INFLUENCES IN AMERICAN ORCHESTRAL TRUMPET PLAYING

EXAMINING THE EFFECTS OF MUSICIANS' COLLEAGUES, TEACHERS, AND TRADITION

by

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Abstract

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Influences in Orchestral Trumpet Playing: Examining the Effects of Musicians' Colleagues, Teachers, and Tradition
Dissertation directed by Associate Professor Terry Sawchuk

The purpose of this project was to study how major orchestral trumpeters perform common audition excerpts and determine whether their musical interpretations are influenced by performance traditions, teachers or section colleagues. In pursuing these goals, this document not only acts as a musical survey of modern American trumpet performance and pedagogy but also can be utilized to augment one's overall approach to performing and teaching trumpet.

For this dissertation, I interviewed and studied with twenty-two trumpeters, all of whom except one were members of the six major American symphonies—the Boston Symphony, the Chicago Symphony, the Cleveland Orchestra, the Los Angeles Philharmonic, the New York Philharmonic, and the Philadelphia Orchestra. Each lesson consisted of a review of seven common excerpts and an interview to determine each player's musical influences. In this paper, I combine these interpretations and influences to reach the study's primary objective: establishing objective musical criteria in order to examine which influences have the most profound effects on a musician's interpretations; their colleagues, their teachers, or the tradition in which they were trained. However, this is not a statistical study and does not attempt to draw definitive conclusions. These objectives are performance-based, and performance preferences of musicians are too complex to determine a simple correct or incorrect method. Instead, I attempt to find patterns within the groupings that may augment performers' and teachers' knowledge and interpretations.

The results can be utilized by musicians regardless of their level, although the discussions are tailored for trumpeters who already have some background in the topics. Performers can use the results to tailor their audition preparation. Teachers can use the results to further their understanding of how interpretations are passed on to students, thereby improving their

pedagogical techniques. Students can use the interpretations and pedagogical techniques employed by these musicians to augment their current studies.

To John and Lucy Butterfield

Thank you so much for your support, both emotional
and financial, as well as the occasional ride to Kansas.

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First and foremost, I would like to thank the twenty-one world-class trumpeters, each of whom spent hours with me, often teaching at far below their normal rates. I was amazed at the talent, knowledge, and generosity of every single participant and appreciated their willingness to help me in this endeavor. These gentlemen were as kind as they were gifted.

This dissertation was made possible by generous funding through a Thomas Edwin Devaney Dissertation Fellowship. In particular, I would like to thank Paula Anderson and Kelly Hine for the assistance they provided while I was supported by the fellowship. Rights to the Hindemith excerpt are provided by European American Music Distributors LLC on behalf of Schott Music. The Mussorgsky/Ravel excerpt is reprinted with permission from Hawkes and Sons.

When this project was nothing more than a pipe dream, Beth Dusinberre not only convinced me that it would be possible, but guided me in my search for mentors and funding. Her efforts on my behalf exceeded anything I could have imagined, and I cannot thank her enough. This project would never have happened without her.

Terry Sawchuk was not only my first trumpet teacher, but he has been a mentor to me since the freshman year of my undergraduate studies. I can think of no more fitting way to end my academic career than under his mentorship. I truly appreciate everything he has done for me over the past decade and know that I would never have made it to this point without his belief in me. I have known William Stanley almost as long as Terry and I owe him no less gratitude as he has given me invaluable advice through many tough situations. Their musicianship and knowledge as teachers are something to which I aspire in my future career.

I would also like to thank the rest of my doctoral committee—Keith Waters, Nicholas Carthy, James Austin, and Jeremy Smith—for all of their efforts in my dissertation and its accompanying projects. While not a direct member of my committee, Steven Bruns has been an

invaluable guide through this process, and I am fortunate that the Associate Dean for Graduate Studies that has helped me through my D.M.A. degree is the same man that taught my very first class as an undergraduate. Furthermore, I would like to thank the rest of the faculty and staff at the University of Colorado-Boulder for supporting me through two degrees over nine years; I was extraordinarily lucky to be taught by so many incredible musicians and pedagogues during my time here. In particular, I am grateful to Joyce Cheney, as the success of my doctoral degree was often dependent on her ability to walk me through the red tape that I was so apt to trip over.

I was blessed to have many amazing former teachers who were able to help me make the many connections needed for a project of this scope. In particular, Eric Berlin, Christopher Still, Scott Thornburg, and Stephen Jones put me in touch with most of the participants of this project, and without them, I have no idea how I would have put this together. My friends Lisa Rogers, Carlie Kilgore, Evan Honse, and Stephanie Bettig were also kind enough to provide me with contact information for certain hard-to-find trumpeters.

Needless to say, the trips to these cities were expensive endeavors, and this project would not have been possible without the many friends who opened their homes to me: Christopher Still and Amanda McIntosh; Helen Polson and Aaron Glass; Matthew Barrett and Helena de Bres; Kathryn Metz; Kristin and Grant Elgersma; and Adam Smit. Thank you so much.

Mitch and Corby Butterfield, my parents, have supported every endeavor I have ever chosen regardless of how strange most of it has seemed to them. I could not have asked for two more caring and loving parents.

Last, but certainly not least, I would like to thank my intelligent, beautiful, and supportive wife, Miranda Wilson. Not only has she provided me with unending encouragement, her insights into this the doctoral process have made molehills out of mountains. I can only hope that I will find a way to pay back her patience and support through my D.M.A. over many more happy years of marriage.

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Introduction

For this document, I spent one year studying with over twenty of the best orchestral trumpeters in the United States. In one of the many interviews, a trumpeter described the circumstances of his departure from his first professional position with a mid-major symphony in the 1970s.

> I had been in my position for a year, but it was decided that I wouldn't be rehired. They told me that I was an Eastern player, and they were a Midwestern orchestra. In those days, there was a much bigger difference. So I didn't fit into their sound as much as they would have liked, so I looked for a different job.[1]

This trumpeter has now been a member of a major American symphony for decades, and he feels that much has changed over his tenure. While his quote highlights the perceived differences between the various traditions of trumpet playing, his allusion to recent changes foreshadows the contrasting reality that I found in my studies and analyses for this project.

In orchestral trumpet playing, there is a common preconception that the region in which a trumpeter is trained or performed defines the way in which he or she approaches music, both expressively and technically. As mentioned in the previous quote, the typical regional divisions in the United States are West Coast, Midwest, and East Coast, and the major orchestras within each division exemplify the regional style. With this in mind, I originally set out to identify the commonalities and differences between regional styles of orchestral trumpet playing, if any existed, as well as to find which musical interpretations are most prevalent among top orchestral players today.

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[1] Interview with Red 4, July 13, 2010. See Methodology below for explanation of alias.

After more than twenty lessons with these trumpeters, half of my original goal, to determine the most common interpretations of standard excerpts, was collected readily enough and is presented in Part I below. However, it became obvious over the course of this project that the old regional stereotypes had become considerably less distinguishable, if not entirely obsolete, on the individual level. There were still definable styles between these orchestras' trumpet sections as a whole, but there was an even greater variation within the members of each section. Instead of struggling to divide these players by perceived regional styles, Part II of this document compares their musical interpretations to their peers in other major symphonies in order to find their commonalities as top level musicians. By focusing on each player's history as a student and a professional, this section also attempts to trace interpretive and pedagogical methods through shared teachers and influences.

These comparisons yielded invaluable information for teachers, students, and performers alike. For performers, this paper acts as a reference showing which interpretations are currently most successful and in use on the audition circuit today. For teachers and students, it provides a comprehensive survey of the most common pedagogical approaches to each of these excerpts as well as methods for addressing often encountered technical issues. Students can use these techniques to augment their current studies, while teachers can use the comparisons to examine which pedagogues have had the most profound influence and more importantly, which of their pedagogical techniques are shared by colleagues. For easier reference, I have also included tables of the analyses for each excerpt as well as lists grouping the trumpeters by their teachers and traditions.

Document Layout

The paper is divided into two large parts, and both parts are further separated into chapters. Part I breaks down the seven chosen excerpts by analyzing a number of musical decisions

within the excerpts. Each musical decision is labeled as a category, and when combined, the categories can be used to create an overall impression of each player's interpretation of the excerpt. Furthermore, Part I includes rankings by prevalence of the choices within each category and at the end of each chapter, contains a 'compiled interpretation': a usable interpretation that incorporates the most commonly used musical decisions in each category. These compiled interpretations are an invaluable tool for any trumpeter preparing for an audition and any teacher wishing to keep their repertoire current with musical styles. Finally, each of the excerpt discussions in Part I contains descriptions of many of the techniques, both pedagogical and performance, which the trumpeters used to refine their interpretations.

Part II uses the criteria established in Part I to compare the trumpeters to their peers in three different groupings: by orchestra section, by common teachers, and by tradition. By comparing the criteria within these three sets, it is possible to find patterns among the players and infer which influences continue to have the most effect, if any, in these professionals' musical interpretations. The final chapter offers a brief summation and a conclusion of the results.

Related Materials

There is no shortage of literature meant to supplement the orchestral education of an aspiring trumpeter. Yet the methodology, scope, and objectives of this project have little precedence when compared to previous ruminations on this broad topic. Numerous aides have been released by professional trumpeters; most prominently *Orchestral Excerpts for Trumpet* recorded by Philip Smith and *Audition and Performance Preparation for Trumpet; Orchestral Literature Studies* series by Rob Roy McGregor. Both of these contain extremely useful information from two renowned trumpeters, but they only provide the musical insights of one person in a field defined by its subjectivity.

The most similar document in content to this dissertation is Heather Rodabaugh's 2008 dissertation "Preparation for Orchestral Trumpet Auditions: the Perspectives of Three Prominent Orchestra Players." In her paper, she covers the performance suggestions of three respected orchestral trumpeters on five standard trumpet excerpts: Bach's *Magnificat,* BWV 243, Bartok's *Concerto for Orchestra*, Debussy's "Fêtes" from *Trois Nocturnes*, Gershwin's *Piano Concerto in F*, and Richard Strauss's *Don Juan*. Her dissertation makes an excellent companion to Part I below for audition preparation, especially considering that the two papers cover entirely different excerpts. Yet Rodabaugh's document differs from this project not only in scope, but also in intention; Rodabaugh intended her paper to be used as a performance aid, whereas this document provides the musical interpretations of prominent musicians only as a means to the end of establishing the fundamental commonalities between the musicians. Rodabaugh's conclusions chapter does discuss some commonalities between the three trumpeters. However, she focuses on the pedagogical suggestions of dealing with the difficulties of each excerpt, whereas in this document, I concentrate on the interpretive decisions employed by each of the players.

Other major documents on the subject of trumpet orchestral parts include "The Most Requested Trumpet Excerpts from the Orchestral Repertoire" by Jan-Krzysztof Dobrzelewski, "An Orchestral Audition Preparation Tool for Aspiring Trumpeters" by Todd James Hastings, "Guide for Interpreting Orchestral Trumpet Repertoire Based on Common Practice of Professional Players in Recorded Performance: a Thesis" by Garry Joe Hardin, "Selected Excerpts for the Trumpet and Cornet from the Opera repertory: a Guide for Preparation and Performance" by Timothy Allen Shaffer, and "A Guide to Orchestral Audition Repertoire for Trumpet" by Robert Victor Cannon. However, like Rodabaugh's dissertation, these documents are only intended to augment performance and audition preparation. Furthermore, the discussions below are the only analyses on this subject of which I know that divide musical interpretations into objectively described categories so that they can be used comparatively.

There have also been countless articles published on orchestral trumpet performance in trade periodicals such as the *ITG Journal*, and some of these will be referenced in the discussions below. For an extensive bibliography of suggested journal articles on these topics, please see the Journal Articles heading under the Bibliography in Rodabaugh's dissertation.[2]

Methodology

Over one year, I recorded lessons with twenty-two of the country's finest orchestral trumpeters. All but two were current members of the New York Philharmonic, Los Angeles Philharmonic, Philadelphia Orchestra, Cleveland Orchestra, Chicago Symphony, or Boston Symphony. I began by contacting every current member of these symphonies; often through mutual acquaintances, but occasionally through orchestras' front offices or the schools at which these trumpeters taught. Because symphony players often teach privately, my initial emails consisted of a simple request for a lesson as well as a brief description of my project. In my subsequent emails to the participants, I made it clear that I would like to record the lesson, but these recordings would never be made public. I also suggested a general time period—usually a week—during which I could be in their city and asked that they suggest meeting times, places, and fees. These trumpeters do charge premium rates for their lessons, so during the year I spent preparing this project, I applied for and procured funding from an external source—in this case, the Devaney Dissertation Fellowship which paid for my research and living expenses for the duration of the project.

I received an overwhelmingly positive response from the participants, many of which have shown a continued interest in this dissertation. Of the five members from these orchestras missing from this project, two were forced to cancel a previously scheduled lesson with little notice for personal reasons, and one was simply unavailable during my time in that city. The other two

[2] Rodabaugh, "Orchestral Trumpet Auditions," 74-77.

omissions from the project were unfilled positions in the orchestras; the chairs were vacant while I was in that city. Of the two trumpeters who participated in this project who were not members of these six major symphonies, one is currently the principal of a mid-major American symphony and the other is a former principal of one of these six major symphonies.

In each of these lessons, we covered the same seven excerpts. To narrow the focus of the discussions, I asked that the musicians primarily discuss their approaches to the excerpts in an audition setting; however, many of the trumpeters also volunteered their opinions on the differences between the audition and orchestral settings. In the descriptions of Part I, I have noted these differences whenever appropriate.

There were two solo excerpts: the opening of Sonata for Trumpet and Piano by Paul Hindemith and the exposition from Concerto for Trumpet in E♭ by Joseph Haydn. The additional five excerpts were orchestral pieces: the offstage call from *Leonore* Overture No. 3 by Ludwig van Beethoven, the Prelude from *Carmen* Suite No. 1 by Georges Bizet, the opening solo from Symphony No. 5 by Gustav Mahler, the opening solo from the Promenade of *Pictures at an Exhibition* by Modest Mussorgsky as orchestrated by Ravel, and the offstage solo from the second movement of *Pines of Rome* by Ottorino Respighi.

I chose each excerpt because of its current prominence in the orchestral trumpet auditions as well as with specific criteria in mind for judging the commonalities and differences between the players. I focused these criteria primarily on musical decisions that could be described objectively, i.e. changes in dynamic, tempo choices, note lengths, and so on. In doing so, I established a basis for comparing musical interpretations in a manner that is as objective as possible considering the general subjectivity of musical interpretation. If I was unsure of the validity of one of these criteria, I contacted the player to ask his opinion. If there was an unresolvable discrepancy, I excluded that particular criterion from the comparisons as shown by the blank responses in some of the musicians' interpretations.

I intentionally chose to disregard differences in tone quality even though tone quality is often considered a defining characteristic for an orchestral musician. Timbre is difficult to quantify in an objective manner, and this judgment is further complicated as each of the lessons was recorded in a different acoustic space.

After each lesson, I interviewed the trumpeters briefly. I asked the musicians to give an overview of their trumpet education including primary teachers, duration of study, and other musicians they considered as primary influences. I also asked them to list any trumpeters that may have had an influence through less direct means, i.e. masterclasses, recordings, etc. I intentionally allowed the participants to differentiate primary influences from lesser influences—rather than simply asking who their college teachers were—in order to allow for the varying degrees to which a teacher may affect a student. By asking which influences each player valued most highly, I hoped to better isolate the influences that had the most profound pedagogical effect on the participants; thereby improving any correlation between students sharing a common influence rather than other influences in the student's environment, e.g. other students, ensembles, etc. Ultimately, there is no way truly to isolate the origin of an idea or concept, but pedagogical patterns could be better explored using the above method.

In the last portion of the interview, I obtained each musician's professional orchestral history and the duration of their tenures in those orchestras. This information established a narrative of influences and enabled me to group each player with other participants by common teacher and regional training. I then compared musical interpretations within these groups as well as to current colleagues.[3]

The trumpet players in this project will remain anonymous for two primary reasons. The first is to protect their musical identities. If a player is quoted as disagreeing with their current music director or colleagues, it could cause unnecessary professional strife. The second reason is a

[3] This methodology is meant as an overview of the project. If you would like a more detailed discussion of the comparative processes of the project, please see the introductions for Part I and Part II.

direct effect of this; I wanted each of the musicians to play and speak their mind freely without worrying about what the other members of the trumpet playing community would think of their opinions. My goal in this project was to gather their opinions regardless of their current position, and providing anonymity allowed them to tell me exactly what they believed. Furthermore, because these lessons were conducted in the lesson setting, each trumpeter could not be expected to have audition-level preparation for the recordings. If I had asked this of them, many would have declined to participate in the project, and their interpretive concepts were far more important to this project than technical perfection in execution. Yet even without performance-level preparation, their extraordinary talents were obvious.

Therefore, each participant in this project is assigned an alias based on their current orchestra and chair within that orchestra. Each orchestra is assigned a color and the chairs within the section are given a number. Principal Trumpet is 1, Second Trumpet is 2, Associate Principal is 3, and Assistant Principal is 4. For example, the principal trumpet of Orchestra Yellow will be known as Yellow 1 for the duration of this project. The two project participants who were not members of the six major symphonies will be labeled as Gray 1 and 2. This system allows the reader to make comparisons of their own as the aliases remain the same throughout both Parts. Also, all of the tables included in the project are color-coded to match the assigned colors. Other than me, the only people who know each player's identity are my dissertation's primary advisors.

Of course, anonymizing the identities of these players and the orchestras to which they belong had some drawbacks. For example, in the comparisons of Part II, I was unable to compare the interpretations of teachers with whom I studied for the project to their students that also participated in the project, because this would have given away both the identity of the teacher and his orchestra. Furthermore, as an audition preparation tool, this document provides great insight into the stylistic preferences of these prominent symphony musicians, and this information could be used to tailor audition preparation for these orchestras or the graduate schools at which the

performers teach. Unfortunately due to anonymity, the reader can only learn large-scale preferences for each of the following excerpts. However, as the conclusion to this document details, individual preferences in musical interpretation are not nearly as important as musicality and execution.

Background

The notion of regional differences remains present in the minds of today's orchestral performers. One member of these orchestras gave this description of a symphony to which he has never belonged.

> I think [the] Cleveland [Orchestra] is the tightest orchestra out there as far as matching thematic interpretation. Even if someone plays a lick in a really stupid way, every person after them will play it the same way.[4]

This demonstrates a current cultural awareness among these trumpeters that orchestral musicians value certain musical characteristics based on the history of the orchestra, performance space, music directors, colleagues, and many other factors. Even though the orchestral player who gave the quote above has been employed with his current orchestra for many years, he was actually trained in the Cleveland area and admits to being biased toward their old recordings. While his observation could very well be true, his regional definition of style has more to do with his recollections rather than an up-to-date familiarity with the orchestra. Given his professional history and the fact that it would preclude him from attending Cleveland's concerts for the last two decades, he may have heard the Cleveland Orchestra in concert only once or twice over that span.

Much has changed over the last forty years during which these musicians have been performing professionally. Recording technology has improved the fidelity of orchestral recordings, and the internet has made it easier to access these recordings instantly from anywhere in the world. Because of these changes in accessibility, I believe that regional differences have mellowed

[4] Interview with Red 2, July 15, 2010.

considerably, and the results of this project confirm this. For example, fifty years ago, an American trumpeter would rarely have considered playing on a rotary-valved trumpet. Today, however, a rotary trumpet is standard equipment for a professional American orchestral trumpeter, and while no one chooses it as their primary instrument, many of these performers suggested its use on various excerpts. Furthermore, the top players often take the time and expense to go to Germany and work with the best manufacturers there to customize the trumpet to their specifications.

While this international awareness underscores the prevalence of an increasingly less distinct regional product in American orchestral trumpeting, it does not imply homogeneity between orchestras. In fact, as I believe the following results demonstrate, the trumpeters in this project are highly individualized. Each member of these major symphonies possesses enough talent and knowledge to switch easily and play the principal part. As such, each trumpeter in this project has well-defined interpretations for each of the excerpts and most often differed not only from the principal player and colleagues of their orchestra but also from the other students of their teacher.

PART I: Performance analysis by excerpt

Instructions for understanding the terminology and shorthand of Part I

Simply put, the first half of this document, Part I, describes how each excerpt sounds. While this part's underlying purpose is to provide a musical framework for the comparisons of Part II, it is also doubles as a performance preparation guide for the seven excerpts. I have broken down each excerpt into a number of musical decisions and then further divided each of these general decisions by the various interpretations utilized by the participants of this project. To provide clarity to the sometimes lengthy musical analyses, I will always refer to the overall musical decisions of each excerpt as 'categories' and the individual interpretations within each category as 'criteria.' I will always denote categories with single quotations, e.g. 'Method for pacing the opening', while criteria will always be italicized, e.g. *Half note frame*.

Understanding these categories and their shorthand criteria is necessary for comprehension of the tables and comparisons in Part II. For quicker reference while reading Part II, each main category is given an underlined heading in Part I and all criteria under that category are italicized and uniformly inset from the margins. These underlined headings correspond directly to the categories listed in the tables of Part II, although sometimes the grammar and style of the heading in the tables have been shortened to accommodate a smaller space in the table. In parentheses following each criterion below, there is a ranking followed by a number. The ranking is the prevalence of that criterion compared to the other criteria in that category, and the number that follows is the number of trumpeters in this project that use that particular criterion in their interpretation. Part I does not include a detailed breakdown of the players' decisions; for that information, please see the tables for each excerpt in Part II. The following discussions do include

specific performance and pedagogical tips from the trumpeters, but these focus primarily on those techniques that help to clarify particularly esoteric discussions of interpretation.[1]

Each excerpt's chapter is a discussion of numerous interpretive decisions, although these decisions fall into two classes: those that are objective enough to be used in the comparisons of Part II and those that are too subjective to be clearly divided and compared. The analysis of each category clearly states how prominently that category will feature in Part II. The objective categories include topics such as the inclusion or exclusion of a dynamic change or the method used to pace an implied rhythm; in short, any musical decision that can be described with little or no ambiguity. The subjective performance suggestions are included only to enhance audition preparation and include topics such as the relative loudness of a particular performance or the quality of the players' sounds. Please note that the term 'objective' refers only to the method of division within each category; the *discussion* of each category's effect on interpretation will be subjective, as any discussion of music tends to be. Occasionally, I have added personal notes, but only when these help to clarify a description or paraphrase a particularly complicated dialogue.

Moreover, Part I analyzes how each objective category affects the listener's impression of the overall interpretation; some of the categories have a more pronounced effect than others. This information is crucial for the comparisons of Part II. The Miscellaneous category under each excerpt includes decisions not discussed by the majority of the trumpeters, and consequently, these topics, even if objectively defined, will not be used in Part II for lack of comparable data.

Copies of each excerpt are included at the beginning of the chapter for reference. Every excerpt has been taken out of context and given new measure numbers. This facilitates discussion of the excerpt by eliminating differences between editions. *All measure number and rehearsal*

[1] Because of the large number of lessons that contributed to this project, I have a vast amount of information pertaining to the pedagogical and musical techniques not only for these seven excerpts, but also general trumpet technique, audition improvement, and performance enhancement. This information will be released at a later date possibly as an appendix to this dissertation, but most likely I will restructure it to incorporate this material as a monograph.

number referrals are applicable only to the parts included with this document. For example, the trumpet line for the Bizet excerpt normally begins in the third measure of the piece. Yet the Bizet excerpt used below has eliminated the opening two bars of rest, so the trumpet line begins on measure 1. In this manner, I can refer to individual measures of the excerpt without considering whether the reader is referring to an original part or an excerpted part. Also, because some of these excerpts are printed in various transpositions, I will refer only to the written note names of the parts listed here unless explicitly stated. However, I have used the most widely recognized transposition to ensure familiarity for most trumpeters.

Each of these chapters will end with a 'compiled' interpretation for the excerpt. This is a synthesized interpretation that incorporates each of the most common criteria from the excerpt's categories. While the compiled interpretation will be used for comparisons in Part II, it also acts as a quick reference for performers preparing these excerpts for an audition. If one were to use the compiled interpretation, it can be assumed that this interpretation would be safely non-offensive. While that sounds uninspiring to an ambitious orchestral musician, regarding general audition preparation, these trumpeters most commonly suggested that first-round excerpts need primarily to showcase the fundamentals of music: a beautiful sound, good intonation, consistent time, and knowledge of the music. The first round is not a time to show off; instead they advised that it is a time to perform the excerpt as it would be played in the orchestra—nothing more, nothing less. To quote Blue 2 in our interview, "You can't win the audition in the first round, but you sure can lose it." Because of the prevalence of these excerpts in the first rounds of auditions, the compiled interpretations at the end of each of the following excerpts are extremely useful preparation.[2]

On an editorial note, I will only use double quotations when I am directly quoting someone. I will use single quotations to separate words that would normally have a different meaning outside of the context. For example, to refer to an offbeat rhythm on a particular beat, I will write the 'and'

[2] Hunsicker, "Surveys of Orchestral Audition Lists."

of beat x. For clarity of discussion, each excerpt will only be referenced by the composer's surname. For example, the opening of Mahler's Symphony No. 5 will be referred to simply as the Mahler excerpt.

CHAPTER 1—Hindemith

Sonata for Trumpet and Piano—Exposition of Movement I

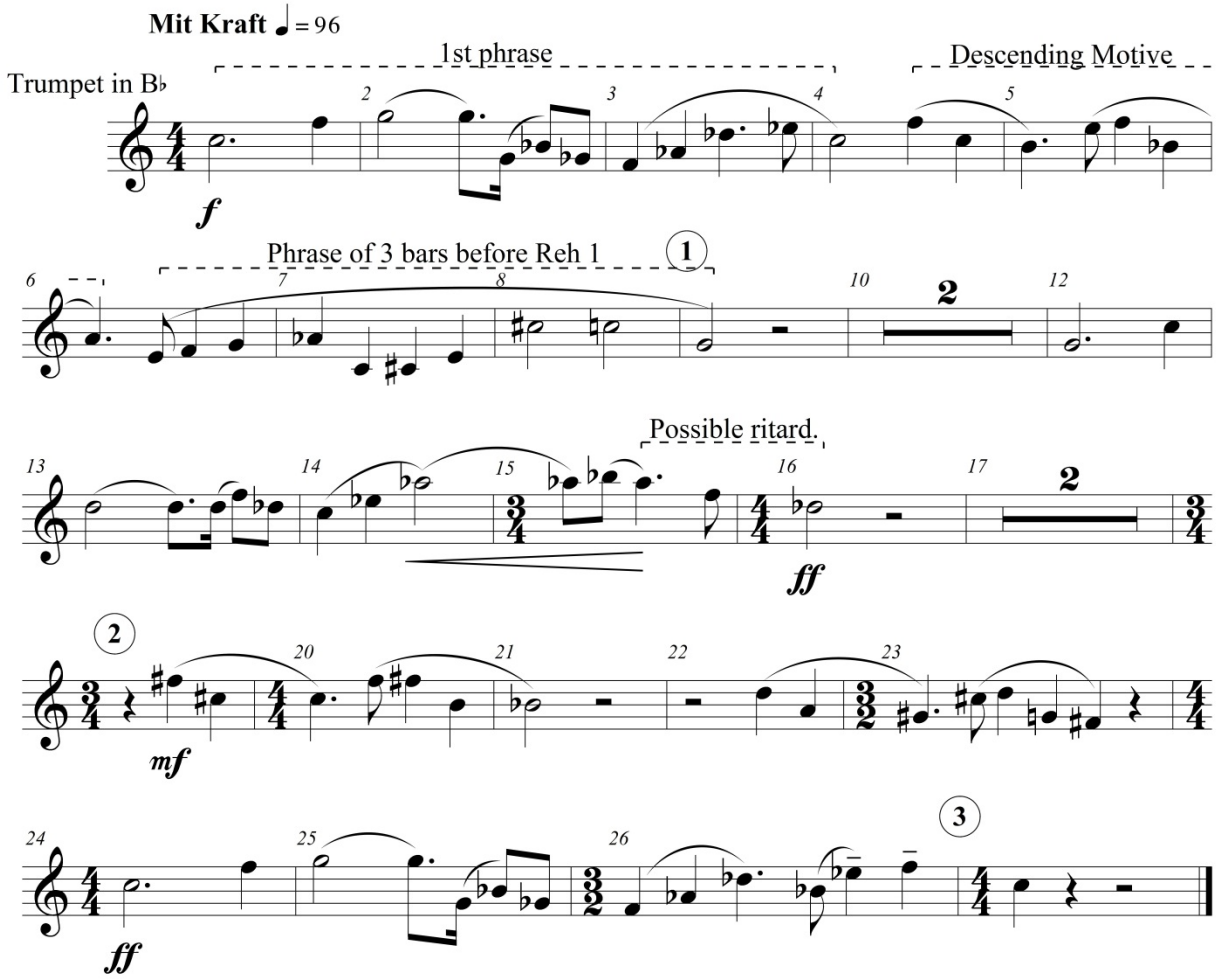

Figure 1. . Hindemith Sonata in B *for Trumpet and Piano* – trumpet part only

The first excerpt is the opening of Sonata for Trumpet and Piano by Paul Hindemith. Unlike the other excerpts, this excerpt was chosen assuming that the interpretations of the participants

would be easily differentiated. The project needed a piece that would be ubiquitous enough that each of the trumpeters would have first-hand knowledge of it yet soloistic enough that these orchestral musicians would not have played it repeatedly for each other thereby influencing the others' interpretations. The Hindemith Sonata is one of the most frequently performed solo works for trumpet, but as it is not a concerto and therefore not played with orchestra, it satisfied all of these prerequisites.

As postulated, there are large differences in interpretations on this excerpt, and the opening dynamic is an exemplar of this. Some players stated that it should "grab the audience," "show the weight of Hindemith," or be played *mit Kraft* (with strength) as marked, and most often these musicians played a very full dynamic at the opening. Conversely, others were concerned about pacing, often commenting that the opening is only *forte* and that there is a *fortissimo* later in the exposition. One musician, Purple 2, pointed out that the high point of the movement occurs on the high B in the development and advised that the opening should be two dynamic levels below that to allow room for growth.

Tempo

As with all of these excerpts, the tempo chosen on the Hindemith is crucial in determining the overall style of the piece. In general, those that chose slower tempi created a deliberate feel, while the faster tempi helped the musicians play with greater connectivity. The tempo choices ranged from 100 to 128 bpm, which is interesting considering that the tempo is marked at the top of the score at 92-100 bpm. The trumpeters were evenly spaced across this faster range of tempi, but five players were grouped at 110 bpm and three others at 115 bpm.

Length and direction of first quarter note

At first, this category seems to be of little consequence, but the first quarter note of this piece sets the tone for the connectivity to be used throughout the exposition. Every trumpeter led dynamically to the G on beat one of the second bar, but those who wanted to create a strict, martial

feel added separation to the quarter note that precedes the G. Others wanted to create long, sweeping lines, which some of the musicians claimed was stylistically consistent with Hindemith's German musical heritage. These players connected these two notes, leaving no space between the first quarter note and the following G. Therefore, the length of the first quarter note is indicative of the stylistic choices each musician used throughout the exposition. This quarter note and its accompanying figure occur twice more in m. 24 and transposed in m. 12

Long (most common – 11): The quarter note connected to the high G with no separation and little or no accent on the front of the note. Use of this criterion implied that the excerpt would be played in a connected manner. This is not meant to suggest that these players approach this excerpt in a purposely legato fashion; they simply had very little separation between their notes.

Equal (2nd - 5): The quarter note received an equal weight and shape to the C and G that precede and follow it respectively. There was a slight taper to the note, but it was still connected to the following G. This style was most often associated with a militaristic style to the excerpt; each line was still connected, but there were march-like qualities within each note.

Separated (3rd - 2): The quarter note was clearly separated from the C and G, but not short. These players preferred a vertical feel and often emphasized harmony over melody.

Long was clearly the most common choice; it was chosen more than the other two combined.

<u>Goal of the first phrase</u>

This category describes the phrase that begins on beat 1 of the first measure and ends after beat 2 of m. 4. The opening phrase is the primary theme for the entire first movement, and in the exposition alone, it occurs twice more at m. 12 and m. 24. The number of recurrences makes it a key factor in the phrasing, although the goal tone is not necessarily indicative of other stylistic choices. Primarily focusing on dynamic changes, this category labels which note each player chose as the

peak of the phrase. Every trumpeter emphasized the G on the downbeat of m. 2, so the differentiation came on how they approached the second half of the phrase.

Last C (most common - 10): The phrase led all the way to the C on the downbeat of m. 4.

Low F (2nd - 4)*:* Dynamically, the phrase contour was inverse to the pitches of the line; as it went lower, it became louder peaking on the F on the downbeat of m. 3.

D♭ (3rd – 3)*:* The phrase peaked dynamically on beat 3 of m. 3.

