries).

### **Assignment Three: Exit Questions**

Your assignments thus far have concentrated on the four participants as individuals, and you have already answered the exit questions for each conductor. However, because they participated in the LMA mini-course together and because one of the goals of this study is to document and describe changes in movement behaviors across the study population, the closing questions address the four participants collectively as a group. Although you may refer back to the video to complete these questions if you wish, no further analysis or viewing is required. Simply let the narratives from your completed assignments speak to the exit questions. **Please type or write your answers on a separate sheet of paper.**

- 1) Based on your conclusions in Assignments One and Two and your experience as a conductor and conducting teacher, comment on the changes, if any, you observed in the conductors' movement behaviors during their posttest performances compared to their pretests. (i.e. What kinds of change in which areas covered by the questions did you observe?) (100 words)
- 2) Did these changes result in improved connections between the conductors' gestures and musical events in the score? Explain how and why. (100 words)
- 3) Do you believe such improvements translated to a better connection between conductor and ensemble? Explain. (100 words)

### **Returning Your Analysis and Media**

Upon completing the three assignments, please make a back-up copy of your computer files before emailing or sending your results by mail and retain the copy until the researcher has notified you that they have been successfully retrieved and transcribed. Your package included a stamped, pre-addressed envelope to make the delivery of your analysis as easy as possible. The postage is sufficient to cover the cost of mailing up to two pounds anywhere in the US so you should not have to add postage. If unsure, weigh the envelope before sending it. If done by hand, make and retain a second, backup hard copy of your analyses until notified as well. You must enclose and return the DVDs with your completed analyses as required by UNCG research protocol. You need not return the score, cover letter or questionnaire, but they do need to be kept confidential until I complete my defense and the dissertation is published.

THANK YOU!!

APPENDIX G

CONDUCTOR EVALUATION QUESTIONNAIRE

Assignment 1  
Conductor 1 Posttest Questionnaire

1a. The conductor's gestures communicate tempo...

	Flawlessly		Effectively		Adequately		Minimally		Poorly
	5		4		3		2		1

1b. The conductor's gestures establish and maintain an appropriate tempo.

<input type="checkbox"/>	Always	<input type="checkbox"/>	Most Times	<input type="checkbox"/>	Over Half the Time	<input type="checkbox"/>	Half the Time	<input type="checkbox"/>	Sometimes	<input type="checkbox"/>	Rarely	<input type="checkbox"/>	Never
--------------------------	--------	--------------------------	------------	--------------------------	--------------------	--------------------------	---------------	--------------------------	-----------	--------------------------	--------	--------------------------	-------

Comments:

2a. The conductor's gestures communicate dynamics...

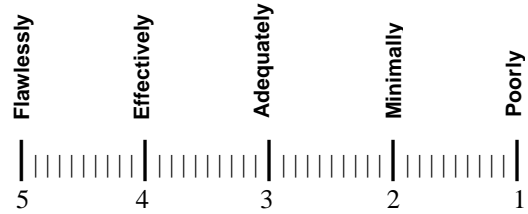
	Flawlessly		Effectively		Adequately		Minimally		Poorly
	5		4		3		2		1

2b. The conductor's gestures accurately reflect the dynamics.

<input type="checkbox"/>	Always	<input type="checkbox"/>	Most Times	<input type="checkbox"/>	Over Half the Time	<input type="checkbox"/>	Half the Time	<input type="checkbox"/>	Sometimes	<input type="checkbox"/>	Rarely	<input type="checkbox"/>	Never
--------------------------	--------	--------------------------	------------	--------------------------	--------------------	--------------------------	---------------	--------------------------	-----------	--------------------------	--------	--------------------------	-------

Comments:

3a. The conductor's gestures communicate articulations...

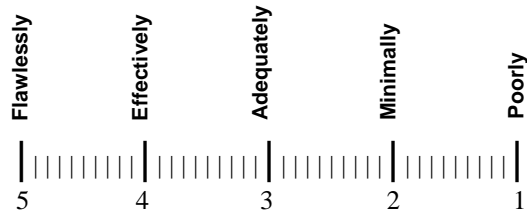


3b. The conductor's gestures accurately reflect the articulations.

<input type="checkbox"/>	Always	<input type="checkbox"/>	Most Times	<input type="checkbox"/>	Over Half the Time	<input type="checkbox"/>	Half the Time	<input type="checkbox"/>	Sometimes	<input type="checkbox"/>	Rarely	<input type="checkbox"/>	Never
--------------------------	--------	--------------------------	------------	--------------------------	--------------------	--------------------------	---------------	--------------------------	-----------	--------------------------	--------	--------------------------	-------

Comments:

4a. The conductor's gestures communicate Beethoven style and character...



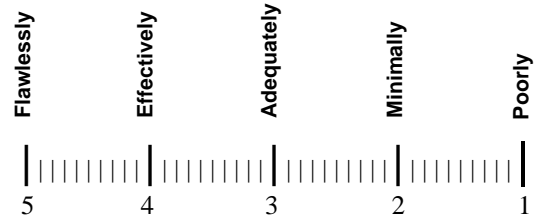
4b. The conductor's gestures accurately reflect Beethoven style and character.

<input type="checkbox"/>	Always	<input type="checkbox"/>	Most Times	<input type="checkbox"/>	Over Half the Time	<input type="checkbox"/>	Half the Time	<input type="checkbox"/>	Sometimes	<input type="checkbox"/>	Rarely	<input type="checkbox"/>	Never
--------------------------	--------	--------------------------	------------	--------------------------	--------------------	--------------------------	---------------	--------------------------	-----------	--------------------------	--------	--------------------------	-------

Comments:



5a. The conductor's gestures communicate phrasing and shape...

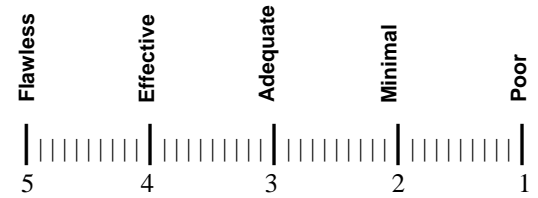


5b. The conductor's gestures accurately convey phrasing and shape.

Always    
  Most Times    
  Over Half the Time    
  Half the Time    
  Sometimes    
  Rarely    
  Never

Comments:

6a. The conductor's preparatory gestures are...



6b. The conductor's gestures transmit instructive preparations when required.

Always    
  Most Times    
  Over Half the Time    
  Half the Time    
  Sometimes    
  Rarely    
  Never

Comments:

7. The conductor's gestures transmit a sense of self confidence.  Always  Most Times  Over Half the Time  Half the Time  Sometimes  Rarely  Never

Comments:

8. The conductor is in control of the performance.  Always  Most Times  Over Half the Time  Half the Time  Sometimes  Rarely  Never

Comments:

9. The conductor's gestures confirm a strong connection to musical events in the score.  Always  Most Times  Over Half the Time  Half the Time  Sometimes  Rarely  Never

Comments:

10. The conductor's gestures affirm a connection with the performers.  Always  Most Times  Over Half the Time  Half the Time  Sometimes  Rarely  Never

Comments:



## Assignment 2 Conductor 2 Questionnaire

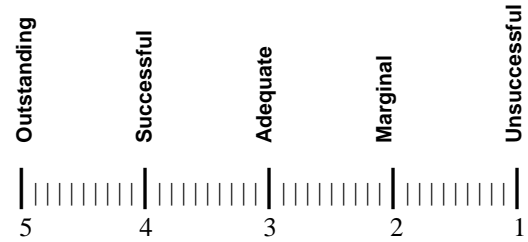
Clip 1 Pretest	The conductor's performance is...	<b>Outstanding</b>	<b>Successful</b>	<b>Adequate</b>	<b>Marginal</b>	<b>Unsuccessful</b>
		5	4	3	2	1

Comments:

Clip 1 Posttest	The conductor's performance is...	<b>Outstanding</b>	<b>Successful</b>	<b>Adequate</b>	<b>Marginal</b>	<b>Unsuccessful</b>
		5	4	3	2	1

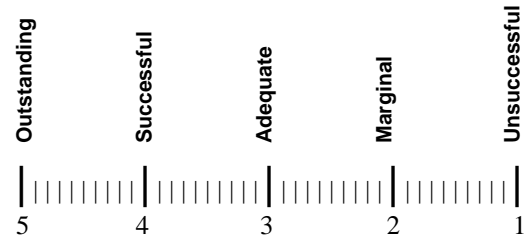
Comments:

Clip 2 Pretest    The conductor's performance is...



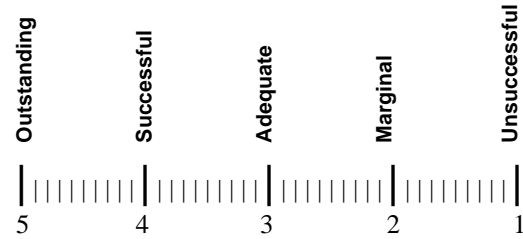
Comments:

Clip 2 Posttest    The conductor's performance is...



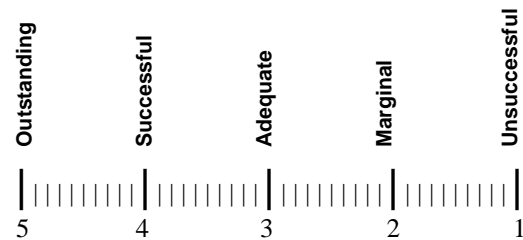
Comments:

Clip 3 Pretest    The conductor's performance is...



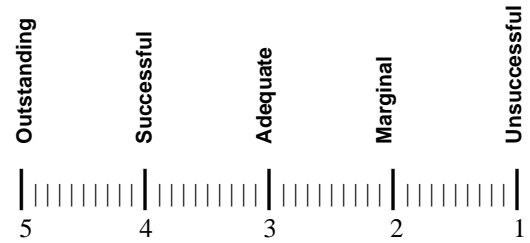
Comments:

Clip 3 Posttest    The conductor's performance is...



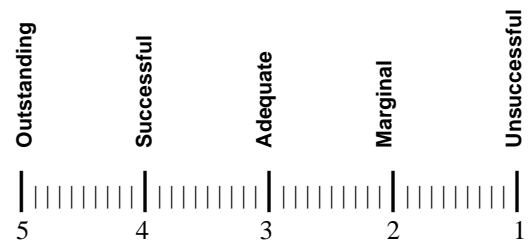
Comments

Clip 4 Pretest    The conductor's performance is...



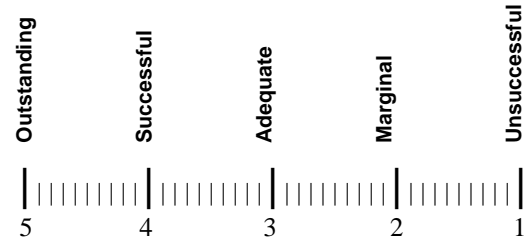
Comments:

Clip 4 Posttest    The conductor's performance is...



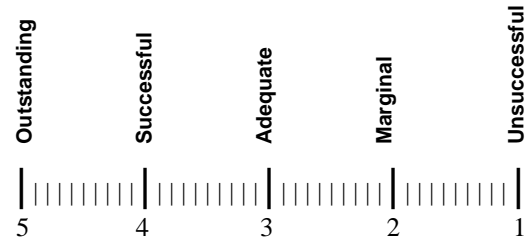
Comments:

Clip 5 Pretest    The conductor's performance is...



Comments:

Clip 5 Posttest    The conductor's performance is...







## APPENDIX H

## CMA PANEL ANALYSES

**CMA Panelist W: Assignment 1****Conductor 1/Assignment 1/Pretest Analysis**

I noticed immediately that Conductor 1 is predominantly in Shape Flow. I never saw him out of Shape Flow.

This man has a full, rich Effort life, though in the pretest I saw his movements mostly limited to states around passion drive, with little free flow except when he organized to move quickly. His predominant state was bound/strong or bound/light, i.e. dream state. He punctuated with quick time, and his sustained time, usually with light weight (rhythm state) was used as a preparation into emphatic phrasing involving passion drive (strong, free or bound and quick).

Direct space Effort was in his eyes and this is how he chose to communicate through Space, with his eyes. He clenches his jaw (bound flow) as intensity builds in his gestures i.e. right before an emphasis in his movement.

He gestures down with bound flow and strength and opens with free flow. He accents bound strong arm movements in chest, bound flow shaking in left arm in forward middle mid reach when starting to intensify . He accents in mid reach with a quick, central pathway out, rebound in, to mid reach K in sagittal dimension in free?, strong and incredibly quick rebound passion drive. Again, I am not seeing space at all in gestures, but in his face. His arm movement accents in the corners of the horizontal planes somewhere between mid and far reach, and simultaneously he drops his chin.

Before a swell in the music he gathers his arms into the vertical dimension and raises them in front of him mid reach. Then in a passion drive punch (minus Space Effort) he alternates his arms in a central pathway, r, l, r and another time r,l,r,l, into the corners of the H plane, mid to far reach, proximally initiated. emphatic phrasing, becoming even as it was repeated. I saw this pattern several times.

## CMA W/ Conductor 1/ Assignment 1/Posttest Analysis

### 1st viewing (initial impressions)

Wow am I impressed! More free flow, lots more space Effort, more state combinations, forward cycling in the sagittal plane. Remote state, use of simultaneous gesture with eyes to communicate. Started by taking his time and really seeing everyone. The biggest change was in the flow and he is so much more grounded! Instead of the movement of the gestures stopping in his chest, they sequence down into his torso. Lots of patterns remain the same, the bound flow building with the left arm. His left hand is less limp and less light. He exudes so much more confidence and power (related to his connection through the vertical dimension. He is connected now to himself and to the orchestra, not just to his inner feelings about the music.

### 2nd viewing

He gathers in the Horizontal plane. He looked at all direct and sustained (awake state) before he started. Accenting out in forward middle (sagittal dimension) but in light weight and either free or minimal bound dream state as opposed to bound strong dream state. This is one of the 2 biggest differences I see. He still tilts his head. Now it looks like its so the right ear can hear. He appears more vertical. I saw a phrase with light free changing to strong quick free. A big difference. Light quick rhythm state was new. I see direct free (remote).

He's moving easier and lighter. His accents are planar now as opposed to octahedral before. I see Horizontal plane and dimension toward near reach space at chest level for accents down-they are smaller. Like he's pulling the orchestra into him. A simultaneous attention (perhaps the closest he can get to indirect) in his right arm as he gestures with his left. He's communicating 2 different things simultaneously and effectively. This is very new for him.

His dream state of free and light is new in the horizontal plane and dimension and initiated from his shoulders. Direct and quick Effort changes (awake state) in his head as he turns to the left. It looks like he's having fun. The whole body is just so much more thoroughly integrated in his movement. He keeps his eye on the orchestra as he turns the page. He is working mid reach. His movement is just so much more about his posture being involved in his conducting. Around 6:32 he struggles to stay out in space, he wants to slip into dream state and feeling the music. His left arm is in vision drive with direct minimal bound and quick time. When he lets the left arm fall this time it's with a swing of free flow, passive weight in the sagittal plane beside him, a clear recuperation where before it was bound and awkwardly hung there. He is really using planes to communicate, much more than he did before.

CMA W/ Conductor 1/ Assignment 1/Posttest Analysis cont.

I'm noticing the turning of his palms more than I did in the pretest -down with direct, light (stable state). At 7:14 he lifts his body with light weight and quickness. He is a pleasure to watch. I see control from a place of power.

3rd viewing

Without music I saw the sigh before he started. He has shape flow support for shaping in his torso and mostly shaping in his arms now with his breath integrated. He shows more differentiation between his arms. I am seeing more states and at 4:55 I saw a basic Effort Action, a dab ( light, direct, quick) coming from a light direct stabile state. Far reach occurs in the horizontal plane with the right arm several times, otherwise his Kinesphere is mid or near reach and that phrase of free flow quick far reach comes right into near reach at the chest with light and ..direct? Lots of effort and effort phrasing variations, swing phrasing even, vibratory, as well as emphatic. Most of his initiations are proximal. He stayed in forward near reach space more. Saw again the little bound flow shaking in his left arm. His arm is very relaxed. Postural integration. Planar cycles inward in the sagittal and horizontal planes.

**CMA W/ Conductor 2/ Assignment 1/Pretest Analysis**

This young woman is highly Effortful (dramatic), full of drives and very postural. I see lots of fully integrated movement, shaping in her upper with her arms mostly, and she is well-grounded. With that strong weight and free flow overriding almost all that she does, she is quite a presence. I see lightness in her hands. She often has sustainment and bound flow in the lifting of her arms as preparation for a passion drive free, strong, quick movement downward. She easily accesses strong and quick with flow variations. There is some Space Effort in her hands but mostly it's in her head. She uses direct space in her eyes to stay connected. I saw one moment of indirecting with her arms, particularly her left. There was a Light direct stabile state touch of her glasses as she pushed them back up her nose. She is very free flow and moving constantly. She could learn to use her bound flow to full effect. At one point, she had a hard time stopping her flow in her right hand and the musicians followed her.

Her Effort phrasing is predominantly swing with combinations of even accented phrases (accent, accent accent, etc.). She reflects the accents in her head with a bob or a shake. One time, there was a full postural right left right movement of her head in passion drive strong, free, quick. I saw one gradual short crescendo phrase into an impactive phrase. She has small swingy movements in her wrists and swaying body. She also has some very long movement phrases (all her flow).

CMA W/Conductor 2/Assignment 1/Pretest Analysis cont.

What confuses me is that her body movements don't seem to relate to the swelling of the music, for example around 9:12. The music is building but her movement isn't and this is confusing after all the earlier big movement. As the music "attacks" she passion punches down with the left arm but as the music repeats she doesn't follow this in her body. This inconsistency in her movement relating to the music is confusing and uncommunicative to me. Her use of her closed fist seem arbitrary at times too.

She passion punched (free flow, strong weight quick time, binding with bound flow) across herself several time, using unilateral sequential arm movement. It seems she has an arsenal of movement vocab here and isn't using it clearly.

### **CMA W/Conductor 2/ Assignment 1/Posttest Analysis**

There are some big differences here! The most notable is how she has minimized her free flow and is using a lot more Space Effort, both indirect and direct. There was even one moment when she was not attentive through her gaze (may have been listening) and was indirecting with her arm. This was new for her. She still has her high dynamism and preference for strong and quick. I didn't notice as much light weight as previously. When she leaned back posturally, she still had light hands, but was so attentive to space that she was in stabile state (light and direct). She still moves with that incredible quickness in her attacks. I also saw a lot of remote state (Space and Flow Efforts), and a rhythm state, (light and quick).

She is communicating better because she is more attentive to Space effort, Arclike and Spoke like directional shaping and to binding her flow. Her spoking comes from the elbows. I see her arcing in the sagittal plane spoking both arms in and spoking forward with light quick free, then recuperating in strong, quick, bound. She actually pauses, [i.e. she is in space and weight Effort (stabile state)]. There was only one spot where her quick strong vertical down arms didn't relate to the corresponding music. She is incredible in how fast she can vary her Effort life and also how she varies it in relationship to space.

Her rebounds from previously have changed into a recuperative spoke like movement toward herself, then arcing out and lifting in a combination of shapeflow with directional. Her Shape flow light indirect free was a recuperative place for her. I am not seeing as much sustainment this time, but when she does use it, it is usually in the horizontal dimension.

### CMA W/Conductor 2/ Assignment 1/Posttest Analysis cont.

Her accents that are strong quick and bound tend to pull inward ever so slightly the rebound is not reflected in her head this time. Sustained light bound seems to be a characteristic recuperative place for her, as does some of her more even flow movements which she brings closer in reach space.

### CMA W/Conductor 3 Assignment 1/Pretest Analysis

Conductor # 3 moves with shape flow and shaping, the shaping is mostly in her arms enclosing and spreading (particularly her right arm) though I did see some postural rising in preparation for a downward emphasis. She swayed from side to side and would sway slightly forward to turn the page with her left and then I would see enclosing with her right and a slight sinking. She has less dynamism than Conductor #2 and her spatial patterns are less varied. Though she has a full range of Effort life, it was not used with variety. Her phrasing, states, drives and spatial use became predictable early on.