E♭ (4th – 1)*:* This method simply followed the contour of the second half of this phrase and peaked on the offbeat of beat 4 in m. 3.

Again, there was a clear favorite in this category in *Last C*, but *Low F* and *D*♭ were used frequently enough not to be considered anomalies.

Phrasing of descending motive

This category examines the two bar phrase that begins on beat 3 of m. 4 and ends after beat 2 of m. 6. It shares many qualities with the previous category, 'Goal of the first phrase'; it labels the dynamic goal tone of the phrase, is thematically important because it is constantly recycled throughout the piece, and is easily divided into two parts—although this theme's halves are shorter at only four beats long. In the exposition, this theme recurs transposed twice in m. 19 and m. 22.

2nd high note (most common – 9 total [6 of first hairpin style, 3 of second hairpin style]): This style combined the two halves of this gesture as one by joining them using a dynamic 'hairpin', a crescendo followed by a decrescendo. There were two divisible, albeit very similar, types of hairpins used here. The first style entailed starting the first note (beat 3 of m. 4) softer than the preceding material and then crescendoing to the second high note (beat 3 of m. 5). The second hairpin style started at a full dynamic consistent with the previous material but got more intense on the second high note. As for musical effect, they were equivalent; one simply peaks louder than the other. This relative change cannot be objectively compared though, so I have grouped them together.

Last note (2nd - 5): This style was basically a simple crescendo that united the two figures by crescendoing to the last note. In the first iteration of the phrase that began in m. 4, the goal tone was the A on the downbeat of m. 6.

Both high notes or *Both bottom notes* (T-3rd – 4 total [2 of each]): This phrasing treated the two halves as distinct gestures, but there were two different approaches. The first was to dynamically emphasize the high note of each gesture which, in the case of the first iteration, would be the F quarter notes on beats 3 of m. 4 and m. 5. The second approach was to crescendo to the bottom note of each gesture—the downbeats of m. 5 and m. 6 in the first iteration of the phrase. *Both bottom notes* was actually quite similar to the *2nd high note* method; the only difference was that the *Both bottom notes* criterion tapers at the end of the bottom note in the first half rather than continuing the crescendo.

The *2nd high note* phrasing was the most common approach to this phrase, but if the two different styles of hairpins are considered, they were no more common than the *Last note* criterion. Dividing the phrase into two halves was the least common style.

Phrasing of three bars before Rehearsal 1

This category references the goal tone of the phrase that begins on the offbeat of beat 2 in m. 6 and ends after the half note at Rehearsal 1. This is one of two objectively defined categories on the Hindemith that were mostly irrelevant in the comparisons of Part II. This is not because this category is unimportant in determining how the interpretation sounds; rather, it is because all the trumpeters' interpretations were nearly unanimous in this category. I have attended performances of this piece where the C♯ in m. 8 is the dynamic goal as well as performances in which a slight lift is inserted after the A♭ in m. 7. However, only one participant in this project chose the former and no participants endorsed the latter. Therefore, this category is useful in preparing for an audition in that there is clearly one accepted phrasing, yet unfortunately, it is not useful in differentiating these participants in Part II.

Final G (most common – 18): The half note G on the downbeat of Rehearsal 1 was the dynamic goal. The line was very connected and always moved forward.

C♯ before final G (2nd – 1): This alternate phrasing crescendoed to the C♯ on the downbeat of m. 8 and then relaxed through the last two notes.

In this phrase, five of the players altered the articulations marked in the part, but it did not affect their phrasing. All five broke the slur at Rehearsal 1 and articulated the G on the downbeat of m. 9 to emphasize the arrival. One of these players also broke the slur after beat 1 in m. 7. He did not give a specific reason, but this articulation did not disturb the flow of his crescendo to the final G.

This opening also displayed one of the more prodigious talents among these players. A few of these trumpeters played the opening eight measures with two breaths; one after beat 2 in m. 4 and another on beat 2 in m. 6, yet many of these trumpeters were able to play the opening eight measures with only the breath in m. 4. However, one of the youngest trumpeters, Blue 2, played the entire opening eight bars in a single breath at an impressively full volume. Even more remarkable was the fact that it had never occurred to this player that others might not be able to do this; he simply had never considered doing it any other way nor had he paid attention to other trumpeters' breathing patterns when he had attended performances. When asked about this, he simply laughed and commented that his teachers had always teased him that he had a "freakish" lung capacity. This was one of the first encounters I had in this project where it became clear that some of the players possess extraordinary physical talents. Nevertheless, it was heartening to know that for every player that had natural abilities like Blue 2, there were many others who were his professional equal without having the same innate physical advantages.

<u>Ritardando at m. 15</u>

The final category for the Hindemith excerpt is whether the player used a *ritardando* over the last beat of m. 15. Because of its shorter duration, this decision is much less prominent than any

of the previous categories and consequently has very little effect on the overall interpretation. However, of all the categories, many of the musicians felt most strongly about whether any *rubato* should be used. Their preferences were split almost evenly between *No* and *Slight*, while only two of the players said they approach this measure with a full *ritardando.*

No (most common – 8): The most common answer regarding this *ritardando* was a simple "no". Many of these trumpeters, including Orange 4 and Red 2, held a strong dislike for any *rubato* here and often pointed out that any disturbance destroys the linear harmonic motion of the descending D♭ major chord that begins on beat 2 of m. 15. Orange 2 went so far as to call this affectation "phoney-baloney".

Slight (2nd – 7): Conversely, almost as many trumpeters like to use some *rubato* here, but even these players did not like to think of it as a full *ritardando*. Instead, the most common suggestion was to "place" the eighth-note F on the 'and' of beat 4. Placing the eighth note can be described as making the note of similar shape to the long notes around it, but adding extra emphasis through weight. The extra stress creates the illusion of a slight ritardando without actually affecting time.

Yes (3rd – 2): Only two players said they use a true ritardando at this spot, but when listening to the recordings, their ritardando was very similar to the placing of the eighth note used in the *Slight* criterion. Therefore, they are placed in this category primarily for semantics, but if there was a difference, it would be eighth note is slightly more separated from the following note than the *Slight* players.

In addition to the *rubato* in this measure, many of these players stated that they must consciously save the peak of their crescendo for the last D♭ in m. 16. Due to the natural tendency to *crescendo* as the line rises in m. 14, this meant holding back dynamically on the ascension to the high A♭, leaving room for a continuous crescendo.

<u>Miscellaneous</u>

At first glance, the primary three categories discussed above seem to cover only the first half of the exposition of this sonata. However, each of the criteria was chosen based on Hindemith's reiteration of each of these motives throughout the exposition, and all but one of these trumpeters were consistent in applying their first interpretation of a motive through the entirety of the piece. As mentioned under the categories above, the opening two bars are reiterated twice more in the exposition alone, once beginning on C and once transposed down the interval of a perfect fourth. Therefore, the two criteria, 'Length and direction of first quarter note' and 'Goal of the first phrase', are used three times each. The 'descending motive' that begins on beat 3 of measure 3 also occurs twice more in the exposition, and by slightly altering these two themes, Hindemith created all the material that comprises the exposition. Consequently, most of the thematic interpretations of the exposition are established in the first four and a half measures.

There were quite a few interpretations of the sixteenth-eighth-eighth note figure in m. 2. The most common was a strict sixteenth note followed by long, weighted eighth notes crescendoing into the low F on the downbeat of m. 3. Yet some of the players wanted a "crushed" sixteenth note and/or heavy eighth notes with an articulation so heavy that it created space between the notes. Trumpeters that used the heavy eighth notes often went so far as to pull back on the tempo slightly, although I do not think this was necessarily intentional.

While most of the players crescendoed into Rehearsal 3, a few decrescendoed to transition smoothly into the following quiet passages; one player, Blue 3, crescendoed through the final beat of m. 26 but then inserted a *subito piano* marking on the downbeat of Rehearsal 3.

Three of the musicians, Yellow 1, Purple 1, and Purple 2, play the Hindemith without vibrato, saying that the vibrato takes away from the strength. This suggestion often was accompanied by very square notes with very little taper for a rigid interpretation. Conversely, Blue 4, stated that he had recently developed a new preference for using lots of vibrato on the piece.

The final, although infrequent, suggestion was to use a German B♭ rotary trumpet. Both of the players who recommended this, Yellow 4 and Green 1, suggested that the natural tendencies of the German rotary trumpet assist in creating rounder attacks. Consequently, a naturally rounder attack allows for a harder articulation adding brilliance without becoming overly harsh.

Compiled Interpretation

Choose a tempo between 110 and 112 bpm, play a long first quarter note, and phrase the first four bars to the C on the downbeat of the fourth bar. Use hairpin dynamics for the next two bars and follow it with a long, sustained phrase to the downbeat of m. 9. Beginning in m. 12, the phrase should crescendo steadily all the way to the D♭ on the downbeat of m. 16 with a slight placing of the eighth note F that immediately precedes it; be cautious not to crescendo too soon on this phrase as it is easy to over-emphasize the first high A♭. The last phrase should be stylized to match the first phrase with an extra edge through volume. Slowly build intensity to the C at Rehearsal 3 with only a small *ritardando* on the penultimate quarter notes.

CHAPTER 2—Haydn

Concerto for Trumpet in E♭—Exposition

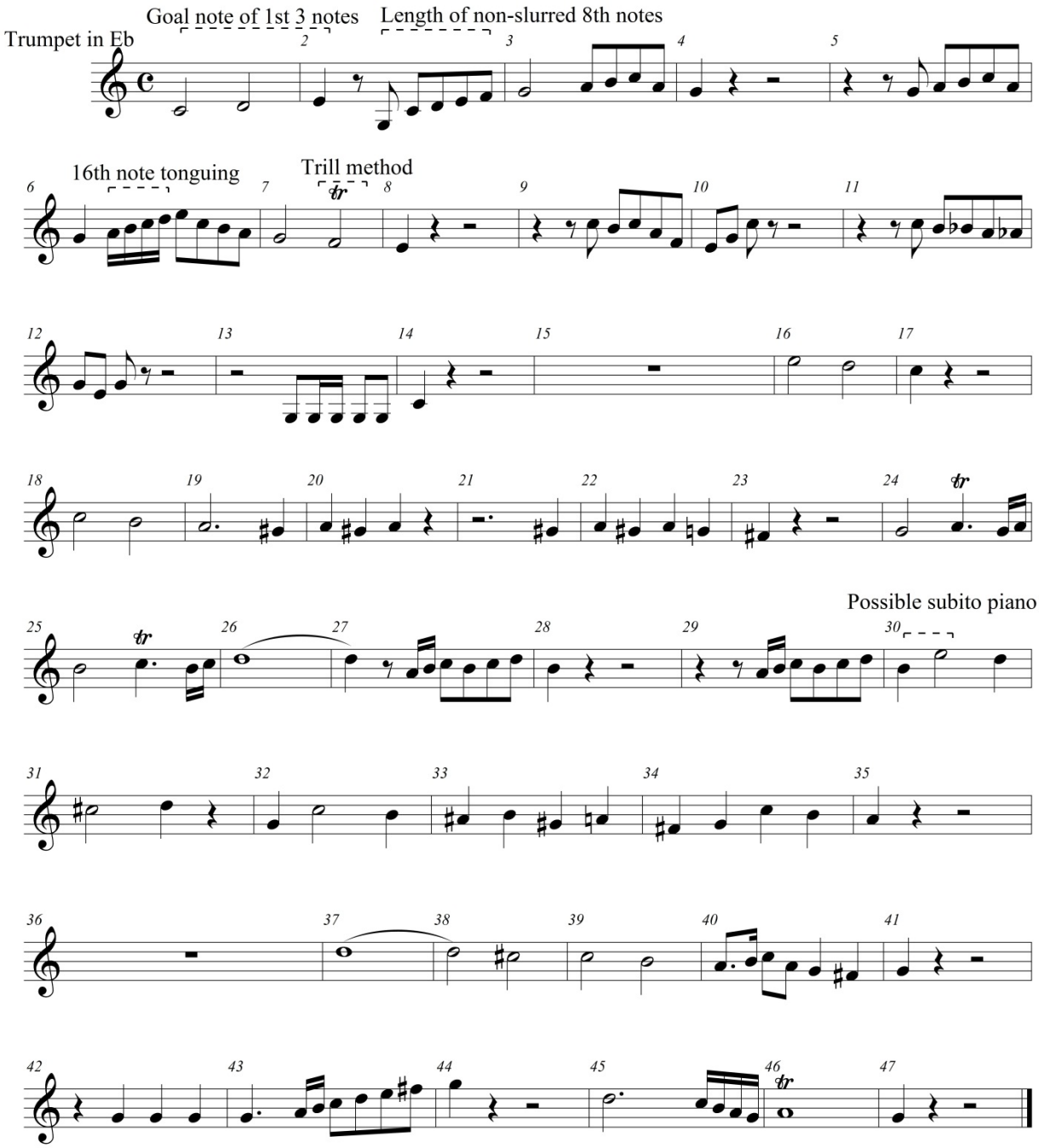

Figure 2. Haydn, Trumpet Concerto – trumpet part, exposition only

Haydn's Concerto for Trumpet in E♭ is the most requested solo piece for orchestral auditions and often used as a feature for the principal trumpet of the orchestra.[1] Its prominence on the audition circuit is enough to warrant its inclusion on the project, but given that most of these trumpeters will have played this with their current orchestra—likely accompanying the principal player—it is the solo piece that is most likely to have been discussed and performed within each section. Because of this, I expected this solo to have stronger grouping than the Hindemith, but as it is still a solo work, I assumed that most of these musicians would strive to put their own signature on the piece.

For this dissertation, I chose to exclude the first three appearances of the solo trumpet. I do feel these figures are important to the overall piece and highlight Haydn's sense of humor, but they are not normally requested in orchestral auditions and therefore are omitted from the following discussion.

Haydn's original manuscript had very few markings in the trumpet solo, and there is considerable debate on the subject of appropriate articulations for the solo part.[2] Given the numerous editions of the Haydn and the conflicting articulations of each, I elected to include a mostly unmarked copy of this excerpt and let the participating trumpeters state their preferences.

Tempo

The tempo choices ranged from 115 bpm to 134 bpm. The majority of players grouped around 120 bpm with nine choosing 120 bpm and another two at 122 bpm. However, eight of the remaining nine musicians chose a tempo between 124 and 134 bpm, so the tendency was to skew toward a quicker tempo rather than a slower one. Only one person, Gray 2, played at a tempo below 120 bpm, and he chose the noticeably slower tempo of 115 bpm. Like the Hindemith, the tempo was

[1] Hunsicker, "Surveys of Orchestral Audition Lists."

[2] Bullock, "Haydn Trumpet Concerto Articulations", 1979; Moore, "Haydn's Trumpet Concerto Andante", 2007.

an important factor in differentiating the various interpretations, but it did not have as pronounced an effect as the tempo did with the Hindemith. On the Hindemith, a change in tempo often implied an entirely different approach to the piece, whereas on the Haydn, the quicker tempi simply provided an opportunity to demonstrate technical virtuosity. This probably stemmed from most of the musicians' wishes that the piece remain in a Classical style, so they chose a gentler overall approach to the Haydn thereby tempering some of the extremes in interpretation.

Goal of first three notes

Each of the musicians had a particular goal in phrasing the first three notes of this exposition, and it divided them into two distinct camps. Remarkably, the approach to these three notes was a strong indicator of the overall approach to the piece and therefore an important factor in comparing their interpretations.

E (most common – 9): Almost every person that aimed for E on the downbeat of m. 2 simply considered the first three notes as a part of a larger four bar phrase leading to either the G, first A, or C of m. 3. For most of these players, their overall approach leaned toward a primarily lyrical style, and they were disposed to focusing more on connecting the phrases and less on creating contrast between the various themes. They strove for smooth, light lines.

C (2nd – 8): In contrast, the other half of these trumpeters chose to put a slight emphasis on the downbeat of m. 1, creating the impression that the first three notes have a slight decrescendo. These three notes still provided forward motion and an overall phrase through the first four bars, but the style was more declamatory. Most of these players stated that this first entrance needed to grab the audience's attention, and one musician, Orange 4, even cited a Schenkerian analysis in which the first C is the primary note of the piece.

Even (3rd – 2): These two people chose not to play the excerpt for me, because they did not have the trumpet that they would normally play this excerpt on at the site of the lesson. Yet

when asked what their goal tone was for the first three notes, they said they think of them as three equal notes and try to create a phrase that extends beyond the first two bars. Given the description above for *E*, these two probably would fit in that criterion, but I felt it best not to assume without a recording to confirm this.

This category was split evenly between the two main criteria. Neither led to a more effective interpretation than the other, but the different approaches to the first three notes were important factors in these interpretations.

Length of non-slurred eighth notes

This category does not focus on a particular passage; instead it extends over the entirety of the excerpt. Specifically, this category labels the length and shape of consecutively articulated eighth notes. A prime example is the five consecutive eighth notes in m. 2, but there are multiple runs of eighth notes throughout the exposition. Each player articulated consecutive, tongued eighth notes in a consistent style, and the length and shape of these eighth notes implied the style for the development and recapitulation. There are two exceptions; most of the trumpeters slurred the eighth notes in m. 9 and m. 11, so these two runs are omitted from consideration. Also, this category excludes the fanfare style eighth notes in m. 13; each player consistently played those eighth notes shorter and firmer than other eighth notes to highlight Haydn's gesture hearkening the fanfare nature of the trumpet before the composition of this piece.

Timpani (most common – 12): This style was played with a firm attack, a slight bounce, and a small amount of taper. The effect was similar to a timpanist playing eighth notes at the same speed, and because of the intertwined function of the trumpet and timpani in Haydn's orchestral music, this analogy was used by multiple players to describe how the player imagined shaping their eighth notes.

Long (T-2nd – 3): These eighth notes have a lighter attack than *Timpani* eighth notes and little or no taper. This style was used only in the lightest and most lyrical approaches.

Firm (T-2nd – 3): This approach was similar in length and connection to the *Long* eighth notes, but had a much bouncier, harder attack. The result created a connected but energetic line.

Detached (T-2nd – 3): The final style of eighth notes is clearly staccato, separated notes. This was very different from the other three criteria and represents the most aggressive approach to the piece.

The *Timpani* eighth notes were the preferred choice, and this was most likely due to its flexibility to function in multiple stylistic approaches. The other three criteria more closely reflected the trumpeters' overall approaches to the piece, while the *Timpani* style did not necessarily denote a particular style, e.g. lyrical or aggressive. This meant that someone using *Long* style eighth notes approached the entire excerpt in a lyrical manner, but a player that chose *Timpani* style could change overall styles between the various themes.

Sixteenth note tonguing

The performance practice of sixteenth note tonguing patterns in Classical and Baroque trumpeting has been increasingly analyzed over the last thirty years, and this research has produced arguments against the typical practices used by trumpeters on the Haydn.[3] While many of these players acknowledged this research and some chose to employ it, for the most part, these orchestral players used whichever method that enabled them to most easily achieve the sound they wanted. This category does not imply any overall stylistic choices like the previous two categories, but it does have a strong effect in determining how the overall interpretation sounds when compared to the interpretations of other participants.

Slur two, tongue two (most common – 10): For this set of musicians, the most common method used to articulate four or more sixteenth notes was to alternate slurring and

[3] Ibid.

tonguing groups of two. If there were only two sixteenth notes, there was no consistent pattern on whether these players articulated or slurred the two notes.

Slur all (2nd – 5): This criterion is one of the two methods typically recommended in period performance practice studies. If the player used this method for large groups of sixteenth notes, they also slurred any smaller groups of two sixteenth notes together and articulated the following eighth note as in m. 27 or m. 29.

Tongue all (3rd – 3): This is the other method often suggested in period performance practice. However one trumpeter, Green 3, said that he chose this method solely because the purpose of a concerto is to display virtuosity, and rapid multiple tonguing was a good example of this. If a player articulated the larger groups of sixteenth notes, they most likely tongued all sixteenth notes in the piece including the smaller groups of two.

Varies (4th – 2): Both of these players said they would determine which of the above three methods of tonguing they would employ based on the situation—changing it to fit the audition, the performance venue, the conductor's or concertmaster's requests, etc.

It is obvious from the above results that *Slur two, tongue two* is still the most prevalent approach to articulating the Haydn Concerto today, but I believe that *Slur all* and *Tongue all* will continue to gain further support as performance practice continues to advance these ideas. Many of the trumpeters who utilize the *Slur two, tongue two* method admitted that they are aware of the research but still prefer the technique with which they learned the piece.

<u>Trill methods</u>

The 'Trill method' category is similar to the 'Sixteenth note tonguing' category in that it cannot be used to infer overall stylistic choices, but it does help in differentiating how the overall interpretation sounds when compared to other performers. It is also similar to the 'Sixteenth note category' because it has been hotly debated in performance practice circles. There were many different approaches to this category, but there was a clear favorite.

Upper neighbor (most common – 11): The most common trill method was to start every trill on the written beat from the upper neighbor of the written note. However, there were a few of these players who claimed to use *Upper neighbor*, but they actually added an upper neighbor grace note a half-beat *before* the start of the written note. They then started their trill from the principal note on the written beat, although they were not consistent in when they chose to add the grace note. For example, most of these players added the grace note in m. 7, m. 24, and m. 25 but chose to use the typical *Upper neighbor* ornament in m. 46. Even this implementation was not consistent though, so I have included them in the *Upper neighbor* criterion—primarily because they all stated that this is the method they use.

Melodic (2nd – 4): This method began every trill from the principal note on the written beat.

Previous note rule (T-3rd – 2): Stylistically, this method was a combination of the two previous criteria. The trill started from the upper neighbor unless the note was preceded by the upper neighbor; in which case, the trill began from the principal note. For this criterion, the ornament always started on the written beat.

Directional rule (T-3rd – 2): This rule was similar to the *Previous note rule,* but it reversed the directions. If the note was approached from below, the trill began from the principal note, yet if the note was preceded by the same pitch or higher, the trill started from the upper neighbor.

Varies (T-3rd – 2): Like the *Varies* criterion under the 'Sixteenth note tonguing' category, two players refused to isolate their interpretation to one method. Instead, they altered their ornamentation as they saw fit.

Upper neighbor is the most common choice, but none of the other four criteria stand out as a clear second choice.

Subito piano at m. 30

This is a musical choice used to accentuate the difference between two perceived themes; the players accomplished this, as the name of the category implies, by inserting a *subito piano* dynamic change on beat 2 of m. 30. As this was not one of the original criteria, some of the trumpeters did not comment on this, yet enough of them did to warrant its inclusion in the results tables in Part II. Of those that did remark, it was split almost evenly between those that used it and those that did not.

Yes (most common – 7): These players used the *subito* change often stating that it allowed them to play with a martial style in m. 29 and a lyrical style beginning on the E in m. 30.

No (2nd – 6): These musicians did not like this affectation because they felt it destroyed the flow of the line.

Slight (3rd – 2): These two players wanted to accentuate the two themes but did not like the idea of a sudden dynamic change; instead they preferred to create a difference by switching to a more lyrical style without the dynamic change.

While this category was not useful in differentiating the musicians because of the smaller amount of responses, there was a remarkable correlation between this category and the first Haydn category, 'Goal of first three notes.' Among the musicians that had given responses in both of these categories, every person who chose to phrase to the *E* in the first three notes also chose the *Yes* criterion of this category. Conversely, all but two of the trumpeters who phrased the opening in the *C* style also choose the *No* criterion for this category. As discussed under the 'Goal of first three notes' category, the decision of how to approach the first three notes is highly indicative of the overall approach to this piece, and the data from this category strongly supports this statement. Those that chose the declamatory *C* opening favor contrasting themes and therefore favor the *subito piano* in this category. Conversely, those that choose the lyrical *E* opening are more concerned with the overall line and therefore choose not to break up the line with a sudden dynamic change.

Miscellaneous

The most common advice given by the participants in this project was to always be aware of the call and response nature of this movement, and in particular, they suggested letting the strings determine your interpretations. This was insightful guidance, but these players rarely agreed on *how* the strings should affect the decisions. For example, two of the players, Yellow 1 and Purple 1, insisted that the three quarter notes in m. 42 should match the length of the similar figure that occurs in the strings in the previous bar, m. 41. Yet others said that they purposely played the quarter notes in m. 42 in a style that contrasted the strings in m. 41 to create interest. Another example was in how the players approached adjusting their tone color. Some of the trumpeters prided themselves on the consistency of their tone, especially on the often finicky E♭ trumpet, while another player, Purple 1, based his entire interpretation on changing the tone color to highlight his designated themes. Because of these inconsistencies, I was unable to formulate these stylistic choices into categories.

Compiled Interpretation

The tempo should be around 120, but no slower. Phrasing in the opening is debatable, but according to the project results, it is slightly more common to begin confidently on the C yet to allow enough room dynamically to phrase through the first E, all the way to either the first A or C in m. 3. The first eighth notes should match the off-the-string articulation in the violins, most often described as timpani-like in length and shape. Despite recent performance practice studies, the slur-two, tongue-two style is still overwhelmingly used on sixteenth notes. Trills should always be approached from the upper neighbor. There is no clear preference among the musicians as to whether there should be a *subito piano* on beat 2 in m. 30, but it is used often enough that it can be used without worrying that it may offend an audition panel. The quarter notes at m. 78 should match the quarter notes of the strings in the preceding bar. All other musical decisions varied

enough to assume that the soloist may choose whatever he or she likes as long as it fits into a Classical framework.

CHAPTER 3—Beethoven

Leonore Overture No. 3—Offstage Call

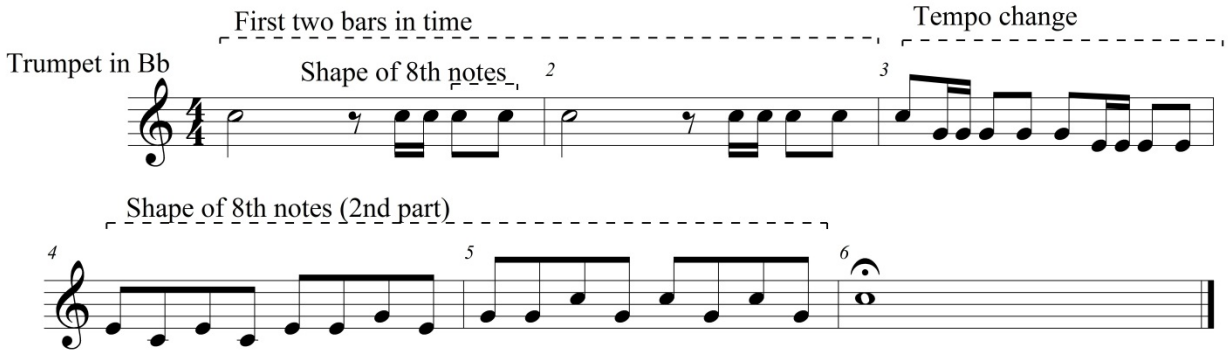

Figure 3. Beethoven, Leonore Overture No. 3 - offstage trumpet call

The first orchestral excerpt of the project is the offstage call(s) from Beethoven's *Leonore* Overture No. 3. According to a recent survey of trumpet audition lists, this is the seventh most requested excerpt in American orchestral auditions. Musically, I was interested in the various ways each trumpeter altered his tempi through this excerpt, although note length became a strong differentiating factor as well. When examining the four main categories of this excerpt, it is helpful to divide them into two groups. The two categories 'Rubato in first two bars' and 'Accelerando' determine the overall structure of this excerpt, whereas the two note length categories indicate the styles employed in the two parts of this excerpt.

There were as many interpretations of this excerpt as there were trumpeters in the project. While many of the performers discussed the role of the offstage calls in the opera, the actual interpretations varied widely due to the lack of technical instructions from Beethoven. Because of this relative freedom, many of the musicians stated that the conductor and performance acoustics had as much to do with interpreting this piece as their personal preferences. Despite the

individuality of the performers, it was actually relatively easy to create the categories for this particular analysis, because the structure of the excerpt lends itself to easily defined decisions.

Rubato in first two bars

This is one of the two 'structural' criteria for this excerpt, as it determines the framework for the first two measures. Many of these trumpeters stated the importance of picking a tempo based on the line in the strings that precedes the offstage call; their tempi, however, were adjusted using various amounts of *rubato* over the course of the first two bars.

Yes (T-most common – 8): These musicians played each note of the first two bars in a strict tempo and did not alter any of the note lengths from what was written on the part.

Rubato (T-most common – 8): These trumpeters were slightly less strict than the *Yes* criterion but still considerably more rigid than the *No* criterion. In this style, the half notes and eighth notes were in time relative to each other, but the sixteenth notes were compressed. Two of the musicians, Yellow 3 and Gray 1, also used a slight amount of *rubato* on the two eighth notes on beat 4 of m. 2, but this was simply foreshadowing the coming accelerando.

No (3rd -6): The rest of the players freely utilized *rubato* over the first two bars. In each of these interpretations, the half notes were often much longer than the shorter note values, but some of the trumpeters even changed the length of half notes relative to each other by making the second half note shorter than the first. This style was used to create the illusion of extending the accelerando that normally takes place in m. 3.

These criteria were evenly distributed among the players. For the comparisons in Part II, it should be noted that the only difference between *Yes* and *Rubato* criteria is the slight compression of the sixteenth notes, and because of this, these two criteria sound very similar. Both were utilized slightly more than *No,* but if paired they were used by sixteen of the twenty-two musicians.

Therefore, the vast majority of these trumpeters play the opening two bars mostly, if not entirely, in time.

Tempo change

The second 'structural' criterion of the Beethoven excerpt shapes the framework for the latter part of the excerpt, m. 3 through m. 6. Every interpretation of this excerpt has a tempo change beginning in m. 3 and a *ritardando* during m. 5. However as these instructions are not marked, two different approaches have evolved to the quickening, although both styles use the same *ritardando* in m. 5.

Gradual (most common – 18): In this style, the tempo change in m. 3 was an accelerando which began either on the downbeat or less frequently, on the two eighth notes of beat 4 in m. 2. The accelerando continued until the downbeat of m. 4, although some players preferred to complete the *accelerando* by the first D sixteenth note on the 'and' of beat 3 in m. 3.

Sudden (2nd – 4): This style changed the tempo by inserting an *alla breve* at the beginning of m. 3. It was an instant change of tempo, and this was often exaggerated by stretching the two eighth notes that preceded it on beat 4 of m. 2.

The *Gradual* criterion was used by almost every trumpeter, while the *Sudden* criterion has mostly disappeared. The *alla breve* was a style popularized by former trumpeters William Vacchiano and Roger Voisin as will be discussed further under the sub-chapters of those two teachers in Part II.

Shape of eighth notes

While the previous two categories described how this excerpt is interpreted structurally, the length and shape of the eighth notes are the best indicators of stylistic interpretation. Each of the players approached the excerpt in two parts—the first two bars and the last four bars—so I have divided the interpretations into two corresponding categories. The criteria used to label each

category are the same, so this paper will examine the criteria for both categories together and then list the results separately.

There are three distinct shapes for these eighth notes; *Round, Short,* and *Long*; but all have good definition and tone.

Round eighth notes are tapered notes with a very slight separation; depending on the acoustic situation, the taper can be adjusted to create a shorter effect without changing the actual length of the note.

Short eighth notes are clearly separated notes with no taper; they could be described as block- shaped notes. This is the most aggressive shape as the end of each note is abrupt and sometimes even rough.

Long, the final note shape, is a block-shaped noted with little or no separation after it. It is not a light or lyrical approach; it is actually just a longer, connected version of the *Short* note and sounds more aggressive than *Round* notes.

All of these shapes are capable of the intensity required for the fanfare-like nature of this excerpt. Pedagogically, I feel that the easiest way to describe the difference in these three eighth note shapes is to use simple syllables: *Round* is 'dun', *Short* is 'duht', and *Long* is 'duh'. By speaking these syllables in eighth note rhythms, one can gain an aural approximation of the three different styles.

<u>First two bars</u>

Round (most common – 13)

Short (2nd – 5)

Long (3rd – 4)

<u>Last four bars</u>

Round (most common – 13): These are not the same thirteen trumpeters as above; only nine played *Round* in both parts.

Short (2nd – 7)

Long (3rd – 2): Only one person, Red 3, played long eighth notes in both halves.

Round was the most common shape for both parts of the excerpt. While it did represent a strong majority, most of the performers cautioned that they would lean toward whichever shape gave them the most clarity, particularly as the notes are played faster. This preference likely explains why the *Short* style gained more users in the last four bars. The Beethoven is performed offstage, and many of the musicians mentioned this as the determining factor in which interpretations they chose. Fourteen of the twenty-two musicians choose to use the same eighth note shape in the first half of this excerpt as they did in the second half, but grouping of these players was very odd. This will be discussed further in Part II under the Beethoven discussion of Chapter 8.