Some patterns that emerged for her. She used condensing Efforts more with her right arm and indulging Efforts more with her left. She initiated free, strong, quick movements from her proximal joints. She initiated bound, light and quick in her wrists using a small kinesphere around her hands. The light was often hard to see because of the larger strong arm movements. She used direct space Effort in her gaze and she had some fleeting direct Space in some of her conducting gestures but they quickly gave way to either free or bound flow, making her direct space Effort elusive.

She used direct space Effort with her shape flow. When she chose to stay in shapeflow for awhile, her Effort became about weight and flow (dream state) and some occasional time would come in, changing the state to rhythm. I also saw remote (direct/free) state. She used passion and action drives. Passion more so with her arms, action (direct, light quick-dab) from her wrists. She tended to direct her gaze to the music, but would occasionally glance directly at the orchestra.

Emphasis happened with an opening of her left hand in forward low midreach. She used strong weight as she swung her arms into horizontal midreach space and paused by bringing her arms into near reach near her abdomen. Her conducting arm fluctuated from free to bound flow and light to strong weight with quick rebounds. The right index finger on the baton was very bound. She used a lot of strong quicks, quick coming from her right wrist while her left hand simultaneously could be sustained light (rhythm state) and shaping.

### CMA W/Conductor 3 Assignment 1/Pretest Analysis cont.

A pattern: traveling down the diameter of sag plane with strong quick, free and recuperating in the horizontal dimension with both arms bilaterally moving through space but with very different efforts. Sometimes the right hand was direct. I saw indirecting changing to strong weight Effort with the left in combination with free flow as she swiped at the orchestra to pull them in.

Her phrasing: She had swing phrasing in the shaping of her wrists with a little coda as she snatched with her left hand closing indirect and quick (awake state). She mostly used impactive phrasing or phrasing with the emphasis in the middle with a rebound. With the quick light snatch of her left hand I saw light weight when she added direct space.

### CMA W/Conductor 3/ Assignment 1/Posttest Analysis

The first thing I saw was that she was in less free flow and using more strong weight with some interesting lower arm attacks from her right elbow (mid limb initiation). I didn't see much change in her which even made me wonder if she had attended the 5 hour class. I still saw the right left separation in her conducting. She was still sweeping and shaping with the left arm. She is using more Space effort in general, both direct with a bit more indirecting, but still marking time with her weight shifts and free flow/strong arms, light hands dream state combinations. Her elbow "punch" doesn't stay in space and quickly changes to passion drive as before. There is very little "wrist conducting" this time, usually with the left, if any.

She still is using lots of shape flow and some arm shaping, with more emphasize on direct space effort than in the pretest. Her first movement is her usual Space and Effort pattern, but then she surprises with an enclosing to spreading movement of her left arm from left back high to right forward low, in the cube, with a passion punch with her lower arm (mid limb initiated) into far reach space. A pause in strong weight, with some slight sustainment and slight indirect space (a wring). A repeat with less strong weight in the "punch". Even though her spatial pattern is the same, she sustains as she spreads in the horizontal dimension with strong weight and bound flow (passion drive) this time. Her attacks are bound strong with less quick in her movement than in the pretest. She is still using direct space Effort to follow the music, but she is directing more to the orchestra.

Her left arm and hand: In general this is where she has light weight in shape flow and a sense of sustainment. I do see some attention to indirect and direct space to bring the flutes in. as she posturally rises. Without the music, I saw that this arm gesture was spoke like directional. She goes into light sustained to recuperate. She has three cycling shape flow arm gesture with her left in midreach space side middle.

### CMA W/Conductor 3/ Assignment 1/Posttest Analysis cont.

Her phrasing is similar, impactive, accented even and swing. She needs the movement preparation, so her impactive “attacks” appears as swing phrases as she moves forward in the sagittal dimension from near to mid reach. She shows crescendos by enlarging her kinesphere.

She accents down repeatedly in her even accented phrases with a shapeflow response in her body. I am seeing her mostly in passion drive (free, strong, quick) light sustained (rhythm), dream state (quick strong), light direct/indirect (stable state). In the end she recuperates in mobile state as she leaves the stand (quick, free).

In general, I see mostly bound strong, shape flow, some light free shaping in her left hand gestures and light indirect hand (stable state) in combination with a light, direct head. I don't feel like she's leading the orchestra, but keeping time.

### CMA W/Conductor 4/Assignment 1/Pretest Analysis

Conductor 4 has the largest movement vocabulary of the four and is not always clear in how he is using it. He stays connected to space in a variety of ways, with spoke like and some arclike directional movement, his shaping and more indirect and direct space Effort than I have seen so far from these conductors. In addition to his arms and posture, he used his eyes, face and head to conduct. He moved with the music and even anticipated it. In some ways he used too much movement, i.e. his movement wasn't quite organized in a clear communicative way.

He has a great use of Effort and changes his Effort life constantly. He has a lot of free flow yet he can bind his flow with incredible quickness. I saw many different states, though he prefers bound strong (dream) with an added quick to make passion drive as he “punches” forward in the sagittal dimension. I also saw sustained direct (awake), recuperations in free flow and passive weight when he drops his arms or only dropped his left arm.

He spreads bilaterally with both arms in the horizontal dimension after going forward with light sustained indirect (a Basic Effort Action, a float). He enclosed his right arm to the back left corner of the cube to spread forward right low. He really likes to accent in the sagittal dimension forward and recuperate back. He does some light indirect shaping (stable state) with his hands to bring the flutes in. There is a far reach forward high -light indirect sustained? with his left arm.



#### CMA W/Conductor 4/Assignment 1/Pretest Analysis cont.

Because he is in space Effort a lot, he has access to more Effort combinations than i have seen from the other conductors. He also switches Efforts a lot. This, in combination with his use of Space and Modes of Shape Change, makes him a VERY complex mover. The final note had a passion “punch”; with a very quick, bound rebound. The direct Space Effort was in his gaze, not in his gesture. In fact because he does seem to move so much and at times be unclear, he tended to use his focus to ensure communication.

#### CMA W/Conductor 4/Assignment 1/Posttest Analysis

The biggest change here was in Conductor 4’s use of Flow Effort. He had much less free flow this time. He also limited his spatial vocabulary dramatically. He had less shape flow this time but still quite a bit of shaping. I saw cycling of his whole arm in the sagittal plane when he was increasing the intensity of the sound. There was no cycling in the wrists this time. He is using more spoke like directional movement with direct space Effort and really communicating effectively. With the diminished flow, he is much cleaner in his movement through space.

His postural shaping didn’t change. He wasn’t attacking with quick bound flow but with direct, quick strong Effort. He’s taken many of his passion drives into action drive. He was into some shapeflow in that quiet section, but only briefly. His states are states around action drives. When he pointed it was with a direct light (stable state). He is still attacking in the sagittal dimension but now with DIRECT, strong, quick, a true punch with a bound quick recuperation. The pause is sustained and direct with some light indirecting. He is still rotating his arms in to forward middle and he still has some passion drive attacks (free, strong, quick) but he comes into space Effort as a recuperation in those. An interesting result of this change-I don’t see he and the music quite as “one” this time.

He cycles back in the sagittal dimension from mid to far reach with the in and down in the cycle accented with strong quick. He also cycles in the vertical dimension with his right arm forward. He almost looks like a hunchback as he conducts homolaterally with the right and the left shoulder rotates in and forward and that arm just suspends. Almost all of his initiations are now proximal but I also see some mid limb (not like before) or from his hands opening (distal). There is shaping in his left hand, arm and right arm. When he shapes, he becomes much more indirect (listening) and at times, spaceless. i also quick light free (passion drive). He dab, even in licking his finger to turn the page. It is just amazing that he’s so much in action drive or the states around it. Where did all that flow go?

## CMA Panelist W: Assignment 2

**CMA W/Conductor 1/Assignment 2/Clip 1** (“a” denotes pretest and “b” posttest.)

Clip 1.1.a shows more minimal intensity bound flow. His weight center is higher and he is using lighter weight effort than in 1.1.b. In 1.1.b, he is more intense, i.e. his use of direct space Effort is more focused, increased strong weight Effort through grounding and lowering his center of weight and his Body Attitude of being more hunched forward through his shoulders gives the sense of intensity. He is more shape flow in 1.1.a. and more shaping through his arms in 1.1.b. There is a wider variety of states in 1.1.b than in 1.1.a. In 1.1.a. saw a pattern of remote into mobile into dream and he stayed in dream state the longest. The one drive was passion.

In 1.1.b. he started remote into mobile again into rhythm and his dream became passion. His focus was in spell drive in 1.1.a and in stabile state in 1.1.b. with some quick little awake states in his focus. I would name his phrasing pattern in both clips as “swing”.

Clip 2

He is mostly in dream state, shape flow in 1.2.a. In 1.2.b. he is generally in stabile state (because of his attentiveness to space through his eye focus) and has a full passion drive at the end of the phrase. He is much more attentive to space in 1.2.b. than in 1.2.a. The constellation of Effort with Shapeflow makes his quick accent on the beat more pronounced in 1.2.b. than in 1.2.a. where the drive was a free flow passion drive and not a bound flow passion drive. The bound flow with quickness gives a finish to the movement in 1.2.b.

Reviewing motif: I see that what strikes me the most is that his phrasing is impactive instead of swing in 1.2.b. and that that accent involved Shaping with Shapeflow support. In the first phrase he was in rhythm and dream states. In the second he had much more variety. He again was in rhythm and dream states but mobile and stabile were also involved.

Clip 3

In 1.3.a., I am struck by his bound and light Effort with quick time almost as a flow rebound and not true “Time Effort” into the dream state transition of minimal bound flow and light weight. 1.3.b has so much more consistent strong weight and he stays in direct space (eye contact) through the transition. Shape flow in 1.3.a. is mostly widening and lengthening and shortening. In his Shaping in 1.3.b. he sinks and rises, advances and spreads. His Shaping relates to the environment so it’s a whole different sense of communication than the self-referential Shape flow of 1.3.a.

CMA W/Conductor 1/Assignment 2/Clip 3 cont.

In 1.3.a. the Effort was rhythm to passion to passion to dream becoming passion with free flow in the configurations. In 1.3.b. there are bound flow quick time accents on each of the 3 movements so there is passion drive, mobile state, passion drive and mobile state. Then in the musical change, his movement becomes more free flow light (dream state) with some indirecting and a hint of sustainment with his lightness, a BEA, a float.

Clip 4

In my general viewing, I am aware of his earnestness, the free flow of the right arm, the Shape flow in his body, the bound flow jaw and bound flow fluctuations in his left arm as he tries to communicate with that left lower arm vibration. In 1.4.b I notice immediately his groundedness and the apparent comfort of being in his own body, the accents down with strong free shaping in his arms with the awake state to the left in his head as his body sinks and retreats, almost to give the music physical space (I know I'm not to interpret but that looked so obvious to me I had to say it.).

In comparing my motifs: the obvious difference is the Shape flow of 1.4.a. and the Shaping of 1.4.b., the dream state recuperation into rhythm or passion drive in 1.4.a as very different in quality from the rhythm into dream state with the accent on the rhythm and rebounding into dream of the in 1.4.b. His head is always in stabile state in 1.4.b. with the postural support which helped him Shape. He had a larger Kinesphere and used more direct space Effort in 1.4.b.

Clip 5

He is mostly in shapeflow in his body with direct space bound flow in head and eyes. He has some quick strong in a downward movement. In 1.5.b. He is more grounded, has a sense of the vertical in his body and free flow quickness and direct space and quickness, awake state in his head and eyes. His strong weight and quick time is more intense than in 1.5.a. In general, he is much more Effortful in 1.5.b. than in 1.5.a.

In 1.5.a he has swing phrasing with passion drive and rhythm states and dream state. In 1.5.b the Effort is similar but the grounding and connecting to Space is most easily seen in his Shape qualities. The 2nd is at a faster tempo with more central pathways. In 1.5.b he doesn't quite finish his accent before he reaches to turn the page. There is an incompleteness in that phrase for me, in the reaching with the left before finishing with the right.

CMA W/Conductor 2/Assignment 2/Clip 1 (“a” denotes pretest and “b” posttest.)

So much shape flow and shaping in the first clip. Second clip had much less movement, she was even still to begin and she REALLY used her eye focus to scan and see in 2.1.b. She had less Shapeflow and her Shape was more organized in her body in 2.1.b. Also in 2.1.b. she moved her arms forward in her passion punch which gave her the connection to space she didn't have as clearly in her 2.1.a. Shape flow internal passion punch. Her Kinesphere is larger in the second phrase. There is sustainment in her gaze at times.

Reviewing motif: Her phrasing is impactive in 2.1.a. and swing in 2.1.b., a big change. Her Effort life is similar in both phrases with more strong weight Effort with the direct space in her eye focus stabile state in 2.1.a.)The major change is in her Modes of Shape Change. She lightened up an iota in 2.1.b. and in general, her gaze was now direct and bound (remote state) as opposed to direct strong.

#### Clip 2

All that movement and weight shifting in 2.2.a. is quieted in 2.2.b, as stated in observing Clip #1. At the big accent, she is in Shape flow. In 2.2.b. she is still in Shape flow but she spokes (directional movement) forward momentarily with direct space effort, a true punch. She gives it up immediately but maintains her direct eye focus. She also uses a larger Kinesphere in 2.2.b. This constellation of movement connects her more through space, i.e. communicates more clearly in 2.2.b. than in 2.2.a.

Reviewing motif: In 2.2.a. I see the large moment as passion drive, her eye focus in awake state (sustained and direct) and the recuperation in spell (because of the directing in her head). In b she actually punches and recuperates in passion drive with a rising (Shape) support in her body.

#### Clip 3

In 2.3.a. she actually changes the Effort in her left hand before she wants it in the music. This is much more visually coordinated with the music in 2.3.b. The postural lean back with weight shift onto the left foot is where she becomes more direct in her eye focus, then indirect, then direct. It's almost like she leans back in order to see the orchestra. In 2.3.b with her being more grounded and a minimal of weight shifting going on, she stays present in using direct and indirect space with her eyes and ears and with arc like directional movements. There is more strong weight Effort present in 2.3.b. than in 2.3.a.

Reviewing motif: the important part of the phrase in 2.3.a. contains a float with Shaping initiated in her left elbow and hand as she Shapes in her body by retreating. In 2.3.b. the use of her eye focus as direct and sustained at that point makes me want to say in general

CMA W/Conductor 2/Assignment 2/Clip 3 cont.

that that movement is a glide even though her arms are light bound and sustained (passion drive). I think it's important to note here that she accents with her wrists, that her Kinesphere stays mid reach and she's using peripheral spatial tension. This keeps her active in space. The enclosing and sinking of the first phrase is thus minimized in accordance with the quietness she wants from the music as opposed to the big postural movements of 2.3.a.

#### Clip 4

I have similar observations as in the previous clip, noticing the big weight shift and lean back on the left foot. In 2.4.b. she still contains her postural shifting and is doing incredible shaping in her arms, even turning away from the orchestra. In both a. and b. she leans back with her hands extended forward and lightly holding peripheral spatial tension.

Reviewing motif: The main emphasis of this phrase is the postural weight shifts again and Shaping in her arms and body as she conducts in states around passion drive. Her eye focus appears remote (direct space and free flow). She takes big cycles of her arms initiated from the shoulders.

2.4.b is so exciting visually because of her daring use of space in turning away, in sweeping into the horizontal dimension in passion drive (free, strong with some quicks) with the movement pattern we saw in 2.1.a. & b. of pulling her arms midreach to extend forward reoccurring, this time keeping her arms in midreach longer than in 2.1.a. & b., and in using such a large Kinesphere to convey the passion of the music. She also moves immediately from 1 drive to another in 2.4.b. from passion (strong, free, quick) into a BEA glide. This is not easy.

#### Clip 5

This is her pattern in several of these clips. In 2.4.b. she has more indirecting space Effort and isn't as dramatic in her postural movement, though her retreat is still here. Probably the biggest difference is that she really attacks with a drive (quick strong into quick strong free) the last accent, which she didn't do in the first phrase at all but just shape flowed through it. She is fully present and right with the music in 2.5.b. This isn't happening in 2.5.a.

Reviewing motif: The only thing worth commenting on that hasn't been said before is that I counted 5 drives in 2.5.b. She was working!

CMA W/Conductor 3/Assignment 2/Clip 1 (“a” denotes pretest and “b” posttest.)

More in Space in 3.1.b. and more Effortful. In 3.1.a. she seems to dislike how she started and says something to side left. in 3.1.a she seems disorganized on a body level at the beginning. In 3.1.b. she takes her time to begin (nice sustainment ) and is more present from the beginning. She holds her breath in 3.1.a. at the beginning. 3 1.1.b. she’s breathing with her movement. and scans the orchestra with her focus. She is grounded and centered and *each movement is purposeful* i.e. clear in Space, Effort, Shape and Body organization.

Reviewing motif: In 3.1.b. The emphatic phrasing is quite effective with the combination of the passion punch into the right forward low corner of the cube with a spoke like directional lower arm isolation. the remote to passion to remote combination is replaced with rhythm, passion, mobile. She has more weight Effort in the emphatic phrase in 3.1.b. and this communicates so much better in my opinion what she wants from the music than the Shape flow mobile states of 3.1.a.

#### Clip 2

The overriding Shape flow reflected in the body bouncing rhythm of of 3.2.a. is replaced with some Shaping, in 3.2.b., particularly in her arms when moves bilaterally. She is still Posturally shifting but with a minimum of Shape flow compared to 3.2.a. In both she glances at the orchestra with direct Space Effort but with more weight Effort in her groundedness in 3.2.b., she appears in stabile state, a much more self-confident place than the Shape flow constellations of 3.2.a.

Reviewing motif: She has very little Space relationship in 2.2. a. The bounce in her body is an up accent, coordinated with the rebound of her baton beat. Her Effort in her movements up is almost as much, if not more, than in her movements down. Her Effort life in 3.2.a. is rhythm state into passion drive. There is a passive weightedness to her body as she begins the next phrase. In 3.2.b. she strokes down in rhythm and recuperates up in dream state becoming increasingly stronger until the impactive passion drive. Her body stays in strong weight throughout and when she begins the next phrase, she prepares in a float combination right before the downbeat, i.e; she’s more spatial in 3.2.b than in 3.2.a.

#### Clip 3

These two clips look very similar upon initial examination. In 3.3.a. she is In Shape flow and is taking big weight shifts from right to left . She glances at the orchestra but the free flow and strong weight dream state override the direct space of her momentary direct focus . Her arms moving up and down in the vertical dimension are about the only thing that gives her a sense of authority. There is no spatial tension in her arms. Not much is

CMA W/Conductor 3/Assignment 2/Clip 3 cont.

happening to communicate although there is a very brief moment of Spell drive. In 3.3.b. she is still weight shifting but the stabile state with indirecting and directing in her focus connect her to the orchestra and in the beginning of the clip she is using peripheral spatial tension while in Shape flow (a way to relate to Space while in Shape flow is not using Effort or other Space categories to do so).

Reviewing motif: It was very hard to motif the Effort changes here and I decided they weren't that important for this clip comparison. What is important is the use of Postural Shaping and her Space Effort in her eye focus in 3.3.b. as compared to the Shape flow self involved BESS configurations of 3.3.a.

Clip 4

There is a lot of difference between 3.4.a. and 3.4.b. In 3.4.a. her arms are in mid to near reach K space and she looks down most of the time. In general she's in Shape flow and dream state with some quick time changes, though her body has some Shape changes with a tendency to strong weight Effort passivity. The most direct space Effort we see is when she turns the page. There is some brief directing in her spoke like directional movement forward with her left hand, almost a BEA glide. In 3.4.b. she is grounded, using her strong weight Effort, a larger Kinesphere, more Shaping, more constant peripheral spatial tension in the beginning, central spatial tension near the end and more Space Effort overall. Again in general, she is much clearer in her use of Space in 3.4.b. than in 3.4.a.

Reviewing motif: I have noted that when she is in Space Effort she uses a larger Kinesphere in which to conduct. Everything else seems to support what I said above.  
Clip 5

Again, in an initial look, there doesn't seem to be much difference between the two phrases. The even accented phrases of 3.5.a becoming slightly swing. conducting in near reach space, not much change in her Effort dynamics throughout the phrase, There does seem to be more attention to space in 3.5.a. than in previous clips and perhaps some direct space Effort in her right arm? Again lots of weight shifting. In 3.5.b. I'm seeing more Shapeflow than I have in earlier clips of this taping.