Miscellaneous

Volume – I have included a 'Volume' category for this excerpt in the tables of Part II, but only half of the trumpeters made a suggestion regarding volume. Consequently, it will not be considered as a differentiator in the comparisons. For the most part, if one of the musicians suggested a particular volume, they made it clear that they adjusted their dynamic between audition and performance situations. Those that asked for a very loud excerpt, such as Yellow 3, always cited the fact that the excerpt is played offstage, and you must play with enough volume and clarity to be heard. Those that talked about the audition setting, such as Orange 3, stated that this is usually the first or second excerpt, and you need to pace yourself; this excerpt should be played at a comfortably full volume with the best sound and intonation possible. Some of these players further suggested that your maximum usable volume should be saved for an excerpt like the opening of Mahler Symphony No. 5 or a Richard Strauss excerpt. Orange 3 warned, "The most awkward *Leonores* I've heard tend to be the loudest. It's still Beethoven."

Vibrato – While many of the trumpeters cautioned against using a wide or slow vibrato for the Beethoven, Yellow 3, Yellow 1, and Yellow 2 all suggested using little to no vibrato on this excerpt.

Compiled Interpretation

As with all the orchestral excerpts, the suggestions for audition preparation differed from actual performance situations, always leaning toward a more conservative approach in auditions. The volume should be full but not the loudest one can play. Instead, save your loudest for excerpts that will appear later in the round. As the Beethoven is often the first excerpt, focus on playing comfortably and with your best sound. The opening two bars should be in time and felt in a slow four, and the eighth notes should be in time with the half notes. However, the sixteenth notes can be in time or slightly compressed, this choice was split equally among the trumpeters. Also, in the first two bars, the eighth notes should have a round shape. A gradual accelerando begins in the third bar. Pace this accelerando by single-tonguing the sixteenth notes on F in m. 3 and immediately switch to a double tongue for the sixteenth notes on D that follow. The eighth notes in the fourth and fifth bar should match the shape of the opening eighth notes even though they will be much faster. To assist the *decelerando* in the fifth measure, group the eighth notes into groups of two with a slight emphasis on the B-flats. Hold the final note the length of a full whole note at the original speed, and do not begin to *decrescendo* the whole note too early.

CHAPTER 4—Bizet

Carmen Suite No. 1—Prelude

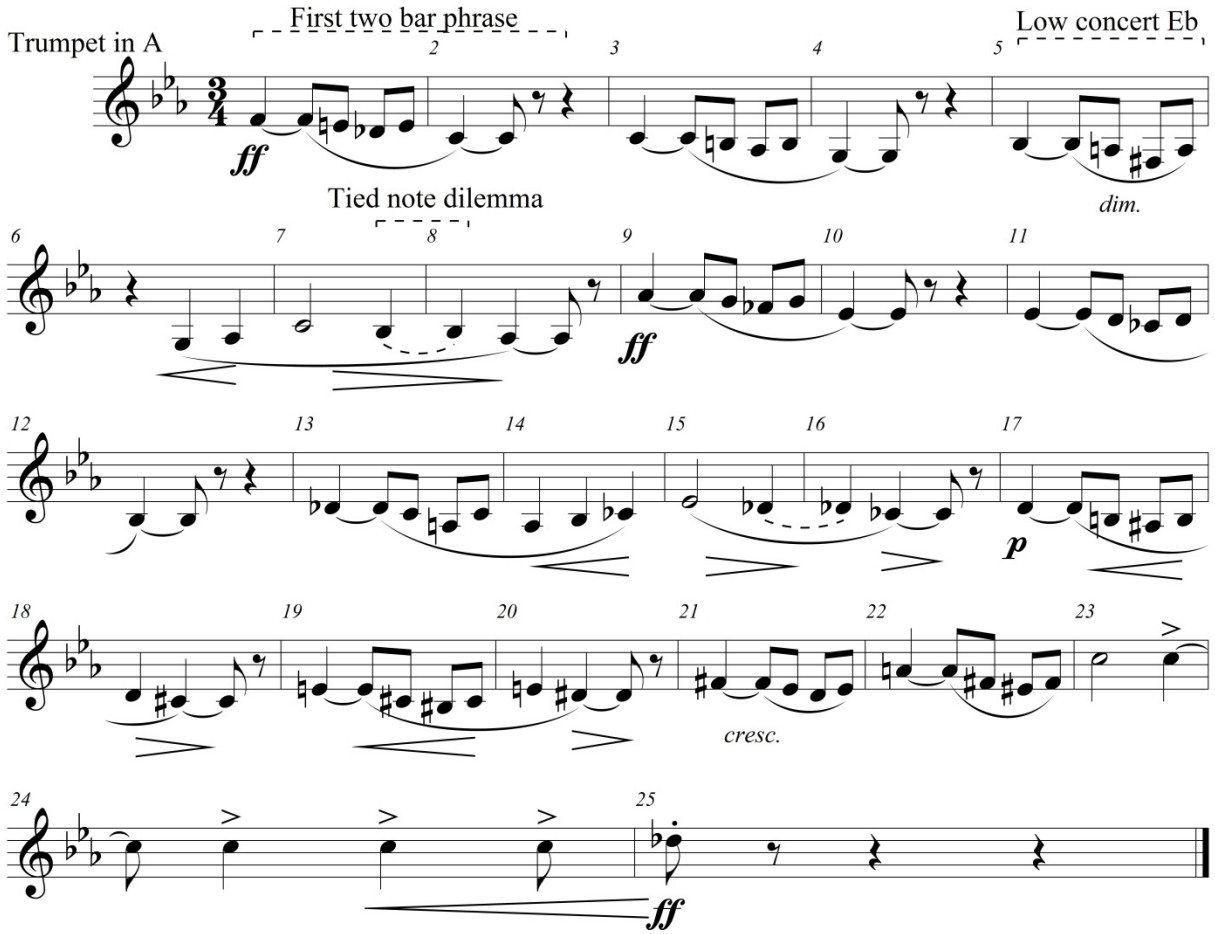

Figure 4. Bizet, Carmen Suite No. 1 - Prelude, 1st trumpet

The second orchestral excerpt is the Prelude to Act I from Bizet's, *Carmen* Suite No. 1. Of the five orchestral excerpts included in this project, this appears least commonly in auditions, but it is requested on almost half of all trumpet auditions and ranks in the top fifteen overall.[1] Unlike the other four orchestral excerpts in this project, it is chosen to demonstrate mastery of the low range of the trumpet and has an extra difficulty in that it contains a note that common modern trumpets are not capable of playing naturally. It is notoriously difficult for these technical reasons, and Purple

[1] Hunsicker, "Surveys of Orchestral Auditions."

1 cautioned that, “Trumpeters are very forgiving when listening to this on an audition; no one else is.” There are quite a few tricks used to play this low concert E♭, and these tricks were the primary differentiator in this excerpt.

I must preface the discussion of the Bizet excerpt with a disclaimer. I feel that these categories devolved to become the least useful determinants of all the excerpts in the project. My original intent was to include categories for note releases and dynamic shapes in addition to the categories listed below. However, these two items were so inconsistent in most of the lessons that I was not able to establish general interpretations for categorization. These reasons are described in further detail under the ‘Miscellaneous’ category near the end of this chapter. Without these two criteria, there was much less information to accurately describe and differentiate the interpretations of the various trumpeters. Under the ‘Miscellaneous’ category below, I’ve listed the recommendations for the less objective criteria, but only suggestions that were told directly to me—none of these are inferred from listening to their playing. By doing this, I can be sure that I am conveying their exact intentions even if they were somewhat ambivalent in the representation on the recording.

Method used to play low concert E♭

This category was the most notable difference among the players. In m. 5, there is a written low F♯ which is unplayable on B♭ trumpet without resorting to pedal notes or other ‘tricks’. These trumpeters had very little difficulty playing this note, but depending on which trick they used, it affected the consistency of tone color in the opening to various degrees. Red 2 stated, “Every time I played this with [name removed] and he decides to just pull his slide out rather than deal with the problem, it’s impossible to play in tune. The timbres are all over the place.”

As for the comparisons in Part II, these methods only changed the overall sound of the interpretation slightly, because each player was able to smooth out the inconsistencies with their immense control of the instrument. Also, the preferred method was very inconsistent from player

to player because they chose the method that allowed them to play the low concert E♭ in the easiest manner. Therefore, this category was probably the most personal decision of any category in the project, as each player based this choice on their physical attributes and equipment rather than the suggestions of their teachers or colleagues.

For the three criteria below that begin with the term 'trigger,' the performer must prepare the trumpet beforehand. On a B♭ trumpet, the third valve slide is extended almost to the end of its length. This lowers every note played with third valve by approximately a half step, thus enabling the trumpet to play a low concert E♭ without resorting to the pedal register.[2] To compensate for the change in length while the slide is extended, every note that uses third valve must be fingered a half-step higher than is normal. For example, a written low G would be fingered as an A♭, and the low F♯ is possible if fingered as an G. This does create a gap in fingerings at the low A in m. 5, but this can be solved by fingering it as third valve only. To assist with the accuracy of quickly finding the correct length of extension for the third valve slide, most B♭ trumpets can be fitted with an extended third valve slide rod (or catch). This equipment modification is critical particularly for the *Trigger 1 phrase* and *Only low E♭* criteria, because these methods do not allow for the third valve slide to be prepared before beginning the excerpt; it must be adjusted quickly and correctly without judging the distance visually.

Trigger 1 bar (most common – 13): In this method, the player extended the third valve slide in the rests in m. 4, used the alternate fingerings only for m. 5, and then pulled the slide back in during the silence on the downbeat of m. 6. One of these trumpeters suggested that if the third valve slide is at all sticky, it is prudent to wait until the eighth rest at the end of m. 8. This is technically less time to act than the quarter note rest of m. 6, but if the slide does

[2] On most Bb trumpets, the low concert Eb should be tuned more precisely with the further addition of slightly extending the first valve slide.

happen to stick, you have the first beat and a half of m. 9 to pull it in as neither of those notes uses the third valve. Therefore, this actually provides two full beats compared to the one beat in m. 6. Unfortunately, this also means that alternate fingerings must be used for all of m. 6 through m. 8 which can lead to intonation issues if not practiced. Most players suggested having the third valve slide well oiled, eliminating this issue for well-cared-for trumpets.

Trigger opening (2nd – 4): These players extended the third valve slide and used alternate fingerings from m. 1 through the end of m. 8.

Pull tuning slide (T3rd – 2): In this technique, the trumpeter pulled the main tuning slide of a B♭ trumpet far enough to move the pitch center of the entire horn down one half-step into A. This changes many of the characteristics of the trumpet, so it must be practiced a great deal before it can be played consistently in tune.

Custom equipment (T3rd – 2): Two of the participants had equipment built to create a trumpet capable of playing a low concert E♭ while retaining the intonation characteristics of a typical trumpet, unlike the *Pull tuning slide* criterion. Orange 2 had a custom trumpet in A designed by Schilke Music Products which he dubbed "The Shredder." Yellow 2 had a custom tuning slide made for his B♭ trumpet with extra-long pipes to turn his B♭ into an A trumpet with proper gaps on the tuning slide. This fixed many of the intonation problems present in the *Pull tuning slide* criterion, but he was forced to adjust all of the valve slides as well to approximate the necessary added length of a trumpet in A. In addition to these two, Green 4 stated that his colleague (who did not participate in this project) used a custom main tuning slide built for his C trumpet with a trigger that when pressed, adds enough tubing to lower the entire horn into the key of A; I did not add this to the results, because I was not able to verify it personally.

*Only low E♭ (*5th – 1): In this criterion, the player only extends the third valve slide for the low F♯, but due to the riskiness of a sticky valve slide or shaking the instrument while performing, only one player suggested using this method.

Trigger all (No users): I have been given parts by past teachers that were marked with the alternate fingerings to play the entire excerpt with the third slide pulled out, but none of the participants in this project used this method.

Trigger 1 bar was clearly the preferred method for this excerpt, but most of these trumpeters differentiated their methods depending on the performance situation – concert or audition. The above results portray their preferences for the audition setting. Yet in concert, many of these musicians stated that it is acceptable to play the low note as either a soft pedal or just leave it out entirely. Blue 3 said, "If you play it with the orchestra, it's not a big deal. I've played it multiple times where we just played it as a pedal note."

Tempo

The tempi of the Bizet excerpt ranged from 58 to 75 bpm, but the vast majority of players, seventeen of twenty-one, chose a tempo between 60 and 66 bpm. Eight people were at 60 bpm which is the tempo marked on some of the editions of this music, although it is debatable whether that marking came from the publisher or Bizet himself. Because of the lack of consistency in other categories, the tempo each player chose on this excerpt was one of the primary differences in their interpretations. Also, because this excerpt had a slower pulse than many of the others, a few beats per minute difference was much more noticeable.

Dynamic goal of each two bar phrase

This excerpt can be divided into many two-measure phrases, but this category refers specifically to the four two-measure phrases that begin in m. 1, m. 3, m. 9, and m. 11. The entire Bizet excerpt is played with the cello section, and these small phrases are therefore important to establish the phrasing to be used throughout the excerpt.

Downbeat = (most common – 18): This style gradually increases volume toward the downbeat of the second measure of each phrase creating a 'hairpin' dynamic shape, and these trumpeters overwhelming preferred this. Of those that justified their reasoning, most stated that emphasizing the downbeats created parallel phrase structure when compared to the two-measure phrases in m. 17 and m. 19, both of which are clearly marked as going to the downbeat.

Beat 3 (2nd – 4): For this style, the players peaked their phrase one beat earlier than the *Downbeat* group, aiming for beat 3 in the first measure of each of the four phrases. Their logic for this was that this dynamic shape better matched the written dynamic contour of the four-measure phrases that began in m. 5 and m. 13, although one could also argue that beat 3 contains the most colorful note of each phrase—the lowered sixth scale degree of each tonal region as well as the lower note of an augmented second interval.

While the reasoning behind both of these criteria is sound, the *Downbeat* group is far more prevalent.

Miscellaneous

Dynamics – The most common suggestion on this excerpt was that the trumpet section must play underneath the cello section and therefore should not play too loudly. Three of the trumpeters, including Blue 4, also suggested saving the loudest volume for the last two notes, so the excerpt's overall dynamics were paced correctly.

Note releases – As alluded to above, there was total inconsistency regarding the releases of the long notes in every other bar, e.g. m. 2 and m. 4, in which there are loud hits in the orchestra on both beats 2 and 3. Some players were adamantly opposed to going past beat 1, and stated the release should be on the first hit on beat 2; others insisted that the passage should be played exactly as marked with a release on the 'and' of beat 1. Still others suggested releasing on beat 3. Red 3 just wanted a nice taper and did not care how long it went, and Orange 4 insisted that he

subdivided staccato eighth notes internally and released after the third eighth note creating a middle ground between 1 and the offbeat of 1. I would have used this as a differentiating category in Part II, but I was unable to generalize their suggestions because many of the players were inconsistent *within* the lesson; I could not determine confidently where many of them wanted the release. A few players mentioned that they did not feel that the timing of the release was important, only that it was consistent and well-shaped. In performance, the release is obscured by loud hits on beats 2 and 3 but can be sorted by watching the principal cellist and releasing with her bowing.

The tied-note dilemma – Between m. 7 and m. 8 and again between m. 15 and m. 16, the tie connecting two quarter notes appears in some editions but not in others. Admittedly, I was unaware of this discrepancy when I began the project, so I played it as a tied note and did not bring it up in the earliest lessons. Yet no one commented on this until the thirteenth lesson, and by the end of the project, only five of the trumpeters made this a point of discussion. Orange 3 and Green 4 mentioned the discrepancy, but both still play the two notes as tied. Green 1 strongly suggested that the tie never be omitted. Only one trumpeter, Red 4, was adamant about breaking this tie, yet he was contradicted immediately in my lesson the next day with his colleague of nineteen years, Red 2. After examining the full score for this suite[3], these notes are clearly split into two quarter notes in both the cello and trumpet lines, and when listening to recordings of this piece, there is an obvious harmonic change on these downbeats. However, given the lack of opinions from most of these players, common performance practice among these trumpeters seemed to differ from the actual score.

<u>Compiled Interpretation</u>

The tempo should be at 60 bpm or slightly faster, but be careful to not take it too slowly. Play at a comfortably full dynamic at the beginning, but make sure to use a sound that will fit well underneath a cello section. This is a lyrical excerpt, and you should therefore strive for a line with

[3] Bizet, *Carmen* Suite No. 1, 1-3.

no sudden changes; Orange 2 described this as, “You don’t want to feel like your trumpet is blowin’ real clean. You need stuff between the notes.” There is no agreement among these musicians about where to release the tied quarter note/eighth note that occurs in m. 2, m. 4, m. 10, and m. 12. However, make sure the release is somewhat tapered and always consistent in auditions; the downbeat of those bars should be the loudest point of a ‘hairpin’ phrase shape. The most common method used to play the low concert F♯ is to employ an extended third valve slide rod. With this, one can use false fingerings only for the two bar phrase that contains the low F♯. The slide should be pulled in on the quarter rest that follows the second A of m. 5. Some conductors will want to break the tie between m. 7 and m. 8 and the corresponding phrase in in m. 15 and m. 16. Only one player stated this as his preferred interpretation, so use this at your own discretion. However, you should be prepared to break the tie in an audition if asked to do so.

CHAPTER 5—Mahler

Symphony No. 5—Opening of Movement I

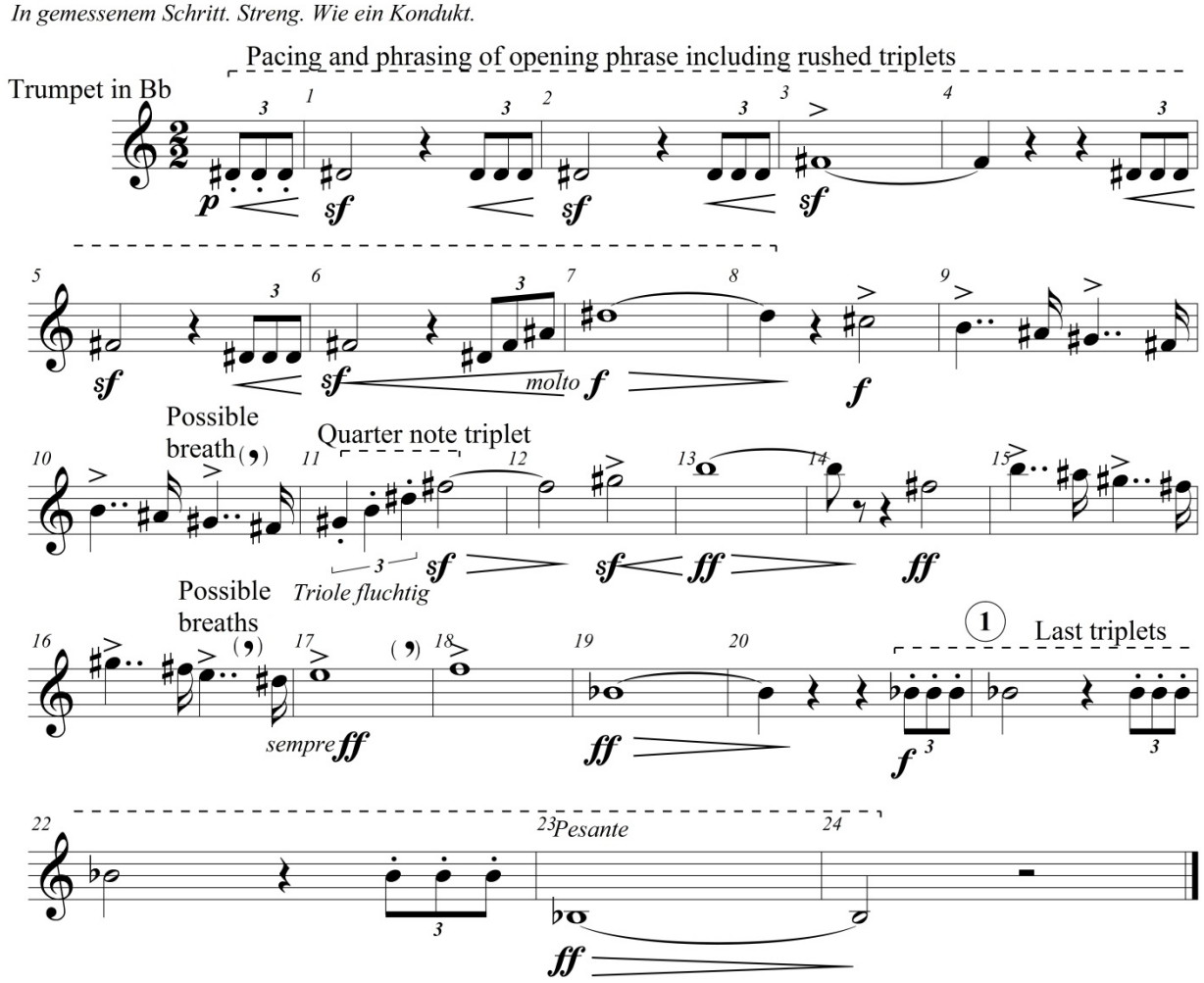

Figure 5. Mahler, Symphony No. 5 - 1st trumpet, opening solo

The third orchestral excerpt is the opening from Mahler's Symphony No. 5, and second only to Stravinsky's *Petrushka,* it is the most requested excerpt in American auditions today.[1] This excerpt is arguably the most virtuosic music in this project as it requires the trumpet's full range of dynamics, pitch, and technique. Blue 3 related an anecdote that demonstrated the difficulty of this

[1] Hunsicker, "Surveys of Orchestral Auditions".

passage. According to him, the former principal trumpet of the New York Philharmonic, William Vacchiano, did not perform the opening seven measures of this symphony. Instead, he had the second trumpet player, Carmine Fornarotto, play the precarious low tonguing of the opening bars, and Vacchiano resumed the solo part starting on beat 3 of m. 8. While none of the principals today would consider this, it illustrates how uncomfortable this opening can be for the trumpeter. Green 1 even suggested that this discomfort is the reason that this symphony is his favorite piece to perform, although not for the expected reason. "[It's] such a great moment. It's so rare for a conductor to feel like 'I really, really need you.' They'll do anything not to screw you up. It's the only time where you get to tell the conductor what you need, and he'll actually listen."

Due to the wide range of musical decisions to be made, I expected this excerpt to have the most varied interpretations, and it fulfilled those expectations. For example, one of my original objectives was to categorize the various approaches to the first seven bars, but as the project progressed, it became clear that there were as many interpretations in phrasing the opening as there were in pacing it. To solve this, I split the decisions of the first seven bars into two separate categories.

<u>Method for rushing triplets</u>

In a footnote on the first page of the principal trumpet part, Mahler instructs the trumpeter on how to interpret the rhythms of the opening. It translates as "The upbeat triplets of this theme should be rendered continuously in a somewhat hasty *quasi accelerando*, in the manner of a military fanfare!"[2] There is also a piano roll of Mahler himself playing this opening, so it is possible to hear what he meant by these instructions.[3] Simply put, the eighth note triplets should be rushed, but the half note beat must remain constant and unaffected by the triplets. There are many techniques used to achieve this, but only three methods were used by the participants of this

[2] Mahler, Symphony No. 5, 1.; The original German text is "Die Auftakt – Triolen dieses Themas müssen stets etwas flüchtig quasi acc., nach Art der Militarfänfaren vorgetragen warden!"

[3] Mahler, *Mahler plays Mahler*, compact disc.

project. This is an extremely important category in comparing the players in Part II, because this category determines the framework of the opening of the excerpt.

6/4 (most common – 11): In this method, the player determined a tempo for the half note and then subdivided the half note pulse into quarter note triplets instead of the duple division as written. This effectively turned the opening time signature into 6/4 with each half note becoming a dotted half note. The written eighth note triplets that Mahler wrote were then transformed into eighth note triplets that began on the last quarter note of the second quarter note triplet in each measure.

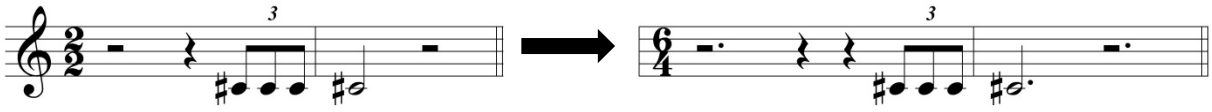

Figure 6. Mahler *6/4* Rhythm Clarification

Some of the proponents of this method stated that they liked the security that came from placing the triplet on a beat, rather than an offbeat as used in the *16th notes* method below. To honor the exact markings in the part, many of these players also added a slight crescendo on each triplet that led to the sforzando half notes.

Half note frame (2nd – 7): The second most common criterion for this category is the most difficult to describe. These musicians simply *felt* how fast they wanted the triplets and then fit that sound into a framework of a steady half note. One of the players, Orange 2, went so far as to eschew even determining this half note framework and instead imagined each half note as a pendulum swinging back and forth at his desired tempo. He used the mental image of the momentum of the pendulum to create his rushed eighth notes. Nonetheless, three of the players that applied this criterion said that they used one of the other methods when

they were less experienced, but at this advanced point in their careers, they could simply recall how they wanted the excerpt to sound without using a particular technique.

16th notes (3rd – 3): The least used technique for pacing this opening was somewhat simpler than the other two. Rather than changing the structure of the opening, the player changed the rhythm of the eighth note triplets. Instead of cut time as written, this method required the trumpeter to subdivide into 4/4. Using this quarter note beat, each triplet was transformed into three sixteenth notes and then placed on the second sixteenth note of beat 4.[4]

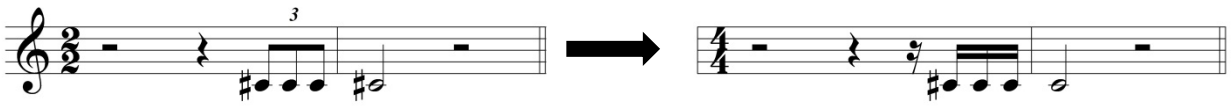

Figure 7. Mahler *16th Notes* Rhythm Clarification

Because this is the beginning of the piece and the listener has no point of reference, the effect is very similar to the *6/4* method above and is indistinguishable to an unaware listener. It has the added benefit of not requiring the trumpeter to switch from triple to duple time at the end of the opening like the *6/4* method. Each of the players that used this method also pointed out that by starting the figure off the beat, it was easier mentally to emphasize the downbeat *sforzando* notes rather than the beginning of the triplets. Some of the trumpeters attributed this method to either Roger Voisin, formerly of the Boston Symphony, or Vincent Penzarella, formerly of the New York Philharmonic.

Many of these players added extra layers to their performance interpretations. Yellow 1 and Orange 1 stated that they stretch the rests in the first six measures to "increase the drama", although they suggested caution in utilizing this affectation in an audition as it could be construed

[4] For this document, the 'ee' of a beat refers to the second sixteenth note subdivision within a duple beat.

as an inability to keep a steady tempo. Interestingly, multiple participants passed on a story regarding the opening of the Mahler as recorded by Phil Smith, principal trumpet of the New York Philharmonic, and several trumpeters admitted that this recording, made in 1989 under Zubin Mehta, was their favorite recording of this symphony.[5] According to Green 1, Mehta asked for the opening trumpet solo "to sound like the final breaths of a dying man. The triplets are a quick, painful inhalation and the half notes are long, rasping exhalations." This imagery created an effect that sounded quite similar to the elongation of the silences by Yellow 1 and Orange 1.

A common audition suggestion was to find the tempo of the opening by mentally singing a passage from later in the piece, most often either the fanfare that begins on beat 2 of m. 8 or the lyrical melody in the strings that immediately follows the opening excerpt. Owing to the freedom of the opening, establishing the tempo from a more rhythmic passage can eliminate the need for sudden tempo changes later in the excerpt.

There was also little agreement among the advocates of any of these criteria as to whether the opening should be single- or triple-tongued, although this was not one of my original questions for the excerpt and therefore was not asked consistently. Not only was there basically an even split between single- and triple-tonguing, there was also disagreement among those that choose to triple-tongue; some used a t-t-k articulation because it "creates forward motion", while others preferred a t-k-t triple-tongue pattern because it "provides clarity and stability."[6] Regardless of personal preference, each player was technically competent enough that they were able to demonstrate both tonguing patterns convincingly.

In summation, a majority of the trumpeters in this project used the *6/4* method to pace this music, but there were still quite a few who preferred the *Half note frame*, two of which were principal players. It also seemed that not many of the players had heard of the *16th note* criterion, but some of them did express interest in it once I explained it. Above, I have described the

[5] Mahler, Gustav, Symphony No. 5, 1989.
[6] Interview with Gray 1, April 15, 2010; Interview with Orange 4, May 28 2010.

numerous opportunities for individuality in this category, but these smaller choices did not change the overall feel and were chosen primarily for the comfort of the player.

'Phrasing of opening passage'

Whereas the previous category was important for comparing these players because it established the framework of this opening, 'Phrasing of the opening passage' is equally important as it describes the style overlaying the framework. The primary difficulty of interpreting the opening seven measures of this excerpt is creating an effective dynamic phrase, while still playing the instructions of Mahler. There were two ways in which these musicians accomplished this, although some of the musicians slightly altered the minutiae in both of these criteria.

Terrace (most common – 13 [11 normal and 2 from mental image]): The most common method of phrasing the opening seven measures was to assign dynamic terraces to certain notes. Generally, these players started at *piano* as marked, and each of the first three iterations increased by one dynamic level. For example, a common outline was to label the downbeat of m. 1 as *piano*, the downbeat of m. 2 as *mezzo piano*, and the downbeat of m. 3 as *mezzo forte*. The whole note of m. 3 decrescendoed one dynamic level so that the downbeat of m. 5 began again at *mezzo piano*. The downbeat of m. 6 was *mezzo forte* and was followed by a large *crescendo* that peaked at *forte* on the downbeat of m. 7. On top of these dynamics, each of the written articulations, such as the accents and *sforzandi*, was still observed.

Yellow 3 described this method as such. "Each of the first three half notes is a false alarm that has a slight decrescendo, but each one gets successively louder overall. The last three are the real deal and each one grows to the C♯ [on the downbeat of m. 7]" Two of the musicians used a mental image rather than the rigid dynamic pattern described above, but the overall effect was the same. Blue 4 imagined troops marching closer and closer to the listener, so each iteration became slightly louder. This had the same terraced feel as the

others, but for this player, it also helped him to bring out the military feel that Mahler suggested in his instructions. Orange 2, as discussed above, utilized the mental image of a swinging pendulum to pace the opening, yet manipulating this image also helped him to phrase the opening. He imagined that every other swing of the pendulum became slightly wider, which meant that the pendulum must move faster to maintain a steady tempo. This increase in speed represented the slight increase in volume that Orange 2 wanted for each half note.

As marked (2nd – 6): The other group of trumpeters simply took Mahler's written dynamics literally. Each of these players also pointed out that Mahler was very particular in all of his markings and instructions, so if he had wanted more dynamic contrast, he would have notated it that way. This method differs from the previous criterion in that the downbeats of m. 1, m. 2, m. 3, and m. 5 are technically the same dynamic, piano, but the downbeat of m. 3 gets a bit more because of the accent on it. These notes also did not decrescendo, although the *sforzandi* acted as a natural weight with a slight taper that could sound like a decrescendo if not done quickly enough. The fourth triplet, which occurs on beat 4 of m. 4, then returned to the same dynamic and shape as the first two triplets. The downbeat of m. 6 was the first long note that increased in intensity, and it began a crescendo that ended after the peak of the phrase on the downbeat of m. 7.

The *Terrace* method was clearly the most used phrasing, but an audition committee would have a difficult time arguing with the *As marked* criterion given that it represents what Mahler wrote. Most importantly, all of these interpretations were convincing when performed by these musicians.

Tempo

The tempo choices of this excerpt were quite diverse; they ranged from 52 to 68 bpm for the half note and were distributed fairly evenly over most of this range. The largest grouping of tempi was between 60 and 68 bpm, and within this range, there were ten players grouped from 64

to 66 bpm. The slower tempi were the least common, as only four tempi were between 52 to 58 bpm. In a few cases, the trumpeters played a slower tempo for the first seven measures and then picked up the tempo on beat 3 of m. 8, but the consensus was to never do this on an audition lest the committee think your time was unsteady. The tempo of the Mahler was a large factor in the overall interpretation, especially when considering that at these slower tempi, a few beats per minute difference could alter the phrasing noticeably.

Quarter note triplet

On the downbeat of m. 11, there is a quarter note triplet labeled *Triole flüchtig* which translates as a 'fleeting (or rushed) triplet.' There are two approaches to rushing this triplet, but both techniques do not affect the overall tempo; the triplet is rushed, but the G♯ on beat 3 of m. 11 is held longer to compensate. Of all the Mahler categories, this one was possibly the least important in determining the overall style because it only affected one beat and the difference between the two styles was small.

> *Rushed* (most common – 16): The players that utilized this technique created a small accelerando within the four notes as each note was slightly quicker than the note that preceded it. Of the players that employed this method, many cautioned that it should never sound similar to a quarter note followed by two eighth notes.
>
> *Steady* (2nd – 8): In this method, all three notes are equal in length, but they are played quicker than the actual marked quarter note triplet. Orange 1 described it as very close to playing eighth notes in time but tying the top F♯ into the next half note.