Reviewing motif: The Effort life is remarkably similar in both. She uses more Modes of Shape Change in 3.5.b. than in 3.5.a. and I've noted that she Shapes through her arms more when she uses them bilaterally. In 3.5.b. she has more Space Effort, remote, stabile or awake in 3.5.b. where in 3.5.a. she is only in remote.

CMA W/Conductor 4/Assignment 2/Clip 1 (“a” denotes pretest and “b” posttest.)

This man has tremendous free flow. In the first clip I see first that free flow with direct space Effort in his focus combined with a strongly held jaw. There is shape flow in his body and he punches in passion drive with spoke like directional movement. He has a propensity for sustainment but it’s not used as much as it is in 4.1.b. Here he has a real sense of stabile state. He is grounded and in awake sate before the first note. During the sustainment he loses Space in the weight and flow (dream state) of the moment but regains it again in his focus after the punch. He organizes through body half, i.e. homologous movement.

Reviewing motif: The biggest change is that he changes from swing to impactive phrasing from 4.1.a. to 4.1.b. This is because he is binding his flow to give a clear finish instead of continuing to move in shapeflow as he did in 4.1.a. I also noted there is more Shaping with shapeflow support in 4.1.b. than in 4.1.a. In both he prefers to stoop forward and conduct from forward low to forward middle. There is more far reach space used in 4.1.b. where he also reaches up and back with the right. He has little spatial tension in 4.1.a. except when he spokes forward with a central spatial tension. In 4.1.b. the peripheral spatial tension is almost palatable as he separates his arms in sustained direct bound vision drive, and he is either in PST or CST throughout. In both motifs there is a recuperation in vision drive after the passion drive.

## Clip 2

In 4.2.a., I notice his use of light weight in his hands and arms which are held higher in his Kinesphere than before in this clip, the right left split in his body, and the strong weight in his free flow spoke like directional punch. Further into the clip there is the light dab of his hands as he drops his head, sinks and encloses in his upper thorax, swinging his left arm in a heavy (passive weight) recuperation. In both clips, the right left split in his body is again obvious. In 4.2.b I see more direct space use, the light weight in his hands and strong whole body involved quick strong bound “punch”, maybe swing phrasing, almost impactive. This punch does not relate to the music for me because of the timing and full Effort life of the rebound pulled into his body.

Reviewing motif: The motif supports that there is more Space Effort in 4.2.b. than 4.2.a. and more spoking in 4.2.a. than in 4.2.b. there is postural support than entire time in 4.1.b. which is not the case in 4.1.a. An important moment in 4.2.b. is when he raises the left arm to get attention in Shape flow but with peripheral spatial tension and direct Space Effort.



### CMA W/Conductor 4/Assignment 2/Clip 3

In 4.3.a. he is moving with shape flow and passive weight. In general he is in dream state. He looks like he's using his eyes but I'm not so sure. Again he is conducting high in the K when using light weight Effort and afterward sinks in his body to start a new musical phrase. His hands are alternating between shaping and shape flow. In 4.3.b. he is strong free, staying more in strong weight in his body than in the passive weight of 4.3. a., even though his body attitude is still hunched and that left shoulder is rolled forward (a la gorilla) as he rocks from left foot to right foot, side/side. He pretty much flows through that musical transition in both clips though there is a larger K use in 4.3.b. in general and he uses his eye focus at the beginning of the new phrase in 4.3.b.

Reviewing motif: I didn't try to motif Effort specifics in 4.3.a. because it was not a particularly Effortful phrase and the subtleties were not that important. I don't think the motif for 4.3.a. gives much more new information. In 4.3.b. his Effort life is more crystallized, he has increasing decreasing phrasing and when he used sustained time he went into shape flow.

### Clip 4

Again 4.4.a. has so much flow both Shape flow and Effort flow that it's easy to slide right throughout the clip. He uses spoke like directional movement in a Central pathway away from his body and shape flow to pull his arm in, accenting with quick strong in. The direct space and free flow on the way out quickly change so it's hard to discern if he ever holds 3 effort elements together to form a drive as he practically pushes the music forward middle far reach space. He also moves into what is coming next before finishing the last phrase. Note how he lifts his head and shifts up and back on his left leg as he makes the 4th musical emphasis. Again he pulls his K in close and up to his chest when he wants to denote a quietness or softness in the music. This is reflected in the light weight Effort and sustainment in his left hand and also in the momentary direct space Effort in his focus.

In 4.4.b. he is less crouched and now cycling the music toward and away from him in the sagittal plane. The accent in this cycle is out with strong quick free, recuperating into possibly light sustained. There is a more punctuated sound in the music here than in the same spot in 4.4.a. His Effort life is fuller in 4.4.b. than in 4.4.a., he uses a larger K and Shaping in his arms. He still uses a small still K to denote light weight Effort but adds a Shaping retreat in his torso to bring the music to him. What is remarkable in this segment is that he is no longer organized in homolateral movement but in full torso integration with both arms working together bilaterally much more than in 4.4.a.

Reviewing motif: All I really noted that hasn't been commented above in some way is that there is a lot happening in terms of Shape in 4.4.a. and that 4.4.b. is VERY different.

#### CMA W/Conductor 4/Assignment 2/Clip 5

Not much new to report in 4.5.a. 2 passion punches into forward middle of his K, and then one that directs to right side middle that rebounds into a dab. He spokes out and shape flows in, He drops both arms to recuperate and begins to attend to Space as he goes into his body level split, then into light sustainment in near reach forward high for the next phrase, indirecting then directing with his attention as his hands lightly dab then into the big arm swing preparation for his passion “punch” swing phrase. In 4.5.b. the music is quicker, he is more grounded, and he is more attentive to Space so the combination of space and weight gives him stability. He is more Shaping and directional in his Modes of Shape Change than Shape flow (as in 4.5.a.) with a minimum of excess movement. He uses CST and PST and in general stays in space effort longer.

Reviewing motif: I see little that is different to comment on. His patterns are the same. In 4.5.a. he is in rhythm states to passion drive with an occasional awake or stabile state in his focus. In 4.5.b. there are more mobile states interspersed with the rhythm states. I noted that he weight shifts without as many postural changes as in 4.5.a. That’s the “minimum of excess movement” I spoke of above. He is not as dramatic, i.e. Effortful in 4.5.b. as in 4.5.a.

#### **CMA Panelist W: Exit Question**

Yes, I think some of the changes I saw can be attributed to the participants’ LMA training. Admittedly 5 hours is not much time to learn and integrate LMA into one’s perception and understanding of movement, but usually once one has a rudimentary understanding of how to qualify movement in ones’ own body, intelligent movement choices can be made to a lesser or greater degree.

Change appears most obvious in the effectiveness in communicating with the orchestra posttest. Conductors 2 and 4s’ limitation of extraneous movement by minimizing shape flow and /or Effort free flow in their second performance illustrates this. They were careful to eliminate movements that did not communicate by choosing movement qualities that were clearer in communicating through Space. For example, all participants were more effective when they used space Effort states and drives as opposed to dream or rhythm state, which take one into internal process and out of Space. Conductor 1 even managed to change his phrasing in the Clip 2 comparisons from swing to impactive phrasing . This is no small change.

### CMA W/Exit Question cont.

In general the participants were more grounded (i.e. connected to their own bodies and aware of their potential power to communicate through movement) in the posttests than they were in the pretests.. They are beginning to own and understand their ability to make choices in their qualitative movement and the potential in what those choices could elicit in response from the orchestra. So much of Laban Movement Analysis is concerned with self-awareness and each participant had some of this self-awareness in the posttest.

Conductor 4 in the last Clip comparison elicited a very different sound from the orchestra in response to his movement choices in 4.5.b. than in 4.5.a. This I would think is the ultimate goal, to understand which Effort, Shape and Space configuration choices in one's own personal style and timing elicit what sounds from a particular group of musicians.

Each participant in the beginning of his/her posttest, standing in preparation to begin the music, had an awareness of his/her ability to communicate through the choices (s)he made in his/her inner attitude toward Space, Weight, Time and Flow Effort. This awareness of how those choices would affect the music produced by the orchestra was not as apparent in that same pause in the pretests. That preparatory moment is extremely important in initiating and follow through. It is a powerful moment, that pause before the music begins. It communicates volumes, and especially does so in the posttest where a Laban Movement Analyst can foresee in that preparation the whole movement phrase to come. The potential in that pause , in movement and in music is so incredibly rich. This moment was the most revealing for me in glimpsing how the participant breathed, organized his/her body and prepared for their role in the future music. Most importantly, they each communicated how they were going to effectively communicate or not communicate in their role as conductor. This was the telling moment for me in observing the success or lack of success in the participants' ability to integrate what they had learned. Conductor #4 took that moment and owned it with direct space in his focus and sustained time, bound flow and intensifying weight Effort as he spread his arms in the horizontal dimension with peripheral spatial tension. It was a moment of suspense. A beautiful moment of suspense. An "You had me at hello" moment, a gestalt moment. Yes, he still needs to work on his Body Attitude, his posture, but this drive before the music began represents for me what LMA can offer to conducting, i.e. options for the way music can look, feel, and sound based on the conductor's understanding and use of his own personal movement style in leading an orchestra.

## CMA Panelist X: Assignment 1

### Conductor 1/Assignment 1/Pretest Analysis

- Body** general patterns of organization/exertion
- homologous movement pattern dominant, with lower body mostly stable
  - mid-limb initiation, with slight core adaptation, and some distal response
  - facial initiation of effort change
- Effort** baseline efforts: flow (binding exertion, moderate fluctuations to slightly free)
- Weight** (light, diminished strength) with moments of space or time phrased in
- some disaffinities: particularly light downward, strong upward gestures
- Space** baseline planes: vertical and horizontal
- rarely fully 3-d, rare transverse pathways
  - reach space: near to mid baseline, varies with musical phrasing
- Shape** baseline: shape flow, gathering
- shape change mostly in gestures of face and mid-limb often without core adaptation
- meas. no.
- 1-49      General gathering, feet remain stationary, diminishing access to shape/space change in icosahedron/cube. General angular (steeple-type) phrasing; Body mostly homologous to m.38.
- 39-49      Body pattern changes to body 1/2.
- 50              Changes to scattering in figure 8's with rounded (volute-type) phrasing, more horizontal or cube along forward high across/back low open axis, and back cross high/front open low axis.
- 77              Switch to sagittal plane with mostly up/down.
- 96+97      Body: changes to body 1/2 pattern: Changes axis to back high across/forward low open.
- 100-54      As development progresses, body movements return to patterns listed above in conjunction w/ music (e.g. binding, angular, strength in upward direction, homologous for: ff and sf and crescendo; return to light downward movements or pattern noted beginning m. 50 for piano and lyrical sections.

## CMA X/Conductor 1/Assignment 1/Posttest Analysis

<b>Body</b>	<p><u>general patterns of organization/exertion</u></p> <ul style="list-style-type: none"> <li>•homologous movement pattern less dominant, more core/distal connections.</li> <li>•distal involvement, core adaptation phrased in more often;</li> <li>•initiation of effort change sometimes comes from lower in the body</li> </ul>
<b>Effort</b>	<p><u>wider range of efforts early on in piece—towards end old patterns reassert</u></p> <ul style="list-style-type: none"> <li>•Efforts fully crystallized more often, leading to more effort phrasing/change</li> <li>•Efforts articulation seems to lead to more subtle/clear musical phrasing</li> <li>•Flow (binding exertion, moderate fluctuations to slightly free) still prevalent</li> <li>•Weight (light, diminished strength) with moments of space or time phrased in</li> <li>•Space and Time efforts phrased in more often</li> <li>•disaffinities less persistent: particularly strong upward gestures—some strength on downbeat appears</li> <li>•Moments of three nearly full effort combinations: near vision and passion drives</li> </ul>
<b>Space</b>	<p><u>baseline</u>: more cycling in the sagittal plane approaches orchestra and receives back</p> <ul style="list-style-type: none"> <li>•more use of 3-d (e.g. diminished cube)</li> <li>•mid-reach with some variation, depending upon musical phrasing</li> </ul>
<b>Shape</b>	<p><u>baseline</u>: fewer and shorter phrases of the nebulous shape flow</p> <ul style="list-style-type: none"> <li>•gathering and scattering more clearly phrased</li> <li>•shape change slightly more core adaptation</li> </ul>
meas. no.	
1-14	Spatial intent clearer: Cycling in sagittal plane, time effort begins to appear, along with binding and directness (“vision” moments).
15	Light, w/ diminished indirect, slight shift from clear sagittal towards horizontal plane, then phrase resolves into sagittal/binding again.
22-50	More subtle changes of effort to bring out various dynamics of music.
50	“Steeple” phrasing changes to “volute”, “passion” drive moment.
83	Conductor returns to pretest patterns briefly, then fingers and distal reactivate.
100	1-D scale w/ disaffinities phrased w/ music: lightness downward and strength upward, then returns to use of cube.

## CMA X/Conductor 2/Assignment 1/Pretest Analysis

(phrasing mostly “outer”)

**Body**      general patterns of organization/exertion:  
 •core-distal pattern seems dominant  
 •some disconnection in head/tail relationship (especially in opening measures)  
 •some stabilization in torso, with mid-limb and distal initiation

**Effort**      baseline efforts: Space and Time (Awake state)  
 •Time Effort: sudden phrased with sustaining  
 •Space Effort: flexible attention  
 •access often to lightness or binding with action drives  
 •often adds lightness to get a state near to Rhythm, but space dominates.  
 •Efforts near to Action drives appear often—nearly: flick, press, float, punch etc.

**Space**      vertical dimension for beginning (e.g. 1-d)  
 •often 3-d near to diagonals (axis?), uses cube (especially “flick-press” diagonal)  
 •mid-reach to far reach, almost beyond base of support sometimes  
 •steeple phrasing dominates

**Shape**      baseline: shape flow, gathering  
 •shape change in limbs clear, but slightly diminished in torso.  
 •combinations of advancing, retreating, spreading, rising

08:13-15      Free stronger, indirect (near spell drive) looses upper-lower connection at top of upbeat, which weakens downbeat.

08:34      Light, indirect Efforts.

09:16      Body 1/2 pattern, with disaffinity of strong upward movement.

09:29      Flick/press diagonal in the cube with light/strong effort.

09:40-2      Switches to horizontal plane and dream state free and light.

10:12      Short phrase of rhythm state.

10:30      Body 1/2 again.

### CMA X/Conductor 2/Assignment 1/Posttest Analysis

(Inner/outer phrasing seems to give her access to her own musical vision, while conducting.)

- Body**      •begins more grounded  
 •softer torso adapts better to shape changes, so core/distal connections are more supported
- Effort**     •Rhythm state is basis, with short phrases of action drives  
 •Time and weight factors dominate, with clear spatial support phrased in  
 •access to strong weight effort as part of phrase  
 •lightness less dominant, rhythm state has more sustaining moments
- Space**      baseline: cycles in the sagittal plane for beginning  
 •Diagonals in Cube present often, but now accesses the Icosohedron  
 •reach space: mid to far, also more level change.  
 •more volute type phrasing  
 •added “dab/wring” diagonal which was missing from pre test
- Shape**      baseline: 3-d shape change cleared, especially in torso  
 •shape change slightly more core adaptation

12:35-7      Opens without losing upper lower connection, permits strong weight effort.  
 (No additional data for Conductor 2)

### CMA X/Conductor 3/Assignment 1/Pretest Analysis

(phrasing mostly “inner”)

- Body**      general patterns of organization/exertion:  
 •general opening/closing  
 •mid-limb initiation, little crossing of the midline  
 •right hand dominates, with left hand supporting/matching  
 •breath support very diminished
- Effort**     baseline efforts: Flow with some weight effort, no defined “state or drive”  
 closest to ‘dream’ state  
 •low tension binding, with fluctuations toward free, with lightness phrased in
- Space**      •little spatial tension, changes with musical phrasing are minimal  
 •general strewing and gathering on slight incline (axis scale?)  
 •steeple phrasing dominates  
 •mostly horizontal plane with slight rises and sinks

## CMA X/ Conductor 3/Assignment 1/Pretest Analysis cont.

**Shape** baseline: shape flow dominates movement, with widening and narrowing (that doesn't cross the midline)

16:30-2 Shape flow preparation, distal initiation, low tension binding, little breath support.

19:40 Some slight advancing and flashes of direct space effort.

End Breathes after finishes!

## CMA X/Conductor 3/Assignment 1/Posttest Analysis

Generally, the changes in Conductor 3's movement are clearest early on. After a while old habits seem to reassert themselves. However the changes are striking for the first part, and demonstrate the learning of the material clearly.

**Body** general patterns of organization/exertion:

- crosses mid-line, supporting attention
- left arm and distal movement better integrated into flow of movement.
- breath support begins to appear.

**Effort**

- space effort appears briefly, with more frequency.
- weight begins to rise and sink, which will eventually support lightness and strength.
- flow fluctuations are more clearly visible.
- closest to Spell drive, but not all efforts crystallize at once.

**Space**

- use of space more varied and includes some "steeple" phrasing.
- inclines have more up/down, closer to diagonals which support Action drives.

**Shape**

- weight rises and sinks more clearly
- advancing/retreating clearer and phrased into widening narrowing movements to create more subtle variation.

21.20 Light free (dream state).

23:50-2 Light free again, clearer vertical.

End: Lovely slash!



### **CMA X/Conductor 4/Assignment 1/Pretest Analysis**

(phrasing begins with “outer” but often has long “inner” phrases)

I found the least changes with this conductor from pretest to posttest.

- Body**     general patterns of organization/exertion:
- Body 1/2 seems to be incompletely integrated: uses one hand or the other alternately, but rarely uses both hands at the same time, and if does, they’re not clearly differentiated in task.
  - core or distal initiation, with flow through mid-limb diminished.
  - flexor tone predominates?
  - Affect changes in face before moving to body and hands
- Effort**     •almost rhythm state, with lightness/strength or sudden/sustaining
- but dominated by binding in right hand
  - indirectness/flexible attention seems to center in ears more often than eyes.
  - often “spaceless” (nearest to “passion drive”)
- Space**     •transverse gestures
- uses both diagonals and icosahedron, but w/ concave shape
  - reach space: mid-reach to far reach, almost beyond base of support sometimes
  - steeple phrasing dominates
  - horizontal plane seems to be “home” with excursions above or below it.
- Shape**     •scattering and lots of subtle shape adaptation at the core.

He begins with advancing, indirect attention, shape flow motions followed by sudden binding in right hand.

25:61     Lightness in left hand and upper body, sudden time effort.

### **CMA X/Conductor 4/Assignment 1/Posttest Analysis**

(phrasing still mostly “inner” but with a bit more give and take or inner/outer)

- Body**     hand gestures: distal initiation in left hand, especially fingertips, which are now more articulate
- Effort**     longer phrases of near “rhythm” state
- some dream state (binding/freeing and lightness)
  - slightly more “indirect” space effort.
  - phrases in passion drive (sudden strong binding)
  - right hand gains effort range: not only binding some lightness
  - left hand less dominant

CMA X/Conductor 4/Assignment 1/Posttest Analysis cont.

**Space** •changed from steeple to volute phrasing for lyrical passages

**Shape** baseline: shape flow, gathering  
 •shape change in limbs clear, but slightly diminished in torso.  
 •combinations of advancing, retreating, spreading, rising

### **CMA Panelist X: Assignment 2**

Conductor 1/Assignment 2/Clip 1

Changes pretest to posttest: In the pretest the Conductor shows some disaffinities: e.g. rising w/ strength or binding. In the posttest, he is able to match the downward gesture with strong weight effort. In the pretest he fluctuates between binding and freeing, in the posttest clip, he mostly fluctuates between lightness and strength. For intensity, see motif.

Clip 2

Again, in the pretest, this conductor uses lightness, freeing and binding: in the posttest, he uses lightness and suddenness, in a rhythm state for m. 19-20, then strength and suddenness in the upbeat before m. 21.

Clip 3

In the pretest binding and freeing dominate.  
 Posttest strength, suddenness, and freeing, makes this phrase lean a bit to passion drive.

Clip 4

Pretest: m. 61 binding dominates, m. 62 lightness and suddenness with diminished binding in m.62, 63. In m. 64, the light binding reappears. In the posttest, I noticed a sense of grounding, a greater elasticity of gesture, and clearer accents, with indirect sudden movements in m. 61, and strong sudden movements following, resolving with light binding.

Clip 5

Pretest: m. 99: light sudden accents to m. 100. In m. 100-102 lightness predominates. m.103 strength followed by binding then freeing. Posttest: Much fuller effort range: strongly accented downward gestures with direct, sudden strength in m. 99-100, m. 101-102 light indirect w/ diminished binding. m. 103 a simple downward strong gesture, then reaches to turn page.

CMA X/Conductor 2/Assignment 2/Clip 1

Pretest to posttest changes: The posttest shows an increase of time and weight efforts to the efforts which stay consistent, bringing the conductor more clearly into rhythm state.

CMA X/ Conductor 2/Assignment 2/Clip 2

Pretest to posttest changes: in the pretest, this conductor used indirectness more often, but in the posttest, clarified the lightness and freeing in m. 19-20, and added a sense of elasticity of gesture. in m. 22, binding is added to the light, sudden movement.

Clip 3

There were no significant changes from the pretest to the posttest.

Clip 4

Pretest: Binding and freeing changes in the posttest to marked strong free downward gestures for m. 62-3. In m. 64 the indirectness of the pretest changes to light sustained movement with slight binding.

Clip 5

Pretest light sudden movements in m. 99-100 in the posttest are strong sudden. Note the change of shape in m. 100-101 from the gathering to phrases of rising, then gathering in the posttest. m. 102 in the pretest has a moment of spell drive, where in the posttest the rhythm state changes to light sudden. Measure 104 of the pretest shows freeing, while the posttest shows strong sudden motion.

CMA W/Conductor 3/Assignment 2/Clip 1

Pretest shows mostly shape and effort flow fluctuations. Posttest has clearer efforts, with some lightness and sustaining, timed more clearly to the measures.

Clip 2

As above, the pretest shows mostly shape flow fluctuations. Posttest shows clear effort choices of light accents ending in m. 22 in a moment of directness.

### CMA X/ Conductor 3/Assignment 2/Clip 3

Pretest shows little change in either shape or effort throughout the phrase until m. 51, which has an advance in the hand. The posttest uses the same rising sinking motion for m. 49. In M. 50, the shape changes to rise and scatter phrases, with indirect sudden accents through m. 51. Gestures become smaller and rounder during the decrescendo.

### Clip 4

Pretest: Size of the gestures changes with dynamics: ff larger or smaller for p.  
 Posttest shows similar accented gestures, with a difference in the intensity of the strength of the downward gesture in m. 62, and clearer strength paired with suddenness for this measure (rhythm state). Last part of m. 63, light sudden rhythm state.

### Clip 5

Pretest: She uses her left hand to indicate dynamic change-light elastic strokes with diminished time element present (sudden) m. 99-100, with m. 101 the left hand adds diminished binding to the lightness, and m. 103-104, freeing on the f, and lightness of the piano.

Posttest: Size of gestures change w/ dynamics, as well as left hand clearly adds the element of time (sudden) to the light elastic gestures. M. 101 light directness in the left hand, and m. 103 directness is added to the freeing in the left hand.

### CMA X/Conductor 4/Assignment 2/Clip 1

Showed little crystallized attention to space, closest to passion drive, with lots of "inner" phrasing of shape which reverts persistently to a convex shape. The pretest and posttest appear very similar, with a moment of freeing in the right hand in the 2nd part of m. 1.

### Clip 2:

Similar phrasing in pre and posttest, with the element of flow added to the lightness in m. 19, bringing it momentarily into dream state.

### CMA X/Conductor 4/Assignment 2/Clip 3

Pretest shows the most change from pre to posttest for this conductor. Pretest uses diagonal with the left half of the body in m. 49 and 50, with the posttest showing forward high and low gestures. M. 50 in the pretest uses freeness with the light gesture (dream state), with the posttest choice of time effort combined with lightness (rhythm state). In m. 52, the light sudden downward diagonal stroke of the pretest is replaced with a light free downward stroke. Conductor still has preference for dream state that resurfaces.

### Clip 4

Pretest: mostly advancing gestures m. 61-15, with retreating at the end of m. 63- 64. Efforts m. 62: strong sudden to strong binding, m. 63 (end) light free. Posttest: simple strong gestures (without marked binding) and clear sudden gestures beginning m. 63.

### Clip 5

Pretest: M. 99 free elastic rising, m. 100 strong bound elastic advancing, m. 101 strong elastic bound retreat into rising sudden bind. M. 102 light sudden retreating to sinking through m. 103. Then m. 104 returns to the pattern in m. 100.

Posttest: Time element clearer, with sudden effort consistent except for a moment in m. 103: elastic sudden advancing gestures m. 99 through beginning of m. 100, which adds directness, then strength. M. 102 keeps the lightness and suddenness of pretest, adding diminished binding, and the right hand shows a moment of directness in m. 103. M. 104, strength shown in pretest is replaced with suddenness and more intense binding.

## **CMA Panelist X: Exit Question**

My answers to the exit question are based mostly upon analysis of the pretest and posttest shown, (with some support from the short clips) as I believe the changes could best be seen globally throughout each conductor's performance.

All conductors in the study seemed to be able to use Shape change affinities to help crystallize Efforts better in the posttest than the pretest. In the pretest, many were working in a different plane of motion, which often seemed to counteract the chosen Effort: e.g. sinking with quickness or advancing with strength in the pretest, versus retreating or advancing with quickness, and sinking with strength in the posttest.

Conductor 1 seemed to be able to add some Efforts to his range and incorporate them into his conducting, particularly by: more core initiation, accessing free flow fluctuations and crystallizing Efforts more frequently.

CMA X/Exit Question cont.

Conductor 2 was clearly able to choose how to change her efforts to consciously match her musical vision. She seems more grounded, and to access Rhythm state more frequently. She has more access to volute phrasing to compliment her steeple phrasing. Her Effort changes seem to lead the orchestra better in the post test, where as sometimes in the pretest her Effort changes take place after the music score changes.

Conductor 3 seemed to grow in confidence by having specific choices to be able to make in movement. In the pretest during clip 1, conductor 3's gesture did not seem to clearly match/lead the music, but in the post test the time-relationship between her gestures and the music seemed tighter. Likewise, in clip 3 pretest, her gestures didn't seem to change much with between sf and p, where in the post test, her gestures became smaller in size during the decrescendo.

Conductor 4: I had difficulty clearly seeing a change in efforts from pretest to posttest. This conductor may benefit from working at the body level/developmental movement patterns to support his ability to make effort choices later. He was the closest to "passion drive" both in the pretest and the posttest. In the posttest, there was more articulation in the left hand, which showed a greater Effort range than in the pretest, as did the right hand. This conductor has a strong preference for the horizontal plane, which may have limited his ability to change decisively, but although in the horizontal plane, he did not crystallize his attention to space.

Conductor 1 was able to add some Efforts to his range and incorporate them into his conducting.

Conductor 2 was clearly able to choose how to change her efforts to consciously match her musical vision.

Conductor 3 seemed to grow in confidence by having specific choices to be able to make in movement.

Conductor 4 may benefit from working at the body level/developmental movement patterns to support his ability to make effort choices later.

## APPENDIX I

## CONDUCTOR PANEL ASSESSMENTS

**Conductor Panelist Y/Conductor 1/Assignment 1**

**1a.** The conductor's gestures communicate tempo \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.2
Posttest	3.8

**1b.** The conductor's gestures establish and maintain an appropriate tempo \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Most Times

**Comments**

**Pretest** The tempo is *not* con brio, but he shows his tempo with good use of heavy ictus. The gestures appear to keep the ensemble reasonably together but not consistently.

**Posttest** This tempo is consistently allegro con brio. It is faster than the pretest and therefore makes the whole performance more convincing.

**2a.** The conductor's gestures communicate dynamics \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	2.8
Posttest	3.6

**2b.** The conductor's gestures accurately reflect the dynamics \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Most Times
Posttest	Most Times

**Comments**

**Pretest** The overall dynamic control is effective and reflects the requirements of the piece most of the time. Sudden changes seem most effective.

**Posttest** In this session he shows more dynamic change and clarity. However, he is more convincing when showing forte than piano.

**3a.** The conductor's gestures communicate articulations \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.2
Posttest	3.4

**3b.** The conductor's gestures accurately reflect the articulations \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** He does good work in many cases where sfz articulations occur on off-beats, but his face and body lack intensity. Piano passages like mm. 118-48 are less effective.

**Posttest** He is not consistently relaxed so his gestures lack the suppleness and grace to show delicacy of articulation.

## Panelist Y: Conductor 1/Assignment 1 Cont.

**4a.** The conductor's gestures communicate Beethoven style and character \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	2.4
Posttest	3.4

**4b.** The conductor's gestures accurately reflect Beethoven style and character \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Sometimes
Posttest	Half the Time

**Comments**

**Pretest** The lack of eye contact in general is the main reason that little of the sense of tragedy is transmitted to the orchestra, and the face and body do not exhibit enough intensity.

**Posttest** This performance has the right energy, but he still lacks pathos in his face. There is a better sense of the character but still not enough eye contact.

**5a.** The conductor's gestures communicate phrasing and shape \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.2
Posttest	3.5

**5b.** The conductor's gestures accurately convey phrasing and shape \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** His is not effective at communicating large shapes (i.e. the difference between legato shape in mm. 36-40 vs. marcato in mm. 40-9).

**Posttest** This area is much improved in the posttest, especially in mm. 36-40 where the different shapes of the phrase are well represented in his gesture.

**6a.** The conductor's preparatory gestures are \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	2.8
Posttest	3.8

**6b.** The conductor's gestures transmit instructive preparations when required \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Most Times

**Comments**

**Pretest** His preparatory gestures are inconsistent. In m. 29 he gives a false prep that confuses the winds and brass. His forte preparations are better than his piano preparations.

**Posttest** His preparations are far more effective. The initial preparatory gesture allows for a clearer entrance by the orchestra although it is somewhat lacking in weight.



Panelist Y: Conductor 1/Assignment 1 Cont.

7. The conductor's gestures transmit a sense of confidence \_\_\_\_.

**Pretest Response:** Sometimes

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** The conductor's body language is basically tight so this prevents him from demonstrating confidence in with the piece, the orchestra or his technique.

**Posttest** Overall there is a greater feeling of confidence in his technique and a wider range of physical gestures.

8. The conductor is in control of the performance \_\_\_\_.

**Pretest Response:** Half the Time

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** The ensemble generally plays by themselves. He often is following rather than leading. His gestures are inconsistent so he lacks control.

**Posttest** Because of the faster tempo there are ensemble problems in the posttest that did not occur in the pretest (i.e. mm. 82-4.)

9. The conductor's gestures confirm a strong connection to musical events in the score \_\_\_\_.

**Pretest Response:** Sometimes

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** He is best at showing dynamic change and in large phrasings. His lack of eye contact does not support whatever gesture that is connected to the score.

**Posttest** His vocabulary of gestures has enlarged and this allows him to more accurately reflect events in the score.

10. The conductor's gestures affirm a connection with the performers \_\_\_\_.

**Pretest Response:** Half the Time

**Posttest Response:** Half the Time

**Comments**

**Pretest** He shows a reasonable connection with the performers. There are ensemble problems that he is not able to control because his baton technique is not yet secure.

**Posttest** Although there is improvement overall, he has yet to show a sense of conviction from within for this piece, and his bodily tension hampers his communication with players.

**Panelist Y: Conductor 1/Assignment 1 Summaries**

**Pretest-** This conductor has basically good inner rhythm in his gesture. The performance overall suffers from a poor choice of tempo which prevents the ensemble from accurately executing the rhythmic counterpoint of this piece. The conductor does not help to integrate the syncopation between winds and strings. He leaves out a crucial beat in bars 27-8 which confuses the winds in their entrance at bar 29. He is most successful in showing dynamic contrast between forte and piano. The performance suffers primarily from the conductor's physical tightness and rigidity that is communicated to the players. This tension prevents him from showing most of the pathos in this piece.

**Posttest-** Conductor 1 shows a basic knowledge of the superficial aspects of the score in both the pretest and posttest. He knows where the dynamic changes occur, which instruments are playing and when they play, and the phrase lengths, etc. He also has a good solid sense of rhythm that came through in both tests as well. The posttest shows major improvement in the use of a wider range of physical motion. He is also somewhat more relaxed although both performances lacked sufficient physical looseness to make for a convincing performance. The conductor does not *own* the piece within and in both tests he is struggling with technical issues that prevent the music from coming through. I observed a much wider range of motion in the posttest. His tempo was more convincing, but there were noticeable ensemble problems which did not occur in the pretest.

**Panelist Y: Conductor 1/Assignment 2**

<b>Clip 1:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.5
	<b>Posttest</b>	Adequate+ 3.4

**Comments**

**Pretest** The upbeat extends too high. Because it is out of proportion to the downbeat, the opening attack is ragged. However, he does manage to sustain unison effectively.

**Posttest** In the posttest he clearly shows 2 silent beats before the upbeat. The proportions of the beat are correct, and the faster tempo so the players feel the upbeat pulse better.

<b>Clip 2:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.5
	<b>Posttest</b>	Successful- 3.7

**Comments**

**Pretest** The upbeat to m. 22 is not properly prepared, and the attack is sloppy. In 19-20 he does not use enough wrist to help the players get off the dotted note so they are not together.

**Posttest** The tempo is faster; the energy is right, and he uses more wrist in this passage so the orchestra is together. His upbeat to m. 22 is too large so the orchestra stumbles.

<b>Clip 3:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Marginal 2.0
	<b>Posttest</b>	Successful- 3.6

**Comments**

**Pretest** The conductor does not show a dim. in mm. 50-1 so he does not get one. He does not get the orchestra off the tie in m. 51 so it is sloppy. He attempts a calando, but he lacks the technical skills to compel the orchestra to produce the effect.

**Posttest** This tempo is considerably faster so the orchestra feels the right energy. The release after the tie in m. 51 is clearer, but there is still no dim. and no calando. He shows better physical control in the posttest, but the result is lacking musically.

Panelist Y: Conductor 1/Assignment 2 Cont.

<b>Clip 4:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.2
	<b>Posttest</b>	Successful- 3.7

#### Comments

**Pretest** His gestures are too tight to be totally successful. However, the subito piano gesture works well.

**Posttest** In the posttest he shows a more subtle range of motion. He is much more relaxed physically, and this is evident in the sound of the orchestra.

<b>Clip 5:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.8
	<b>Posttest</b>	Adequate+ 3.6

#### Comments

**Pretest** The icti lack energy and therefore the syncopations are sloppy. The upbeat for the winds in m. 104 is too wide and unfocused so the result is sloppy as well.

**Posttest** He shows more energetic well focused icti so the syncopated notes are better placed and more together, and the wind upbeat in m. 104 was together.

### Panelist Y: Conductor 1/Assignment 2 Summary

In the posttest it was clear that the conductor utilized some different physical gestures. He widened his repertoire of strokes in order to achieve a cleaner execution in all five clips. Part of this was due to the faster tempo, but other factors entered into the equation as well. There were more successful upbeats throughout, more nuance was shown and an overall better conviction for the material was evident.

## Conductor Panelist Y: Conductor 2 Assessments

### Conductor 2/Assignment 1

**1a.** The conductor's gestures communicate tempo \_\_\_\_.

Pre/Post	Rating
Pretest	2.8
Posttest	3.7

**1b.** The conductor's gestures establish and maintain an appropriate tempo \_\_\_\_.

Pre/Post	Response
Pretest	Half the Time
Posttest	Over Half the Time

#### Comments

**Pretest** Tempo is given and clear, but is changing almost with every phrase. She sometimes feels the quarter notes too heavily rather than the half notes. This confuses the players.

**Posttest** The tempo is much more consistent. Rebounds are more relaxed and have the proper energy to propel the piece forward. Tempo modifications are more controlled.

**2a.** The conductor's gestures communicate dynamics \_\_\_\_.

Pre/Post	Rating
Pretest	2.7
Posttest	3.6

**2b.** The conductor's gestures accurately reflect the dynamics \_\_\_\_.

Pre/Post	Response
Pretest	Half the Time
Posttest	Over Half the Time

#### Comments

**Pretest** She gets lost in the score, and she is not focused physically. Her wide motions do not allow the forte gestures to be under control. She shows more effective piano strokes.

**Posttest** She was not lost dynamically, and she prepared the dynamic shifts effectively. In mm. 31-46 she revealed the beginnings of passive vs. active gestures for dynamic nuance.

**3a.** The conductor's gestures communicate articulations \_\_\_\_.

Pre/Post	Rating
Pretest	3.2
Posttest	3.4

**3b.** The conductor's gestures accurately reflect the articulations \_\_\_\_.

Pre/Post	Response
Pretest	Over Half the Time
Posttest	Most Times

#### Comments

**Pretest** In general she is aware of the big articulations of the score. Her use of body motion to show sfzandi are is effective, but baton strokes seem inconsistent.

**Posttest** Again the use of passive vs. active strokes allow the phrases to become clearer. I also saw a wider variety of forte strokes in forte passages.

## Panelist Y: Conductor 2/Assignment 1 Cont.

**4a.** The conductor's gestures communicate Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.4
Posttest	3.7

**4b.** The conductor's gestures accurately reflect Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Most Times

**Comments**

**Pretest** Her passion is evident, but she is not secure. Her struggle with the tempo and the details of execution make it difficult for the true Beethoven character to come through.

**Posttest** The passion and intensity of the pretest were evident, and her stronger sense of tempo allowed her feeling for the work to come through more effectively.

**5a.** The conductor's gestures communicate phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.4
Posttest	3.3

**5b.** The conductor's gestures accurately convey phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Half the Time
Posttest	Most Times

**Comments**

**Pretest** There is a fine legato stroke in her gesture. She blends and shifts well between legato and marcato. She has a good sense of line in the second theme.

**Posttest** Her control of phrasing and shape is still inconsistent. She had trouble keeping the ensemble together in transitional sections, but was much more convincing elsewhere.

**6a.** The conductor's preparatory gestures are \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	2.6
Posttest	3.7

**6b.** The conductor's gestures transmit instructive preparations when required \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** She loses the orchestra at times because of poor preparation. Her struggle with tempo prevents her from being properly ahead of the orchestra so preparations suffer.

**Posttest** Most of the preps for the winds and brass were done well. When she fumbled it was because she lost eye contact; her head was down and not connected with the players.

Panelist Y: Conductor 2/Assignment 1 Cont.

7. The conductor's gestures transmit a sense of confidence \_\_\_\_\_.

**Pretest Response:** Half the Time

**Posttest Response:** Most Times

**Comments**

**Pretest** Conductor 2 exudes *outer* confidence but her gestures indicate that she lacks the *inner* confidence to control musical issues.

**Posttest** The posttest showed more conviction and positive energy.

8. The conductor is in control of the performance \_\_\_\_\_.

**Pretest Response:** Half the Time

**Posttest Response:** Most Times

**Comments**

**Pretest** She was lost in the score several times, and this took away her credibility and overall control of the performance. Problems with tempo contributed as well.

**Posttest** Except for some transitional sections, most of the posttest was under her control. In general she leads and does not follow.

9. The conductor's gestures confirm a strong connection to musical events in the score \_\_\_\_\_.

**Pretest Response:** Over Half the Time

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** In many instances she shows the correct energy for this piece. Her problems with the details of the score held the performance back.

**Posttest** There were some clear attempts at showing most of the details of score through her stick and body movement.

10. The conductor's gestures affirm a connection with the performers \_\_\_\_\_.

**Pretest Response:** Half the Time

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** At times she showed displeasure with the execution of the orchestra in her face and demeanor. I think that those moments worked negatively for her.

**Posttest** She showed less displeasure with the orchestra members and more involvement with their work as musicians.

**Panelist Y: Conductor 2/Assignment 1 Summaries**

**Pretest-** Conductor 2 shows some talent and passion for conducting. She lacks a physical presence; call it a grace to make her gestures appropriate to the music. Her feeling for the score is evident and she has some power and technical knowledge of keeping an orchestra together. She was continually struggling with the issue of tempo in the pretest. She lacked the physical and technical control of her body and stick to make the music that is within her. I noted a certain attitude to the orchestra which will not benefit her. I was impressed with some of her forte solutions for the piece when she had them under control.