The *Rushed* criterion is used twice as often as the *Steady*, but *Steady* might be a safer option in an audition. Of those that used the *Rushed* method, no one disliked the *Steady* technique; they simply

liked the *Rushed* method more. However, of the trumpeters that preferred the *Steady* method, many of them said that the *Rushed* technique sounded "corny" or "contrived."[7]

Rushing of last triplets

The final decision for this excerpt is whether or not to rush the triplets in m. 20, m. 21, and m. 22 in the same manner as their counterparts in the first seven measures. Among these trumpeters, two factors were important in this decision: consistency and the trombones. Those players that treated these triplets the same as the opening six measures reasoned that the style established in the opening should be carried throughout the figure and that the rest of the brass would have an easier time matching the style if it was consistent. However, those that played the latter triplets slightly slower or completely straight were considering the technical difficulty of getting the brass to sound together, especially when considering the added difficulty of the trombone section having to move their slides quickly enough to play this cleanly. Before a trombonist reading this takes offense, the rationale was that the figure in the trombones is more difficult because it changes notes whereas the principal trumpet figure is static. This category is certainly an important decision for the audition setting but does not have as large an effect on the interpretation as the previous categories.

Yes (most common – 15): These players played the last triplets exactly the same as the opening.

Slight (2nd – 3): This method was the middle ground between the rushed and straight figure. Green 4 suggested that this effect could be achieved by triple-tonguing the opening but single-tonguing the last triplets.

No (3rd – 2): The triplets in this method are played in time exactly as written.

[7] Interview with Yellow 1, February 9, 2010; Interview with Orange 2, May 28, 2010.

Yes was preferred overwhelmingly by these players, but many of them suggested that an auditionee should always be prepared to play the excerpt without rushing the last triplets in case the committee requests it.

Miscellaneous

The categories above cover most of the excerpt, but I was unable to design a category that successfully described m. 8 through m. 10 or m. 14 through m. 16. These dotted rhythms were played rhythmically strict by every musician, but the length and shape of the dotted notes varied from trumpeter to trumpeter. Some connected these notes and suggested always focusing on "long air",[8] while others wanted these notes with a bit of separation as demonstrated on the piano roll that Mahler recorded.[9] The general consensus was to err toward connected notes, but there was enough variety in the styles to prevent categorical descriptions. Therefore, these bars are unfortunately excluded from the comparisons of Part II.

Vibrato and *Rubato* – A common performance suggestion was to be judicious with the use of vibrato in this opening. Many of the players, including Yellow 1 and Yellow 2, suggested using no vibrato, particularly in the first seven measures, because this music is stark and sorrowful. Every player in the project warned against using a "pretty" or "lyrical" vibrato stating that it provided the incorrect mood, primarily because the movement is entitled 'Funeral march.' Two of these players also suggested stretching the G♯ in m. 12 to create more time for the dramatic crescendo, but this will be discussed further under the Eugene Blee portion of Chapter 9.

Breathing – The breaths taken in the Mahler were somewhat erratic and for one player, even contentious. Some trumpeters breathed in m. 10 before the sixteenth note F♯ that precedes the *Triole flüchtig*, but others felt it detracted from the forward motion. The most disputed breath occurs in the whole notes of m. 17, m. 18, and m. 19. Some of the participants believed that no

[8] Interview with Blue 2, March 8, 2010.
[9] Mahler, Gustav, Symphony No. 5, 1989.

breath is necessary in this region, while others took a breath before the final sixteenth note in m. 16 because it matched the breath they took in m. 10. No one took a breath between m. 18 and m. 19, but two players insisted that the whole orchestra will lift between m. 17 and m. 18. Of these two, Green 3 went so far as to say that anybody who said otherwise must have "never played with a conductor who knew what he was doing."

Compiled Interpretation

This is the only excerpt on which many of the players mentioned a particular recording that they enjoyed: the aforementioned Phil Smith recording with the New York Philharmonic under Zubin Mehta. Unsurprisingly, the overall compiled interpretation matches that recording perfectly. Choose a tempo around 64 and pace the opening using the *6/4* method. It doesn't matter if you single- or triple-tongue the opening, as long as the notes are clearly articulated and noticeably rushed. Phrase the opening in the *Terrace* style described above. When you reach the quarter note triplet, compress it using the *Rushed* method by making each note slightly quicker than the previous. Time may be stretched *very* slightly on either of the half notes (G♯ and F♯) that precede the two high B's, and if this is being played in an audition, the first high B will begin your loudest dynamic of the entire round. You may breathe immediately before or after the D natural, but you continue crescendoing all the way to the whole note B♭. The final triplets should be rushed in the same manner as the opening, but remember that trombones play those notes as well, and you may be asked to rush them at a slightly slower pace or not at all. If you triple-tongue the opening, single-tonguing can be a comfortable technique to slow down the final triplets.

CHAPTER 6—Mussorgsky/Ravel

Pictures at an Exhibition—Promenade

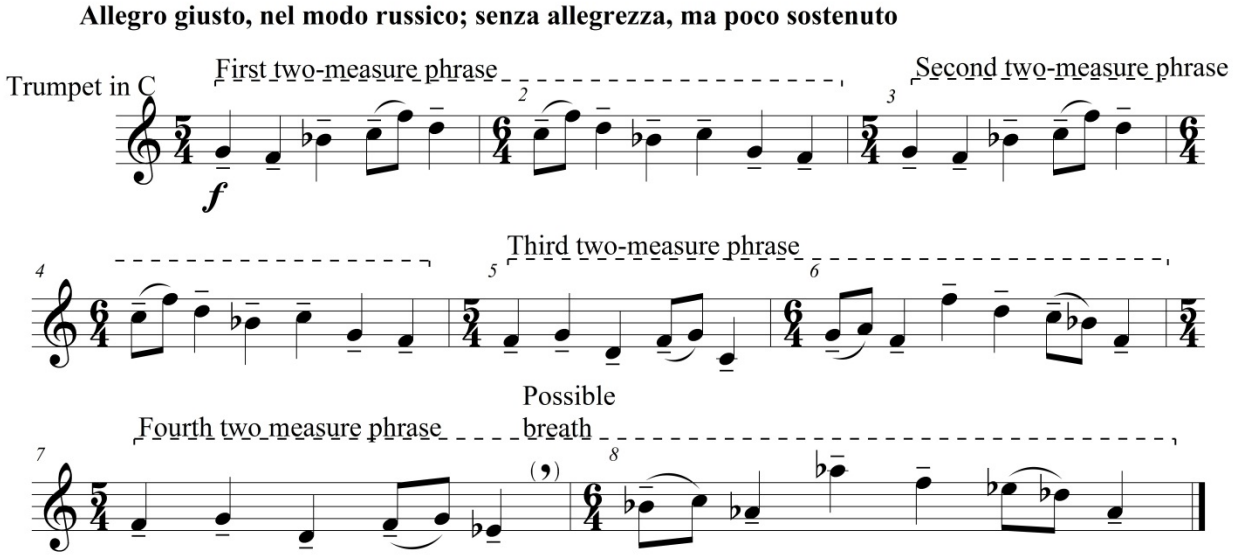

Figure 8. Mussorgsky/Ravel, *Pictures at an Exhibition* - Promenade, opening 1st trumpet

Ravel's orchestration of Mussorgsky's *Pictures at an Exhibition* is the fourth most requested piece for orchestral trumpet auditions.[1] Like the Beethoven excerpt, instead of flourishes of technique, this opening excerpt requires subtle interpretive choices to create interesting lines making it an extremely useful excerpt for this project. Each of these trumpeters imagined the Promenade as a stately gentleman walking through an art exhibition, but the methods used to illustrate this picture varied widely. Every recording of this piece is different, some more so than others, and I expected there to be a wide range of interpretations. Two of the categories proved to be far more important than any of the other musical decisions in determining the overall effect, so

[1] Hunsicker, "Surveys of Orchestral Auditions".

while the interpretations were subtly diverse, the data did not demonstrate this as much as I first presumed.

Tempo

The tempo choices for the Mussorgsky ranged from 82 to 96 bpm. However, only one person chose 82 bpm, and only one person chose 96 bpm. Every other trumpeter fell between 84 and 92 bpm. Twelve players were at either 88 or 90 bpm, meaning that the majority of the players preferred a moderate tempo. Of the rest of the trumpeters, there was a slight tendency toward the slower tempi, but the difference was marginal. It seemed that the trumpeters who had most recently won their jobs such as Gray 2 and Yellow 2, preferred slower tempi reasoning that this excerpt was an opportunity to show off timbre and intonation. Yet many that had held their positions longest—and presumably had sat through *many* auditions such as Orange 1 and Green 3—preferred faster tempi "that would not bore an audition committee."

Tempo was one of the two most significant comparative categories for this excerpt. If two of the trumpeters agreed on every interpretive decision but were more than four beats per minute apart, the two interpretations sounded very different. I believe this is because in this excerpt, more than any other excerpt in this project except possibly the Hindemith, the tempo was chosen based on the overall style the musician wanted. This choice was tied directly to each trumpeter's vision of the mood and character of their imagined gentleman in the art gallery, and therefore corresponded well to the overall style of the excerpt. For example, if the trumpeter imagined the gentleman as elderly and calm, the tempo would be slower. Yet if the trumpeter imagined the gentleman as powerful or sprightly, the musician would reflect that persona with a quicker tempo.

Shape of quarter notes

The Mussorgsky is rhythmically simple and dominated by quarter notes. The shape of these quarter notes was the other significant factor in differentiating the interpretations of this excerpt. If

two players agreed on the shape of their quarter notes and chose similar tempi, the two interpretations sounded very similar.

Sustained (most common – 15): These quarter notes had a slightly accented front, block shaped note, and little to no separation. Because of the energetic attack and lack of taper, this method naturally provided the most forward motion of these four criteria.

Bell tones (2nd – 4): These were the most aggressive quarter notes; they had a firm, bouncy attack, obvious tapers, and little separation – in short, they were bell-tones.

Lyrical (3rd – 3): This style of quarter note had a gentle attack but still had the same block-shaped body and little to no separation as the *Sustained* criterion. This was the lightest interpretation and was always accompanied by a tempo of 88 bpm or slower.

Tapered (none): The final style in this category had clear but sedate attacks with taper and no separation. This style only differs from the *Bell tone* style by its attack—*Tapered* does not have any accent on the front of the note. While some of the players described this as an alternative that conductors had requested, no player in this project used this as their personal interpretation.

The *Sustained* style is clearly preferred by the trumpeters to the other styles and is the safest shape for auditions. However, most of the teachers suggested that practicing the other shapes would not only prepare you for the contingency of this being asked on an audition, but it also would improve the consistency of your chosen style by clearly defining the styles in your ear. Orange 2 even suggested practicing the excerpt on each key of trumpet, e.g. C, B♭, E♭, etc., to see how the different timbres and physical characteristics of the horns influenced the note shapes.

<u>Goal of each phrase</u>

The rest of these categories are not nearly as critical as the previous two in defining overall style. 'Goal of each phrase' describes the phrasing shape of each of the four two-measure phrases, primarily through dynamic shaping. However, because there are no marked dynamic changes and

all of the players put a premium on consistency of tone through this excerpt, the differences in the following criteria were minimal. The trumpeters did agree, however, that the key to making any of these phrasings successful was to always have forward motion to the line, and consequently, most of these phrasing techniques are designed with horizontal connection in mind. To be perfectly honest, if I had not discussed the details with the musicians, I would have had a difficult time telling the different methods apart solely by listening to the recordings of the lessons, because each method accomplished the same objective—forward motion and connection.

Even (most common – 13): Most of the trumpeters did not have a specific phrasing goal in mind; they simply tried to play with an even tone that had energy in the connections between the notes. Yellow 3 pointed out that if there was constant connection, the natural contour of the line would generate all the phrasing necessary to create interest. There were two small variations that still fell under this criterion. Yellow 2 played most of the excerpt evenly, but he crescendoed slightly on the bottom note of the last two octave jumps in m. 6 and m. 8, the low F and low A♭ respectively. In the other variation, Orange 4 played the opening two phrases evenly, but then switched to *Metric division* for the last two phrases. He is listed under both criteria.

Arc (2nd – 4): In this phrasing, the trumpeter aimed for either beat 2 or beat 4 in the second measure of each two-measure phrase. Regardless of whether they chose beat 2 or beat 4, the choice remained consistent for the entire excerpt. I grouped both of these goal tones together because they had the same aural effect.

Hairpin (3rd – 3): This was the simplest of the methods that involved an actual goal tone; these musicians simply aimed for the downbeat of the second measure in each of the two-measure phrases. One player, Green 4, did alter his last phrase to aim instead for the high A♭ rather than the downbeat.

Metric division (4th – 1+1): Contrasting the *Hairpin*, this technique was the most complicated of the methods. To use this technique, the trumpeter mentally divided the two-measure phrases into multiple smaller measures to emphasize certain beats through metric agogic accents. For example, Green 3 grouped the quarter note beats into miniature measures of 2+3+3+3 for the first two phrases, then switched to 3+3+2+3 for the last two phrases. Orange 4, listed above under *Even*, switches to *Metric modulation* only for the last two phrases.

While there were multiple approaches, they all served the purpose of creating horizontal connection within the lines. Even though *Even* was the most common, the dynamic goals of the other three were so slight as to make little overall difference.

Extra breath

All of these musicians take breaths after m. 2, m. 4, and m. 6, although one player, Red 3, demonstrated the ability to play through the entire excerpt at normal volume and tempo without taking a single breath.[2] Physical rarities aside, some players chose to take a quick extra breath between m. 7 and m. 8. This category makes no difference in interpretation and is not considered in Part II. It is only included to benefit players preparing for an audition.

Last bar (most common – 9): These players stated that they had occasionally taken the breath before the last measure but sometimes chose not to, depending on the performance situation.

No (2nd – 8): These trumpeters preferred not to take a breath before the last bar. As audition preparation is intended to be the primary usage of this Part, I have classified in this criterion the one person who said he did not use the extra breath in auditions but was likely to use it during performance.

[2] This was done solely for demonstrating efficiency of air. He never performs the excerpt without the three normal breaths.

While many of the teachers commented on the last breath, none of them stated that they would consider the extra breath a taboo on the audition. Some just stated a preference for not taking one themselves. The only requirement was that the breath should not affect the tempo or take away too much tone from the previous note—exactly like the other three breaths in the opening.

Miscellaneous

Green 3 and Red 4 suggested that they increase the volume noticeably in the phrases where the brass would be playing with them, e.g. m. 3 and m. 4, but most of the musicians believed that simply hearing an imaginary orchestra joining you as you play is enough to make the change felt.

Compiled Interpretation

The tempo should fall between 88 and 92 bpm. Every quarter note must be identical—slightly accented front, block shaped note, no intentional separation. Each note sounds like it has a slight taper, but that comes from the weight and energy in each note's articulation rather than tapering each note dynamically. If the articulation is too heavy, it can create separation. Rather than dynamically shaping these phrases, each phrase should simply have a sense of forward motion. If you crescendo, then you will need to follow it with a decrescendo, and a decrescendo goes against the consistent flow that a man walking through an art gallery would have. If you need an extra breath in the last phrase, take it after the E♭ in measure 7, but make it quick and unobtrusive.

CHAPTER 7—Respighi

Pines of Rome—Offstage Solo

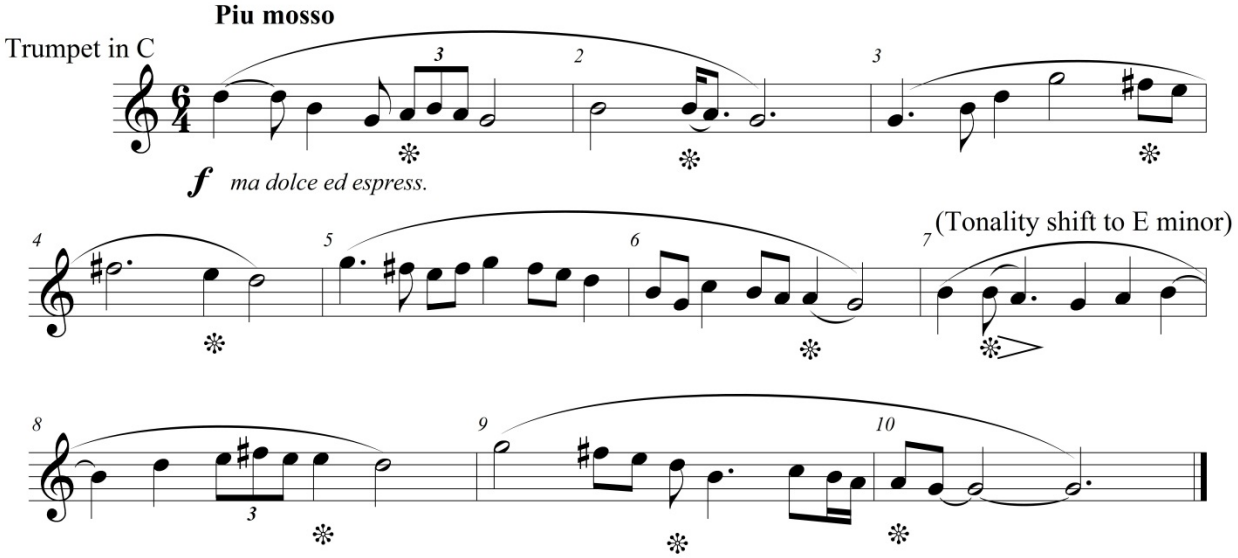

Figure 9. Respighi, *Pines of Rome* - offstage trumpet solo

The *Pines of Rome* is the third most requested piece on trumpet auditions, and the offstage solo from the second movement is the most requested lyrical excerpt.[1] Like the Mussorgsky and Beethoven excerpts, this offstage solo requires a tremendous amount of control, yet unlike those excerpts, the Respighi is a test of the musician's lyricism and phrasing, much like the Bizet excerpt. For this dissertation, I thought that studying each player's use of *rubato*, vibrato, and dynamic shapes would be enough to differentiate each interpretation, but the differences were obfuscated because every trumpeter approached this excerpt with a similar overall style—one of understatement and simplicity.

This excerpt is based on a Gregorian chant from a mass in the *Liber Usualis*, a book of commonly-used Gregorian chants in Catholic services; this plainchant is used specifically in the

[1] Hunsicker, "Surveys of Orchestral Auditions".

Sanctus from Missa IX, "Cum Jubilo" of Saint Antoine Daniel.[2] Because of this, most of the trumpeters exercised constraint in their *rubato* and dynamic contrasts, and many used the mental image of a monk singing a chant in a catacomb. Many of the trumpeters, particularly Yellow 4, had studied these chants and had copies of the original on-hand. Yellow 1 summarized his approach to this excerpt as, "[I] use only gentle phrases. I don't want any sharp turns of phrase or dramatic crescendos and decrescendos. Save it for a piece that cares."

Tempo

The tempo choices ranged from 55 to 72 bpm, but only three of the players chose a tempo below 60 bpm. Thirteen players chose a tempo between 60 and 64 bpm, and many of these players simply looked at the second hand on their wristwatch to find a tempo of 60 bpm. Like each of the other excerpts, tempo was important in the overall interpretation, but it did not affect the style as much as the others; almost every player employed a simple, lyrical approach regardless of the tempo they had chosen. For those that did use tempi at 66 bpm or above, the most common reasoning was to pick a tempo that would not 'bore' an audition committee; two of these musicians were principal players, so this advice likely stems from years of listening to this excerpt on auditions.

Rubato

Because of its lyricism, the Respighi excerpt is extremely conducive to using *rubato*. However, even though Respighi composed primarily in a Romantic style, this specific passage should not be treated as such. Most of the trumpeters cautioned against using overt *rubato* for many reasons: the offstage communication difficulties that *rubato* can cause, the moving accompaniment in the strings, and most importantly, the aforementioned chant origin of the melody. Almost all of these players stretched certain notes, but never in an overstated manner. For

[2] For an explanation of these masses as well as scores and audio files, visit the website for the Saint Antoine Daniel Chant Ordinaries at http://www.antoinedanielmass.org/kyriale/IX. Accessed June 2011.; There is an excellent discussion on the Gregorian origins of this excerpt on the Trumpet Herald online forums. http://www.trumpetherald.com/forum/viewtopic.php?p=1140148. Accessed June 2011.

example, it was common to stretch the first note of both of the eighth note triplets and then slightly compress the second two notes so the quarter note beat would not be distorted. This category makes a subtle but noticeable difference in the overall style of the excerpt, so it was an important determinant in the comparisons of Part II.

Beat (most common – 13): In this style, the musicians established a strict quarter note beat but allowed movement within the beats. This meant that any eighth note, sixteenth note or triplet could be stretched or pushed so long as it did not alter the arrival of the next quarter note beat.

Slight (2nd – 4): This method is identical in practice to the *Beat* method, but these players restricted the use to only one or two figures in the excerpt, usually the two triplets. This criterion is a compromise between the *Beat* and *Strict* criteria.

Phrase (T-3rd – 2): Two of the trumpeters advocated the use of *rubato* across multiple beats if the performer maintained an average tempo across the entire excerpt. These players believed that this excerpt is one of the few chances in an audition where a trumpeter can demonstrate his or her lyrical musicality, and this is an opportunity that should not be wasted.

Strict (T-3rd – 2): The final two players advocated a straightforward interpretation of the rhythms with no *rubato*. Again, they attributed this decision to the chant origins of the excerpt.

The *Beat* criterion was clearly the most common choice for this category, most likely because it allowed the musicians a chance to acknowledge the underlying nature of the chant while still demonstrating a small amount of Romantic sensibility.

Vibrato

Because of its Gregorian chant origins, a teacher once informed me in a masterclass that it is appropriate to play this excerpt without vibrato. However, every participant of this project advised

against this because this excerpt is one of the few chances in an audition to demonstrate lyrical technique, and vibrato is an important component of this. Yet while each musician did use vibrato, they employed it in many different manners. For example, Yellow 3 and Gray 1 used a gentle and constant vibrato but removed it at certain spots to create emphasis on certain notes. Red 2 employed vibrato in the exact opposite manner; he played the excerpt with very little vibrato but increased vibrato on the most important notes of his phrase. Others used a 'delay' effect in which most notes started without vibrato but was added and altered depending on the importance of the note. Because each use of vibrato was personalized, I was unable to group the players into the necessary criteria rendering this category useless for the later comparisons.

Phrasing methods

When listening to the recordings of the performers on this excerpt, every interpretation was smooth, connected, and subtly phrased. As has already been discussed thoroughly above, the underlying chant influenced every aspect of their interpretations, and their phrasing was no exception. Rather than creating interest through large dynamic contrasts, almost every trumpeter tried to remove all sudden changes or "bumps" from their phrasing. Instead, they created interest by emphasizing goal tones through alternative means, and the structures of these divided into two basic criteria.

Upper neighbor (most common – 17): Surprisingly, there was a near unanimous method among the players to phrasing this excerpt, although some were more obvious in using this method than others. Simply put, the musicians emphasized an upper neighbor resolution in most measures, and I have marked these notes with an asterisk below the staff in the included part. Each of these notes was given a small amount of extra weight and resolves to the following note with a slight decrescendo, although some of the trumpeters excluded one or two of these emphasis points. While the contour inevitably provided natural dynamic shape, these musicians focused primarily on weighting the notes to keep the phrasing more

subtle. Others made a particular point of using vibrato to highlight these notes as described under the 'Vibrato' category. Of these, Red 2 used vibrato only on the upper neighbors to make them "sparkle." Conversely, Yellow 3 and Gray 1 used vibrato on every note *except* the upper neighbor notes likening this to playing an open string on a stringed instrument.

Contour (2nd – 3): The other three trumpeters did not like the *Upper neighbor* phrasing; one went so far as to call it "overly cerebral." These players simply followed the contour of the various phrases, making sure their lines were always connected and without sudden changes in dynamic.

These phrasing techniques were a strong factor in determining the overall character of the interpretation, but unfortunately, the grouping was so predominately in favor of *Upper neighbor* that it was not as practical in differentiating the trumpeters as it could have been.

Last note

While not an important indicator of overall interpretation, the use of vibrato on the last note of this excerpt was discussed by many of these musicians. Every player used a slow decrescendo on this note. So the primary argument was how to apply vibrato, and each player was specific about how it should be resolved. I did not intend to discuss this originally, so some of the participants did not comment on this. However, enough of the interviewees brought this up without prompting that it was worth noting.

Partial (most common – 9): Most of these trumpeters began the final G with the same vibrato that they had used throughout the excerpt but then allowed the vibrato to slowly come to a stop. Orange 4 described it as "fading to black", while Orange 2 explained it as "allowing the tone to become still."

End (2nd – 5): These trumpeters held the vibrato to the end of the note, although Yellow 1 warned that if one uses this method, it is important not to end on either the high or low side of the pitch; the vibrato must stop directly in the center of the pitch.

None (3rd – 1): Only one player suggested not using any vibrato on the last note.

While this category would be useful in helping to prepare for the minutia of an upcoming audition, the results were not indicative of any overall stylistic choices and were therefore excluded from the comparisons of Part II.

Miscellaneous

Yellow 3 and Gray 1 both discussed using "slow valves" on the Respighi to create a small amount of portamento between the notes; they both believed this extra connection mimics the human voice as well as rounds off any sharp edges in the contour caused by slurring larger intervals.

Tone color – Several of the trumpeters, including Purple 1, Blue 2, and Blue 4, thought it musically necessary to alter their sound slightly in the middle of the Respighi excerpt. In m. 7, the tonality of the accompaniment shifts from G major to E minor, and to reflect this change, these musicians changed their timbre from that downbeat onwards. Orange 1 used the following mental image to facilitate the change. "Imagine lying in a field and watching the clouds go by. It's a beautiful sunny day, and the clouds are white and wispy. When you get to the E minor section, the clouds have to become suddenly gray. As you move toward [m. 9], the clouds become thicker and thicker, and in the end, the observer just falls asleep waiting for the rain."

Compiled Interpretation

Choose a tempo around 62 bpm, but do not let it become too slow. Stylistically, this should not be a Romantic lyricism, rather, it should be understated and beautiful with no sharp turns of phrase or dynamics. The quarter note beat should remain steady, even while breathing between phrases, but a small amount of *rubato* can be used within each beat, particularly on the two triplets. For phrasing, aim for the tension and release provided in most bars by upper neighbor notes resolving downward by step as marked on the part above. When the harmony changes to E minor in m. 7, strive for a darker mood through changes in timbre and vibrato. Vibrato should be used

throughout, but like the lyrical approach to this excerpt, it should remain understated, never too wide or too fast. By increasing vibrato or taking it away entirely, it can accentuate important notes such as the upper neighbor notes in your phrasing. The last note should begin with vibrato but become still toward the end of the note.

PART II: Interpretation Comparisons

As defined in the Introduction, the primary objective of this project was to establish which musical influences, if any, affect interpretations of professional musicians. I have constructed three different groupings for the participants in order to search for patterns: colleagues within their current orchestra section, teachers and primary influences, and regional tradition. Using the categories outlined in Part I to compare patterns within these sets, it is possible to discern some likely sources for the interpretations of these musicians.

Because of the relatively small sample size, this part does not attempt to draw definite conclusions based on statistical analysis. Instead, the goal is to present patterns and provide commentary on the most noteworthy of these. In addition to my observations, this information will allow the reader to draw their own informed conclusions and apply them in their performing and teaching as they best see fit. For every grouping, I have created tables that are color coded by the alias of each orchestra. In the grouping by trumpet section, this is admittedly redundant as the orchestras define the colors, but the color system allows for easier pattern recognition in the groupings by teacher and by tradition. I will be using the shorthand terminology for the categories established in Part I for the following analyses. Because these categories have already been defined and discussed in the previous chapters, I will not be going into great musical detail in this Part, but I have added brief descriptions of each criterion as footnotes below the initial tables. For further descriptions, please refer to the underlined sub-headings in each chapter in Part I; those sub-headings match the tables' headings exactly.

As discussed in Part I, some of the criteria listed in the tables do not apply well in determining how similarly two players sound when playing an excerpt. For your reference, these are:

The ‘Volume’ category in the Beethoven excerpt was not included specifically in the original questions for each lesson, so many of the trumpeters were not questioned about it. Furthermore, when they did provide a response, the situation was not defined between performing this excerpt with an orchestra versus performing this in an audition, thus making it impossible to ensure that their answers were referring consistently to the same performance situation.

The ‘Beginning dynamic’ category in the Bizet is excluded for the same reasons as the Beethoven’s ‘Volume’ category.

The ‘Extra breath’ category of the Mussorgsky was asked to all of the musicians, but some of the player’s stated that they had different preferences depending on whether they were performing or playing an audition. Others did not mention the performance situation at all, creating an inconsistency across the criteria. More importantly, this breath, while pedagogically relevant, does not create a noticeable difference when listening to the recordings and therefore does not strongly differentiate the players’ interpretations.

The ‘Vibrato’ category from the Respighi excerpt is not useful for comparisons because every player in this project uses vibrato on this excerpt, and I was unable to generalize the nuances of each player into criteria.

The ‘Last note’ category from the Respighi excerpt is excluded for the same reasons as the Beethoven ‘Volume’ and Bizet ‘Beginning dynamic’ categories.

CHAPTER 8—Excerpt Breakdown by Section

Hindemith

The likelihood of each trumpeter having heard one of his colleagues perform the Hindemith was greatly diminished because it is a work for solo trumpet and piano. Therefore, I hypothesized that this excerpt would have the most differentiation by section, and it did for the most part. There were, however, some interesting similarities between certain players.

Table 1. Hindemith Sorted by Section

Musician	Tempo	Length and Direction of 1st Quarter Note[a]	Goal of 1st Phrase	Phrasing of Descending Motive[b]	Phrasing of 3 bars before Reh. 1	*Ritard.* at m. 15[c]
Yellow 1	124	Equal	Low F	Both bottom notes	Final G	Slight
Yellow 2	102	Equal	Last C	Both bottom notes	Final G	No
Yellow 3	128	Long	Last C	2nd high note	Final G	Slight
Yellow 4	-	-	-	-	-	-
Purple 1	105	Long	Last C	Last note	Final G	-
Purple 2	105	Long	Low F and Last C	Last note	-	-
Blue 2	115	Long	D♭	Both high notes	Final G (w/out breath)	No
Blue 3	110	Equal	D♭ (possible last C)	-	C♯ before final G	No
Blue 4	114	Long	D♭	2nd high note, but both high	Final G	Slight
Orange 1	120	Long	Last C	2nd high note	Final G	Slight
Orange 2	110	-	-	Both high notes	Final G	No
Orange 3	100	Equal	Last C	Last note	Final G	Slight
Orange 4	115	Long	Last C	2nd high note	Final G	No
Red 2	115	-	-	Last note	Final G	No
Red 3	120	Long	Last C	Last note, but both low	Final G (w/ tongue)	Slight
Red 4	118	Separated	Last C	2nd high note	Final G	Slight
Green 1	110	Separated	Low F	2nd high note, but both high	Final G (w/ tongue)	No
Green 3	112	Long	Low F	2nd high note, but both high	Final G (w/ tongue)	-
Green 4	110	Long	Last C	Last note	Final G	No
Gray 1	110	Equal	E♭	2nd high note	Final G	Yes
Gray 2	108	Long	Last C	2nd high note	Final G, but last 3 notes	Yes

[a] Long = leading to high G, no accent; Equal = equal weight and shape to C and G; Separated = separated from C and G

[b] 2nd high note = hairpin phrasing; Both high notes = two distinct but connected gestures

[c] Slight = placing of 8th note

Tempo

Two sections grouped well under tempo, Orchestra Green and Orchestra Purple. Both members of Orchestra Purple chose 105 bpm, and in Orchestra Green, everyone was between 110 and 112 bpm. It is also noteworthy that Gray 1, former principal of Orchestra Green, was similar to the other Orchestra Green players.

Goal of 1st Phrase

The entire Orchestra Orange section phrased this category to the *Last C*, but this was the most common interpretation, so it is not surprising. However, all three of the members in Orchestra Blue phrased to the $D\flat$, and this is striking as they were the only players in the project to choose this phrasing. This implies that there may be some particular trait that the members of Orchestra Blue share in their section that affects the way each individual phrases other pieces. Unfortunately, I was not able to hear the principal of Orchestra Blue play this piece, so there was not a fourth option for comparison.