**Posttest-** Conductor 2 showed some minor and some major physical and musical changes in the posttest. These were mainly due to her selection of tempo initially and effectively managing issues relating to tempo throughout the piece. The ensemble was tighter and the overall musical flow was clearer. Certain physical issues of bending over into the orchestra, some wild forte thrusts and unfocused body movements detracted from the performance. I was impressed with her ability to integrate some passive conducting gesture with active gesture in order to create better phrasing and musical shape.



**Panelist Y: Conductor 2/Assignment 2**

<b>Clip 1:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.4
	<b>Posttest</b>	Successful- 3.9

**Comments**

**Pretest** Good job, but the first beat of m. 3 lacks the energy necessary to properly convey the forte chord.

**Posttest** A more successful presentation with a cleaner outcome that had more power and thrust in m. 3.

<b>Clip 2:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.2
	<b>Posttest</b>	Successful- 3.8

**Comments**

**Pretest** Acceptable but not clearly focused.

**Posttest** The tempo is faster so the energy propels the flow of music into the wind and timpani attack.

<b>Clip 3:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful- 3.6
	<b>Posttest</b>	Successful- 3.6

**Comments**

**Pretest** The conductor shows some indication of tempo modification, but little or no diminuendo.

**Posttest** The posttest in this instance is essentially the same as the pretest: some tempo modification but no diminuendo.

Panelist Y: Conductor 2/Assignment 2 Cont.

<b>Clip 4:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful- 3.5
	<b>Posttest</b>	Successful+ 4.1

#### Comments

**Pretest** She shows the overall shape of the phrase with her gesture but misses the finesse of the subito piano.

**Posttest** In the posttest she shows a more subtle range of motion. She is much more relaxed physically, and this is evident in the sound of the orchestra.

<b>Clip 5:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.3
	<b>Posttest</b>	Successful- 3.8

#### Comments

**Pretest** The ensemble was not together because the conductor's preparations are a bit late.

**Posttest** She is much more successful because she showed better energy, improved focus, better eye contact and more timely preparations.

### Panelist Y: Conductor 2/Assignment 2 Summary

Overall there are several changes between conductor two's pretest and posttest clips. The changes are principally in the area of tempo control, dynamic control and more focused strokes in the forte dynamic range. The overall feeling and passion were similar in both sets of clips, but the posttest session showed a more focused, clearer rendition and was therefore more successful. Certain physical limitations still exist for this conductor that must be overcome so that she can be totally fluent with her gestures and movements.

## Conductor Panelist Y: Conductor 3 Assessments

### Conductor 3/Assignment 1

**1a.** The conductor's gestures communicate tempo \_\_\_\_.

Pre/Post	Rating
Pretest	3.7
Posttest	3.7

**1b.** The conductor's gestures establish and maintain an appropriate tempo \_\_\_\_.

Pre/Post	Response
Pretest	Over Half the Time
Posttest	Most Times

#### Comments

**Pretest** The tempo is clear, but clear like a metronome. Her gesture shows nothing of the allegro con brio character. It is simply time beating at its worst

**Posttest** The conductor showed a very solid feeling of pulse and tempo. The beat had excellent rebound and also showed the inner pulse in her stick and body.

**2a.** The conductor's gestures communicate dynamics \_\_\_\_.

Pre/Post	Rating
Pretest	1.8
Posttest	3.3

**2b.** The conductor's gestures accurately reflect the dynamics \_\_\_\_.

Pre/Post	Response
Pretest	Rarely
Posttest	Over Half the Time

#### Comments

**Pretest** The beat remains constant both in character and dynamic. There is little or no attempt to show changes in dynamics.

**Posttest** There were very clear attempts at dynamic shading Although some of the shapes were primitive and somewhat awkward, they nevertheless communicated to the players.

**3a.** The conductor's gestures communicate articulations \_\_\_\_.

Pre/Post	Rating
Pretest	1.8
Posttest	2.8

**3b.** The conductor's gestures accurately reflect the articulations \_\_\_\_.

Pre/Post	Response
Pretest	Rarely
Posttest	Over Half the Time

#### Comments

**Pretest** No evidence of either a legato or marcato beat is present; every beat is the same. The orchestra is playing the articulations without assistance from the podium.

**Posttest** There were clear attempts at sfzando articulations. This was particularly evident in m. 40. The articulations in the strings in mm. 75-7 were clearly well done.

## Panelist Y: Conductor 3/Assignment 1 Cont.

**4a.** The conductor's gestures communicate Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	1.6
Posttest	2.8

**4b.** The conductor's gestures accurately reflect Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Never
Posttest	Half the Time

**Comments**

**Pretest** There is no representation of the character of the music in the quality of her time beating. Whatever Beethoven character came through did so by virtue of the players.

**Posttest** Although the opening downbeat was a bit awkward, it did establish some Beethoven character. Placement of upbeats and downbeats helped the attacks.

**5a.** The conductor's gestures communicate phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	1.5
Posttest	3.3

**5b.** The conductor's gestures accurately convey phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Rarely
Posttest	Over Half the Time

**Comments**

**Pretest** There is not attempt to show shape or phrasing except perhaps mm. 62-3 where some semblance of line is present. The second theme is beaten exactly the same as the first.

**Posttest** In the posttest the character of the beat changed from the 1<sup>st</sup> to 2<sup>nd</sup> theme which had a more rounded shape and allowed for better control and an improved outcome.

**6a.** The conductor's preparatory gestures are \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	2.2
Posttest	3.3

**6b.** The conductor's gestures transmit instructive preparations when required \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Rarely
Posttest	Over Half the Time

**Comments**

**Pretest** Because she gave two preparatory gestures, the opening upbeat was a disaster for the orchestra, but they managed to play. There was a lack of preparation throughout.

**Posttest** Though awkward, the initial upbeat showed sufficient preparation and character. The integration of winds and brass at mm. 20 & 27 was well prepared.

Panelist Y: Conductor 3/Assignment 1 Cont.

7. The conductor's gestures transmit a sense of confidence \_\_\_\_\_.

**Pretest Response:** Rarely

**Posttest Response:** Half the Time

**Comments**

**Pretest** The opening upbeat demonstrated the conductor's inexperience and lack of confidence. There was little or no eye contact that would indicate a sense of confidence either.

**Posttest** The performance clearly exhibited some degree of confidence and this probably came from more technical and musical control of this piece.

8. The conductor is in control of the performance \_\_\_\_\_.

**Pretest Response:** Rarely

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** The orchestra played amazingly well and together despite the lack of information given on the podium. They consistently played in spite of what was shown gesturally.

**Posttest** The conductor clearly held the time under her control. This was evident in a clear forceful beat that had sufficient subdivisions to give the ensemble an inner pulse.

9. The conductor's gestures confirm a strong connection to musical events in the score \_\_\_\_\_.

**Pretest Response:** Rarely

**Posttest Response:** Half the Time

**Comments**

**Pretest** Most of the time the conductor seemed clueless as to what was going on in the score. Her performance was simply time beating with little or no additional information.

**Posttest** Although many of the nuances of the piece did not come through, the broad brush was there in the posttest.

10. The conductor's gestures affirm a connection with the performers \_\_\_\_\_.

**Pretest Response:** Never

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** There was never any eye contact with the players so it was impossible to determine if they were even watching beyond the constant "1 – 2" of her time beating.

**Posttest** There was a 70% improvement in eye contact with the ensemble and this certainly improved the connection with the players.

**Panelist Y: Conductor 3/Assignment 1 Summaries**

**Pretest-** This was a case of an inexperienced conductor being rescued by the orchestra in the pretest performance because the group was playing on “autopilot.” The only saving grace which the conductor showed was a rhythmic ability to beat a clear, vertical staccato 1-2 beat. This beating was relentless in its monotony, but it amazingly allowed the orchestra to play reasonably well together. This is another example demonstrating that most orchestras will play in spite of lack of gestural information coming from the podium.

**Posttest-** This performance showed a significant improvement over the pretest in several areas. I am not sure whether it was from the fact that conductor 3 completed the Laban training or whether she spent more time improving her knowledge of the score and developing some additional technical strokes to help communicate the music to the ensemble. Nevertheless, there are many things to talk about. In the posttest I observed:

1. Clear and better use of marcato vs. legato strokes,
2. More decisive beating,
3. Better eye contact with the performers,
4. Better gestural representation of articulations in both piano and forte,
5. More right hand/left hand independence.

**Panelist Y: Conductor 3/Assignment 2**

<b>Clip 1:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Unsuccessful+ 1.3
	<b>Posttest</b>	Successful- 3.7

**Comments**

**Pretest** The orchestra began on upbeat rather than downbeat. However, it was together and the chord was properly sustained.

**Posttest** The upbeat gesture, though slightly awkward and out of time, nevertheless had power and enough shape for the group to play together.

<b>Clip 2:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.2
	<b>Posttest</b>	Successful- 3.5

**Comments**

**Pretest** The constant vertical motion allowed the wind to feel the entrance properly.

**Posttest** Although the 2<sup>nd</sup> beat in m. 20 looked more like a downbeat than "2," it got the entrance together. There was also an attempt to show the legato and cresc. in mm. 19-20.

<b>Clip 3:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.8
	<b>Posttest</b>	Adequate+ 3.4

**Comments**

**Pretest** The orchestra was not together at all after the tie in m. 50, and there was little else in the conductor's beat to help them with the other changes.

**Posttest** The time is maintained through m. 50 and the violoncellos released together, but still nothing more to help the orchestra.

Panelist Y: Conductor 3/Assignment 2 Cont.

<b>Clip 4:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Marginal- 1.9
	<b>Posttest</b>	Successful- 3.5

**Comments**

**Pretest** Little attempt is made to show a real piano. Also the forte exhibits little or no contrast to the piano.

**Posttest** There is a difference in shape from mm. 62-3 and 64. The sounds that result more closely match indications in the score.

<b>Clip 5:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 2.6
	<b>Posttest</b>	Successful- 3.6

**Comments**

**Pretest** There is little difference in shape to help the orchestra execute the articulations. The brass are poorly prepared for the attack.

**Posttest** There is some attempt to show the inner pulse of the syncopation in mm. 100-01, and the result has more energy. The winds are also better prepared.

**Panelist Y: Conductor 3/Assignment 2 Summary**

In all five clips Conductor 3 scores higher on the posttest. She has more confidence in her technique, and she is clearly experimenting with some newly learned gestures. They are still a bit awkward but should improve with more experience. Another matter that I did pick up concerning why her pretest went as well as it did was that she always has a very strong whip up on "2" and this enables one to feel a strong propulsion to the downbeats.



## Conductor Panelist Y: Conductor 4 Assessments

### Conductor 4/Assignment 1

**1a.** The conductor's gestures communicate tempo \_\_\_\_.

Pre/Post	Rating
Pretest	2.8
Posttest	4.3

**1b.** The conductor's gestures establish and maintain an appropriate tempo \_\_\_\_.

Pre/Post	Response
Pretest	Over Half the Time
Posttest	Most Times

#### Comments

**Pretest** The gestures are inconsistent, and they do not establish an accurate steady tempo. The orchestra tends to push the tempo, and the conductor is not in total control.

**Posttest** The tempo is slightly more con brio and has good energy. The icti are well placed, and the rebounds allow the ensemble to feel the line accurately.

**2a.** The conductor's gestures communicate dynamics \_\_\_\_.

Pre/Post	Rating
Pretest	3.7
Posttest	4.5

**2b.** The conductor's gestures accurately reflect the dynamics \_\_\_\_.

Pre/Post	Response
Pretest	Most Times
Posttest	Always

#### Comments

**Pretest** His gestures show an understanding of the dynamics. The piano gestures are less effective than forte. He misses the dim. in m. 50.

**Posttest** The dynamics are very well controlled in both forte and piano. The preparation for each dynamic shape is well projected.

**3a.** The conductor's gestures communicate articulations \_\_\_\_.

Pre/Post	Rating
Pretest	3.5
Posttest	4.3

**3b.** The conductor's gestures accurately reflect the articulations \_\_\_\_.

Pre/Post	Response
Pretest	Most Times
Posttest	Most Times

#### Comments

**Pretest** The conductor shows the character of the sfz in forte (m. 46) as well as the staccato articulation in piano. There are some good horizontal strokes for legato shape.

**Posttest** Because of the inner energy between the beats, the ensemble is able to adjust the articulations to conform to the character of the music (i.e. mm. 97-101).

## Panelist Y: Conductor 4/Assignment 1 Cont.

**4a.** The conductor's gestures communicate Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.2
Posttest	4.4

**4b.** The conductor's gestures accurately reflect Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Most Times
Posttest	Always

**Comments**

**Pretest** The conductor shows intensity and overall Beethoven character in both his face and baton, but poorly placed beats in the opening measures lead to lackluster execution.

**Posttest** The tragic character is well reflected in the opening. Throughout the work a healthy dose of right/left hand independence which adds to the intensity of gestures.

**5a.** The conductor's gestures communicate phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.4
Posttest	3.8

**5b.** The conductor's gestures accurately convey phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** In most cases the shapes of the piece come through in his gestures. The large phrases are well executed. He seems lost in mm. 82-4: the cresc. is not properly demonstrated.

**Posttest** The large phrases, especially mm. 92-101. In m. 118 and 140 the inner rhythm is missing so the strings begin to round corners and play triplets instead of what is written.

**6a.** The conductor's preparatory gestures are \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	4.4
Posttest	4.6

**6b.** The conductor's gestures transmit instructive preparations when required \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Most Times
Posttest	Always

**Comments**

**Pretest** The preparations for the winds and brass are exceptional. His eye contact is consistent and effective in both piano and forte sections.

**Posttest** The conductor has excellent eye contact throughout. The wind, brass and timpani entrances are almost always given. When he hunches over, his preps. are less effective.

Panelist Y: Conductor 4/Assignment 1 Cont.

7. The conductor's gestures transmit a sense of confidence \_\_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Always

**Comments**

**Pretest** The conductor has good presence and a degree of self confidence.

**Posttest** The correct energy for the piece is clearly given in the body language and facial expression.

8. The conductor is in control of the performance \_\_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** Good control physically, always listening and reacting to the ensemble. He demonstrated good rhythmic control as well.

**Posttest** There was some rushing, loss of rhythmic control and lack of control and direction for crescendi in the posttest.

9. The conductor's gestures confirm a strong connection to musical events in the score \_\_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Always

**Comments**

**Pretest** The conductor has a variety of gestural strokes which contribute to the overall connection to events in the score. His r/l hand independence produces good results.

**Posttest** The conductor knows the details of the score and shows them in his gestures. He understands passive vs. active beating. This adds to his overall effectiveness.

10. The conductor's gestures affirm a connection with the performers \_\_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Always

**Comments**

**Pretest** Conductor 4 is well connected to the performers, especially the winds, brass and timpani. He controls much of their playing yet is not able to control the time.

**Posttest** There was a consistent strong link between the conductor's gestures and the required response from the ensemble. He was always leading and not following.

**Panelist Y: Conductor 4/Assignment 1 Summaries**

**Pretest-** This is overall a successful rendition of the piece. The conductor has clear leadership ability, is communicative and understands the details of the score. He is not consistent in his ability to get the ensemble to play together. His is hampered by some poorly placed upbeat and downbeat strokes which do not produce accurate ensemble playing. He has a good sense of the orchestration and reflects this in his eye contact with the winds and brass.

**Posttest-** This was a most convincing performance. Despite one or two inaccuracies noted in the details, the orchestra played beyond their capacity. The conductor showed more control of the tempo in the posttest and had the right energy and conviction for this piece. His weakness remains in his hunched over posture and often inaccurate speeds of his upbeats in piano dynamics.

**Panelist Y: Conductor 4/Assignment 2**

<b>Clip 1:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful- 3.8
	<b>Posttest</b>	Outstanding- 4.7

**Comments**

**Pretest** His upbeat is not clearly placed so the resulting initial attack is ragged.

**Posttest** The posture of the conductor and the shapes of the upbeats are properly synchronized for an accurate attack and sustained chord.

<b>Clip 2:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful+ 4.3
	<b>Posttest</b>	Adequate+ 3.4

**Comments**

**Pretest** The preparation in m. 20 is well executed as is the upbeat to m. 22.

**Posttest** The energy and crescendo into m. 20 is well done. However, the upbeat to m. 22 is too high and results in a poor entrance.

<b>Clip 3:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.3
	<b>Posttest</b>	Successful+ 4.3

**Comments**

**Pretest** The hunched over position of the conductor detracts from the attack in m. 52. There is no diminuendo in mm. 50-1, but the relaxation of tempo comes through.

**Posttest** There is no modification of tempo. However, the release of the tie in m. 51 is good, and the attack in m. 52 is clear.

Panelist Y: Conductor 4/Assignment 2 Cont.

<b>Clip 4:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful 4.0
	<b>Posttest</b>	Successful+ 4.3

#### **Comments**

**Pretest** The dynamic changes are well done. The strokes used for the forte are not as convincing.

**Posttest** The rounded strokes of the forte in mm. 62-3 show the proper character of the event. The piano is also well executed.

<b>Clip 5:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful+ 4.4
	<b>Posttest</b>	Successful- 3.7

#### **Comments**

**Pretest** Consistency of rhythm is evident in solid downward strokes. The preparation for the winds and brass is clear.

**Posttest** The rhythm is not as clearly established, and the downbeats are less convincing, although the preparation for the winds and brass remain accurate.

### **Panelist Y: Conductor 4/Assignment 2 Summary**

Although there is not as clear a picture of a difference between the pre and posttest, there are slight and subtle changes for Conductor 4. These changes are reflected in a better overall posture, less hunched over and more positive strokes in both forte and piano. There were, however, one or two clips that were more successful in the pretest than posttest, and these are so noted.

### **Panelist Y: Exit Questions**

- 1) Based on your conclusions in Assignments 1 and 2 and your experience as a conductor and conducting teacher, comment on the changes, if any, you observed in the conductors' movement behaviors during their posttest performances compared to their pretests.

**Response:** Overall all four conductors' gestural performance improved significantly in the posttest compared to the pretest. All four used a wider range of motion and involved different gestural solutions to inherent problems in the score. The issue of change in the amount of physical tension was most evident in conductors 1 and 3, where the posttest showed a more relaxed physical attitude on the podium. Conductors 2 and 4 showed the least amount of overall change to physical attitude. In both posttests they had similar physical constraints of hunched body position and lack of physical grace to allow their interpretations to resonate with the orchestra and observers.

- 2) Did these changes result in improved connections between the conductors' gestures and musical events in the score? Explain how and why. (100 words)

**Response:** The issue of tempo was the primary difference in all 4 conductors in the posttest versus the pretest. Other than conductor 4, where there was little change of tempo from pre to posttest, the remaining 3 conductors had considerably faster tempi in the posttest. Whether this was due to their work in the Laban workshops or from the fact that they were more comfortable and more relaxed physically from the additional experience before this ensemble is not clear. Additionally because of their wider range of physical motion (especially with conductor 3) they were able to demonstrate more dynamic control as well as control of the many rhythmic demands of the score.

- 3) Do you believe such improvements translated to a better connection between conductor and ensemble? Explain.

**Response:** As noted above, all 4 conductors were more relaxed in the posttest versus the pretest. Because of this the ensemble was relaxed and responded with overall better execution of the piece. Since all 4 conductors had a wider range of physical motion in the posttest, they were more successful in controlling the ensemble playing of the orchestra and the rhythmic line ups of the score were improved. All the posttests showed a greater degree of eye contact. This translated into better communication with the orchestra and allowed their preparatory gestures to be more successful, resulting in better performances by the orchestra.



## CONDUCTOR PANELIST Z

**Conductor Panelist Z/Conductor 1/Assignment 1**

**1a.** The conductor's gestures communicate tempo \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.8
Posttest	2.8

**1b.** The conductor's gestures establish and maintain an appropriate tempo \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Half the Time

**Comments**

**Pretest** Initial preparation was not exactly in tempo, but the rest of the excerpt was pretty consistent.

**Posttest** Tempo not steady right at the beginning; there was a fluctuation of beat in mm. 1-2. Also some tempo issues in mm. 15-20.

**2a.** The conductor's gestures communicate dynamics \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	2.4
Posttest	3.2

**2b.** The conductor's gestures accurately reflect the dynamics \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** The dynamic range shown is rather narrow. The pp in m. 78 shows no variance from piano in m. 72 or 75. Crescendos in mm. 18-9, 30-4 were rather weak.

**Posttest** The timing of subito piano was much more controlled. Still, sforzandi such as mm. 46-9 were barely evident ('generic dynamics at best).

**3a.** The conductor's gestures communicate articulations \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.2
Posttest	3.2

**3b.** The conductor's gestures accurately reflect the articulations \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** 2<sup>nd</sup> theme beginning m. 52 needs to be much more legato. Staccato/marcato passages need more energy. Contrasts are not vivid enough.

**Posttest** Still needs more legato for 2<sup>nd</sup> theme, although the left hand was more effective here. Staccati still very neutral.

## Panelist Z: Conductor 1/Assignment 1 Cont.

**4a.** The conductor's gestures communicate Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	1.8
Posttest	2.6

**4b.** The conductor's gestures accurately reflect Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Sometimes
Posttest	Half the Time

**Comments**

**Pretest** No sense of drama. Black and white contrasts of this piece seem to elude the conductor of this piece. Changes of character shown only minimally.

**Posttest** In some ways, there is more character shown, but overall it still lacks the essential drama of Beethoven.

**5a.** The conductor's gestures communicate phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	2.5
Posttest	3.5

**5b.** The conductor's gestures accurately convey phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** Some sense of shape in the 2<sup>nd</sup> theme, but much of the conducting is mere time beating. The staccato passages lack energy and tightness.

**Posttest** Generic shapes were there, but true leadership of the direction of events is completely lacking.

**6a.** The conductor's preparatory gestures are \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.4
Posttest	3.2

**6b.** The conductor's gestures transmit instructive preparations when required \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** Some events are shown too early, especially the subito piano in mm. 102 and 118. Poorly timed conductor page turn distracts from piano preparation in m. 15.

**Posttest** Most events were shown 'correctly' but without life or impetus to compel the players to react vividly.

Panelist Z: Conductor 1/Assignment 1 Cont.

7. The conductor's gestures transmit a sense of confidence \_\_\_\_.

**Pretest Response:** Sometimes

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** His arms look more confident than his face. Often the facial expressions distract from the musical events.

**Posttest** Much greater self-confidence and relaxation noticeable in the arms and torso. Somewhat less eye contact, however.

8. The conductor is in control of the performance \_\_\_\_.

**Pretest Response:** Half the Time

**Posttest Response:** Sometimes

**Comments**

**Pretest** Pretty steady tempo and the players follow well if mechanically.

**Posttest** The gain in confidence mentioned above seems to have resulted in a marked decrease in control of rhythm on occasions like mm. 15-20 and 102-10.

9. The conductor's gestures confirm a strong connection to musical events in the score \_\_\_\_.

**Pretest Response:** Sometimes

**Posttest Response:** Sometimes

**Comments**

**Pretest** The basic ideas are transmitted in a rudimentary fashion but without a true sense of commitment and involvement

**Posttest** The gestures are there on the surface, but the inner life and depth behind them are missing.

10. The conductor's gestures affirm a connection with the performers \_\_\_\_.

**Pretest Response:** Over Half the Time

**Posttest Response:** Half the Time

**Comments**

**Pretest** Pretty good eye contact with the group and a good sense of staying with them rhythmically.

**Posttest** Eye contact with the players not enough. The arms do their job, but somewhat in a vacuum.

**Panelist Z: Conductor 1/Assignment 1 Summaries**

**Pretest-** This conductor does not convey much of the drama or excitement of Beethoven. He is a time beater rather than a conductor. The gestures look “correct” and dutiful, but they have no inner intensity, either in the dramatic parts or the lyrical sections. The subtle differences between piano and pianissimo are ignored as are those between forte and fortissimo. While there is some good surface contact with the players, a deeper connection is missing. I see lots of mirroring with both arms, and page turns are very obtrusive, always interrupting the conductor’s physical concentration.

**Posttest-** This conductor appeared markedly more relaxed and confident in the posttest. However, his relaxation sometimes caused him to lose control of the tempo at a number of spots along the way. Some of the musical events and changes were timed later, especially sudden dynamic drops. Crescendi still lacked intensity, and overall the musical result was still very pale Beethoven. There also seemed to be somewhat less eye contact with the players. Left hand independence was improved. Overall the posttest was a mixed bag of some things getting better and others worse.

**Panelist Z: Conductor 1/Assignment 2**

<b>Clip 1:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.7
	<b>Posttest</b>	Adequate+ 3.9

**Comments**

**Pretest** Hesitation at the top of the preparatory beat before coming down creates insecure attack. Facial grimaces not helpful. Right hand time beating not helpful Torso bounces slightly with beats.

**Posttest** Much more focused prep showing good tempo and attack. Rt. hand focused and neutral, torso solid. Overall impact much tighter. Still could use more powerful initial downbeat

<b>Clip 2:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Marginal+ 2.2
	<b>Posttest</b>	Successful- 3.5

**Comments**

**Pretest** Very tentative and hesitant. Virtually no crescendo shown. Lack of drama in pause, with eyes dropping down to score and useless beating.

**Posttest** Still not enough crescendo, though the forte was cut off with more vigor. The rest was more focused, and the prep to continue was cleaner.

<b>Clip 3:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Marginal- 1.8
	<b>Posttest</b>	Adequate- 2.5

**Comments**

**Pretest** No diminuendo shown. Change of character to legato theme was very unclear. Mirror conducting without taking expressive advantage of left hand.

**Posttest** Somewhat better, but still no sense of diminuendo or expressive color change. The arms look more controlled physically but still don't show the essence of the music.

Panelist Z: Conductor 1/Assignment 2 Cont.

<b>Clip 4:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 3.8
	<b>Posttest</b>	Successful- 4.5

#### Comments

**Pretest** Not enough contrast here. Fortissimo needs to be much bigger. Change to subito piano is shown fairly clearly, but is way too early rhythmically. Facial grimaces don't help.

**Posttest** The fortissimo is still weak, but the timing of the subito piano is better. The arms are more controlled and focused, and the beat is more concise.

<b>Clip 5:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.2
	<b>Posttest</b>	Successful- 3.8

#### Comments

**Pretest** Again, the subito piano gesture comes too soon. The preceding fortissimo dotted rhythms don't have much energy or intensity. In m. 102-03 his eyes wander around aimlessly, detracting from the drama.

**Posttest** The fortissimo rhythms still seem casual, but the subito piano is managed much better. Eyes are more focused, and the beat is better controlled.

#### Panelist Z: Conductor 1/Assignment 2 Summary

These clips show this conductor clearly improving in the areas of relaxation, confidence and physical comfort. The arms look more natural, and everything works in greater harmony visually. This does not necessarily mean he is identifying with the music or drama more strongly; he merely looks better doing what he did before. I sense no inner drive or compulsion in him about this music. While the mechanics were greatly improved in the posttest, the results remain pretty mechanical.

## Conductor Panelist Z: Conductor 2 Assessments

### Conductor 2/Assignment 1

**1a.** The conductor's gestures communicate tempo \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	4.2
Posttest	4.5

**1b.** The conductor's gestures establish and maintain an appropriate tempo \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Over Half the Time

#### Comments

**Pretest** Tempo is set well at the beginning and is held quite consistently throughout.

**Posttest** Very good tempo control throughout.

**2a.** The conductor's gestures communicate dynamics \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.5
Posttest	4.2

**2b.** The conductor's gestures accurately reflect the dynamics \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Half the Time
Posttest	Over Half the Time

#### Comments

**Pretest** Dynamics were well shown unless she forgot where she was in the piece (m.49). The crescendo in mm. 80-4 was not convincing, nor was the forte in m. 110.

**Posttest** Almost all sudden dynamic changes were well shown. The crescendi, however, still are a bit less convincing (mm. 30-4.).

**3a.** The conductor's gestures communicate articulations \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	4.2
Posttest	4.2

**3b.** The conductor's gestures accurately reflect the articulations \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Most Times

#### Comments

**Pretest** Very nice legato for the 2<sup>nd</sup> theme, though with too much left hand mirroring. Good clarity in the staccato sections.

**Posttest** Articulations were very clear, especially the length of the big chords in the opening.

## Panelist Z: Conductor 2/Assignment 1 Cont.

**4a.** The conductor's gestures communicate Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.8
Posttest	4.2

**4b.** The conductor's gestures accurately reflect Beethoven style and character \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Most Times

**Comments**

**Pretest** Good sense of energy right from the beginning; pretty good contrasts throughout. Crescendi need more excitement (mm. 29-34 e.g.).

**Posttest** The character is more consistent with good sense of drama in the big moments.

**5a.** The conductor's gestures communicate phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.6
Posttest	3.8

**5b.** The conductor's gestures accurately convey phrasing and shape \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** For the most part the phrases are clear though not always vivid enough. For example, mm. 72-5 could have been shaped better...

**Posttest** Much of the shaping and direction of the piece was improved, with the exception of long-range crescendi.

**6a.** The conductor's preparatory gestures are \_\_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.8
Posttest	4.2

**6b.** The conductor's gestures transmit instructive preparations when required \_\_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** She didn't always seem to know where she was in the piece. When she did, the gestures were fine.

**Posttest** Better gestures reflect better familiarity with the score throughout.



Panelist Z: Conductor 2/Assignment 1 Cont.

7. The conductor's gestures transmit a sense of confidence \_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Most Times

**Comments**

**Pretest** Self-confidence is lost at page turns, especially the first two, which become annoyingly obtrusive due to her having to bend over to reach the score.

**Posttest** Self-confidence displayed quite consistently except when moving around the podium for page turns.

8. The conductor is in control of the performance \_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Most Times

**Comments**

**Pretest** She is in control when she is clear on where she is in the score.

**Posttest** Good control of tempo, dynamics and overall progression of events in the score.

9. The conductor's gestures confirm a strong connection to musical events in the score \_\_\_\_.

**Pretest Response:** Over Half the Time

**Posttest Response:** Most Times

**Comments**

**Pretest** She produces many good physical responses to the musical events in the score. Some of the contrasts could be shown more vividly.

**Posttest** A much more consistent identification with the music comes through in her gestures.

10. The conductor's gestures affirm a connection with the performers \_\_\_\_.

**Pretest Response:** Over Half the Time

**Posttest Response:** Most Times

**Comments**

**Pretest** She reacts well to the players, and vice versa. When the viola/cello rhythm started to go astray (mm. 126-30) she paid attention to them and pulled things together.

**Posttest** Improved eye contact was a plus. Her arms look relaxed and communicative.

**Panelist Z: Conductor 2/Assignment 1 Summaries**

**Pretest-** This conductor has poise and strength, as well as a good conception of what she wants. She is undermined by not knowing the score well enough and showing dynamics in the wrong place (m. 49, for example). Also, her music stand is too low, causing her to bend forward awkwardly for every page turn. She tends to do a lot of mirroring, but the character of what she does is convincing. She is also a bit restless on the podium, moving from side to side quite a bit.

**Posttest-** This performance shows this conductor more relaxed and self-confident. Part of this may be the result of knowing the score better and not being caught by surprise with dynamic changes. The physical gestures seem expanded in terms of contrast. The opening measures are bigger in scope, and some of the quieter passages are smaller, though some of the latter could be even more contained. She looked more centered physically and also showed greater left hand creativity. Strangely, she leaves out a half measure of rest in mm. 27-8 this time around. It was correct in the pretest. The beat could be much smaller right at the beginning in m. 15, and still the shape of the phrase in mm. 72-5 is very bland. Overall, the posttest represents an improvement on almost every level.

**Panelist Z: Conductor 2/Assignment 2**

<b>Clip 1:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful+ 4.1
	<b>Posttest</b>	Successful+ 4.3

**Comments**

**Pretest** The initial preparatory gesture was very high, almost out of sight of the players. The gesture pushes into the downbeat, rather than falling through the weight of gravity. Good energy and character.

**Posttest** Slightly more focused gesture with especially strong cutoff. Eyes tend to wander side-to-side. Good intensity on sustained note.

<b>Clip 2:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.3
	<b>Posttest</b>	Successful- 3.5

**Comments**

**Pretest** Beat looks scattered, with hints of unnecessary internal subdivisions. Dramatic pause looks uncomfortable. Too much mirroring and crescendo was not very compelling.

**Posttest** Better, but still slightly uncomfortable looking. The arms are lower which gives better focus. Extraneous motion during rest after the forte chord. Good prep to continue.

<b>Clip 3:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.2
	<b>Posttest</b>	Adequate+ 3.2

**Comments**

**Pretest** Beginning of diminuendo is already too soft and lacks intensity, so the phrase goes nowhere. A little perfunctory. The left hand bounces up and down instead of showing a smooth diminuendo, and the beat does not change character enough.

**Posttest** Still a rather pedestrian transition without much elegance or change of color. Left hand looks better; right hand shows no diminuendo whatsoever.

Panelist Z: Conductor 2/Assignment 2 Cont.

<b>Clip 4:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.8
	<b>Posttest</b>	Successful- 3.6

**Comments**

**Pretest** The fortissimo seems quite weak visually; the subito piano is not dramatically different enough. Left hand not independently helpful. Difference of character in this material not shown.

**Posttest** Much better contrasts in both directions. The fortissimo had real energy, and the piano was well prepared. Posture looks more centered overall. Left hand better, but still mirrors and bounces around a lot.

<b>Clip 5:</b> The conductor's performance is _____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.8
	<b>Posttest</b>	Successful+ 4.1

**Comments**

**Pretest** Rhythmic character of mm. 100-01 not delineated sharply enough. Subito forte at end of m. 103 virtually invisible. She is trying to control the tempo, which distracts her physically, and her left hand is still in a piano position when the forte comes.

**Posttest** Subito piano was very good this time, including good eye contact with the winds and brass. Dynamic shift to piano done well, but slightly soft-edged transition. Gestures look cleaner and more confident.

**Panelist Z: Conductor 2/Assignment 2 Summary**

This conductor improves physically in the second performance with greater focus and clarity of intent. Some of this I attribute to better knowledge of the score. Her beat seems slightly lower and makes the shoulders appear more relaxed. Dynamic changes are generally more successfully executed. Overall confidence as exhibited by her demeanor and her face is also improved. The gestures seem more natural and less forced, and there is less extraneous body motion.

## Conductor Panelist Z: Conductor 3 Assessments

### Conductor 3/Assignment 1

**1a.** The conductor's gestures communicate tempo \_\_\_\_.

Pre/Post	Rating
Pretest	3.4
Posttest	3.6

**1b.** The conductor's gestures establish and maintain an appropriate tempo \_\_\_\_.

Pre/Post	Response
Pretest	Over Half the Time
Posttest	Over Half the Time

#### Comments

**Pretest** After a totally unclear beginning in mm. 1-3, the tempo settled down and was quite steady for the rest of the time.

**Posttest** She lost the beat in mm. 77-83, but recovered. Otherwise the tempo remained solid.

**2a.** The conductor's gestures communicate dynamics \_\_\_\_.

Pre/Post	Rating
Pretest	2.6
Posttest	2.8

**2b.** The conductor's gestures accurately reflect the dynamics \_\_\_\_.

Pre/Post	Response
Pretest	Sometimes
Posttest	Half the Time

#### Comments

**Pretest** Dynamics were shown in a nominal fashion, with two choices: forte and piano. No subtleties, no crescendo with commitment.

**Posttest** Dynamics were clear, but still not showing enough levels and shadings. The beat was consistently way too large in pianissimo (mm. 78, e.g.).

**3a.** The conductor's gestures communicate articulations \_\_\_\_.

Pre/Post	Rating
Pretest	2.8
Posttest	2.8

**3b.** The conductor's gestures accurately reflect the articulations \_\_\_\_.

Pre/Post	Response
Pretest	Sometimes
Posttest	Half the Time

#### Comments

**Pretest** There is some hint of legato for the 2<sup>nd</sup> theme, but otherwise pretty generic stick waving.

**Posttest** Legato was more expressive in the 2<sup>nd</sup> theme. More energy could be shown for big rhythmic movements (mm. 92-102 e.g.).

## Panelist Z: Conductor 3/Assignment 1 Cont.

**4a.** The conductor's gestures communicate Beethoven style and character \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	1.6
Posttest	3.2

**Comments**

**Pretest** Very little sense of drama, contrast or intensity. "Middle of the road" time beating throughout.

**Posttest** The vividness of Beethoven's contrasts still needs more highlighting, as well as the marcato vs. espressivo nature of the material.

**4b.** The conductor's gestures accurately reflect Beethoven style and character \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Never
Posttest	Half the Time

**5a.** The conductor's gestures communicate phrasing and shape \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	2.4
Posttest	2.8

**Comments**

**Pretest** Not much in the way of large-scale context or direction.

**Posttest** Lots of mirroring with both arms detracts from the possibility of musical shaping. The left hand needs independence.

**5b.** The conductor's gestures accurately convey phrasing and shape \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Sometimes
Posttest	Half the Time

**6a.** The conductor's preparatory gestures are \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	2.6
Posttest	3.4

**Comments**

**Pretest** Many of the gestures were there, but too noncommittal and bland to have much impact on the players.

**Posttest** Most of the gestures were in the right place, but need to be magnified and intensified for maximum effectiveness.

**6b.** The conductor's gestures transmit instructive preparations when required \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Sometimes
Posttest	Over Half the Time

Panelist Z: Conductor 3/Assignment 1 Cont.

7. The conductor's gestures transmit a sense of confidence \_\_\_\_.

**Pretest Response:** Half the Time

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** Self-confidence was manifested in the beat alone, but not through the music.

**Posttest** The arm gestures are confident, but the lack of eye contact negates some of that confidence.

8. The conductor is in control of the performance \_\_\_\_.

**Pretest Response:** Sometimes

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** There was a sense of disconnect with the orchestra playing on its own and the conductor conducting on her own.

**Posttest** Aside from the small lapse noted above (mm. 77-83), things were under control.

9. The conductor's gestures confirm a strong connection to musical events in the score \_\_\_\_.

**Pretest Response:** Sometimes

**Posttest Response:** Half the Time

**Comments**

**Pretest** The gestures she showed seemed "learned" but not assimilated nor stemming from any deep-seated musical impulses.

**Posttest** Many of the gestures seem more naturally musical and manifesting themselves as a true response to the musical fabric.

10. The conductor's gestures affirm a connection with the performers \_\_\_\_.

**Pretest Response:** Sometimes

**Posttest Response:** Half the Time

**Comments**

**Pretest** Very little eye contact. She seems to be on "automatic pilot," plowing ahead regardless of the players.

**Posttest** The connection is better, but the cuing is almost non-existent, and eye contact, though improved, is still lacking.

**Panelist Z: Conductor 3/Assignment 1 Summaries**

**Pretest-** This conductor is operating at a very rudimentary level. The opening three measures were incomprehensible. She then adjusted her shirt during the dramatic pause. Then further adjustments of her hair along the way contributed to a general impression of distraction and non-involvement. She was buried in the score most of the time. The beat was steady for the most part, but showed little character or contrast. Though there was nothing “wrong” in what she did, there was absolutely no sense of musical involvement or drive. The beat did not have much variety or contrast and was frequently mirrored by the left hand.

**Posttest-** Though still not at a very advanced level, this performance shows a marked improvement in terms of musical involvement and physical comfort level. The gestures seem to come more from inside the music than superimposed onto it. She is still hampered by a lot of mirror conducting in a routine fashion as well as a lack of eye contact with the players. She repeated the annoying rhythmic habit of adding a half measure in mm. 27-8 in both pre and posttest performances. The greater relaxation and fluidity of physical motion and gesture are the most noticeable differences between the two performances.



**Panelist Z: Conductor 3/Assignment 2**

<b>Clip 1:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Unsuccessful+ 1.2
	<b>Posttest</b>	Adequate- 2.8

**Comments**

**Pretest** The beginning was totally unclear, and her expression shows she knew it. Uncertain tempo, number of beats was puzzling. She then pulls at her shirt during the pause. Her head remained buried in the score.