Hindemith conclusions by section

The categories from the table not discussed specifically above were either almost unanimous, such as 'Phrasing of 3 bars before Reh. 1, or very divergent, such as 'Length and direction of 1st quarter note'. The only trumpet section that matched all four of the primary categories on the Hindemith was Orchestra Purple. Yet even though they were consistent across all four of the most important categories for this excerpt, the significance of this is somewhat diminished as there were only two participants from that section. The other orchestras often contained at least two members with like interpretations, for example Blue 3 and Blue 4, but no section had three or more similar renditions. Green 1 and Green 3 matched on two of the rarer criteria—phrasing the first phrase to the *Low F* and tonguing the written G natural before Rehearsal 1. However, they disagreed on the 'Length and direction of 1st quarter note' category, and after re-listening to their recordings, Green 3 was not only more connected than Green 1, but also

considerably more aggressive. While this last observation is subjective and therefore excluded from the results; they overall effect of the two interpretations was quite different regardless. Consequently, because of the greatly differing interpretations, the results support the original hypothesis of this sonata providing little correlation within these groupings.

Haydn

For the Haydn, I assumed that the principal of each section would be the performer that the others heard on a most regular basis, and the influence of the principal's choices would be further heightened as the others would be accompanying him in the orchestra. Therefore, I expected the results to be most consistent between players that had played with the principal for the longest.

Table 2. Haydn Sorted by Section

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes[d]	16th note tonguing[e]	Trill methods[f]	*Subito piano* at m. 30
Yellow 1	130	C	Timpani	Slur two, tongue two	Upper neighbor	-
Yellow 2	120	E	Timpani	Slur two, tongue two	Upper neighbor	Yes
Yellow 3	130	E, but pretty equal	Long	Tongue all	Upper neighbor	Yes
Yellow 4	120	E	Firm	Slur all	Upper neighbor	Slight
Purple 1	130	E	Firm	Slur two, tongue two	Melodic	Yes
Purple 2	-	-	Timpani	Slur all	Upper neighbor	Yes
Blue 2	132	C	Timpani	Slur two, tongue two	Upper neighbor	No (different phrasing)
Blue 3	124	C	Long	Varies	Upper neighbor	No
Blue 4	120	C	Timpani	Slur two, tongue two	Upper neighbor	No
Orange 1	134	C	Timpani	Slur all	Previous note rule	No
Orange 2	120	C	Timpani	Varies	Varies	-
Orange 3	120	Even	Timpani	Slur two, tongue two	Melodic	Slight
Orange 4	120	E	Detached	Slur two, tongue two	Melodic	-
Red 2	122	E	Timpani	Slur two, tongue two	Upper neighbor	-
Red 3	126	E	Long	-	Previous note rule	-
Red 4	120	Even	Timpani	Slur all	Upper neighbor (as grace note)	No
Green 1	120	-	Firm	Tongue all	Melodic	No
Green 3	128	E	Detached	Tongue all	Directional rule	-
Green 4	-	E	Timpani	Slur two, tongue two	Upper neighbor (as grace note)	Yes
Gray 1	122	C	Timpani	Slur all	Directional rule	Yes
Gray 2	115	C	Detached	Slur two, tongue two	Varies	Yes

Tempo

Three of the four principals selected a tempo at 130 bpm or above, but the majority of the players chose a tempo around 120 bpm including the principal of Orchestra Green. Alone, this contrast is almost enough to disprove my original principal-influenced theory, but the Orchestra Orange section aced as an exemplar. All three section members played the Haydn at 120 bpm, yet Orange 1 was above 130 bpm. Orchestra Yellow provides further evidence; Yellow 1 had been playing with Yellow 3 for seven years, and they chose the same tempo. Yet Yellow 1 had been playing with Yellow 4 for 28 years, and they were 10 bpm different.

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[d] Long = lyrical approach; Firm = long, no separation; Timpani = firm attack, bounce, taper; Detached = staccato, separated

[e] Varies = follows no specific rule

[f] Upper neighbor = every trill begins from the upper neighbor; Melodic = every trill begins on the principle of the note; Previous note rule = from upper neighbor unless the note is preceded by the upper neighbor; Directional rule = from the note if approached from below, from upper neighbor if preceded by the same or higher pitch

Goal of 1st phrase

Most sections had a majority in this category, which is noteworthy because the majority was not the same in the various sections. Orchestra Blue was the only unanimous section, while Orchestra Orange had the most variation.

Length of non-slurred 8th notes

This category had very mixed results. Only Orchestra Orange and Orchestra Blue had a majority, and neither was unanimous.

16th note tonguing

This was surprisingly divergent considering that the section would be asked to match the articulations of the soloist. No section was unanimous or even had more than two players using the same method.

Trill methods

This was probably the tightest grouping by section in any category of the Haydn. Both Orchestra Yellow and Orchestra Blue were unanimously in favor of the *Upper neighbor* criterion, and the Orchestra Orange section was also similar in its approaches given that the *Melodic* and *Previous note* methods yield very similar results in actual practice for this excerpt.[1]

Haydn conclusions by section

No section trumpeter played this excerpt similarly to their principal's interpretation regardless of time spent with the orchestra. Overall, this excerpt was as divergent as the Hindemith if not more so. As a concerto is a solo work, these results do enforce the soloistic principle of personal expression, but I found the degree of individualization surprising given the time spent playing this work together. The Haydn Trumpet Concerto is not only the most performed trumpet concerto, it is the most popular concerto that Haydn wrote for any instrument.[2] Only a handful of

[1] As most of the trills in the Haydn are approached from the upper neighbor, both methods imply that the trill begins on the note.

[2] Tarr, "Haydn's Trumpet Concerto—Origins", 66.

players made a majority of the same decisions as another player, and only two of these belonged to the same orchestra, Blue 2 and Blue 4. However, after re-listening to the recordings of both of these trumpeters, the large difference in tempo creates a vastly different feel to their interpretations; Blue 2 is quite virtuosic whereas Blue 4's approach is lyrical. Therefore, there is no true grouping within sections on this excerpt.

Beethoven

Given that the participants of this project were all professional orchestral musicians, I assumed that these trumpet sections would have greater similarities in interpretation on the orchestral excerpts than the solo excerpts, as the orchestral pieces represent the repertoire that they play together daily. The results for the Beethoven excerpt confirmed this by having strong majorities in three of the four significant categories, not only within each section, but across all participants of the project.

Table 3. Beethoven Sorted by Section

Musician	*Rubato* in first two bars[g]	Tempo change[h]	Shape of 8th notes in 1st two bars[i]	Shape of 8th notes in last 4 bars[j]	Volume[k]
Yellow 1	Yes	Sudden	Round	Short	-
Yellow 2	Yes	Gradual	Round	Short	Loud
Yellow 3	Rubato	Gradual	Round	Short	Loud
Yellow 4	Yes	Sudden	Short	Round	Loud
Purple 1	Yes	Gradual	Short	Round	Loud
Purple 2	Yes	Gradual	Long	Short	-
Blue 1	Rubato	Gradual	Round	Round	-
Blue 2	Yes	Sudden	Round	Long	Comfortable
Blue 3	No	Gradual	Long	Round	-
Blue 4	Rubato (slight)	Gradual	Round	Round	Comfortable
Orange 1	No	Gradual	Round	Round	-
Orange 2	Rubato	Gradual	Round	Round	-
Orange 3	Rubato	Gradual	Round	Round	Comfortable
Orange 4	No (slightly long ½ notes)	Gradual	Round	Round	Loud
Red 2	Yes	Gradual	Short	Short	-
Red 3	No	Gradual	Long	Long	-
Red 4	Yes	Sudden	Short	Short	-
Green 1	Rubato	Gradual	Round	Round	Comfortable
Green 3	No	Gradual	Short	Short	Loud
Green 4	No	Gradual	Round	Round	Comfortable
Gray 1	Rubato	Gradual	Round	Round	-
Gray 2	Rubato	Gradual	Round	Round	-

Rubato in first two bars

Every section except Orchestra Orange had a majority of players agree on this category, but the table does not seem to indicate as strong a grouping for this category as it did for categories below. Furthermore, as indicated on the table, some of the musicians used minor alterations within criteria fragmenting this category further. However, Chapter 3 explained that the *Yes* and *Rubato* criteria only differ by the length of the sixteenth notes in each measure and therefore sound very similar. When considering this, it becomes clear that Orchestra Green is the only section that preferred the stricter *No* criterion while Orchestra Yellow, Orchestra Blue, Orchestra Purple, and

[g] Yes = all notes in time; No = long notes are not in strict relation to 8th notes; Rubato = 8th notes are in time with half notes, but 16th notes are compressed

[h] Gradual = accelerando happens throughout bar 3; Sudden = alla breve at beginning of bar 3

[i] Long = block shape with very little space between notes; Short = separated with no taper (block shape); Round = separated but with taper

[j] Long = block shape with very little space between notes; Short = hard staccato; Round = separated but with taper

[k] (Only if mentioned by teacher specifically); Loud = forceful or aggressive dynamic; Comfortable = relaxed dynamic, but still full

Orchestra Red favored the relatively free *Yes* and *Rubato* criteria. Orchestra Orange was the only section which did not have a majority of members favor a particular method.

Tempo change

The method of accelerando was almost unanimous across all the players in favor of the 'gradual' accelerando, meaning that it is not very useful in differentiating the musicians. Furthermore, of the four outliers that used the *Sudden* criterion, Blue 2 admitted that he *thought* of it as a 'gradual' accelerando, but he changes the tempo quickly beginning in bar 3. Because of this, his interpretation sounds like an *alla breve*, hence his inclusion in the *Sudden* grouping. The other three outliers have one thing in common: they were three of the four oldest performers in the project. Therefore, the *alla breve* style is probably an older interpretation of this excerpt that has fallen out of favor; this hypothesis is discussed further under Williams Vacchiano's students in the next chapter.

Shapes of 8th notes

Both categories that label 8th notes in the two portions of this excerpt showed strong grouping in every section except Orchestra Purple. Depending on the section, the players favored either R*ound* or S*hort* eighth notes shapes. Orchestra Orange was unanimous in their choices of R*ound* eighth notes for both parts, but Orchestra Blue, Orchestra Red, and Orchestra Green also had a majority of players choose *Round* eighth notes. Orchestra Yellow was the most interesting case, as three out of the four members chose *Round* eighth notes for the first half but switched to *Short* eighth notes for the second half. Only eight of the twenty-two participants chose to change their note shapes between the two parts, and Orchestra Yellow had four of these. Therefore, it is unlikely to be a coincidence that three of the Orchestra Yellow members changed styles between the two halves in addition to using the same styles in both halves. Of these three musicians, Yellow 2 is relatively new to the section, but Yellow 1 and Yellow 3 have been playing together for seven years. Considering their chairs, Yellow 4 would likely never play this piece, which might explain why his

choices for the two halves of the excerpt were the exact opposite of his three colleagues. Overall, this category represents a strong case for collegial influence on this excerpt.

Beethoven conclusions by section

Based on the tables, Orchestra Orange was easily the most unified section on the Beethoven. Not only did they all use the *Gradual* accelerando, but they matched note lengths in both halves of the excerpt and only differed on the strictness of their time in the opening. When examined as sections, Orchestra Yellow, Orchestra Blue, and Orchestra Green all had a majority of the same answers in each category. However, for excerpt interpretations to sound similar, the categories must align from player to player. For example, using the majority answers from the Orchestra Blue section in Beethoven, we can establish that the 'compiled' interpretation for Orchestra Blue employs *Rubato* in the first two bars, a *Gradual* accelerando, and *Round* eighth notes in both halves of the excerpt. This is useful as it gives performers a usable guide in how to interpret the excerpt, and this interpretation does match perfectly with the principal's interpretation. However, when I actually listened to the four recordings in sequence, only two of them truly sounded similar, Blue 1 and Blue 4, because they matched all four criteria. Blue 3 only matched two of the principal's criteria, and Blue 2 only matched one of the principal's. While their criteria contributed to the majority consensus of interpretation, they do not have a similar interpretation to what was just established as the 'Orchestra Blue interpretation.' Therefore, Orchestra Orange is the only section that had a majority of players interpreting this excerpt in the same way.

Other than Orchestra Orange, no section had discernable commonalities corresponding to the tables, although some players within those sections matched up well, particularly when including non-objective results. For example, Yellow 2 and Yellow 3 were very similar. The only difference in their interpretations was that Yellow 3 compresses his first sixteenth notes slightly; otherwise, their overall structure, note lengths, and tempo changes matched closely. Furthermore, even though vibrato usage was not able to be included in the overall comparisons, Yellow 1, Yellow

2, and Yellow 3 all suggested that they may choose to use no vibrato on this excerpt. Because of these multiple similarities, Orchestra Yellow does show a strong influence as a section. Some players had similar grouping in multiple categories, such as Green 1 and Green 4, but this could be attributed to their similar educational backgrounds. Chapter 9 will explore this under the students of Barbara Butler and Charlie Geyer. Blue 4 is remarkably similar to Blue 1's interpretation, but this is not surprising as he is a self-proclaimed "[Blue 1] admirer."

Bizet

The Bizet excerpt differed from the other excerpts in that the primary decision, 'Method used to play low E♭', is a mechanical decision rather than a musical one. When I began this project, I did not realize that a decision based on mechanics would be considerably more personal than musical decisions, and this difference affected the groupings considerably.

Table 4. Bizet Sorted by Section

Musician	Method used to play low E♭[l]	Tempo	Dynamic goal of each 2-bar phrase[m]	Beginning dynamic
Yellow 1	Trigger opening	75	Beat 3	Mezzo forte
Yellow 2	Custom equipment (tuning slide)	60	Downbeat	Mezzo forte
Yellow 3	Pull tuning slide	64	Downbeat	Mezzo forte plus
Yellow 4	Trigger 1 bar	60	Downbeat	Mezzo forte plus
Purple 1	Trigger opening	60	Downbeat	Mezzo forte plus
Purple 2	Trigger 1 bar	65	Downbeat	Mezzo forte
Blue 1	Trigger 1 bar	65	Downbeat	-
Blue 2	Trigger 1 bar	64	Beat 3	Mezzo forte
Blue 3	Trigger 1 bar (plus following 2 bars)	58	Downbeat	Mezzo forte plus
Blue 4	Trigger 1 bar	60	Downbeat	Mezzo forte
Orange 1	Only low E♭	70 (?)	Downbeat	Under celli
Orange 2	Custom equipment (The Shredder)	60	Downbeat	Mezzo forte
Orange 3	Trigger 1 bar	66	Downbeat	Easy forte
Orange 4	Trigger 1 bar	60	Beat 3	Mezzo 'comfortable'
Red 2	Trigger opening	64	Downbeat	Comfortable forte
Red 3	Pull tuning slide	65	Beat 3	Mezzo forte
Red 4	Trigger 1 bar	60	Downbeat	-
Green 1	Trigger 1 bar	65	Downbeat	Comfortable forte
Green 3	Trigger opening	68	Downbeat	-
Green 4	Trigger 1 bar	-	Downbeat	-
Gray 1	Trigger 1 bar	60	Downbeat	-
Gray 2	Trigger 1 bar	62	Downbeat	Mezzo forte

Method for reaching low concert E♭

In my experience as a performer, it is easiest to play this excerpt in tune within the trumpet section when both players are using the same method to reach the low concert E♭. Even if both trumpeters are playing at the correct pitch, the different fingerings can create very different timbres making it seem out of tune. Because of this, I thought there would be agreement within each section on how to approach this mechanically, yet this was not the case; Orchestra Blue was the only section that had more than two players using the same method.

Nevertheless, there was a reason that these sections did not group strongly in this category. Most of the teachers told me that they chose their method based entirely on what gave them the best results in the audition, and Purple 2 even admitted to creating an alternate embouchure just

[l] Only low E♭ = only triggers the 3rd valve for the low E♭; Trigger 1 bar = pull out third slide and use false fingerings only for 2-bar mini-phrase with low note; Trigger opening = pull out third slide for opening 8, 9, or 10 bars; Trigger all = pull out third slide for entire excerpt and use false fingering; Custom equipment = had custom horn or slide built to play in A; Pull tuning slide = pulls B♭ tuning slide out

[m] Even = simply lyrical with no dynamic goal; Downbeat = downbeat of 2nd bar; Beat 3 = 3rd beat of 1st bar

for the first portion of this excerpt. Many of them reminded me that the reason for including this excerpt on an audition is not to determine which method the player employs; rather, it is to determine who can overcome the obstacle with the greatest ease and still convey a coherent musical phrase. In this light, it makes sense that each player would embrace the method that allowed them to cope most easily with the hurdle. Furthermore, many admitted to being comfortable with relying on a less consistent method in performance, e.g. playing the concert E♭ as a pedal tone without slide assistance, because they were trying to play beneath the dynamic of the cello section anyway.[2]

Tempo

Tempo choices within each section were completely inconsistent. Only two sections, Orchestra Yellow and Orchestra Orange, had even two players within one beat per minute of each other, and these were both at the tempo commonly marked on the excerpt, 60.

Phrasing goal of each mini-phrase

Like the accelerando method from the Beethoven, this criterion was almost entirely unanimous. All but four players chose the *Downbeat* criterion, and the four outliers all belonged to different sections, had different teachers, and came from different generations. In short, they had nothing in common.

Bizet conclusions by section

The two inconsistencies of this excerpt as defined in Part I, the tied note discrepancy and the release of each two-measure phrase, made the interpretations of this excerpt extremely difficult to compare. However, the existence of these two inconsistencies further supports the preliminary conclusions that these trumpet sections did not group well. This divergence was especially

[2] Because of the acoustics of trumpets with only three valves, it is not possible to play below the first overtone of the instrument's overtone series. Therefore, any note below the written low F♯ of a particular keyed trumpet, e.g. C or E♭, can only be played through physical manipulation of the performer's embouchure, airstream, and throat. These false notes are called pedal tones.

surprising given the prominence of the *Trigger 1 phrase* technique for playing the low concert E♭ and the *Downbeat* method of phrasing for each mini-phrase; it seemed likely that given these two strong majorities, chance alone would have aligned the interpretations of the members of at least one section. Yet the tempo choices were too varied for most of these interpretations to sound similar. Especially when considering that at the lower metronomic speed of this excerpt, the difference between one or two beats per minute was more exaggerated than it would have been at a faster tempo.

Mahler

Because of the popularity of the Mahler excerpt among trumpeters, I thought this excerpt would have more individual nuance than the other excerpts and therefore would be more difficult to define categories. While there was certainly no lack of individuality on the Mahler, many of the participants cited similar influences, and this not only showed within their interpretations, but made generalizing the categories much simpler.

Table 5. Mahler Sorted by Section

Musician	Method for rushing triplets[n]	Phrasing of opening[o]	Quarter note triplet[p]	Tempo (half note)	Rushing of last triplets[q]
Yellow 1	Half note frame	-	Steady	68	No
Yellow 2	6/4	Terrace (w/out pull back after 3rd)	Steady	52	Yes
Yellow 3	6/4	Terrace	Steady	60	Yes
Yellow 4	6/4	Terrace	Steady	68	-
Purple 1	6/4	Terrace	Rushed	65	Yes
Purple 2	16th notes	-	Rushed	-	Yes
Blue 1	6/4	Terrace	Rushed	60	Yes
Blue 2	6/4	Terrace	Rushed	64	Yes
Blue 3	16th notes	-	Rushed	58	Yes
Blue 4	6/4	Terrace (Troops marching)	Rushed	65	Yes
Orange 1	Half note frame	Terrace	Rushed	66	Slight
Orange 2	Half note frame (Pendulum)	Terrace (Pendulum)	Steady	55	Slight
Orange 3	Half note frame	As marked	Rushed	62	Yes
Orange 4	Half note frame	As marked	Steady	66	No
Red 2	16th note	Terrace (but starts at mf)	Rushed	64	Yes
Red 3	Half note frame	As marked	Rushed	65	Yes
Red 4	Half note frame	As marked	Rushed	66	Yes
Green 1	6/4	Terrace	Rushed	62	Yes
Green 3	6/4	As marked	Steady	66	-
Green 4	6/4	Terrace	Rushed	-	Slight
Gray 1	Half note frame	As marked	Rushed	54	Yes
Gray 2	6/4	Terrace	Steady	66	Yes

Pacing of opening

Only one section was unanimous in this category—Orchestra Green used the *6/4* method—but every other section grouped into at least a majority. Even more interesting was that the preferred method differed between sections, indicating that colleagues had a noticeable influence on this category. Orchestra Yellow, Orchestra Blue, and Orchestra Green all had a majority of members that favored the *6/4* method, but Orchestra Orange and Orchestra Red both chose the *Half note frame*. The *16th note* method was relegated to an unusual individual preference, and no section had more than one person using this method.

Phrasing of opening

[n] 6/4 = divide the half note into three and place a 16th note triplet on the last beat; 16th notes = play three 16th notes beginning on the 'e' of beat 4; Half note frame = gets tempo and just 'fits' rushed triplets

[o] Terrace = start at piano and each of the first three iterations get louder (p-mp-mf) come back down one level for 4th iteration and each one gets louder to last forte; As marked = plays exactly what is marked in the part

[p] Rushed = accelerando through the figure, each note gets quicker; Steady = all three notes are equal, but played faster than an actual quarter note

[q] Yes = same as opening; No = in time triplets; Slight = rushed, but not as fast as the opening

Only Orchestra Yellow, utilizing the *Terrace* criterion, was unanimous in this category. The *Terrace* method was the most common choice overall, but every other section had a fairly even mix of the other criteria. Conversely, Orchestra Red and Orchestra Orange had more members using the *As marked* style. As the principal players are the only trumpeters who regularly perform this excerpt, the fact that every principal used the *Terrace* criterion was the most useful information to any aspiring performer.

Quarter note triplet

Orchestra Purple, Orchestra Blue, and Orchestra Red were unanimous in choosing a *Rushed* quarter note triplet, while the Orchestra Yellow section was unanimous in using a *Steady* quarter note triplet. A majority of the Orchestra Green players also used the *Rushed* triplet, especially when including the former member of their section, Gray 1. Orchestra Orange was the only section with an even split between the two styles. This category had the tightest grouping by section of any of the criteria thus far. However, the *Rushed* triplet was by far the most common, and only one section unanimously chose something different. From these results, we can assume that something happened within Orchestra Yellow to push them toward the less common choice, but determining what that was would involve gathering much more background information. When asked about this preference, Yellow 4 cited his German students in saying that this triplet "should be no big deal." The other three members of this orchestra simply stated that it was a personal preference, but Yellow 1 admitted that he thought the *Rushed* triplet sounded "corny".

Tempo

The results were inconsistent within each section on tempo choices on this excerpt. This might be attributed to the fact that some of the trumpeters played the opening seven bars with *rubato* yet switched to a steadier tempo beginning in m. 8, but there was still little consensus within the sections. Orchestra Red was the most consistent section as each of its members chose a tempo of either 64 or 65 bpm. Orchestra Yellow, Orchestra Blue, and Orchestra Orange all had an extreme

outlier who chose a tempo below 59 bpm, but their other members were still spread between 60 and 66 bpm.

Rushing of last triplets

Again, Orchestra Red was unanimous, but Orchestra Blue and Orchestra Purple were also unanimous in choosing to rush the final triplets in the same manner as the opening.

Mahler conclusions by section

If we set tempo aside, the results seem to imply that the trumpeters were strongly influenced by their colleagues on the Mahler excerpt. While each section had one outlier, a majority from each section was remarkably similar, and furthermore, most of the sections had its own clearly defined approach that was unique to that section. For example, Orchestra Blue had a compiled interpretation that matched the principal's interpretation exactly. This compiled interpretation was the *6/4* pacing of the opening, *Terrace* phrasing, and a *Rushed* quarter note triplet. In contrast, Orchestra Orange unanimously used a *Half note frame* opening rather than Orchestra Blue's *6/4* method, and Orchestra Yellow unanimously chose to use a *Steady* quarter note triplet opposed to Orchestra Blue's *Rushed* quarter note triplet. The strong grouping within each section coupled with the differentiation between the sections suggests that colleagues had a strong influence on this excerpt.

Mussorgsky

Unlike the other excerpts included in this project, the categories for this excerpt are broader and cover the entirety of the excerpt. Two of the criteria, 'Tempo' and 'Shape of quarter notes', are the primary determinants in how this excerpt sounds, because when combined, they describe almost every note in this excerpt. The concentrated effect of having only two prominent categories made differentiating the participants more difficult than some of the other excerpts.

Table 6. Mussorgsky Sorted by Section

Musician	Tempo	Shape of quarter notes[r]	Goal of each phrase[s]	Extra breath[t]
Yellow 1	90	Sustained	Even	-
Yellow 2	88	Bell tones	Even, except last two octave jumps	Last bar
Yellow 3	88	Sustained	Even	Last bar
Yellow 4	82	Sustained	Hairpin	-
Purple 1	86	Sustained	Even	No
Purple 2	84	Sustained	Even	Last bar
Blue 1	96	Sustained	Even	No
Blue 2	92	Sustained	Arc	No
Blue 3	84	Lyrical	Even	Last bar
Blue 4	88	Lyrical	Even	No
Orange 1	90	Sustained	Arc	Last bar
Orange 2	84	Bell tones	Even	Last bar
Orange 3	90	Bell tones	Arc	No in audition
Orange 4	88	Lyrical	Even, then Metric Division for last two bars	Last Bar
Red 2	90	Sustained	-	-
Red 3	92	Bell tones	Arc	No
Red 4	88	Sustained	Even	Last Bar
Green 1	88	Sustained	Hairpin	No
Green 3	90	Sustained	Metric division (2+3+3+3, then 3+3+2+3)	-
Green 4	90	Sustained	Hairpin (except last phrase goes to high A♭)	Last Bar
Gray 1	92	Sustained	Even	
Gray 2	84	Sustained	Even	No

Tempo

Every orchestra except Orchestra Blue grouped well on tempo. The average tempo of Orchestra Purple, 85 bpm, was slightly slower than Orchestra Yellow, Orchestra Orange, Orchestra Green, and Orchestra Red, which were all around 90 bpm. However, Orchestra Yellow and Orchestra Orange each had one player who chose to play this excerpt noticeably slower than the rest of their section.

Shape of quarter note

Orchestra Green and Orchestra Purple were both unanimous in choosing the *Sustained* style, and Orchestra Yellow and Orchestra Red had a majority of players using this criterion as well.

[r] Tapered = clear but not bouncy front, tapers, no separation; Bell tones = bouncy front, tapers, no separation; Sustained = slightly accented front, block shaped note, no separation; Lyrical = block shaped note, no separation

[s] Hairpin = downbeat of second bar; Arc = second D or last C; Even = no obvious goal, just forward motion; Metric division = divides the two bars up into multiple smaller bars to emphasize certain beats

[t] Last bar = OK to breath before last bar; No = does not use any breath other than beginning of each phrase

Conversely, Orchestra Blue and Orchestra Orange had a wide variance of criteria within their sections.

Goal of each phrase

Most sections were equally split between *Even* and *Arc*, but Orchestra Green was united in their use of alternative methods; two of them used the *Hairpin* phrasing, while the other used *Metric modulation*. Outside of Orchestra Green, there was only one other use of either of these methods, and that use of *Metric modulation* was only applied to a small portion of the excerpt.

Mussorgsky conclusions by section

The results for the Mussorgsky excerpt concluded similarly to the results for the Beethoven excerpt. It was easy to establish a compiled interpretation for each section, as there were clear majorities in most categories. However, the individual approaches were not similar enough to conclude that the members of each section were influencing their colleagues. For example, a majority of the members in Orchestra Yellow use a tempo between 88 and 90 bpm, *Sustained* quarter notes, and *Even* phrasing, but only two of the members actually matched both of the primary categories for determining similarity on this excerpt. As mentioned above, I feel that the encompassing nature of the categories is primarily responsible for the varied results; three of the comparable categories; 'Tempo', 'Shape of quarter note', and 'Goal of each phrase'; are present throughout the entire excerpt. Conversely, on the Mahler excerpt, two players could sound similar even if they used different methods on the 'Quarter note triplet' or 'Rushing of last triplets', because the categories only apply to a small portion of the excerpt. On the Mussorgsky, however, the two most important categories, 'Tempo' and 'Shape of quarter note',[3] are present throughout the excerpt, and if only one of these two is different from another trumpeter, the two interpretations will still sound different overall. That being said, the Orchestra Green section matched both 'Tempo' and 'Shape of quarter notes', so even though they chose differently in 'Goal of each phrase', their

[3] The reasoning for the importance of these two categories is defined in Chapter 6, the Mussorgsky chapter.

interpretations sound comparable. Both of the players from Orchestra Purple sounded very similar, but as discussed previously, they were also the smallest sample size of any orchestra. Two players each from Orchestra Yellow, Orchestra Blue, and Orchestra Red sounded similar as well, but as sections, there was not an overall strong correlation.

Respighi

As mentioned in Chapter 7, The Respighi was similar to the Bizet in that the categories did not markedly differentiate the interpretations of the participants. Unlike the Bizet though, the reason was not because the players were inconsistent; it was due to the group's tendencies to approach this excerpt in the same manner. Most of the categories for the Respighi have strong majorities throughout all of the participants, making it difficult to determine whether any commonalities are due to a particular influence, such as their colleagues.

Table 7. Respighi Sorted by Section

Musician	Tempo	*Rubato*[u]	Vibrato	Phrasing methods[v]	Last note[w]
Yellow 1	70	Beat	Yes	Contour	Partial
Yellow 2	55	Slight	Yes	Upper neighbor	None
Yellow 3	64	Beat	Yes	Upper neighbor (through vibrato)	End
Yellow 4	62	Beat	Yes	-	Partial
Purple 1	60	Slight	Yes	Upper neighbor	-
Purple 2	64	No	Yes	Upper neighbor	-
Blue 1	60	Slight	Yes	Contour	Partial
Blue 2	60	Phrase	Yes	Upper neighbor	End
Blue 3	58	Beat	Yes	Upper neighbor	End (but slows)
Blue 4	62	Beat	Yes	Upper neighbor	Partial
Orange 1	70	Beat	Yes	Upper neighbor	Partial
Orange 2	56	Beat	Yes	Upper neighbor	Partial
Orange 3	60	No	Yes	Contour	Partial
Orange 4	64	Beat	Yes	Upper neighbor	Partial
Red 2	66	Beat	Yes	Upper neighbor (through vibrato)	-
Red 3	68	Phrase	Yes	Upper neighbor	End
Red 4	60	-	Yes	Upper neighbor	-
Green 1	62	Beat	Yes	Upper neighbor	Partial
Green 3	64	Beat	Yes	-	-
Green 4	66	Beat	Yes	Upper neighbor	End
Gray 1	72	Beat	Yes	Upper neighbor (through vibrato)	-
Gray 2	60	Slight	Yes	Upper neighbor	-

Tempo

The members of Orchestra Green and Orchestra Blue chose tempi within four bpm of each other. The other sections had a far wider variance; Orchestra Yellow's principal and second players were actually a full fifteen bpm apart. Admittedly, the consensus tempo seemed to be around 60 bpm, but two of the principals, Orange 1 and Yellow 1, preferred much faster tempi than the rest of their sections.

Rubato

Orchestra Yellow, Orchestra Orange, and Orchestra Green all had a majority of players that use *rubato* within each beat. Orchestra Green was unanimous in this, and Orchestra Yellow's one

[u] Beat = absolute beat, but room within beats; Phrase = beats are flexible; Slight = occasional rubato within beat, but mostly strict; Strict = no rubato

[v] Upper neighbor = generally aims for upper neighbor appoggiatura, also follows contour; Contour = follows general shape of line, but gives no particular notes emphasis

[w] End = vibrato all the way to the end; Partial = begins with vibrato and fades to still; None = no vibrato

differing player, Yellow 2, did occasionally use *rubato* within the beat, albeit much less frequently than his section-mates. Orchestra Blue, Orchestra Purple, and Orchestra Red had very little agreement in this category.

Phrasing methods

The 'upper neighbor' phrasing was popular enough that every orchestra had a majority of players using this. Orchestra Green, Orchestra Purple, and Orchestra Red were all unanimous, but the others only had one outlier each.

Respighi conclusions by section

The lyrical nature of this excerpt lends itself to individualistic expression, but the interpretations were quite consistent within some of the sections—Orchestra Green, Orchestra Orange, and Orchestra Blue in particular. Orchestra Green was nearly unanimous, and while Orchestra Orange did have a wide variety of tempi, Orange 3 was the only obvious outlier. For the Orchestra Blue section, the 'Tempo' and 'Phrasing methods' categories grouped well, but 'Rubato' category is more similar than it seems at first glance. In the Respighi chapter of Part I, the *Slight* and *Beat* criteria were established as quite similar in overall style, because the *Slight* interpretation is simply a slightly restrained version of the *Beat* method. Therefore, the Orchestra Blue section had fairly strong majorities in each of the categories, and their overall similarities were confirmed by listening to the recordings. However, the other three sections did not group nearly as well. In particular, the principal and second trumpeters in Orchestra Yellow and Orchestra Orange were two of the most interesting contrasts. The two principal players chose to play the Respighi much faster than most, and Orange 1 clearly stated that he feels that, "A lot of guys play this too slowly." However, their second trumpeters, Yellow 2 and Orange 2, opted for the two slowest tempi of all the participants in the project, yet in the last four years, both of these second players were given positions in the orchestra by committees containing these two principals.

Overall conclusions for comparisons by sections

The completed comparisons of these six trumpet sections yielded mixed results. For most of these orchestras, it was possible to establish a compiled interpretation using the majorities from each category on almost every excerpt, and this supports the accepted idea that sections have established styles. However, only half of the players in each section typically matched enough of the important categories in the compiled interpretation to truly represent the compiled interpretation. Furthermore, many of the players' interpretations shared notable resemblances to each other on particular excerpts, but the similar players within each section often changed from excerpt to excerpt.

I expected certain comparisons to yield more similar results, but these assumptions were consistently incorrect. For example, because of the way in which concert seating is assigned, the principal trumpet and second trumpet are the two players within a section who are most likely to play together every week during the season. Yet as discussed under the Haydn and Respighi excerpts, these pairings often interpret the excerpts in completely different fashions.

Also, length of time playing with a particular player seemed to have little effect on how similar two performers' interpretations were. Below, I have inserted a table that shows how long each of the trumpeters had belonged to their sections at the time of the interview.

Table 8. Number of Seasons with Current Orchestra

Musician	Time with current orchestra
Yellow 1	28 years
Yellow 2	3 years
Yellow 3	7 years
Yellow 4	28 years
Purple 1	19 years
Purple 2	8 years
Blue 1	33 years
Blue 2	2 years
Blue 3	12 years
Blue 4	4 years
Orange 1	22 years
Orange 2	11 years
Orange 3	1 year
Orange 4	4 years
Red 2	19 years
Red 3	9 years
Red 4	36 years
Green 1	6 years
Green 3	17 years
Green 4	8 years
Gray 1	2 years with Orchestra Green
Gray 2	2 years

As discussed under the 'Tempo' category of the Haydn above, some of these musicians have far more in common with colleagues who had had less time together rather than more. One possible explanation is that recent additions to the orchestra are selected by an audition committee containing the older musicians, whereas many of the oldest participants in this project went through a slightly different process in which the conductor may have had more input than the other orchestra members involved in the selection. Regardless of the reason, there was no identifiable method to foresee which players would group within each section and each excerpt.

Having said that, many of the members of these sections prided themselves on the culture of their current orchestra. For example, every member of Orchestra Orange described their preferred generic note shape through the same unmistakable analogy—deeply paraphrased; each note should be "like a sausage." All four of the Orchestra Orange members attributed this analogy to the former second trumpeter of Orchestra Orange. While the objective of this dissertation is not concerned with specific pedagogical techniques, this example shows that these sections identify themselves as a unit regardless of their individualistic interpretations.

CHAPTER 9—Excerpt Breakdown by teacher

Yellow 1 had the following anecdote about his time studying at Juilliard with William Vacchiano, the former principal of the New York Philharmonic.

> I came in to his office for my first lesson, and I really thought that I was good. As the lesson went on, I felt that I was playing pretty well, and so I wasn't surprised when Vacchiano turned to me and asked, "Do you know why you guys make it so easy to teach?" At this point, I was fully expecting him to compliment me on my natural abilities, but instead, he said, "Because you all make the same mistakes."

Almost every one of the trumpeters with whom I studied for this project had a similarly amusing and insightful story about their favorite teachers, and the following comparisons attempt to establish what lasting effects these teachers may have had on their students. This chapter is an analysis similar in structure to the analysis by trumpet sections above, but each of the following sub-chapters is categorized by shared teachers and influences rather than current colleagues. In the interview portion of the lessons for this project, I asked each of the participants to name their primary musical influences as well as any experiences that left a lasting impression on them. These influences were not limited to direct teaching; they were asked to list any influence that they felt had an effect on their musical growth, e.g. recordings, masterclasses, and former colleagues.

From this information, I developed a list that groups these trumpeters by each of their self-professed influences. I have included this list below, but this list excludes the many teachers and influences that had only one student—this chapter is about comparing the students, so it requires more than one subject. While I am sure that all of these teachers have had a profound effect on their students, this paper's comparisons focus on only those teachers who had multiple students list them as a *primary* influence, and I have highlighted those teachers in italicized text. After each student's name, I have listed the medium in which the influence reached the student.

Bernie Adelstein – Cleveland Orchestra
1. Yellow 4 – recordings
2. Orange 4 – recordings
3. Orange 3 – recordings
4. Red 2 – recordings

Maurice Andre – solo recording artist
1. Yellow 3 – recordings
2. Yellow 1 – recordings
3. Orange 1 – recordings
4. Orange 4 - recordings

Eugene Blee – Cincinnati Conservatory of Music, Cincinnati Symphony
1. *Yellow 3 – Primary, CCM*
2. *Gray 2 – Primary, CCM*
3. *Orange 4 – Primary, CCM*
4. *Green 3 – Primary, CCM*

Larry Black – Atlanta Symphony (Cichowicz student)
1. Orange 4 – colleague
2. Green 1 – Primary, first teacher in HS

Barbara Butler – Northwestern University, Eastman School of Music
1. *Blue 2 – Primary, Northwestern*
2. *Blue 4 – Primary, Northwestern*
3. *Green 4 – Primary, Eastman*
4. *Green 1 – Primary, Eastman*

Vincent Cichowicz – Chicago Symphony, Northwestern University
1. Yellow 3 – one lesson only
2. Purple 1 – Primary, Northwestern

Phil Collins – Cincinnati Symphony
1. *Orange 4 – Primary, lessons (not affiliated with school)*
2. *Green 3 – Primary, lessons*

James Darling – Cleveland Orchestra, Baldwin Wallace, Cleveland Institute of Music
1. *Orange 4 – Primary, BW*
2. *Orange 3 – Primary, BW*
3. *Red 2 – Primary, BW*

Glenn Fischthal
1. Gray 1 – colleague
2. Orange 3 – recordings

Chris Gekker – the Juilliard School, University of Maryland, American Brass Quintet, Aspen Music Festival
1. *Purple 2 – Primary, Aspen*
2. *Orange 2 – Primary, Juilliard*

Charlie Geyer – Eastman, Atlanta Symphony, Northwestern
1. *Yellow 3 – Primary, Eastman*
2. *Blue 2 – Primary, Northwestern*
3. *Blue 4 – Primary, Northwestern*
4. *Green 1 – Primary, Eastman*
5. *Purple 2 – four or five lessons*

Armando Ghitalla – University of Michigan, New England Conservatory, Boston Symphony
1. Red 2 – Primary, NEC
2. Orange 1 – some lessons

Mark Gould – Metropolitan Opera, Manhattan School of Music, the Juilliard School
1. *Purple 2 – Primary, Juilliard*
2. *Orange 1 – Primary, Juilliard*
3. *Red 3 – some lessons*

Adolph Herseth – Chicago Symphony Orchestra
1. *Yellow 4 – Primary, lessons*
2. *Yellow 3 – recordings*
3. *Purple 1 – recordings*
4. *Purple 2 – recordings*
5. *Blue 2 – recordings*
6. *Blue 3 – recordings*
7. *Gray 1 – recordings*
8. *Orange 1 – some lessons, recordings*
9. *Green 1 – recordings*
10. *Green 3 - colleague*

Arnold Jacobs – Chicago Symphony Orchestra
1. Yellow 4 – Primary, many lessons
2. Purple 1 – Primary, lessons
3. Yellow 3 – one lesson only

Gil Johnson – Philadelphia Orchestra, University of Miami
1. Red 4 – Primary, quintet coach at Curtis, more through his playing
2. Yellow 4 – recordings
3. Blue 3 – recordings
4. Red 3 – recordings

John Lindenau – Interlochen School for the Arts
1. *Purple 2 – Primary, Interlochen*
2. *Blue 3 – Primary, Interlochen*

Wynton Marsalis – recording artist
1. Blue 4 – recordings
2. Green 1 – recordings

Tim Morrison – Boston Pops, Boston Symphony Orchestra
1. Purple 1 – colleague
2. Orange 3 – recordings

Vincent Penzarella – New York Philharmonic
1. Yellow 2 – Primary, lessons
2. Blue 3 – Primary, lessons

Anthony Plog – Los Angeles freelancer, numerous professional orchestras
1. Orange 1 – Primary, undergrad
2. Yellow 4 – colleague

Tom Rolfs – Boston Symphony Orchestra, New England Conservatory, Tanglewood Music Festival
1. *Purple 2 – Tanglewood*
2. *Blue 4 – Tanglewood*
3. *Blue 2 – Tanglewood*

Michael Sachs – Cleveland Orchestra, Cleveland Institute of Music
1. *Purple 2 – Primary, CIM*
2. *Orange 2 – some lessons, colleague*

Doc Severinsen – recording artist
1. Yellow 3 – recordings
2. Purple 1 – recordings
3. Red 2 – recordings

Charlie Schlueter – Boston Symphony, New England Conservatory, Minnesota Symphony, University of Minnesota
1. *Yellow 2 – Primary, NEC*
2. *Purple 1 – Primary, University of Minnesota*

Susan Slaughter – St. Louis Symphony
1. Yellow 2 – recordings
2. Green 4 - colleague

Phil Smith – New York Philharmonic, Chicago Symphony Orchestra
1. *Yellow 3 –colleague, recordings*
2. *Yellow 2 – recordings*
3. *Purple 2 – recordings*
4. *Blue 2 – colleague, recordings (self-admitted obsession)*
5. *Blue 4 – colleague, recordings*
6. *Green 4 – recordings*
7. *Green 1 – some lessons, recordings*
8. *Green 3 – recordings*

Marie Speziale – Cincinnati Symphony, Indiana University, Rice University
1. Gray 2 – Primary, Indiana
2. Green 3 – recordings

James Stamp – Los Angeles Philharmonic, University of Southern California
1. *Yellow 1 – Primary, USC*
2. *Yellow 4 – Primary, lessons*
3. *Orange 1 – Primary, lessons*

Tom Stevens – Los Angeles Philharmonic
1. Yellow 3 – recordings
2. Yellow 1 – lessons while in high school and undergraduate
3. Orange 1 – recordings

James Thompson – Atlanta Symphony, Eastman, Montreal Symphony (James Stamp student)
1. Green 1 – Primary, lessons in high school and undergraduate
2. Yellow 3 – recordings
3. Purple 2 – recordings
4. Orange 4 – colleagues

William Vacchiano – New York Philharmonic, the Juilliard School

1. *Yellow 1 – Primary, Juilliard*
2. *Blue 1 – Primary, Juilliard*
3. *Red 2 – Primary, lessons over 3 summers after Vacchiano had retired*
4. *Yellow 4 – recordings*
5. *Orange 1 – some lessons*

Roger Voisin – Boston Symphony, New England Conservatory, Tanglewood Music Festival

1. *Yellow 4 – recordings*
2. *Yellow 2 – Tanglewood*
3. *Blue 3 – some lessons*
4. *Orange 1 – Tanglewood*

For the tables under each influence below, I have re-grouped the information from the tables of the previous chapter by the teacher-specific groupings on the list above. To denote primary influences, I have included a 'P' in parentheses following the names on the table. The tables are still color-coded by section, but these tables are arranged to reflect two more hierarchies. Primary students are always listed above non-primary students; and within this ordering, participants have been arranged by approximate age, so patterns that may occur across generations can be recognized easier.

Eugene Blee and Phil Collins

Eugene Blee and Phil Collins are grouped together as they were both principal trumpet players in the Cincinnati Symphony and taught at Cincinnati Conservatory of Music. Furthermore, they shared many of the same students, although Eugene Blee has two more included in this project, Yellow 3 and Gray 2. One of their students, Green 3, describes the Cincinnati tradition as strongly tied to the German tradition.

> Eugene Blee was principal in Cincinnati from the fifties through the seventies. His predecessor was Helmuth 'Henry' Wohlgemuth who was brought there by Reiner. Henry was there from the mid-thirties until Gene took over. Henry was from Germany, so that's where my Germanic musical heritage comes from. My interpretations tend to reflect this.

Blee's links to the German heritage will be discussed further below, particularly as they differentiate his students from Collins's. Not only does each of these four students currently belong to different orchestra sections, but their ages span twenty-five years.

Table 9. Blee/Collins Students

Teacher: Eugene Blee

Hindemith: Sonata

Musician	Tempo	Length and Direction of 1st Quarter Note	Goal of 1st Phrase	Phrasing of Descending Motive	Phrasing of 3 bars before Reh. 1	Ritard. at m.15
Yellow 3 (P)	128	Long	Last C	2nd high note	Final G	Slight
Green 3 (P)	112	Long	Low F	2nd high note, but both high	Final G (w/ tongue)	-
Orange 4 (P)	115	Long	Last C	2nd high note	Final G	No
Gray 2 (P)	108	Long	Last C	2nd high note	Final G, but last 3 notes	Yes

Teacher: Phil Collins

Hindemith: Sonata

Musician	Tempo	Length and Direction of 1st Quarter Note	Goal of 1st Phrase	Phrasing of Descending Motive	Phrasing of 3 bars before Reh. 1	Ritard. at m.15
Green 3 (P)	112	Long	Low F	2nd high note, but both high	Final G (w/ tongue)	-
Orange 4 (P)	115	Long	Last C	2nd high note	Final G	No

Hindemith - With the exception of the tempo selections, the Hindemith excerpt was quite unified among the players. Admittedly, the differences in tempi did make a marked difference when listening to the playback, but the technical decisions bear strong resemblances. Green 3 was the only one that did not agree on the 'Goal of 1st phrase' category. Also, while it is not a topic that can be included in this project, his extreme dynamic volume for this excerpt further distanced his interpretation from the other three when listening to the recordings. On the other hand, Orange 4 and Gray 2 were noticeably similar, and Yellow 3 paralleled both of them in every category except 'Tempo'.

Teacher: Eugene Blee

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Yellow 3 (P)	130	E, but pretty equal	Long	Tongue all	Upper neighbor	Yes
Green 3 (P)	128	E	Detached	Tongue all	Directional rule	-
Orange 4 (P)	120	E	Detached	Slur two, tongue two	Melodic	-
Gray 2 (P)	115	C	Detached	Slur two, tongue two	Varies	Yes

Teacher: Phil Collins

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Green 3 (P)	128	E	Detached	Tongue all	Directional rule	-
Orange 4 (P)	120	E	Detached	Slur two, tongue two	Melodic	-

Haydn - All four of the Haydn interpretations were different. While the opening two bars sounded fairly similar, the differences in '16th note tonguing' and 'Trill methods' created drastically different styles between the four.

Teacher: Eugene Blee

Beethoven: Leonore

Musician	*Rubato* in first two bars	Tempo change	Shape of 8th notes in 1st two bars	Shape of 8th notes in last 4 bars	Volume
Yellow 3 (P)	Rubato	Gradual	Round	Short	Loud
Green 3 (P)	No	Gradual	Short	Short	Loud
Orange 4 (P)	No (slightly long ½ notes)	Gradual	Round	Round	Loud
Gray 2 (P)	Rubato	Gradual	Round	Round	-

Teacher: Phil Collins

Beethoven: Leonore

Musician	*Rubato* in first two bars	Tempo change	Shape of 8th notes in 1st two bars	Shape of 8th notes in last 4 bars	Volume
Green 3 (P)	No	Gradual	Short	Short	Loud
Orange 4 (P)	No (slightly long ½ notes)	Gradual	Round	Round	Loud

Beethoven - Like the Hindemith, Yellow 3 and Gray 2 interpreted this excerpt quite similarly. On the other hand, both Orange 4 and Green 3 were similar in their pacing and structure, but they differed on their eighth note shapes and overall style.

Teacher: Eugene Blee

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of each 2-bar phrase	Beginning dynamic
Yellow 3 (P)	Pull tuning slide	64	Downbeat	Mezzo forte plus
Green 3 (P)	Trigger opening	68	Downbeat	-
Orange 4 (P)	Trigger 1 bar	60	Beat 3	Mezzo 'comfortable'
Gray 2 (P)	Trigger 1 bar	62	Downbeat	Mezzo forte

Teacher: Phil Collins

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of each 2-bar phrase	Beginning dynamic
Green 3 (P)	Trigger opening	68	Downbeat	-
Orange 4 (P)	Trigger 1 bar	60	Beat 3	Mezzo 'comfortable'

Bizet - As discussed in the Bizet portion of Chapter 8, the method for reaching the low concert E♭ was highly individualized, so it was no surprise that there was little agreement on that within this group. As for the musical decisions, however, there was a fairly strong grouping across all four students. The interpretation of Orange 4 sounded the most different because of the way he shaped each phrase, but the others were quite similar.

Teacher: Eugene Blee

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Yellow 3 (P)	6/4	Terrace	Steady	60	Yes
Green 3 (P)	6/4	As marked	Steady	66	-
Orange 4 (P)	Half note frame	As marked	Steady	66	No
Gray 2 (P)	6/4	Terrace	Steady	66	Yes

Teacher: Phil Collins

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Green 3 (P)	6/4	As marked	Steady	66	-
Orange 4 (P)	Half note frame	As marked	Steady	66	No

Mahler - Once again, Yellow 3 and Gray 2 matched almost perfectly. Gray 2's tempo was slightly faster, but their interpretations were otherwise identical. Both of these players even suggested an unwritten affectation; in m. 12, they recommended that the G♯ could be stretched ever so slightly to allow more time for the dramatic crescendo to the high B. Another point of interest in this group was the choice of the *Steady* method for rushing the quarter note triplet. Orchestra Yellow was the only orchestra section to strongly favor the *Steady* method, but all four of these students chose to phrase this way, including the member here who belongs to Orchestra Yellow. There were only eight players in total who chose the *Steady* method; half of them studied with Blee, and this leads to an important connection. Given Green 3's description of the German heritage of the Cincinnati players, it was no surprise that one of the non-Blee students, Yellow 4, said the reason he chose the *Steady* quarter note triplet is due to his German students. He claims that he had taught multiple German students, and each of them had said that in their studies in Germany, they were taught that the quarter note triplet "should be no big deal". While this is not

enough evidence to draw a definitive conclusion, we can hypothesize that the *Steady* quarter note triplet may have originated in the German tradition. Unfortunately, it would be very difficult to test this without studying directly under German trumpeters; my first inclination was to test this hypothesis against recordings of this piece as performed by German orchestras, but I believe this would be an unreliable source as the conductor may be altering the natural inclinations of the trumpet player.

Teacher: Eugene Blee

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Yellow 3 (P)	88	Sustained	Even	Last bar
Green 3 (P)	90	Sustained	Metric division (2+3+3+3, then 3+3+2+3)	-
Orange 4 (P)	88	Lyrical	Even, then Metric Division for last two bars	Last Bar
Gray 2 (P)	84	Sustained	Even	No

Teacher: Phil Collins

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Green 3 (P)	90	Sustained	Metric division (2+3+3+3, then 3+3+2+3)	-
Orange 4 (P)	88	Lyrical	Even, then Metric Division for last two bars	Last Bar

Mussorgsky - The Mussorgsky excerpt had two noteworthy similarities under the Blee/Collins students. The first was that Yellow 3 and Gray 2 were almost identical in interpretation again. Their phrasing and note shape choices created very similar sounding renditions, and their tempi were fairly close.

Green 3's and Orange 4's use of *Metric modulation* phrasing was the other notable development in this grouping, and it presents a very interesting case for the influence of Collins as a teacher. Orange 4 and Green 3 are the only two players in the entire project to use *Metric modulation* in their phrasing of this excerpt, and both studied with Blee and Collins. However, neither of the other Blee students, Yellow 3 and Gray 2, used *Metric modulation* in phrasing, and neither of them studied with Collins. Therefore, it is likely that the *Metric modulation* concept originated with Collins. Furthermore, Orange 4 used a less strict version of *Metric modulation*

phrasing by only using it on the last two bars, whereas Green 3 used this phrasing for the entire excerpt. This could be because Orange 4 listed multiple primary influences, yet Green 3 listed only these two Cincinnati teachers as primary influences. Orange 4's current interpretation may therefore reflect both Collins's and Blee's teaching as well as other influences, whereas Green 3 is still influenced by his only primary teachers.

Teacher: Eugene Blee

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Yellow 3 (P)	64	Beat	Yes	Upper neighbor (through vibrato)	End
Green 3 (P)	64	Beat	Yes	-	-
Orange 4 (P)	64	Beat	Yes	Upper neighbor (most of the time)	Partial
Gray 2 (P)	60	Slight	Yes	Upper neighbor	-

Teacher: Phil Collins

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Green 3 (P)	64	Beat	Yes	-	-
Orange 4 (P)	64	Beat	Yes	Upper neighbor (most of the time)	Partial

Respighi - All four of the players sounded similar on this excerpt, with Gray 2 being slightly stricter than the other three. However, their similarities were not necessarily related to a particular influence if we consider that the overall interpretations among all twenty-two players were fairly similar as defined in the previous chapter.

Blee/Collins conclusions

Given the disparate age range of the four students and their various current locations, it is no surprise that there were differences in many of their interpretations. However, Yellow 3 and Gray 2 were two very similar players in interpretation as well as being the youngest and oldest to have studied with Blee. Yellow 3 tended to choose slightly brisker tempi, but the interpretations of both players were very alike, exemplified by suggesting the same unwritten affectation in the Mahler excerpt. Interestingly, they both studied only with Blee; the other two students, Green 3 and Orange 4, studied with both Blee and Collins. Green 3 and Orange 4 were also much more similar to each other in interpretations than they were to Yellow 3 and Gray 2. Therefore, Blee shows the

strongest effect on both Yellow 3 and Gray 2, while Collins provided a contrasting view for both Green 3 and Orange 4.

Barbara Butler and Charlie Geyer

Like Blee and Collins, it is beneficial to examine Barbara Butler and Charles Geyer as a pair as well. Not only are they married, but they have taught together at the Eastman School of Music and later moved together to join the faculty of Northwestern University. They shared many of the same students as shown in the tables, and the two students unique to each teacher, Purple 2 and Yellow 3, present a chance to study exactly which characteristics belonged to each teacher. Of the students, Blue 2 and Blue 4 were two of the youngest players in the project, attended school together, currently play in the Orchestra Blue, and listed Butler and Geyer as their only primary teachers. It is therefore not a large leap of logic to assume that they should have many similar interpretations, although Blue 4 said that he studied primarily with Geyer while Blue 2 spent more time with Butler. Green 1 and Green 4 also attended school together and currently play in the same orchestra, but Green 4 only listed Butler as a primary teacher. Yellow 3 was much older than all of these other students, and Purple 2 only had a handful of lessons with Geyer. Because of this, I expected Yellow 3 and Purple 2 to have weaker ties to this group than the other four.

Table 10. Butler/Geyer Students
Teacher: Barbara Butler

Hindemith: Sonata

Musician	Tempo	Length and Direction of 1st Quarter Note	Goal of 1st Phrase	Phrasing of Descending Motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Green 4 (P)	110	Long	Last C	Last note	Final G	No
Green 1 (P)	110	Separated	Low F	2nd high note, but both high	Final G (w/ tongue)	No
Blue 2 (P)	115	Long	D♭	Both high notes	Final G (w/out breath)	No
Blue 4	114	Long	D♭	2nd high note, but both high	Final G	Slight

Teacher: Charles Geyer

Hindemith: Sonata

Musician	Tempo	Length and Direction of 1st Quarter Note	Goal of 1st Phrase	Phrasing of Descending Motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Yellow 3 (P)	128	Long	Last C	2nd high note	Final G	Slight
Green 1 (P)	110	Separated	Low F	2nd high note, but both high	Final G (w/ tongue)	No
Blue 4 (P)	114	Long	D♭	2nd high note, but both high	Final G	Slight
Blue 2 (P)	115	Long	D♭	Both high notes	Final G (w/out breath)	No
Purple 2	105	Long	Low F and Last C	Last note	-	-

Hindemith – Of the players that studied with these two teachers, only Blue 2 and Blue 4 interpreted the Hindemith excerpt in a similar manner, which of course is not surprising given the strong ties to each other listed above. Strangely, Green 4 and Green 1 had completely different interpretations of the piece. This may be attributed to the fact that they were from an older generation than Blue 4 and Blue 2 and consequently had had more time to develop separately, but they currently play in the same orchestra and have done so for the last six years. As expected, Yellow 3 and Purple 2 had very little in common with the other four.

Teacher: Barbara Butler

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Green 4 (P)	-	E	Timpani	Slur two, tongue two	Upper neighbor (as grace note)	Yes
Green 1 (P)	120	-	Firm	Tongue all	Melodic	No
Blue 2 (P)	132	C	Timpani	Slur two, tongue two	Upper neighbor	No (different phrasing)
Blue 4	120	C	Timpani	Slur two, tongue two	Upper neighbor	No

Teacher: Charles Geyer

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Yellow 3 (P)	130	E, but pretty equal	Long	Tongue all	Upper neighbor	Yes
Green 1 (P)	120	-	Firm	Tongue all	Melodic	No
Blue 4 (P)	120	C	Timpani	Slur two, tongue two	Upper neighbor	No
Blue 2 (P)	132	C	Timpani	Slur two, tongue two	Upper neighbor	No (different phrasing)
Purple 2	-	-	Timpani	Slur all	Upper neighbor	Yes

Haydn - On this excerpt, Blue 4 and Blue 2 were again similar in interpretation, but unlike the Hindemith excerpt, Green 4 was very similar to both of them as well. There was a slight

difference in their tempi, but they were fairly uniform. Otherwise, there was very little grouping in this excerpt among the other students of either teacher.

Teacher: Barbara Butler

Beethoven: Leonore

Musician	*Rubato* in first two bars	Tempo change	Shape of 8th notes in 1st two bars	Shape of 8th notes in last 4 bars	Volume
Green 4 (P)	No	Gradual	Round	Round	Comfortable
Green 1 (P)	Rubato	Gradual	Round	Round	Comfortable
Blue 2 (P)	Yes	Sudden	Round	Long	Comfortable
Blue 4	Rubato (slight)	Gradual	Round	Round	Comfortable

Teacher: Charles Geyer

Beethoven: Leonore

Musician	*Rubato* in first two bars	Tempo change	Shape of 8th notes in 1st two bars	Shape of 8th notes in last 4 bars	Volume
Yellow 3 (P)	Rubato	Gradual	Round	Short	Loud
Green 1 (P)	Rubato	Gradual	Round	Round	Comfortable
Blue 4 (P)	Rubato (slight)	Gradual	Round	Round	Comfortable
Blue 2 (P)	Yes	Sudden	Round	Long	Comfortable
Purple 2	Yes	Gradual	Long	Short	-

Beethoven - For the first orchestral excerpt, we see the first hint of interpretive differences in the interpretations of Blue 2 and Blue 4. Interestingly, Blue 4 and Green 1 were very similar, and Yellow 3 shared quite a bit in common with both of them. Unfortunately, these results are rendered somewhat ambiguous as both Blue 2 and Purple 2 were dissimilar from the other three as well as each other.

Teacher: Barbara Butler

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of each 2-bar phrase	Beginning dynamic
Green 4 (P)	Trigger 1 bar	-	Downbeat	-
Green 1 (P)	Trigger 1 bar	65	Downbeat	Comfortable forte
Blue 2 (P)	Trigger 1 bar	64	Beat 3	Mezzo forte
Blue 4	Trigger 1 bar	60	Downbeat	Mezzo forte

Teacher: Charles Geyer

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of each 2-bar phrase	Beginning dynamic
Yellow 3 (P)	Pull tuning slide	64	Downbeat	Mezzo forte plus
Green 1 (P)	Trigger 1 bar	65	Downbeat	Comfortable forte
Blue 4 (P)	Trigger 1 bar	60	Downbeat	Mezzo forte
Blue 2 (P)	Trigger 1 bar	64	Beat 3	Mezzo forte
Purple 2	Trigger 1 bar	65	Downbeat	Mezzo forte

Bizet - With the exception of Blue 2's choice to phrase the two-measure phrases to the third beat instead of the downbeat of the next bar, the Bizet excerpt showed extremely strong grouping.

Yet as discussed in Chapter 4, the categories for the Bizet were not the most reliable and created the most uniformly interpreted excerpt in this project because the discrepancies were not able to be generalized into categories. This means that the results above do not necessarily project a strong influence for the teaching influence of Butler and Geyer. If we create a 'compiled' interpretation of the Butler/Geyer students using the same methods detailed in Part I, the Butler/Geyer interpretation was identical to the overall interpretation. Therefore, the similarities in Butler/Geyer students probably reflected the generally accepted practice rather than the influence of these teachers.

Teacher: Barbara Butler

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Green 4 (P)	6/4	Terrace	Rushed	-	Slight
Green 1 (P)	6/4	Terrace	Rushed	62	Yes
Blue 2 (P)	6/4	Terrace	Rushed	64	Yes
Blue 4	6/4	Terrace (Troops marching)	Rushed	65	Yes

Teacher: Charles Geyer

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Yellow 3 (P)	6/4	Terrace	Steady	60	Yes
Green 1 (P)	6/4	Terrace	Rushed	62	Yes
Blue 4 (P)	6/4	Terrace (Troops marching)	Rushed	65	Yes
Blue 2 (P)	6/4	Terrace	Rushed	64	Yes
Purple 2	16th notes	-	Rushed	-	Yes

Mahler - On the Mahler excerpt, the results among these musicians were remarkably consistent—especially given the number of variables on the Mahler. Green 4, Green 1, Blue 2, and Blue 4 were almost identical in interpretation, and listening to the recordings confirms this. Yellow 3 only differed in the 'Quarter note triplet' category, and as discussed above, all of the members of Orchestra Yellow do this. Therefore, his only interpretive contrast to the other Geyer/Butler students was likely due to one or more of his current colleagues. Again, Purple 2 is an outlier from the others, particularly differentiated by his use of the *16th note* method of pacing the opening.

Teacher: Barbara Butler

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Green 4 (P)	90	Sustained	Hairpin (except last phrase goes to high A♭)	Last Bar
Green 1 (P)	88	Sustained	Hairpin	No
Blue 2 (P)	92	Sustained	Arc	No
Blue 4	88	Lyrical	Even	No

Teacher: Charles Geyer

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Yellow 3 (P)	88	Sustained	Even	Last bar
Green 1 (P)	88	Sustained	Hairpin	No
Blue 4 (P)	88	Lyrical	Even	No
Blue 2 (P)	92	Sustained	Arc	No
Purple 2	84	Sustained	Even	Last bar

Mussorgsky - When examining the table, the interpretations of the Mussorgsky seem much more fragmented than the previous excerpt, yet as mentioned under the section comparisons for this excerpt, the 'Tempo' and 'Shape of quarter notes' categories contributed much more to determining the overall character of the excerpt than the other criteria. All of the primary Geyer/Butler students chose a tempo between 88 and 92 bpm, and all but Blue 4 used the *Sustained* quarter note shapes. Because of this, the primary students did sound quite similar, although Purple 2's slower tempo set him apart from the rest of the group yet again.

Teacher: Barbara Butler

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Green 4 (P)	66	Beat	Yes	Upper neighbor	End
Green 1 (P)	62	Beat	Yes	Upper neighbor	Partial
Blue 2 (P)	60	Phrase	Yes	Upper neighbor	End
Blue 4	62	Beat	Yes	Upper neighbor	Partial

Teacher: Charles Geyer

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Yellow 3 (P)	64	Beat	Yes	Upper neighbor (through vibrato)	End
Green 1 (P)	62	Beat	Yes	Upper neighbor	Partial
Blue 4 (P)	62	Beat	Yes	Upper neighbor	Partial
Blue 2 (P)	60	Phrase	Yes	Upper neighbor	End
Purple 2	64	No	Yes	Upper neighbor	-

Respighi - Like many of the other orchestral excerpts, Blue 4 and Green 1 are basically identical in their interpretive choices, and Purple 2 is a complete outlier. There are quite a few similarities in the categories of this excerpt, but as discussed in the previous part, the overall interpretations of this excerpt were similar among most of the musicians.

Butler/Geyer conclusions

One would think that Blue 4 and Blue 2, the younger Geyer/Butler pair, would be very similar across all the excerpts considering that their collegiate and professional careers have mirrored each other so closely. However, while they interpreted both of the solo excerpts alike, their interpretations of the orchestral excerpts were quite dissimilar. In particular, Blue 2 employed some of the least common interpretations, such as the *Sudden* accelerando in the Beethoven, and these choices set him apart not only from Blue 4, but from most of the other players in the project.

The older Geyer/Butler pair, Green 1 and Green 4, had a similarly mirrored collegiate and professional situation, yet their interpretive results were the exact opposite of the younger pair's. Their interpretations differed greatly on both of the solo excerpts, yet their orchestral excerpt interpretations were very similar. When beginning the project, I assumed that results like these—dissimilar solo excerpts and similar orchestral excerpts—would be the predominant outcomes as these players perform the orchestral excerpts regularly with each other.