**Posttest** Much better beginning. The preparatory beat has a bit of hesitation at the top, followed by a downward push. Still virtually no eye contact with the players. An odd-looking legato glide through the sustained note, but then a good prep for the chord in m. 3.

<b>Clip 2:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Marginal+ 2.3
	<b>Posttest</b>	Adequate- 2.8

**Comments**

**Pretest** There is no intensity in the beat. The crescendo is executed by some of the players in spite of her lack of direction. Extraneous motions during the rest spoil the drama of the moment.

**Posttest** Slightly better involvement with the music. Better control of the silence in the rest. The preparatory beat to continue is still unclear, but the beat in general is cleaner than in the pretest.

<b>Clip 3:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Marginal- 1.8
	<b>Posttest</b>	Marginal+ 2.4

**Comments**

**Pretest** The right hand is beating rather marcato during the long note in m. 50; the left is trying to do something musical, but without success. The head is bobbing and the general visual impression does not relate to the music.

**Posttest** Still bobbing and bouncing, with no independence of the hands. She appeared marginally more focused but not relevant to the color of the moment. The face and posture reflect greater confidence, however.

Panelist Z: Conductor 3/Assignment 2 Cont.

<b>Clip 4:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.7
	<b>Posttest</b>	Successful- 3.8

**Comments**

**Pretest** While the size of the beat changes somewhat from the fortissimo to the piano, the character of the gesture does not. Eyes buried in the score, head bouncing, not much sense of the importance of moments like this in the piece.

**Posttest** Better all around. The fortissimo had more energy; the piano was nicely prepared, eye contact increased. The beat still looks too choppy for the legato in m. 64.

<b>Clip 5:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.5
	<b>Posttest</b>	Adequate- 2.9

**Comments**

**Pretest** The subito piano is shown clearly while the subito forte was late and had a hesitation in the beat, resulting in a ragged attack. Not much involvement with the music.

**Posttest** The forte was better; overall, however, this excerpt still lacks a real connection with the music. The subito piano seems to be anticipated by an unintended diminuendo.

**Panelist Z: Conductor 3/Assignment 2 Summary**

This conductor improved in varying degrees in most of the excerpts. Her posture reflected greater confidence and control, even though the musical impulses were not necessarily any stronger the second time around. Changing her hairstyle helped a great deal by removing what was initially a distraction for her as well as the players. She still does not get very deeply into the music; she uses very little eye contact with the orchestra, and she continues to bob her head and torso excessively. The arms, however, show better control in the second performance.

## Conductor Panelist Z: Conductor 4 Assessments

### Conductor 4/Assignment 1

**1a.** The conductor's gestures communicate tempo \_\_\_\_.

Pre/Post	Rating
Pretest	4.5
Posttest	3.8

**1b.** The conductor's gestures establish and maintain an appropriate tempo \_\_\_\_.

Pre/Post	Response
Pretest	Over Half the Time
Posttest	Over Half the Time

#### Comments

**Pretest** Very steady throughout, not rattled by occasional lapses in the orchestral playing.

**Posttest** Generally steady, but started to push ahead in mm. 36-40, with not good results.

**2a.** The conductor's gestures communicate dynamics \_\_\_\_.

Pre/Post	Rating
Pretest	4.4
Posttest	3.5

**2b.** The conductor's gestures accurately reflect the dynamics \_\_\_\_.

Pre/Post	Response
Pretest	Most Times
Posttest	Over Half the Time

#### Comments

**Pretest** Good dynamic shifts, always anticipated and shown clearly to the players in advance. Pianissimo could still be smaller in m. 78, for example.

**Posttest** Crescendi not strongly shown in mm 31-4. Also, mm. 56-62 did not have a sense of inevitable build. The sforzando in mm. 46-9 not shown as well as the pretest.

**3a.** The conductor's gestures communicate articulations \_\_\_\_.

Pre/Post	Rating
Pretest	3.8
Posttest	3.8

**3b.** The conductor's gestures accurately reflect the articulations \_\_\_\_.

Pre/Post	Response
Pretest	Over Half the Time
Posttest	Over Half the Time

#### Comments

**Pretest** I would have liked more legato for the 2<sup>nd</sup> theme in the 1<sup>st</sup> violins. He chose to address the cellos instead (m. 52), and thus his beat reflected their arpeggios.

**Posttest** Still ignored the violin theme at m. 52, robbing the piece of one of the most beautiful elements. There was too much staccato beating in general.

## Panelist Z: Conductor 4/Assignment 1 Cont.

**4a.** The conductor's gestures communicate Beethoven style and character \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.6
Posttest	3.6

**4b.** The conductor's gestures accurately reflect Beethoven style and character \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Over Half the Time
Posttest	Over Half the Time

**Comments**

**Pretest** The representation of character was acceptable, but the fortissimo sections were not really powerful enough. Even more contrast would be welcome.

**Posttest** The contrasts need to be maximized for this piece to come to life. Some of the big moments were powerful, but the contrasting sections lacked lyricism.

**5a.** The conductor's gestures communicate phrasing and shape \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	3.8
Posttest	3.6

**5b.** The conductor's gestures accurately convey phrasing and shape \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Most Times
Posttest	Over Half the Time

**Comments**

**Pretest** Good delineation of events as they occurred. Some of the quick exchanges need more exaggerated gestures (mm. 72-5).

**Posttest** Lots of shapes and ideas were shown on the small levels, but the direction of the big picture was less clear.

**6a.** The conductor's preparatory gestures are \_\_\_\_.

<b>Pre/Post</b>	<b>Rating</b>
Pretest	4.4
Posttest	4.2

**6b.** The conductor's gestures transmit instructive preparations when required \_\_\_\_.

<b>Pre/Post</b>	<b>Response</b>
Pretest	Most Times
Posttest	Most Times

**Comments**

**Pretest** Very clear preparations for almost everything, resulting from good familiarity with the score and effective arm usage.

**Posttest** Everything is well prepared in advance and the intentions are always clear, if not dramatic enough.

Panelist Z: Conductor 4/Assignment 1 Cont.

7. The conductor's gestures transmit a sense of confidence \_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Most Times

**Comments**

**Pretest** Self-confidence was evident in not only the arms and posture but also the good eye contact.

**Posttest** Good poise and confidence. Sometimes the bent over posture detracted from this.

8. The conductor is in control of the performance \_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Over Half the Time

**Comments**

**Pretest** Good control physically, always listening and reacting to the ensemble. He demonstrated good rhythmic control as well.

**Posttest** There was some rushing, loss of rhythmic control and lack of control and direction for crescendi in the posttest.

9. The conductor's gestures confirm a strong connection to musical events in the score \_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Most Times

**Comments**

**Pretest** Again, the connection comes from the knowledge of the music and where it is going. The arms are following that mental process.

**Posttest** Gestures follow naturally from the musical ideas, with the exception of the expressive 2<sup>nd</sup> theme.

10. The conductor's gestures affirm a connection with the performers \_\_\_\_.

**Pretest Response:** Most Times

**Posttest Response:** Most Times

**Comments**

**Pretest** Good eye contact and use of ear allowed him to maintain a fine connection with the musicians.

**Posttest** Good eye contact, clear arm motions all relate to the players well.

**Panelist Z: Conductor 4/Assignment 1 Summaries**

**Pretest-** This conductor exhibited a solid knowledge of the score and was ready for all the details when they occurred. His build made him look a bit heavy and stiff on the podium, but he managed to lighten up for the quieter passages. His good eye contact and listening skills enabled him to produce a performance that was nicely integrated. He didn't capture one hundred percent of the drama in Beethoven, but managed to delineate everything in the right place at the right time.

**Posttest-** This conductor's second performance was an interesting mix of some things getting better and others not going as well. He seemed slightly more open physically and less tight, but he also did not control the tempo and rhythm as well as previously. Sometimes the left hand indicates a piano dynamic that is negated by right hand beating that is too large. This performance seemed less dramatic and somewhat restless. While he was physically more relaxed, he tended to move around a lot, which detracted from the character of the events. Towards the latter part of the excerpt (mm.84-118), the players started to run away with the tempo, and he was unable to hold it.

**Panelist Z: Conductor 4/Assignment 2**

<b>Clip 1:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful- 3.8
	<b>Posttest</b>	Successful+ 4.3

**Comments**

**Pretest** I'm bothered by the four pattern he conducts in the first two measures. It does not really make sense metrically. Slight hesitation at the top of the preparatory beat produces a ragged first note. Good energy, but his body and beat seem focused to his right rather than the center.

**Posttest** This clip shows a better preparatory beat, better centering of gestures and focus. He tends to lean forward rather than stand straight; this detracts from the character of the music. Less bouncing of the body on each beat than in the first performance.

<b>Clip 2:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful- 3.7
	<b>Posttest</b>	Successful- 3.8

**Comments**

**Pretest** Lots of side-to-side body motion that is not necessary. The crescendo does not really lead into the forte chord; the chord itself is well shown. The continuation is good, but slightly tentative.

**Posttest** The improvement is there, but barely noticeable. Still a fuzzy attack in m. 22. Perhaps a slight increase in self-confidence. Part of the reason for the unclear attack in m. 22 is his lack of rhythmic stability in the rest. He cheats the silence by trying to prolong it, but then starts up unexpectedly and with a preparatory beat that is not precisely in tempo.

<b>Clip 3:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate- 2.8
	<b>Posttest</b>	Adequate+ 3.2

**Comments**

**Pretest** Virtually nothing musical happens in m. 50. The long note is just played through with no inflection, change of color or dynamic indicated by the conductor. The lead-in to the first violin theme is then abandoned in favor of the cellos.

**Posttest** Still a very hurried feeling in the transition. The arrival at m. 50 was better, but again, the continuation into the melody was left to its own devices. All contact with the violins was lost.

Panelist Z: Conductor 4/Assignment 2 Cont.

<b>Clip 4:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Adequate+ 3.3
	<b>Posttest</b>	Successful- 3.7

#### Comments

**Pretest** The fortissimo beat was too legato for its rhythmic nature. The pullback to piano looked good visually but elicited no response from the players, meaning it needed to be even more dramatic.

**Posttest** The fortissimo was better, but these measures looked very uninvolved in this performance. There is a kind of perfunctory superficiality which does not work in Beethoven. The physicality looks good but does not translate into appropriate musical character.

<b>Clip 5:</b> The conductor's performance is ____.	<b>Response</b>	<b>Rating</b>
	<b>Pretest</b>	Successful+ 4.4
	<b>Posttest</b>	Successful- 3.7

#### Comments

**Pretest** Good contrasts shown with conviction and good timing. Subito piano was in place and the subito forte occurred without hesitation.

**Posttest** The posttest was not as well done. The subito piano was not well timed, and the forte seemed a bit casual compared to the first performance. Greater restlessness visually as well.

#### Panelist Z: Conductor 4/Assignment 2 Summary

This conductor did not show consistent improvement between pretest and posttest performances. Some of the musical elements which were so strong in the first performance seemed to dissipate the second time around. His involvement with the music also varied and occasionally seemed perfunctory. Physically he looked more poised but also seemed to move around more. Perhaps, being more experienced to start with, he was less flexible with respect to changing his approach.



**Panelist Z: Exit Questions**

- 1) Based on your conclusions in Assignments 1 and 2 and your experience as a conductor and conducting teacher, comment on the changes, if any, you observed in the conductors' movement behaviors during their posttest performances compared to their pretests.

**Response:** In general, the four conductors exhibited greater control of body language in their posttest performances as compared to the pretests. They seemed more poised and relaxed physically and more self-confident both physically and mentally. Their gestures were more focused and more purposeful, with fewer extraneous motions in their arms or bodies. Contrasts of dynamics were more vividly delineated, as were certain, but not all, changes of character. Shaping of phrases also benefited from the greater physical focus, and, in some cases, eye contact with the players improved. I would say the least experienced conductors showed the greatest amount of improvement, and vice versa, as my detailed individual comments point out.

- 2) Did these changes result in improved connections between the conductors' gestures and musical events in the score? Explain how and why. (100 words)

**Response:** The correlation between improved gestures and musical events is harder to pinpoint. In some cases, especially conductor number two, I attribute part of the greater success in the posttest to a better knowledge of the score the second time around. Conductor number four seemed to lose some of his focus in the posttest. Conductor number 3 improved physically but still had very little sense of the drama of the music at hand. And conductor number one also looked better in the posttest, but did not necessarily present a deeper musical experience because of the physical improvement.

In the final analysis, the inner musicality of the conductors was unaffected by their physicality.

- 3) Do you believe such improvements translated to a better connection between conductor and ensemble? Explain.

**Response:** I do believe the conductors' visual clarity and self-confidence shown in the posttest results were helpful to the players. Inaccuracies of ensemble were often solved by increased physical control and the musical ideas were able to be presented and perceived with less visual clutter. Again, this does not mean that the ideas themselves became more compelling: only that they became more readily evident to the musicians.

## APPENDIX J

## POST-STUDY PARTICIPANT INTERVIEWS

**Conductor No. 1 Interview Conducted on 9 December 2004****Part 1: Background Information**

Interviewer: Describe your conducting studies (length, type, etc.).

Conductor: I've had two semesters of undergraduate instruction, one semester of conducting for graduate students, one semester of graduate seminar and one semester of graduate level private studio instruction.

Interviewer: Are you presently studying privately or in a conducting Class?

Conductor: Yes, I am taking private lessons.

Interviewer: Where?

Conductor: At the School of Music.

Interviewer: Did your teacher help you prepare the study repertoire?

Conductor: Yes, we worked on the overture before the pretest.

Interviewer: Once prepared, did you consult your teacher about the study repertoire during the course of the study?

Conductor: No, we did not discuss it once the study started.

Interviewer: Had you ever conducted the study repertoire before this project?

Conductor: No, I wasn't familiar with it.

Interviewer: Did you have any additional conducting opportunities during the study?

Conductor: No, nothing beyond the conducting I did in my lessons..

Interviewer: Have you participated in any movement classes prior to your participation in this study?

Conductor: No.

**Part 2: Impressions and Participation in the Study**

Interviewer: What factors influenced your decision to take part in this study?

Conductor: My teacher told me about the study. I am interested in new ways to improve my conducting, and I am always looking for opportunities to get more time in front of an orchestra.

Interviewer: Did the instructor present the concepts and course material in a manner that was easy for you to grasp?

Conductor: Yes, he was clear and easy to follow.

Interviewer: Which concept(s) were the easiest for you to incorporate into your conducting?

Conductor: The easiest for me was Flow Effort: Time was easy as well.

Interviewer: Could you go into more detail?

Conductor: Sure, I think most musicians are at least somewhat connected to Time Effort because we sometimes play quickly; sometimes we indulge the time. We are also need to be able to accelerate and slow down when the music calls for modifications of tempo. Flow was easy for me to incorporate because of the way I think of phrasing, but I also found that it was easy to forget to think about it, and I had to remember to consider it consistently.

Interviewer: Which were most difficult for you to learn?

Conductor: Weight was definitely most difficult. It felt foreign to me. I didn't feel I was conveying it well. Now I'm more comfortable with weight. Space is the one effort that I don't feel I am incorporating well even after the course. I need to continue to work on that.

Interviewer: Were the in-class participatory exercises and homework assignments helpful?

Conductor: Yes, I don't think I would have understood the concepts as well without the activities.

Interviewer: Do you have a favorite?

Conductor: I liked the time we spent observing each other the best.

Interviewer: Why?

Conductor: Discussing our observations and experiences right after we did them really helped me understand the movements better.

Interviewer: How many hours were you able to devote to the course material each week?

Conductor: About five or six hours a week. The majority of my time was spent attempting to apply the material from the course to my conducting lessons.

Interviewer: Was that enough time, not enough or about right?

Conductor: I think the time I was able to devote was enough for me to really begin to experience my conducting from a “Laban” perspective.

Interviewer: What methods did you use to apply the course material to your conducting?

Conductor: Watching other conductors, I was able to identify the Effort qualities and to incorporate them into my own work by using the concept of “movement thinking.”

### **Part 3: Outcomes**

Interviewer: Do you consider your participation in the study to be of lasting benefit to you as a conductor, a musician, a teacher?

Conductor: Yes, even though I don’t have any aspirations as a conductor right now.

Interviewer: How has your participation in this study changed your understanding of conducting?

Conductor: Now I clearly understand that musicians react a lot more to a conductor’s movements that most of us realize.

Interviewer: How has your understanding of LMA changed your perception of other conductors’ gestures?

Conductor: It’s given me another tool for observing and communicating, describing what I see from a conductor.

Interviewer: Do you consider yourself a better observer of conducting after the class?

Conductor: Yes, I now recognize things in a conductor’s gesture that I know I missed before.

Interviewer: How has the course improved your own connection between the elements of musical expression and the movements you choose as a conductor to convey musical content?

Conductor: I find that I am much more confident with my movement choices.

Interviewer: Have your conducting teacher(s) or ensemble members noticed any changes in your conducting during or since your participation in the study?

Conductor: Yes. My teacher has told me that I have improved a lot. I can't recall any specific examples, but he clearly thinks I am conducting better.

Interviewer: How do you plan to continue to use the knowledge gained through your participation in this study?

Conductor: As I learn new pieces, my understanding of LMA will give me another point of view. It's another useful consideration, especially for large-scale issues dealing with questions of musical shape, pacing and form, for example.

Interviewer: If offered, would you take advantage of additional LMA studies?

Conductor: Yes.

Interviewer: Why?

Conductor: For all the reasons discussed before and because, with more exposure, I would be able to gain a better understanding of LMA and how I might apply it as a player and conductor.

Interviewer: Based on your experience in this project, would you encourage other conductors, conducting teachers and students to add or incorporate LMA into their own studies?

Conductor: Yes, I think any conductor would find it useful. I'm considering emailing my two undergraduate teachers to tell them about LMA. Any conductor should find some kind of benefit—something that will help them no matter what level they might be.

## Conductor No. 2 Interview Conducted on 22 December 2004

### Part 1: Background Information

Interviewer: Describe your conducting studies (length, type, etc.).

Conductor: I'm about to start my second semester of my second year of a Master of Music program in conducting. In college I did a lot of conducting without a lot of formal study. I took a choral conducting class and an orchestral conducting class, and I did a bunch of workshops, but I didn't have a steady teacher. I just sort of did a lot of it.

Interviewer: Are you presently studying privately or in a conducting Class?

Conductor: Yes, I am taking private lessons once a week at the School of Music.

Interviewer: Did your teacher help you prepare the study repertoire?

Conductor: No.

Interviewer: Once prepared, did you consult your teacher about the study repertoire during the course of the study?

Conductor: No.

Interviewer: Have you ever conducted the study repertoire before?

Conductor: I did the Coriolan Overture at a workshop in Bacau, Romania last summer. I was asked to do it on the spot so I really didn't work with a teacher to prepare the work on that occasion either.

Interviewer: Did you have any additional conducting opportunities during the study?

Conductor: During the study I was working on the ballet music from *Idomeneo*, and I had just started working on the Flying Dutchman Overture with the UNCG University Orchestra.

Interviewer: Have you participated in any movement classes prior to your participation in this study?

Conductor: Yes, I studied Alexander Technique for two summers at Brevard Music Center in a group class. I took some lessons in Alexander Technique during my undergraduate work, and I've done a little bit of Tai Chi, Yoga type stuff at random times here and there.

Interviewer: How about LMA?

Conductor: No LMA.

## **Part 2: Impressions and Participation in the Study**

Interviewer: What factors influenced your decision to take part in this study?

Conductor: You told me that you were doing the study, and you invited me to participate. Of course, more podium time is always better as well, and there was also some curiosity involved in my decision.

Interviewer: Did the instructor present the concepts and course material in a manner that was easy for you to grasp?

Conductor: Yes, it is the sort of material that you kind of have to do in order to really understand, but I felt like I understood the framework that was being used.

Interviewer: Which concept(s) were the easiest for you to incorporate into your conducting?

Conductor: None of it seemed particularly obtuse so it all seemed to make good solid musical sense and seemed to fit very well within the framework of how I usually think of my own conducting.

Interviewer: Could you go into more detail?