While this presumption has turned out to be mostly true, the parallel situations combined with the contrasting results of these two Geyer/Butler student pairs may provide insight into how the preferences of these teachers developed over the course of their careers. It is quite possible that as Butler and Geyer evolved as teachers, they chose to focus more on the solo repertoire rather than the orchestral repertoire. This is reflected in the similarities of the older pair's orchestral interpretations and the similarities of the younger pair's solo interpretations. As immensely skilled teachers, Butler and Geyer would be able to teach musical fundamentals to their students using any repertoire and, more importantly, application of these skills to other pieces from the repertoire. While this supposition may or may not accurately portray the slow evolution of these two teachers' pedagogical styles, many factors have likely played just as important a role in these students carrying on different sets of instructions. In particular, Butler and Geyer changed teaching institutions between these sets of students, and the culture of each school may represent an even

stronger influence, especially when considering that the previous chapter of this dissertation demonstrated how strong an effect a musician's peers may have on musical interpretation.

Purple 2's overall contrast to the group is also useful to this study. He is the only student here who did not list either Geyer or Butler as his primary teacher. Not only do his dissimilarities lend credence to the influence that these two teachers had on their primary students, he presents an easily demonstrable example of how a student with little contact with one teacher, will be influenced more by frequent interactions with other teachers and colleagues. While this concept—time spent studying with a teacher has a proportionately increasing effect on a student—seems like common sense, it does provide further evidence that the criteria and methods being used in this project reflect concepts which we already hold to be true and logical.

James Darling

James Darling was a member of the Cleveland Orchestra for over three decades, and during his time in Cleveland, he taught many students at both the Baldwin-Wallace College Conservatory of Music and the Cleveland Institute of Music. All three of his students in this project studied with him as undergraduates at Baldwin-Wallace, and interestingly, these three students graduated from this institution separated almost perfectly by a decade each. This separation allows us to compare Darling's teaching style at various points in his career.

Table 11. Darling Students

Hindemith: Sonata

Musician	Tempo	Length and Direction of 1st Quarter Note	Goal of 1st Phrase	Phrasing of Descending Motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Red 2 (P)	115	-	-	Last note	Final G	No
Orange 4 (P)	115	Long	Last C	2nd high note	Final G	No
Orange 3 (P)	100	Equal	Last C	Last note	Final G	Slight

Hindemith – Unfortunately, in our lesson, Red 2 never played the first three and a half measures of this excerpt, so I was unable to gather two of the criteria from him on this excerpt.

Orange 3 was quite different in most of the categories from both Red 2 and Orange 4, so there was very little similarity between the three players.

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Red 2 (P)	122	E	Timpani	Slur two, tongue two	Upper neighbor	-
Orange 4 (P)	120	E	Detached	Slur two, tongue two	Melodic	-
Orange 3 (P)	120	Even	Timpani	Slur two, tongue two	Melodic	Slight

Haydn – For this excerpt, the three categories—'Tempo', '16th note tonguing', and 'Trill methods'—occurred throughout the excerpt. All three of these musicians matched in the 'Tempo' and '16th note tonguing' categories, and Orange 4 and Orange 3 matched perfectly in all three of the major categories. Yet all of their other decisions were different, including the other two categories listed on the table as well as the small phrase shapes not listed on the table. Therefore, the two interpretations were similar in overall structure, but the details were contrasting enough to create highly individualized interpretations. Red 2's interpretation was noticeably different from the interpretations of Orange 4 and Orange 3.

Beethoven: Leonore

Musician	*Rubato* in first two bars	Tempo change	Shape of 8th notes in 1st two bars	Shape of 8th notes in last 4 bars	Volume
Red 2 (P)	Yes	Gradual	Short	Short	-
Orange 4 (P)	No (slightly long ½ notes)	Gradual	Round	Round	Loud
Orange 3 (P)	Rubato	Gradual	Round	Round	Comfortable

Beethoven – Orange 4 and Orange 3 approached this excerpt in much the same manner, and this was logical as they both play in Orchestra Orange. Red 2's choices were different in almost every category. As a reminder, the 'Volume' criterion should not be considered for this comparison.

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of each 2-bar phrase	Beginning dynamic
Red 2 (P)	Trigger opening	64	Downbeat	Comfortable forte
Orange 4 (P)	Trigger 1 bar	60	Beat 3	Mezzo 'comfortable'
Orange 3 (P)	Trigger 1 bar	66	Downbeat	Easy forte

Bizet – Each player in this group actually sounded quite different on the Bizet even though it was easy to establish a 'compiled' interpretation. While there was a clear majority in the three primary categories, all but 'Beginning dynamic', enough majorities did not line up within the

individuals to create overall likenesses. Admittedly, Red 2 and Orange 3 approached the musical aspects of this excerpt, 'Tempo' and 'Dynamic goal of each two-bar phrase', in the same way, but because Red 2 triggered the entire opening, the tone colors were quite different on every note involving third valve.

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Red 2 (P)	16th note	Terrace (but starts at mf)	Rushed	64	Yes
Orange 4 (P)	Half note frame	As marked	Steady	66	No
Orange 3 (P)	Half note frame	As marked	Rushed	62	Yes

Mahler – Like the Beethoven results for this group, Orange 4 and Orange 3 were very similar, while Red 2 was different throughout the entire opening. The two differences between Orange 4 and Orange 3, 'Quarter note triplet' and 'Rushing of last triplets', were both isolated and did not detract much from their overall similarity.

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Red 2 (P)	90	Sustained	-	-
Orange 4 (P)	88	Lyrical	Even, then Metric Division for last two bars	Last Bar
Orange 3 (P)	90	Bell tones	Arc	No in audition

Mussorgsky – Even though all three of the players chose a similar tempo for the Mussorgsky, they all differed in the most important category, 'Shape of quarter notes'. Because of this, there was little correlation between these three players on this excerpt.

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Red 2 (P)	66	Beat	Yes	Upper neighbor (through vibrato)	-
Orange 4 (P)	64	Beat	Yes	Upper neighbor (most of the time)	Partial
Orange 3 (P)	60	No	Yes	Contour	Partial

Respighi – This is the only excerpt where Red 2 matched well with another player in this group, Orange 4. Conversely, this is the only excerpt where Orange 3 strongly contrasted Orange 4. As this is the only result under Darling's students that goes against the seemingly much stronger

grouping of belonging to Orchestra Orange, this may represent a generational divide given that Orange 3 is ten years younger than Orange 4 and twenty years younger than Red 2.

Darling conclusions

Of the Darling students, the interpretations of Orange 4 and Orange 3 grouped as well as any two musicians in this project, but Red 2's had little in common with either of them. This seems to corroborate the conclusions of the previous chapter as both Orange 4 and Orange 3 belonged to the Orchestra Orange section, whereas Red 2 did not—the study of these three students suggests that colleagues have stronger ties than teachers.

Even though this data is a small sample size, if we assume the assertion that colleagues had a more pronounced effect here than the teacher is true, it presents an interesting timeline for the development of a young trumpeter. All three of these musicians studied with Darling as undergraduates, and in most collegiate music curriculums, an undergraduate degree is a time to hone the basics of musicianship, e.g. tone and technique, assuming that many of the finer nuances of musical interpretation will be established in later degrees and professional engagements when the technical aspects of the instrument become less of a barrier. Having studied with all three of these players, I can attest to their wonderful sounds and techniques, and each of them attributed much of their fundamental technique to the teaching of Darling. Therefore, it is quite possible that as a teacher, Darling may have chosen to focus more on the technical aspects of trumpet playing rather than the interpretive. This is certainly not to imply that Darling's teaching would have ignored the musical aspects as that would have been all but impossible with such talented students, but he may have simply chosen to focus on the trumpet playing of these relatively young students to prepare them for their upcoming careers.

Chris Gekker

Chris Gekker currently teaches at the University of Maryland but has previously taught at the Juilliard School and the Aspen Music Festival. It was at the latter two of these institutions that he taught both of the students involved in this project.

Table 12. Gekker Students

Hindemith: Sonata

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Orange 2 (P)	110	-	-	Both high notes	Final G	No
Purple 2 (P)	105	Long	Low F and Last C	Last note	-	-

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Orange 2 (P)	120	C	Timpani	Varies	Varies	-
Purple 2 (P)	-	-	Timpani	Slur all	Upper neighbor	Yes

Beethoven: Leonore

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Orange 2 (P)	Rubato	Gradual	Round	Round	-
Purple 2 (P)	Yes	Gradual	Long	Short	-

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Orange 2 (P)	Custom equipment (The Shredder)	60	Downbeat	Mezzo forte
Purple 2 (P)	Trigger 1 bar	65	Downbeat	Mezzo forte

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Orange 2 (P)	Half note frame – (pendulum)	Terrace (using "Pendulum)	Steady	55	Slight
Purple 2 (P)	16th notes	-	Rushed	-	Yes

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Orange 2 (P)	84	Bell tones	Even	Last bar
Purple 2 (P)	84	Sustained	Even	Last bar

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Orange 2 (P)	56	Beat	Yes	Upper neighbor	Partial
Purple 2 (P)	64	No	Yes	Upper neighbor	-

<u>Gekker conclusions</u>

Rather than go through each of the excerpts, it is easy to glance at the tables and see that these two students, Purple 2 and Orange 2, had very little in common. They are close to the same age, so there is not a generational gap. Both Purple 2 and Orange 2 listed Gekker as a primary influence, but there are many possible explanations why neither student had much correlation in their interpretations. Orange 2 described Gekker as "an incredible teacher who was able to take my

existing ideas and teach me how to polish them to a truly professional level." It is possible that Gekker may have focused more on improving Orange 2's pre-existing personal choices rather than trying to change his interpretations to a particular style. On the other hand, Purple 2 only studied with Gekker for a brief time at the Aspen Music Festival and may have simply never played these particular pieces for him. It is also quite possible that one of these students may be a strong indicator of Gekker's teaching, while the other has drawn more influence from someone or somewhere else. Unfortunately, with only two students, it is impossible to further this comparison. Regardless of his influence on these excerpts, both students spoke highly of Gekker and referred to him as a "major influence."

Mark Gould

Mark Gould is a former principal of the Metropolitan Opera Orchestra, and is currently trumpet faculty at both the Juilliard School and Manhattan School of Music. Of Gould's three students that participated in this project, only two listed him as a primary influence. Interestingly, of the two primary students, the younger student studied with the older primary student, Orange 1, before he studied with Gould. The non-primary student had "four or five lessons" with Gould but also said that Gould left a "lasting impression."

Table 13. Gould Students

Hindemith: Sonata

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Orange 1 (P)	120	Long	Last C	2nd high note	Final G	Slight
Purple 2 (P)	105	Long	Low F and Last C	Last note	-	-
Red 3	120	Long	Last C	Last note, but both low	Final G (w/ tongue)	Slight

Hindemith – Orange 1 and Red 3 were very similar in their interpretations on the Hindemith, only differing in their shaping of the 'descending motive'. This motive was one of the

two primary pieces of thematic material for the exposition, however, so their contrasts were quite noticeable. Purple 2 differed from both.

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Orange 1 (P)	134	C	Timpani	Slur all	Previous note rule	No
Purple 2 (P)	-	-	Timpani	Slur all	Upper neighbor	Yes
Red 3	126	E	Long	-	Previous note rule	-

Haydn – Unfortunately, when Purple 2 played the opening of the Haydn, each playing was quite different—almost improvisatory. Consequently, I was unable to determine a consistent tempo or an opening phrasing rendering his results for this excerpt less useful. However, Purple 2 matched Orange 1 in most of the other criteria, and this should not be a surprise considering that Purple 2 also studied with Orange 1. Even though their approach to trills was different, the 'Previous note rule' was actually a slightly modified *Upper neighbor*, meaning that the final product was still quite similar. Red 3 had very little in common with the other two on this excerpt.

Beethoven: Leonore

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Orange 1 (P)	No	Gradual	Round	Round	-
Purple 2 (P)	Yes	Gradual	Long	Short	-
Red 3	No	Gradual	Long	Long	-

Beethoven – While all three players used a gradual accelerando on the Beethoven, this was not very indicative of any particular influence as it was the overwhelming choice among all the players in the project. Otherwise, there was almost no correlation among these three players on this excerpt.

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Orange 1 (P)	Only low E♭	70 (?)	Downbeat	Under celli
Purple 2 (P)	Trigger 1 bar	65	Downbeat	Mezzo forte
Red 3	Pull tuning slide	65	Beat 3	Mezzo forte

Bizet – This was even less correlation among these players on the Bizet excerpt than there was on the Beethoven. They did all choose to play the excerpt at a quicker tempo than the marked tempo of 60 bpm, but that was not all that uncommon.

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Orange 1 (P)	Half note frame	Terrace	Rushed	66	Slight
Purple 2 (P)	16th notes	-	Rushed	-	Yes
Red 3	Half note frame	As marked	Rushed	65	Yes

Mahler – Each of these musicians chose to use a *Rushed* method under 'Quarter note triplet', but otherwise these players sounded very different on this excerpt. This is further diminished as the 'Quarter note triplet' category was one of the two least important determinants on this excerpt.

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Orange 1 (P)	90	Sustained	Arc	Last bar
Purple 2 (P)	84	Sustained	Even	Last bar
Red 3	92	Bell tones	Arc	No

Mussorgsky – Again, it was possible to establish majorities in each category for the Mussorgsky, but no two players in this group produced similar sounding overall interpretations. As discussed above, the two most important categories for this are the 'Tempo' and 'Shape of quarter notes', and none of these three matched.

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Orange 1 (P)	70	Beat	Yes	Upper neighbor	Partial
Purple 2 (P)	64	No	Yes	Upper neighbor	-
Red 3	68	Phrase	Yes	Upper neighbor	End

Respighi – All three students in this group used vibrato and *Upper neighbor* phrasing, but both are so common that they are not indicative of grouping without other similar criteria. In this group, there were not any other matching categories.

Gould conclusions

Like the students of Gekker, there were very few similar interpretations among Gould's three students. It is surprising, however, that Purple 2 and Orange 1 did not group more strongly given that Orange 1 was a primary teacher of Purple 2. Purple 2 seems to be a unique musician, and this is strengthened over the next two teachers.

John Lindenau

John Lindenau was the trumpet instructor at the Interlochen Arts Academy for more than three decades. Lindenau currently has two students in major symphonies, Blue 3 and Purple 2, and both of these students listed him as a primary influence.

Table 14. Lindenau Students

Hindemith: Sonata

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Blue 3 (P)	110	Equal	D♭ (possible last C)	-	C♯ before final G	No
Purple 2 (P)	105	Long	Low F and Last C	Last note	-	-

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Blue 3 (P)	124	C	Long	Varies	Upper neighbor	No
Purple 2 (P)	-	-	Timpani	Slur all	Upper neighbor	Yes

Hindemith and *Haydn* – The interpretations of Blue 3 and Purple 2 on both solo excerpts, the Hindemith and the Haydn, differed in almost every way.

Beethoven: Leonore

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Blue 3 (P)	No	Gradual	Long	Round	-
Purple 2 (P)	Yes	Gradual	Long	Short	-

Beethoven – Blue 3 and Purple 2 also sounded quite different on the Beethoven. While both used a *Gradual* tempo change, there were only four players in this project who chose a different criterion, so Blue 3 and Purple 2 were certainly not unique in choosing the *Gradual* method. However, Blue 3 and Purple 2 also used *Long* eighth notes in the first two measures; this criterion was noteworthy as they were two of only four players in the project to shape these eighth notes this way. Unfortunately, these eighth notes are least significant category for this excerpt and contribute little to the overall sound of the interpretation.

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Blue 3 (P)	Trigger 1 bar (plus following 2 bars)	58	Downbeat	Mezzo forte plus
Purple 2 (P)	Trigger 1 bar	65	Downbeat	Mezzo forte

Bizet – Purple 2 and Blue 3 were almost identical in their interpretations of the Bizet. The only minor difference was that Purple 2 chose a quicker tempo. However, the categories for the Bizet were not the most effective differentiators, so these results should be considered with restraint.

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Blue 3 (P)	16th notes	-	Rushed	58	Yes
Purple 2 (P)	16th notes	-	Rushed	-	Yes

Mahler - Both of these players also interpreted the Mahler excerpt in similar ways even so far as evading the question of how they phrase the opening. Only three trumpeters in the project used the *16th note* method of pacing the opening, so it is possible that Lindenau may have had something to do with disseminating this technique. It is unlikely, however, that he was the originator—this is discussed under the students of Roger Voisin later in this chapter.

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Blue 3 (P)	84	Lyrical	Even	Last bar
Purple 2 (P)	84	Sustained	Even	Last bar

Mussorgsky – Again, Purple 2 and Blue 3 made almost identical choices on the Mussorgsky, but the one category in which they differed, 'Shape of quarter notes', was the most crucial category in determining similar interpretations for this excerpt. Admittedly, the 'Sustained' and 'Lyrical' choices were very close in overall effect, but the difference was noticeable when listening to these two recordings.

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Blue 3 (P)	58	Beat	Yes	Upper neighbor	End (but slows)
Purple 2 (P)	64	No	Yes	Upper neighbor	-

Respighi – Because of the importance of the 'Tempo' and 'Rubato' categories on the Respighi, Purple 2 and Blue 3 were not similar overall on this excerpt. The interpretation of Blue 3 included a much freer sense of *rubato* than the cleaner choices of Purple 2.

<u>Lindenau conclusions</u>

Because Interlochen is a high school program and the large age gap between these two students, I assumed that most musical training learned this early in a student's development would be harder to retain over the long course of a career. Yet while the solo excerpts showed two very different musical decisions, there were quite a few significant similarities between these two players in the orchestral excerpts. In particular, the *Long* eighth notes in the opening of the Beethoven and the *16th note* method for pacing the opening of the Mahler are both rare choices and suggest that Lindenau had a lasting effect on these two students. As you may have noticed, Purple 2 has appeared on many of these teacher comparisons as almost all of his primary as well as his secondary influences happened to be well-known orchestral pedagogues. Until Lindenau's two students, he was a complete outlier to every grouping, but the Lindenau tree was easily his strongest grouping. While this grouping was not incredibly consistent, it was interesting that Purple 2's high school teacher seemed to have had the most noticeable influence.

Even though Lindenau currently has students playing in many prominent positions around the world, it is unfortunate that this project was not able to include more of his students. He was the only teacher with multiple students on this list who taught at the high school level. It would have made for an interesting pedagogical study if there had been more students of his in this dissertation to allow for a stronger comparison of the lasting effects of early private teaching. Given that Lindenau seems to have been Purple 2's only noticeable influence, it would make a very interesting study to see if a student was more influenced by their first great teacher than subsequent great teachers.

Thomas Rolfs

Thomas Rolfs is currently the principal trumpet of the Boston Symphony Orchestra and teaches at the New England Conservatory and Tanglewood Music Center. None of his three students included in this project listed him as a primary teacher as they all spent only one or two summers

working with him at Tanglewood. Furthermore, two of these students, Blue 2 and Blue 4, were already discussed and compared under both the Orchestra Blue comparison by section as well as the Geyer/Butler comparison by teacher. Because these two students are already strongly grouped together by their section and primary teachers, the only comparisons worth mentioning here are if either of the Orchestra Blue students matches the other Rolfs student, Purple 2. Purple 2 had a great many famous teachers, yet he only grouped well with his primary high school teacher, Lindenau.

Table 15. Rolfs Students

Hindemith

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Purple 2	105	Long	Low F and Last C	Last note	-	-
Blue 4	114	Long	D♭	2nd high note, but both high	Final G	Slight
Blue 2	115	Long	D♭	Both high notes	Final G (w/out breath)	No

Haydn

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Purple 2	-	-	Timpani	Slur all	Upper neighbor	Yes
Blue 4	120	C	Timpani	Slur two, tongue two	Upper neighbor	No
Blue 2	132	C	Timpani	Slur two, tongue two	Upper neighbor	No (different phrasing)

Beethoven

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Purple 2	Yes	Gradual	Long	Short	-
Blue 4	Rubato (slight)	Gradual	Round	Round	Comfortable
Blue 2	Yes	Sudden	Round	Long	Comfortable

Bizet

Musician	Method used to play low E ♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Purple 2	Trigger 1 bar	65	Downbeat	Mezzo forte
Blue 4	Trigger 1 bar	60	Downbeat	Mezzo forte
Blue 2	Trigger 1 bar	64	Beat 3	Mezzo forte

Mahler

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Purple 2	16th notes	-	Rushed	-	Yes
Blue 4	6/4	Terrace (Troops marching)	Rushed	65	Yes
Blue 2	6/4	Terrace	Rushed	64	Yes

Mussorgsky

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Purple 2	84	Sustained	Even	Last bar
Blue 4	88	Lyrical	Even	No
Blue 2	92	Sustained	Arc	No

Respighi

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Purple 2	64	No	Yes	Upper neighbor	-
Blue 4	62	Beat	Yes	Upper neighbor	Partial
Blue 2	60	Phrase	Yes	Upper neighbor	End

Rolfs conclusions

While there were one or two similarities between the Orchestra Blue members and Purple 2, the overall differences were obvious. However, there was one example of direct evidence that did not show up on the table. While working on the Respighi excerpt with Blue 2, he said, “One of the things I really try to bring out on this excerpt is the tone color change at the E minor. [m. 7 on the

included part] I first heard this from Tom Rolfs, and I think it's really important to reflect this tonal shift in your audition." I can confirm that Rolfs insists on this tone color change in his teaching, and Purple 2 and Blue 4 also brought up this timbre change in my lessons with them. This is a prime example of how a teacher can pass on something he finds important even if he has limited contact with the student. That being said, he was not these students' primary teacher, and consequently, he did not seem to pass on his overall interpretations to any of this group of students.

Michael Sachs

Michael Sachs is currently principal trumpet of the Cleveland Orchestra and teaches at the Cleveland Institute of Music. Of his two students here, Orange 2 lists Sachs as a secondary influence with which he has had some lessons but more importantly, had been a colleague of Sachs at some point during his career. The other player, Purple 2 listed Sachs as a primary influence as Purple 2 completed his undergraduate degree with Sachs. This is the last teacher on this list under which Purple 2 appears.

Table 16. Sachs Students

Hindemith: Sonata

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m.15
Purple 2 (P)	105	Long	Low F and Last C	Last note	-	-
Orange 2	110	-	-	Both high notes	Final G	No

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Purple 2 (P)	-	-	Timpani	Slur all	Upper neighbor	Yes
Orange 2	120	C	Timpani	Varies	Varies	-

Beethoven: Leonore

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Purple 2 (P)	Yes	Gradual	Long	Short	-
Orange 2	Rubato	Gradual	Round	Round	-

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Purple 2 (P)	Trigger 1 bar	65	Downbeat	Mezzo forte
Orange 2	Custom equipment (The Shredder)	60	Downbeat	Mezzo forte

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Purple 2 (P)	16th notes	-	Rushed	-	Yes
Orange 2	Half note frame – (pendulum)	Terrace (using "Pendulum)	Steady	55	Slight

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Purple 2 (P)	84	Sustained	Even	Last bar
Orange 2	84	Bell tones	Even	Last bar

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Purple 2 (P)	64	No	Yes	Upper neighbor	-
Orange 2	56	Beat	Yes	Upper neighbor	Partial

Sachs conclusions

Much like Purple 2's comparison to the Orchestra Blue members under the Rolfs and Geyer/Butler teacher trees, Purple 2 was dissimilar to Orange 2 on almost every excerpt. The only excerpt on which Orange 2 and Purple 2 grouped well was the Mussorgsky, but they did not match on the most important of the categories, 'Shape of quarter notes'. Therefore, there was no noticeable grouping under the two students of Sachs, but as there were only two to compare, this is not a very representative sampling.

Charles Schlueter

Charles Schlueter was the principal trumpet of the Boston Symphony and taught at the New England Conservatory and the Tanglewood Music Center. Prior to that, he performed and taught across the country including playing principal trumpet for the Minnesota Orchestra and teaching at the University of Minnesota. While both of the students in the following comparisons listed Schlueter as a primary influence, they were separated by a sizeable age difference.

Table 17. Schlueter Students

Hindemith: Sonata

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Purple 1 (P)	105	Long	Last C	Last note	Final G	-
Yellow 2 (P)	102	Equal	Last C	Both bottom notes	Final G	No

Hindemith – Purple 1 and Yellow 2 both had somewhat similar interpretations on the Hindemith as they chose comparable tempi and approached many of the phrases in the same manner. However, the interpretations of Purple 1 were considerably more connected as shown by the 'Length and direction of 1st quarter note' and 'Phrasing of descending motive' categories. In both of these categories, Purple 1 simply led to the last note, whereas Yellow 2 created a martial feel by using more separation in the opening three note motive as well as breaking the descending motive into two smaller phrases. Because of these general stylistic differences, the two interpretations ended up sounding quite different.

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Purple 1 (P)	130	E	Firm	Slur two, tongue two	Melodic	Yes
Yellow 2 (P)	120	E	Timpani	Slur two, tongue two	Upper neighbor	Yes

Haydn – Other than their use of *Slur two, tongue two* under '16th note tonguing', there were very few similarities between their preferences on the Haydn.

Beethoven: Leonore

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Purple 1 (P)	Yes	Gradual	Short	Round	Loud
Yellow 2 (P)	Yes	Gradual	Round	Short	Loud

Beethoven – Both of these musicians started the excerpt the same, but their eighth note lengths were reversed, creating a noticeable difference from the second bar through the end.

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Purple 1 (P)	Trigger opening	60	Downbeat	Mezzo forte plus
Yellow 2 (P)	Custom equipment (tuning slide)	60	Downbeat	Mezzo forte

Bizet – Yellow 2 was one of only two trumpeters in this project to use custom equipment for the Bizet, although he mentioned that he sometimes used a trigger method similar to Purple 1 if he did not have his custom horn with him for a performance (never in audition, though.) Other than this slight difference, Purple 1 and Yellow 2 were identical in their approach to this excerpt as was typical for this excerpt.

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Purple 1 (P)	6/4	Terrace	Rushed	65	Yes
Yellow 2 (P)	6/4	Terrace (w/out pull back after 3rd)	Steady	52	Yes

Mahler – While both players approached the opening flourishes in the same manner, the large gap in tempo created very different styles for the excerpt.

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Purple 1 (P)	86	Sustained	Even	No
Yellow 2 (P)	88	Bell tones	Even, except last two octave jumps	Last bar

Mussorgsky –The table for these musicians seemed similar at first glance, but the most important determinant for this excerpt was the 'Shape of quarter notes' category. The *Bell tones* preferred by Yellow 2 largely contrasted the *Sustained* choice of Purple 1.

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Purple 1 (P)	60	Slight	Yes	Upper neighbor	-
Yellow 2 (P)	55	Slight	Yes	Upper neighbor	None

Respighi – Even though Yellow 2 favored a slightly slower tempo than Purple 1, these two interpretations ended up sounding quite similar. Both players favored a very simple approach to the lyricism necessary for this excerpt and cautioned against over-Romanticizing.

Schlueter conclusions

The similarities between these two students on the Bizet and the Respighi excerpts, particularly their comments about lyrical approaches, suggested that Schlueter may have had some lasting effect on his students' lyrical playing, yet the overall effect of Purple 1 and Yellow 2 were quite different.

James Stamp

James Stamp grew up in Minnesota, and like Charles Schlueter, spent time playing with what would become the Minnesota Orchestra. Stamp moved to Los Angeles to play for movie soundtracks and eventually became a member of the Los Angeles Philharmonic. While teaching at multiple universities in Los Angeles, Stamp developed an impressive reputation as a brass pedagogue, and many of his warm-up exercises and pedagogical techniques are still employed by trumpeters today. All three of the following students listed Stamp as a primary influence, and while the youngest of these students is nearly fifty years old, these students still span over twenty-five years.

Table 18. Stamp Students

Hindemith: Sonata

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Yellow 4 (P)	-	-	-	-	-	-
Yellow 1 (P)	124	Equal	Low F	Both bottom notes	Final G	Slight
Orange 1 (P)	120	Long	Last C	2nd high note	Final G	Slight

Hindemith – Yellow 4 declined to comment on his interpretation of the Hindemith, so his data was unavailable for this comparison. The other two students, Orange 1 and Yellow 1, shared almost no common interpretive decisions on this excerpt.

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Yellow 4 (P)	120	E	Firm	Slur all	Upper neighbor	Slight
Yellow 1 (P)	130	C	Timpani	Slur two, tongue two	Upper neighbor	-
Orange 1 (P)	134	C	Timpani	Slur all	Previous note rule	No

Haydn - The results for the Stamp students on the Haydn excerpt represent yet another example of a 'compiled' interpretation incorrectly portraying the interpretations of the group. There is a clear majority in each of the categories, but no two players actually sound alike on this piece.

Beethoven: Leonore

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Yellow 4 (P)	Yes	Sudden	Short	Round	Loud
Yellow 1 (P)	Yes	Sudden	Round	Short	-
Orange 1 (P)	No	Gradual	Round	Round	-

Beethoven – The overall results for the Beethoven excerpt with this group were the same as the Haydn—there were categorical majorities, but they did not accurately reflect like interpretations. The individual note lengths of both of Orchestra Yellow students were exact opposites. However, as shown by the 'Rubato in first two bars' and 'Accelerando' categories, they both had a similar overall structure on this excerpt. These two students were two of only four players in the entire project to use the *Sudden* method of tempo change on this excerpt, and that would seem to imply that Stamp may have been a proponent of this. I do not claim to know what Stamp's preference was regarding this, but as will be discussed shortly under William Vacchiano's students, multiple trumpeters have suggested that the *Sudden* tempo change can be attributed to Vacchiano. Both Yellow 4 and Yellow 1 studied with Vacchiano, which means that this choice likely had little to do with Stamp.

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Yellow 4 (P)	Trigger 1 bar	60	Downbeat	Mezzo forte plus
Yellow 1 (P)	Trigger opening	75	Beat 3	Mezzo forte
Orange 1 (P)	Only low E♭	70 (?)	Downbeat	Under celli

Bizet – These three interpretations of the Bizet excerpt could hardly be more disparate, even when excluding the inconsistencies of this excerpt that did not appear under these categories.

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Yellow 4 (P)	6/4	Terrace	Steady	68	-
Yellow 1 (P)	Half note frame	-	Steady	68	No
Orange 1 (P)	Half note frame	Terrace	Rushed	66	Slight

Mahler – All three players choose similar tempi for the Mahler excerpt, but that was the only consistent category for the Mahler excerpt. It was interesting that Yellow 1 and Orange 1 used the *Half note frame* structure for pacing the opening given its relative obscurity, but all of Orange 1's section used it is as well. This might not preclude Stamp from teaching this method, however, because Orange 1 is also the oldest and longest-tenured member of Orchestra Orange as well as the principal. Therefore, it is quite possible that he is responsible for unification of Orchestra Orange, and Stamp may have been the teacher that passed on the *Half note frame* criterion. Unfortunately, we only have three Stamp students for comparison, so it is difficult to make any further assumption.

There was a similarity between two of these players that was not included on the listed categories. Both Yellow 1 and Orange 1 suggested that the rests in the opening six measures of the Mahler should be stretched to "increase drama." Stamp is a probable source of this interpretation as he is the only *primary* teacher they both shared, although both of these trumpeters also studied with William Vacchiano to varying extents.

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Yellow 4 (P)	82	Sustained	Hairpin	-
Yellow 1 (P)	90	Sustained	Even	-
Orange 1 (P)	90	Sustained	Arc	Last bar

Mussorgsky – Yellow 1 and Orange 1 sounded very similar on the Mussorgsky excerpt, even though Orange 1 used a slight dynamic arc in his phrasing. Yellow 4's rendition sounded like a comparable but slower version of the other two.

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Yellow 4 (P)	62	Beat	Yes	-	Partial
Yellow 1 (P)	70	Beat	Yes	Contour	Partial
Orange 1 (P)	70	Beat	Yes	Upper neighbor	Partial

Respighi – Like the previous excerpt, Yellow 1 and Orange 1 had quite a bit in common on the Respighi, but their phrasing created a noticeable difference. The *Contour* effect that Yellow 1 used meant that each two bar phrase peaked much sooner than the *Upper neighbor* method of Orange 1.

Stamp conclusions

There was not much grouping among Stamp's students, although Orange 1 and Yellow 1 did share many similarities over the last three excerpts, including the distinctive suggestion to stretch the rests in the opening of the Mahler. However, both are principal trumpet players, so it was no surprise that they had developed differing opinions over the many years since they studied with Stamp. It was surprising, however, that Yellow 4 was so different from Yellow 1 considering that they not only studied with Stamp, but also had played with each other in the same orchestra for the last twenty-eight years.

William Vacchiano

William Vacchiano was a member of the New York Philharmonic for thirty-eight years and taught at the Juilliard School, the Manhattan School of Music, and the Mannes College of Music for a staggering sixty-seven years. It is estimated that he taught over two thousand trumpet students during his tenures at those institutions, so it is no shock that he currently has five students in major symphonies – three of them as principal. Of the students, three listed Vacchiano as a primary influence.