Conductor: Sure, I wouldn't say it was easier to change my concept of Weight than it was to change my concept of Space because it was all mashed together.

Interviewer: Are there any Effort qualities with which you feel more comfortable with than others?

Conductor: I'm probably most drawn to Space because spatial geometry is just sort of how my mind works. In terms of my conducting, I think the thing I try sometimes to get away from—and sometimes it's tough—is my placement is space.

Interviewer: Remember that Space Effort is about your *attitude* towards space as opposed to your pathway through space or locations in the kinesphere.

Conductor: Right, I was talking about both placement and attitude.

Interviewer: Which were most difficult for you to learn?



Conductor: In terms of applying them to my conducting, what I've been struggling with for years would be the way I use Weight in relation to Time and not being so strictly bound in terms of one specific relationship between the two.

Interviewer: Were the in-class participatory exercises and homework assignments helpful?

Conductor: Yes.

Interviewer: Did you have a favorite?

Conductor: I think the exercises with the basketball were really useful. When you're bouncing a ball up and down with two hands, it's actually a very complex motion, but because it's such an intuitive one and a simple one with no consequences, it's really a good way to just break it down into all of its separate pieces. So I think that was probably my favorite.

Interviewer: Is it that you found the direct application of what was just discussed helpful as opposed to seeing it on paper and trying to visualize the physical sensations associated with specific effort qualities?

Conductor: Yeah, the handouts and discussions help me to conceptualize what they mean, but when we got up and moved around, I was able to feel how things work.

Interviewer: How many hours were you able to devote to the course material each week?

Conductor: It very quickly became a useful framework for thinking about the problems I was having in my conducting. How many hours I put into practicing conducting, I have no idea. During the course I was probably conducting on the podium in front of an orchestra about an hour each week. Practicing on my own, I would put in an additional four to five hours each week.

Interviewer: So the material covered in the course was consistently a part of my practice.

Conductor: Yes, even before the framework was completely fleshed out in my mind, it immediately made sense to me. Like if I was having trouble with a downbeat, I would ask "What am I doing?" I might decide that I should back off Strong Weight or the Time is too quick, and I could now adjust those things.

**Part 3: Outcomes**

Interviewer: Do you consider your participation in the study to be of lasting benefit to you as a conductor, a musician, a teacher?

Conductor: Yes.

Interviewer: How has your participation in this study changed your understanding of conducting gesture?

Conductor: I'm not sure that it's really changed a lot. It's given me a better vocabulary to describe the issues that I have been working on for years. I think having studied Alexander Technique, it taught me to look at movement in different ways. LMA is a different framework and a different set of concerns, but most of what it helped me with is to look at a complex movement and to see not only the different qualities that are going into it, but the different aspects of those qualities and the different parts of the motion.

Interviewer: How has your understanding of LMA changed your perception of other conductors' gestures?

Conductor: It's given me a vocabulary to describe very specific movement issues, which before I didn't have. I could just say "No, that's a problem because the movement results in this effect" without being able to describe what's going on in the movement that's causing the problem. I couldn't have an intelligent discussion.

Interviewer: Do you consider yourself a better observer of conducting after the class?

Conductor: Yes.

Interviewer: How has the course improved your own connection between the elements of musical expression and the movements you choose as a conductor to convey musical content?

Conductor: That's the tough part, isn't it? And it the slowest in coming. I now have a better understanding of the connection between what I do and the sound I get and exactly how to describe that connection. The connection between what's on the page and why I do what I do is still hard to describe and, in some sense, still instinctual.

Interviewer: Have your conducting teacher(s) or ensemble members noticed any changes in your conducting during or since your participation in the study?

Conductor: Since I am in a conducting program, and I am studying conducting regularly, I'd like to think I am always improving, or at least I was changing so--yes. Although I don't I think he has said anything specifically, he has definitely seen a difference in my ability to stop being so tied to Space. That's probably been the most dramatic change for me.

Interviewer: How do you plan to continue to use the knowledge gained through your participation in this study?

Conductor: I'm already using. I think it's become a very useful framework to analyze my own movements, analyze what other people are doing and what works versus what doesn't.

Interviewer: If offered, would you take advantage of additional LMA studies?

Conductor: Yes. Time permitting, I would like to take another course in LMA.

Interviewer: Based on your experience in this project, would you encourage other conductors, conducting teachers and students to add or incorporate LMA into their own studies?

Conductor: Yes, I think it could be such a useful pedagogical tool, especially for introductory conducting class. To be able to talk with a class effectively about what motions work and why is a Godsend.

### **Conductor No. 3 Interview Completed 12 February 2005**

#### **Part 1: Background Information**

Interviewer: Describe your conducting studies, the length, type, etc.

Conductor: Prior to the mini-course I had taken only the two courses included in my Music Education degree which included reading about different conductors and styles of conducting styles, observing several conductors on video and conducting brief musical excerpts with a small lab ensemble in class.

Interviewer: Are you presently studying privately or in a conducting class? If yes, describe the instruction (studio, class, etc).

Conductor: During the course I was taking large ensemble conducting. Since the course I've completed all my coursework and begun student teaching.

Interviewer: Did your instructor help you prepare the study repertoire?

Conductor: No, I worked independently without outside assistance.

Interviewer: Did you consult your teacher regarding the study repertoire during the mini-course?

Conductor: No.

Interviewer: Have you ever conducted the Coriolan Overture before?

Conductor: No.

Interviewer: Did you have any additional conducting opportunities during the study?

Conductor: Yes, I occasionally conducted the University Band. The only other conducting I did was the large ensemble conducting class.

Interviewer: Had you ever conducted an orchestra before participating in the study?

Conductor: No. The pretest was my first time in front of an orchestra.

Interviewer: Were you nervous?

Conductor: Yes Even though I was among friends. I play in the Philharmonia..

Interviewer: Have you participated in any movement classes prior to your participation in this study?

Conductor: No.

## **Part 2: Impressions and Participation in the Study**

Interviewer: What factors influenced your decision to take part in the study?

Conductor: I was attracted by the possibility that I might learn something that would help build confidence as a conductor and, at the same time, give me a chance to experiment physically in a safe environment. I also received some encouragement from one of my professors.

Interviewer: Did the instructor present the concepts in a manner that was easy to grasp?

Conductor: Yes.

Interviewer: No difficulty with terminology or any of the...

Conductor: The only real difficulty came from my inability to physically follow the instruction—making the mind/body connection.

Interviewer: Which concepts were the easiest for you to incorporate into your conducting?

Conductor: Which ones weren't? That's really more the question for me at the time.

Interviewer: I know you felt quite challenged for the first few weeks, but you really began to open up by the fourth week or so.

Conductor: Yeah, and what I do now is a lot like the work we did in class. I do a lot more thinking about the movements I make when I conduct. I can't really describe it, but I can say that my conducting is nothing like it was prior to taking the course.

Interviewer: Which were most difficult for you to learn?

Conductor: They were all difficult.

Interviewer: I understand, but can you think of one of the Motion Factors, Weight, Time, Space and Flow, that you found particularly challenging?

Conductor: I think Time was the most difficult for me.

Interviewer: You mean your attitude towards time?

Conductor: Yes, particularly the concepts of accelerating and decelerating as they relate to Quick and Sustained time.

Interviewer: Were the in-class participatory exercises and homework assignments helpful? Do you have a favorite?

Conductor: Yes, I think working with the basketball was my favorite.

Interviewer: Why?

Conductor: Even though I wasn't very good at it, I was able to really physically connect the qualities of movement with the actions associated with throwing, catching and bouncing the ball.

Interviewer: How about the swing? Did you like it?

Conductor: Yes, I liked it a lot.

Interviewer: I asked because you mentioned earlier that Time was challenging for you. The swing demonstrated both Quick Time on the way down and Sustained Time on the way up.

Conductor: I know. I find myself thinking about those sensations a lot even now.

Interviewer: How many hours were you able to devote to the course material each week?

Conductor: I would say at least an hour a day between working by myself and the conducting I did at the time.

Interviewer: Was that enough time, not enough or about right?

Conductor: I would have liked more time to practice

Interviewer: What methods did you use to apply the course material to your conducting?

Conductor: I found myself thinking in terms of movement much more often, and observing movement from a new perspective. Whenever I had free time, I would work through my conducting movements and experiment with different combinations. I would also apply the work we did in the course to my large ensemble conducting assignments. Whether I was conducting or watching others, I would try to use what I learned in class to figure out which qualities best suited a particular musical passage.

### Part Three: Outcomes

Interviewer: Do you consider your participation in the study to be of lasting benefit to you as a conductor, a musician, a teacher?

Conductor: It was fantastic! I have no doubt that I learned a lot from the course.

Interviewer: How has your participation in this study changed your understanding of conducting gesture?

Conductor: Not only do I understand other conductors better now, I also have much more appreciation for the art and the difficulty of conducting as well as the ability to convey a lot of things that, previously, I just couldn't figure out. Until I took the course, I didn't think of conducting in terms of gesture, but now I realize that it is much more than patterns and beating time.

Interviewer: How has your understanding of LMA changed your perception of other conductors' gestures?

Conductor: It just clarified a whole lot. It also really made me think about what they're doing. Previously, as a player, I was just following what I was given. Now that I've had the course, when I watch other conductors, I feel like I am participating with them. I am more in tune with what they're doing and why they're doing it—what kind of larger picture they are trying to convey.

Interviewer: Do you consider yourself a better observer of conducting after the class?

Conductor: I do think I'm better, but I find it's almost at a subconscious level. Sometimes I see something and it brings me right back to the class.

Interviewer: How has the course improved your own connection between the elements of musical expression and the movements you choose, as a conductor, to convey musical content?

Conductor: At the most basic level, I now have choices to make. Before the class I felt like I was lost in the music with no tools or system to help me connect my gestures to the music. After the course I am able to look at a score and know that I can quickly find a solution to almost any problem or challenge I encounter.

Interviewer: Have your conducting teacher(s) or ensemble members noticed any changes in your conducting during or since your participation in the study? Explain.

Conductor: During the study, my large ensemble conducting teacher noticed a big change. When I started that class, my conducting was timid and not very well controlled. After two sessions of the mini-course I conducted in class again, and my scores went from all threes (on a scale of 1-5) to all fives! She saw a remarkable improvement in my conducting and my confidence level.

Interviewer: How do you plan to continue to use the knowledge gained in the mini-course?

Conductor: I feel like it's already engrained so I don't think I'll have to plan. It's just become part of my routine, what I do normally. Once I get a job, I plan to share this knowledge with my students as well. That way they'll carry the knowledge with them if they choose to continue their studies as well.

Interviewer: If offered, would you take advantage of additional LMA studies? Why?

Conductor: If it fit my schedule... (laughs). Yeah! I enjoyed it, and it provided a fresh perspective on something that I had always considered to be kind of a dry form. The class really did make a huge difference in my conducting. If five one-hour classes can make such a difference, what could another class do?

Interviewer: Based on your experience in this study, would you encourage other conductors, conducting teachers and students to add or incorporate LMA into their own studies? Explain.

Conductor: Without a doubt because it's fabulous. Who wouldn't want to do something this fun that can make you better?



### **Conductor No. 4 Interview Conducted on 13 January 2005**

#### **Background Information**

Interviewer: Describe your conducting studies, length, type, etc.

Conductor: Instead of the typical undergraduate conducting courses. I took two years of conducting class and two semesters of private study as well. After signing on with the Navy Band in Washington D.C., I didn't do much conducting at first, but after awhile, I started doing some guest conducting with area high school bands. I've also attending between fifteen and twenty conferences over the years as well. The conferences led to a lesson here and there with a couple of college directors. After leaving the Navy, I came back to school and studied with the Director of Bands for three semesters and took a semester with the Director of Orchestras. That's most of the study aspect. I conduct the Greensboro Concert Band. It's the fourth ensemble I've led.

Interviewer: Are you presently studying privately or in a conducting class?

Conductor: Yes, I am studying privately at the School of Music.

Interviewer: Did your teacher(s) help you prepare the study repertoire?

Conductor: No, I prepared the score myself without any outside assistance.

Interviewer: Once prepared, did you consult anyone regarding the study repertoire during the course of the study?

Conductor: I mentioned it to my teacher in passing, and he expressed his approval; nothing more.

Interviewer: Have you ever conducted the study repertoire before?

Conductor: No, this is the first time I've done the Coriolan Overture.

Interviewer: Did you have any additional conducting opportunities during the study?

Conductor: As I mentioned earlier, I have weekly rehearsals plus concerts with the Greensboro Concert Band, and I do a lot of guest conducting with churches. I've been music director at two local churches so the contacts remain. I also guest conduct the Triangle Brass Band. It's a high school age group with a terrific reputation—national champions for four years in a row!

Interviewer: Have you participated in any movement classes prior to your participation in this study?

Conductor: Yes. The University of Minnesota has a conductors conference called “The Art of Conducting” that I’ve taken twice. It includes two weeks of movement class taught by a drama professor at Northwestern. He does a lot of motion stuff with theatre students and shares much of it to the conductors at the conference.

Interviewer: How about LMA?

Conductor: No LMA before your study.

### **Impressions and Participation in the Study**

Interviewer: What factors influenced your decision to take part in this study?

Conductor: One of my teachers talked to me about it. I was interested in anything that has to do with movement and gesture since the things we do as conductors are directly influenced by that. Essentially, I’m interested in anything that may help my repertoire of gestures.

Interviewer: Did the instructor present the concepts and course material in a manner that was easy for you to grasp?

Conductor: Yes. I had no trouble understanding the material. I also believe that learning these concepts in a class setting is much easier than trying to learn them on your own from readings. More than just learning, I found the class materials to be an aesthetic experience as well.

Interviewer: Which concept(s) were the easiest for you to incorporate into your conducting? OR Were there any concepts that were easier for you to incorporate into your conducting?

Conductor: Flow Effort was easy for me to grasp because I was already exploring and trying to master Bound and Free Flow to my gestures—without benefit of the knowledge I now have. The definitions, terminology and application of the LMA framework fine tuned my awareness.

Interviewer: Are there any effort qualities with which you feel more comfortable with than others?

Conductor: I would probably say Time Effort most challenging for me. I find that whenever I'm trying something new, my attitude towards time is not as clear. I have to go back to the Time Elements and really focus on them.

Interviewer: Were the in-class participatory exercises and homework assignments helpful?

Conductor: Yes, I found the in-class participatory work especially helpful.

Interviewer: Did you have a favorite?

Conductor: I did really like the work we did with the basketball.

Interviewer: What did you like about it?

Conductor: For me it was very much like my experiences while learning conducting. When I am able to connect the visual image with the physical sensations, the impact and impression of the movement stays with me. I am more readily able to remember how it feels

Interviewer: How many hours were you able to devote to the course material each week?

Conductor: I wasn't able to devote as much time as I would have liked. Adding it all up, I would say at least five hours a week. I did at least two hours a week of work directly on the LMA concepts, but I also was constantly using the material whenever I was on the podium conducting.

Interviewer: So the material covered in the course was consistently a part of your practice.

Conductor: With the Greensboro Concert Band, I am free to try just about anything so it was a great laboratory for me to apply what we covered in class the previous week.

Interviewer: What methods did you use to apply the course content to your conducting?

Conductor: The process of mentally conceiving the movement and then trying to produce it exactly as I had imagined it—sort of thinking, sensing and remembering the feeling of it was usually how worked. Sensory memory and muscle memory seemed to play a part as well. The repetition helped me better remember the connecting between sound and gesture.

Interviewer: Were you analyzing or preparing scores for movement content?

Conductor: I wasn't so much analyzing scores as it was replaying them in my memory so I could think of the music in terms of movement.

### **Outcomes**

Interviewer: Do you consider your participation in the study to be of lasting benefit to you as a conductor, a musician, a teacher?

Conductor: Yes. Certain things that we learned in the class are already embedded in my repertoire of movements. They will always be there. For me, the largest impact is probably that use of Space in the sagittal dimension.

Interviewer: We only touched on the dimensions briefly.

Conductor: I know, but once I tried using that space and become consciously aware of it, there seemed to be a resonance that just felt right.

Interviewer: How has your participation in this study changed your understanding of conducting gesture?

Conductor: Many things I already believed have been reinforced. It's also given me some very useful terminology to describe movements I am already using. Now I am able to much more accurately describe and discuss them with others.

Interviewer: How has your understanding of LMA changed your perception of other conductors' gestures?

Conductor: Any time you acquire new knowledge or insight you start looking to see what others are doing, and I am definitely watching conductors more closely to try to see if their Effort choices match their musical intentions. I'd be more interested in learning more about LMA before feeling totally comfortable as an observer using all the tools to analyze a conductor's movements.

Interviewer: Do you consider yourself a better observer of conducting after the class?

Conductor: Yes; hopefully I'm a better observer today than I was yesterday with or without the class, but the time spent learning about LMA has definitely helped me in that way.

Interviewer: How has the course improved your own connection between the elements of musical expression and the movements you choose as a conductor to convey musical content?

Conductor: I think what I've learned has already given me more movement choices as a conductor, and I know I am able to show things visually without worrying about whether or not I'm awkward. It's certainly also reinforced much of my way of thinking about conducting as well.

Interviewer: Have your conducting teacher or ensemble members noticed any changes in your conducting during or since your participation in the study?

Conductor: Yeah, my teacher said something. We were talking about beating in three, and he mentioned that my conducting had completely smoothed out. I'm convinced that this progress resulted from my new use of the sagittal direction.

Interviewer: None of your players said anything?

Conductor: Actually, I do recall a discussion with a conductor who 'subbed' for me one evening with the Greensboro Concert Band mention something, but I don't know if it had anything to do with the class. He said, "You're so much easier to follow than I am. How do you do that?" I told him that when I conduct, I think about the music and not about waving my arms. I let the music drive me where I need to go. His response, "I wish it would flow out me the way it does you."

Interviewer: Interesting that he used "flow" to describe your visual presentation, isn't it?

Conductor: I hadn't thought about it, but yes, it is.

Interviewer: How do you plan to continue to use the knowledge gained through your participation in this study?

Conductor: Especially when I begin my graduate studies, I'm going to look for more opportunities to participate in movement classes like yours and the classes I mentioned earlier at Minnesota. They are movement classes that have an association with music, but they also help us to better understand who we are. I plan to continue to work with the LMA material in any case.

Interviewer: Based on your experience in this project, would you encourage other conductors, conducting teachers and students to add or incorporate LMA into their own studies?

Conductor: Yes. I'm convinced that LMA training, or some form of movement education, should almost be a requirement for conductors. We need to get away from patterns, from being restricted with our arms and bodies, from trying to do everything "right." I think the "natural musician" in all of us tends to be a much better conductor. The problem is: how do we set that natural musician free? LMA would certainly help along those lines.

My experience has also convinced me that LMA helps me in situations where I have to react to whatever may be happening in rehearsal or a concert. Many conductors are fine as long as they stick to some kind of plan, but things don't always go as planned. It seems to me that LMA instruction would teach conductors to be more spontaneous and to be better prepared for those "surprises" that we all have to contend with.

## APPENDIX K

## DVD VIDEO OF PARTICIPANT CONDUCTING SESSIONS

## Menu No. 1: Participant Pretest/Posttest Performances

Chapter 1 .....	Conductor 1 Pretest
Chapter 2 .....	Conductor 2 Pretest
Chapter 3 .....	Conductor 3 Pretest
Chapter 4 .....	Conductor 4 Pretest
Chapter 5 .....	Conductor 5 Pretest
Chapter 6 .....	Conductor 6 Pretest
Chapter 7 .....	Conductor 7 Pretest
Chapter 8 .....	Conductor 8 Pretest

## Menu No. 2: Clips for Detailed Analysis

Chapter 1 .....	Conductor 1 Clips
Chapter 2 .....	Conductor 2 Clips
Chapter 3 .....	Conductor 3 Clips
Chapter 4 .....	Conductor 4 Clips
Chapter 5 .....	Conductor 5 Clips

This document should include a DVD recording of the Conductors' pretest and posttest performances.

Time codes and chapter/title numbering schemes often differ from one player to the next, and certainly from players to computer DVD drives. The first menu contains eight buttons, one for each pretest and posttest. The Clips for Detailed Analysis are separated into five chapters (one for each conductor) that each contain ten buttons, one for each pretest and posttest clip.