Table 19. Vacchiano Students

Hindemith: Sonata

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Yellow 1 (P)	124	Equal	Low F	Both bottom notes	Final G	Slight
Red 2 (P)	115	-	-	Last note	Final G	No
Yellow 4	-	-	-	-	-	-
Orange 1	120	Long	Last C	2nd high note	Final G	Slight

Hindemith – As discussed above, the Hindemith excerpt results for both Yellow 4 and Red 2 were not usable, and I was unable to get any interpretations for Blue 1 on either the Hindemith or Haydn excerpts. Consequently, Orange 1 and Yellow 1 were the only two students of this group with complete interpretive data, and they were different in almost every way.

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Yellow 1 (P)	130	C	Timpani	Slur two, tongue two	Upper neighbor	-
Red 2 (P)	122	E	Timpani	Slur two, tongue two	Upper neighbor	-
Yellow 4	120	E	Firm	Slur all	Upper neighbor	Slight
Orange 1	134	C	Timpani	Slur all	Previous note rule	No

Haydn – The two primary students, Yellow 1 and Red 2, were quite similar in their overall styles as shown by their matching results in 'Length of non-slurred 8th notes', '16th note tonguing', and 'Trill methods'. All three of these categories occur throughout the piece and are important for these comparisons. However Yellow 1 and Red 2 phrased differently as shown under 'Goal of 1st 3 notes' as well as choose largely different tempi, so their interpretations seemed quite different when listening to the recordings. The two non-primary students were noticeably different from the primary students as well as each other.

Beethoven: Leonore

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Blue 1 (P)	Rubato	Gradual	Round	Round	-
Yellow 1 (P)	Yes	Sudden	Round	Short	-
Red 2 (P)	Yes	Gradual	Short	Short	-
Yellow 4	Yes	Sudden	Short	Round	Loud
Orange 1	No	Gradual	Round	Round	-

Beethoven - The Beethoven excerpt is particularly interesting for the Vacchiano grouping. In a lesson with Eric Berlin four years ago, Berlin told me that he believed Vacchiano was the

originator of the *alla breve* change on this excerpt. Unprompted, two of the trumpeters in this project, Blue 3 and Purple 1, also attributed the creation and subsequent popularization of the *alla breve* style to Vacchiano even though they did not use it. Assuming that these experienced trumpeters were correct in their attribution, it would follow that Vacchiano's students would also use the *Sudden* tempo change, yet only two of the five Vacchiano students used the *Sudden* tempo change.

Admittedly, there were only four players in the entire project that still played it as an *alla breve*, so two Vacchiano students was a disproportionately large number. Of the two non-Vacchiano students to use the *Sudden* style, Red 4 came from the same generation as Yellow 4 and Yellow 1, the Vacchiano students, but did not list any connection to Vacchiano, although it is quite possible that Red 4 heard Vacchiano play this overture. Blue 2 is one of the youngest players in the project and had no direct ties to Vacchiano. Blue 2 did state explicitly that he tried to achieve a result that combined both the *Gradual* and *Sudden* criteria, but his interpretation sounded identical to the other *alla breve* style players hence his inclusion in that group.

There is a primary source of Vacchiano playing the Beethoven excerpt. In 1960, the New York Philharmonic recorded the *Leonore* Overture No. 3 with Leonard Bernstein conducting and William Vacchiano playing principal trumpet. On the recording, Vacchiano did use the *Sudden* tempo change in both iterations of the call. So while it is not possible to determine conclusively whether Vacchiano created the *alla breve* style, or even if he is primarily responsible for disseminating it throughout the United States, his recording from 1960 proves that he favored this affectation and that Yellow 1, Yellow 4, and possibly even Red 4 may have all taken this interpretation from Vacchiano.

This is one of the few excerpts to which we can refer to a primary source of the teacher performing, but given that it is possible that Bernstein may have asked Vacchiano to interpret the excerpt in a particular way, we cannot entirely trust this recording in the same way we use the

recorded interviews with these players. it is interesting to see which students are most similar to the teacher. Yet the comparison it creates is still illuminating. We have already established that the *Sudden* criterion is a prominent feature of Vacchiano's interpretation, but his recording also provided the following interpretations: the first two bars were played with *Rubato*, and his '8th note shapes' were *Round* for both halves of the excerpt. While Yellow 4 and Yellow 1 were the only two to use Vacchiano's tempo change, they do not match him in any other consistent manner. However, Orange 1 matched Vacchiano's note lengths and Blue 1 matched both note lengths and the *rubato* opening. Because of this, Blue 1 sounded closer stylistically to Vacchiano than either of the students that used the sudden tempo change. So while the tempo change drew the attention, the pacing and note lengths of this excerpt were more important in determining similarity in the style.

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Blue 1 (P)	Trigger 1 bar	65	Downbeat	-
Yellow 1 (P)	Trigger opening	75	Beat 3	Mezzo forte
Red 2 (P)	Trigger opening	64	Downbeat	Comfortable forte
Yellow 4	Trigger 1 bar	60	Downbeat	Mezzo forte plus
Orange 1	Only low E♭	70 (?)	Downbeat	Under celli

Bizet – As mentioned previously, 'Tempo' is most often the determining factor in this excerpt followed closely by 'Method used to play low E♭'. Among the Vacchiano students, there was an extremely wide range of tempi, and only two musicians were within five bpm of each other. There was also very little correlation in how the players play the low concert E♭. Therefore, there was basically no agreement among the Vacchiano students on this excerpt.

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Blue 1 (P)	6/4	Terrace	Rushed	60	Yes
Yellow 1 (P)	Half note frame	-	Steady	68	No
Red 2 (P)	16th note	Terrace (but starts at mf)	Rushed	64	Yes
Yellow 4	6/4	Terrace	Steady	68	-
Orange 1	Half note frame	Terrace	Rushed	66	Slight

Mahler – Other than the 'Phrasing of the opening' category, there were no consistent similarities to group the Vacchiano students together. These results were not surprising if we consider that Vacchiano never played this excerpt as a whole as detailed in Chapter 5.

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Blue 1 (P)	96	Sustained	Even	No
Yellow 1 (P)	90	Sustained	Even	-
Red 2 (P)	90	Sustained	-	-
Yellow 4	82	Sustained	Hairpin	-
Orange 1	90	Sustained	Arc	Last bar

Mussorgsky – Unlike the previous excerpts, the Vacchiano students grouped well on the Mussorgsky. Yellow 1, Red 2, and Orange 1 sounded very much alike, because they used the same tempi and 'Shapes of quarter notes'. Blue 1 and Yellow 4 did match on 'Shapes of quarter notes' as well, but they used the fastest and slowest tempi respectively of any trumpeter in the project giving their Promenades noticeably different feels from the other three Vacchiano students.

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Blue 1 (P)	60	Slight	Yes	Contour	Partial
Yellow 1 (P)	70	Beat	Yes	Contour	Partial
Red 2 (P)	66	Beat	Yes	Upper neighbor (through vibrato)	-
Yellow 4	62	Beat	Yes	-	Partial
Orange 1	70	Beat	Yes	Upper neighbor	Partial

Respighi – Orange 1 and Yellow 1 were slightly similar on the Respighi, but their interpretations were compared under James Stamp's students above. The other three students all differed on the significant categories of 'Tempo' and 'Rubato'.

Vacchiano conclusions

While the Vacchiano students had some noteworthy comparisons, particularly on the Beethoven, there was very little evidence to establish the primary decisions of Vacchiano. Most likely, this can be attributed to the large time that has passed since any of these students studied with Vacchiano. As a set, they had the highest average age of any of the groupings, so the students' preferences had had time to evolve.

Roger Voisin

Roger Voisin was principal of the Boston Symphony for thirty-eight years and served on the faculties of the New England Conservatory, Boston University, and the Tanglewood Music Center. Much like William Vacchiano, his career spanned several decades. He began playing with the BSO in 1935, but he was still teaching at Tanglewood until his death in 2008. Four trumpeters listed Roger Voisin as an influence, although none of them considered him a primary influence.

Table 20. Voisin Students

Hindemith: Sonata

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Yellow 4	-	-	-	-	-	-
Orange 1	120	Long	Last C	2nd high note	Final G	Slight
Blue 3	110	Equal	D♭ (possible last C)	-	C♯ before final G	No
Yellow 2	102	Equal	Last C	Both bottom notes	Final G	No

Hindemith – There were no similarities among the interpretations of these students on the Hindemith excerpt.

Haydn: Concerto

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Yellow 4	120	E	Firm	Slur all	Upper neighbor	Slight
Orange 1	134	C	Timpani	Slur all	Previous note rule	No
Blue 3	124	C	Long	Varies	Upper neighbor	No
Yellow 2	120	E	Timpani	Slur two, tongue two	Upper neighbor	Yes

Haydn – Three of the Voisin students used the same trill method for the Haydn, but *Upper neighbor* was the most common choice for this category across all the trumpeters, so it cannot be linked only to Voisin. There were no further similarities with this group.

Beethoven: Leonore

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Yellow 4	Yes	Sudden	Short	Round	Loud
Orange 1	No	Gradual	Round	Round	-
Blue 3	No	Gradual	Long	Round	-
Yellow 2	Yes	Gradual	Round	Short	Loud

Beethoven – None of these players approached the Beethoven in the same manner.

Bizet: Carmen

Musician	Method used to play low E♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Yellow 4	Trigger 1 bar	60	Downbeat	Mezzo forte plus
Orange 1	Only low E♭	70 (?)	Downbeat	Under celli
Blue 3	No	Gradual	Long	Round
Yellow 2	Custom equipment (tuning slide)	60	Downbeat	Mezzo forte

Bizet – On the Bizet excerpt, only two trumpeters, Yellow 4 and Yellow 2, had a somewhat similar overall interpretation, but they are both members of Orchestra Yellow. Their similarities are more likely linked to their orchestra considering that they are almost forty years apart in age.

Mahler: Sym. No. 5

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Yellow 4	6/4	Terrace	Steady	68	-
Orange 1	Half note frame	Terrace	Rushed	66	Slight
Blue 3	16th notes	-	Rushed	58	Yes
Yellow 2	6/4	Terrace (w/out pull back after 3rd)	Steady	52	Yes

Mahler – Again, the only two similar interpretations were the two members of Orchestra Yellow, although they choose drastically different tempi. In the lesson with Blue 3, he stated that Roger Voisin taught him to use the *16th note* method for pacing the opening triplets, yet none of the other students here used that method. This can possibly be attributed to the fact that none of these students considered Voisin a primary influence, although it is also conceivable that they simply achieved better results using one of the other methods.

Mussorgsky: Pictures

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Yellow 4	82	Sustained	Hairpin	-
Orange 1	90	Sustained	Arc	Last bar
Blue 3	84	Lyrical	Even	Last bar
Yellow 2	88	Bell tones	Even, except last two octave jumps	Last bar

Mussorgsky – None of the Voisin students matched on the two most important categories, 'Tempo' and 'Shape of quarter notes', so there were no meaningful similarities in this group on the Mussorgsky.

Respighi: Pines

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Yellow 4	62	Beat	Yes	-	Partial
Orange 1	70	Beat	Yes	Upper neighbor	Partial
Blue 3	58	Beat	Yes	Upper neighbor	End (but slows)
Yellow 2	55	Slight	Yes	Upper neighbor	None

Respighi – At first glance, there seemed to be quite a few commonalities among the students on the Respighi, but the drastic range of tempi created four unique interpretations for this excerpt.

Voisin conclusions

As expected, there were no substantial similarities among the Voisin students, most likely due to Voisin being the oldest teacher discussed here and therefore having no primary students.

Overall conclusions for comparisons by teacher and influences

As mentioned in this paper's introduction, this project contains many variables that cannot be isolated in a scientific manner, and because of this, the conclusions drawn for this project cannot be definitive in nature. In this chapter, I have highlighted the patterns that were noteworthy and useful, but in reality, these results are only helpful in beginning to understand what effects a teacher may have on a student. This is not only a small sample size of each teacher's students, but also a small sample of the repertoire that the teacher would have covered with each student. For the secondary influences, it is likely that some of the material in this project was not covered in their interactions. However, if a secondary influence was known for a particular performance of a piece, it should be possible to see a direct correlation.

Table 211. Mahler Categories for Phil Smith Influences

Mahler

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Yellow 3	6/4	Terrace	Steady	60	Yes
Green 3	6/4	As marked	Steady	66	-
Green 4	6/4	Terrace	Rushed	-	Slight
Green 1	6/4	Terrace	Rushed	62	Yes
Purple 2	16th notes	-	Rushed	-	Yes
Yellow 2	6/4	Terrace (w/out pull back after 3rd)	Steady	52	Yes
Blue 4	6/4	Terrace (Troops marching)	Rushed	65	Yes
Blue 2	6/4	Terrace	Rushed	64	Yes

As discussed in the Chapter 5, many of this project's participants mentioned the importance of Phil Smith's recording of Mahler's Symphony No. 5 with the New York Philharmonic under Zubin

Mehta. This table shows the interpretations on the excerpt of the students who listed Phil Smith as an influence, primarily though his recordings, and the results are striking. There is a clear agreement in each category, and the compiled interpretation matches the recording's interpretation exactly—*6/4*, *Terrace, Rushed,* a tempo between 60 and 65 bpm, and *Yes* for the final triplets. Oddly, the one outlier under the 'Pacing of the opening' category—Purple 2, our perpetual outlier— exhibited the most affection for this particular recording. When asked about how he came to his interpretation on the Mahler excerpt, he responded, "I just listened to the Phil Smith recording so many times that I could sound just like him." Admittedly, by itself, the technique used on 'Method for rushing triplets' does not necessarily preclude him from sounding like Phil Smith, but it does demonstrate how differently each influence can affect an individual. Excluding Purple 2, the influence of this recording is remarkable.

Furthermore, another notable observation comes from comparing the overall compiled interpretation of the Mahler excerpt from Part I to the interpretation taken from the aforementioned recording of Phil Smith; the two interpretations are identical, and as discussed in Part I, many of the trumpeters mentioned an admiration for Phil Smith's recording of this opening, even if they did not list him as an influence. That recording's prominence has likely contributed to the most homogenous interpretation overall of any of these excerpts, but it still did not completely erase difference between sections as demonstrated under the Mahler portion of Chapter 8.

Table 222. Mussorgsky Categories for Herseth Influences

Mussorgsky

Musician	Tempo	Shape of quarter notes	Two-measure phrasing	Extra breath
Yellow 4 (P)	82	Sustained	Hairpin	-
Orange 1	90	Sustained	Arc	Last bar
Purple 1	86	Sustained	Even	No
Blue 3	84	Lyrical	Even	Last bar
Yellow 3	88	Sustained	Even	Last bar
Green 3	90	Sustained	Metric division (2+3+3+3, then 3+3+2+3)	-
Gray 1	92	Sustained	Even	
Green 1	88	Sustained	Hairpin	No
Purple 2	84	Sustained	Even	Last bar
Blue 2	92	Sustained	Arc	No

This second table includes the interpretations of only the participants who listed Adolph Herseth, the famous former principal of Chicago Symphony, as an influence. All but one of these musicians said that Herseth was only a secondary influence because they did not study with him; they only listened to his recordings. While it is arguable, I am fairly confident in stating as a trumpeter that Herseth's recordings of Mussorgsky's *Pictures at an Exhibition* are his most recognized efforts, and the tables from this project support this strongly. On the Mussorgsky, the results of the 'Shape of quarter note' category, the most important stylistic category for this excerpt, is almost unanimous across ten of the participants. The other stylistically defining category, 'Tempo', has only two outliers meaning that almost all of these interpretations are quite similar regardless of the 'Two-measure phrasing' category. Of course, it is impossible to tell whether Herseth's interpretations on these recordings were his alone and not influenced by any number of factors, e.g. the conductor or the recording space. Regardless, the final product of these recordings does seem to affect those musicians who listed him as an influence for this project.

In my lesson with Gray 1, there was a further example of the fragmentary nature of musical influence through teaching. When discussing the Respighi excerpt, Gray 1 stated that a single lesson had changed everything about his approach to this excerpt. Fortunately, this person was Yellow 3, so we can compare their interpretations of the Respighi directly.[1]

Table 23. Respighi Excerpt for Yellow 3 and Gray 1

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Yellow 3	64	Beat	Yes	Upper neighbor (through vibrato)	End
Gray 1	72	Beat	Yes	Upper neighbor (through vibrato)	-

Aside from a moderate difference in tempo, it is obvious that Gray 1 had modeled his interpretation of this excerpt after Yellow 3; they were also the only two trumpeters in the entire project who explicitly stated that they removed all *vibrato* to emphasize the important notes of the *Upper neighbor* phrasing. However, the Beethoven was the only other excerpt that these two

[1] Yellow 3 only had one participant in this project list him as an influence, so he was not given his own comparison section in this chapter.

interpreted similarly, and even on that excerpt, they used a different style for the last four bars. Therefore, even though Gray 1 considered Yellow 3 a primary influence, Yellow 3 only directly affected Gray 1 on one, or maybe two, of these seven excerpts.

All three of these samples are indicative of the results of this chapter. A teacher's influence is limited due to the many competing forces for a student's attention. For example, it is quite possible that one of these musicians may have chosen the Phil Smith interpretation of the Mahler excerpt, the Bud Herseth recording of the Mussorgsky, their undergraduate teacher for the Hindemith, and everything else from their current colleagues. Therefore, the common sense conclusion of this chapter is simply that a teacher should expect to be a strong influence on a student, but certainly not the only influence. This lesson is of particular importance to collegiate music professors; the peers of a student will have as much, if not more influence on the progress of a student than private instruction. Therefore in my opinion, it is important to establish a strong tradition of student leadership within the studio and to recruit and accept students that will help continue this. I am sure that there are more experienced teachers than me with opinions on this, but talent should not be the sole determinant in accepting students for private study.

CHAPTER 10—Excerpt Breakdown by Tradition

As mentioned in the introduction, the original impetus of this project was to study the different regional schools of orchestral trumpeting—East Coast, Midwest, and West Coast. As I began the project, I was under the impression that these musicians had earned their jobs playing in the appropriate school, and occasionally, this idea was reinforced by the trumpeters. For example, in the interview portion of my lesson with Orange 1, he said, "It's not a coincidence that students that grew up in the area eventually won jobs here." Upon completion of the project however, I felt that none of the participants struck me as particularly 'regional'. Each trumpeter was extraordinarily talented and thoughtful, and as such, my impression of these trumpeters denied simple regional categorizations. For this reason, I decided to analyze the players in one more grouping—by the tradition in which they were trained. I have designed standards that establish a tradition for each of the six cities included in this project: Boston, Chicago, Cleveland, Los Angeles, New York, and Philadelphia. For a player to belong to a tradition, he must have met at least one of the following criteria: been a member of the professional symphony of the city for a season, studied at a degree granting institution in the city, listed an established member of the city's symphony as a primary influence, or studied with the symphony's training orchestra.[1]

This list *excludes* the trumpeters from their *current* orchestra if their current position is the *only* link they have to that orchestra. For example, a trumpeter who is currently employed by the New York Philharmonic, but never studied in New York or with a member of the New York Philharmonic would *not* be on the New York list.

[1] This section will only consider the collegiate-level training orchestras of Boston and Chicago, Tanglewood and the Chicago Civic respectively.

As a preliminary test for this set of criteria, I made a list using the current members of these six symphonies to see if any groupings were readily apparent, and the results were remarkable enough for me to include this list here. For the following list, I only used information that was readily available from each symphony member's biography as listed on their current orchestras' websites or their personal website, not information gathered from the interviews for this project. By using only publically available information, I am able to list the actual names of the trumpeters. In the three years since I began this project, there has been some turnover in the sections*. This means that this list not only* includes *multiple trumpeters that did not participate in this project, it also* excludes *multiple trumpeters that were participants of this project*. Because of this, I feel confident in listing their real names, as it is not possible using this list to tell which of these trumpet players actually participated in the project and therefore cannot be used to decipher the anonymity established in the previous chapters.

<u>Tradition Tree – current as of June 2011</u>
Current members of the orchestra are italicized.
Boston – Criteria: held position with a professional orchestra in Boston; studied at a degree granting institution in Boston; studied with Charlie Schlueter, Roger Voisin, or a current member of the orchestra; studied at the Tanglewood Music Center.
All of the current members of the Boston Symphony are on this list.

1) *Tom Rolfs* - Studied with Charlie Schlueter, studied at Tanglewood
2) *Ben Wright* - Studied at Tanglewood
3) *Tom Siders* - Studied at Tanglewood with Tom Rolfs
4) *Michael Martin* - Studied at Tanglewood with Tom Rolfs
5) Chris Still - Studied at NEC with Charlie Schlueter, studied at Tanglewood with Voisin
6) Ethan Bensdorf - Studied at Tanglewood with Tom Rolfs
7) Matthew Muckey - Studied at Tanglewood with Tom Rolfs
8) Thomas Smith - Studied at NEC with Robert Nagel
9) Michael Sachs - Studied at Tanglewood with Roger Voisin
10) Robert Earley - Studied at NEC with Ghitalla, performed with Boston Pops

Chicago – Criteria: held position with a professional orchestra in Chicago including the Chicago Civic; studied at a degree granting institution in Chicago; studied with Adolph Herseth, Vincent Cichowicz, Charles Geyer, Barbara Butler, or with a current member of the orchestra.
All current members of the Chicago Symphony are on this list except Mark Ridenour.

1) *Tage Larsen* - Studied with Barbara Butler
2) *Chris Martin* - Studied with Charles Geyer and Barbara Butler
3) *John Hagstrom* - Grew up in Chicago
4) Jim Wilt - Studied with Charlie Geyer at Eastman
5) Tom Rolfs - Studied at Northwestern with Vincent Cichowicz
6) Ben Wright - Former member of the CSO, studied with Charlie Geyer for multiple lessons
7) Michael Martin - Studied at Northwestern with Barbara Butler and Charles Geyer, performed with the Chicago Civic
8) Phil Smith - Former member of the CSO
9) Ethan Bensdorf - Studied at Northwestern with Barbara Butler and Charles Geyer, performed with the Chicago Civic
10) Matthew Muckey - Studied at Northwestern with Charles Geyer and Barbara Butler, performed with Chicago Civic

Cleveland – held a position with the Cleveland Orchestra; studied at a degree granting institution in Cleveland; studied with Bernard Adelstein, James Darling, or with a current member of the orchestra.
Two of the current members of the Cleveland Orchestra are on this list. Michael Sachs and Jack Sutte did not have previous ties to this orchestra.

1) *Mike Miller* - Studied at Baldwin Wallace with Jim Darling
2) *Lyle Steelman* - Studied at Baldwin Wallace with Jim Darling, grew up in Cleveland
3) Ben Wright - Studied at CIM with Mike Sachs
4) Robert Earley - Studied at Baldwin Wallace with Jim Darling

Los Angeles – held position with a professional orchestra in Los Angeles; studied at a degree institution in Los Angeles; studied with Tom Stevens, James Stamp, Tony Plog, James Thompson (through James Stamp), or with a current member of the orchestra.
Yellow 1 is the only current member of the Los Angeles Philharmonic on this list. Jim Wilt and Chris Still did not have previous ties to Los Angeles.

1) *Don Green* - Studied at USC with Tom Stevens and James Stamp
2) Thomas Smith - Studied with Don Green over two summers
3) Michael Sachs - Studied at UCLA, while there studied with Anthony Plog and James Stamp, grew up in Los Angeles
4) Chris Martin - Performed as guest principal with Los Angeles Philharmonic, studied with Jim Thompson at Eastman

New York – held position with a professional orchestra in New York; studied at a degree granting institution in New York; studied with William Vacchiano, Vincent Penzarella, or with a current member of the orchestra.
Phil Smith is the only current member of the New York Philharmonic on this list. Ethan Bensdorf, Matthew Muckey, and Thomas Smith did not have previous ties to this orchestra.

1) *Philip Smith* - Studied at Juilliard with William Vacchiano
2) Jim Wilt - Former member of the New York Philharmonic
3) Chris Still - Studied with Vince Penzarella
4) Don Green - Studied at Juilliard with William Vacchiano
5) Ben Wright - Studied at Juilliard with Mark Gould
6) Michael Sachs - Studied at Juilliard with Mark Gould
7) Jack Sutte - Studied at Juilliard with Chris Gekker and Ray Mase
8) David Bilger - Studied at Juilliard
9) Robert Earley - Studied with William Vacchiano over three summers

Philadelphia – held position with the Philadelphia Orchestra; studied at a degree granting institution in Philadelphia; studied with Gil Johnson, Frank Kaderabek, Seymour Rosenfeld, Sam Kraus, or with a current member of the orchestra.
Two of the current members of the Philadelphia Orchestra are on this list. Dave Bilger and Bob Earley did not have previous ties to Philadelphia.

1) *Jeff Curnow* - Studied at Temple with Seymour Rosenfeld
2) *Roger Blackburn* - Studied at Curtis with Sam Krauss and Gil Johnson
3) Ben Wright - Multiple lessons with Dave Bilger
4) Jack Sutte - Studied at Curtis with Frank Kaderabek
5) Chris Martin - Former member of the Philadelphia Orchestra

The most notable observation is that with only one exception, each of the players in this project have received training in at least one, if not more, of the six cities studied in this project. The largest groupings by city are in Boston and Chicago; three of the four members of the Chicago Symphony have ties to Chicago, and all four of the Boston Symphony members studied in Boston at some point. The other four orchestras have at least one current member of their orchestra linked to their city, but it is clear that they have far less than students overall than either Boston or Chicago. I believe the main difference lies in Chicago's and Boston's training orchestras. Both of the major symphonies with a training orchestra tied directly to their program seem to have a far greater reach. For example, Boston would have six fewer students tied to their tradition if Tanglewood were excluded, leaving only four students who actually completed degrees with members of the BSO. Because of this, this chapter will pay special attention to students who played in the training programs to see if they share a demonstrable link.

In the previous two chapters, comparisons by section and by teacher, the largest group involved six musicians, but most had between two and four. In these cases, it was feasible to compare the overall interpretation of each trumpeter to each of the other interpretations of the group. A clear majority in one or two of the categories within each excerpt was worth commenting, but unless the overall interpretations matched, it was not enough to attribute a stylistic influence. Yet in this chapter, two of the traditions, Boston and Chicago, have considerably more students than any previous grouping, so I have adjusted the comparison strategy to accommodate this. If no obvious majorities are present, I will compare the interpretations within each tradition to the majorities in each category established in Part I. In this manner, it is possible to determine whether the majorities in each tradition are actually unique to that tradition or simply a tendency throughout all the trumpeters in the project. Furthermore, this chapter will focus primarily on large-scale comparisons. Because of the repeated individual comparisons by section and by teacher, most of the individual comparisons that could be examined in this chapter have already been discussed, primarily under one or more shared teachers.

Again, the list that I used to establish the tradition tree for the comparisons below is different than the one listed above. Some of the sections have made changes recently, so these changes are reflected only in the previous list, not the following tables. Any student with a 'T' in parentheses following his name studied in the training orchestra of that city. Like the previous chapter, the musicians are sorted by descending approximate age within each tradition, but not by training orchestra.

Table 24. Hindemith Sorted by Tradition

Musician	Tempo	Length and direction of 1st quarter note	Goal of 1st Phrase	Phrasing of descending motive	Phrasing of 3 bars before Reh. 1	Ritard. at m. 15
Boston						
Orange 1 (T)	120	Long	Last C	2nd high note	Final G	Slight
Purple 1 (T)	105	Long	Last C	Last note	Final G	-
Red 2	115	-	-	Last note	Final G	No
Blue 3	110	Equal	D♭ (possible last C)	-	C♯ before final G	No
Purple 2 (T)	105	Long	Low F and Last C	Last note	-	-
Yellow 2 (T)	102	Equal	Last C	Both bottom notes	Final G	No
Blue 4 (T)	114	Long	D♭	2nd high note, but both high	Final G	Slight
Blue 2 (T)	115	Long	D♭	Both high notes	Final G (w/out breath)	No
Chicago						
Yellow 4	-	-	-	-	-	-
Purple 1	105	Long	Last C	Last note	Final G	-
Yellow 3	128	Long	Last C	2nd high note	Final G	Slight
Gray 1	110	Equal	E♭	2nd high note	Final G	Yes
Green 4	110	Long	Last C	Last note	Final G	No
Green 1	110	Separated	Low F	2nd high note, but both high	Final G (w/ tongue)	No
Purple 2	105	Long	Low F and Last C	Last note	-	-
Yellow 2	102	Equal	Last C	Both bottom notes	Final G	No
Blue 4 (T)	114	Long	D♭	2nd high note, but both high	Final G	Slight
Blue 2 (T)	115	Long	D♭	Both high notes	Final G (w/out breath)	No
Cleveland						
Red 2	115	-	-	Last note	Final G	No
Orange 4	115	Long	Last C	2nd high note	Final G	No
Purple 2	105	Long	Low F and Last C	Last note	-	-
Orange 3	100	Equal	Last C	Last note	Final G	Slight
Los Angeles						
Yellow 4	-	-	-	-	-	-
Yellow 1	124	Equal	Low F	Both bottom notes	Final G	Slight
Orange 1	120	Long	Last C	2nd high note	Final G	Slight
Blue 3	110	Equal	D♭ (possible last C)	-	C♯ before final G	No
Gray 1	110	Equal	E♭	2nd high note	Final G	Yes
Green 1	110	Separated	Low F	2nd high note, but both high	Final G (w/ tongue)	No
New York						
Yellow 1	124	Equal	Low F	Both bottom notes	Final G	Slight
Orange 1	120	Long	Last C	2nd high note	Final G	Slight
Red 2	115	-	-	Last note	Final G	No
Yellow 3	128	Long	Last C	2nd high note	Final G	Slight
Orange 2	110	-	-	Both high notes	Final G	No
Purple 2	105	Long	Low F and Last C	Last note	-	-
Yellow 2	102	Equal	Last C	Both bottom notes	Final G	No
Philadelphia						
Red 4	118	Separated	Last C	2nd high note	Final G	Slight
Orange 2	110	-	-	Both high notes	Final G	No
Red 3	120	Long	Last C	Last note, but both low	Final G (w/ tongue)	Slight
Green 1	110	Separated	Low F	2nd high note, but both high	Final G (w/ tongue)	No
Purple 2	105	Long	Low F and Last C	Last note	-	-

Hindemith – With one minor exception, none of the traditions had any strong groupings on this excerpt, even when compared to the compiled data. The Los Angeles tradition had a minor exception under 'Length and direction of 1st quarter note.' For this group, there was a majority of *Equal,* even though the overall data is heavily skewed toward *Long* quarter notes. That being said, it cannot even be considered a strong pattern as it was only one category in a much larger set. Neither of the training orchestras had any particular differences from the rest of the group.

Table 25. Haydn Sorted by Tradition

Musician	Tempo	Goal of 1st 3 notes	Length of non-slurred 8th notes	16th note tonguing	Trill methods	*Subito piano* at m. 30
Boston						
Orange 1 (T)	134	C	Timpani	Slur all	Previous note rule	No
Purple 1 (T)	130	E	Firm	Slur two, tongue two	Melodic	Yes
Red 2	122	E	Timpani	Slur two, tongue two	Upper neighbor	-
Blue 3	124	C	Long	Varies	Upper neighbor	No
Purple 2 (T)	-	-	Timpani	Slur all	Upper neighbor	Yes
Yellow 2 (T)	120	E	Timpani	Slur two, tongue two	Upper neighbor	Yes
Blue 4 (T)	120	C	Timpani	Slur two, tongue two	Upper neighbor	No
Blue 2 (T)	132	C	Timpani	Slur two, tongue two	Upper neighbor	No (different phrasing)
Chicago						
Yellow 4	120	E	Firm	Slur all	Upper neighbor	Slight
Purple 1	130	E	Firm	Slur two, tongue two	Melodic	Yes
Yellow 3	130	E	Long	Tongue all	Upper neighbor	Yes
Gray 1	122	C	Timpani	Slur all	Directional rule	Yes
Green 4	-	E	Timpani	Slur two, tongue two	Upper neighbor (as grace note)	Yes
Green 1	120	-	Firm	Tongue all	Melodic	No
Purple 2	-	-	Timpani	Slur all	Upper neighbor	Yes
Yellow 2	120	E	Timpani	Slur two, tongue two	Upper neighbor	Yes
Blue 4 (T)	120	C	Timpani	Slur two, tongue two	Upper neighbor	No
Blue 2 (T)	132	C	Timpani	Slur two, tongue two	Upper neighbor	No (different phrasing)
Cleveland						
Red 2	122	E	Timpani	Slur two, tongue two	Upper neighbor	-
Orange 4	120	E	Detached	Slur two, tongue two	Melodic	-
Purple 2	-	-	Timpani	Slur all	Upper neighbor	Yes
Orange 3	120	Even	Timpani	Slur two, tongue two	Melodic	Slight
Los Angeles						
Yellow 4	120	E	Firm	Slur all	Upper neighbor	Slight
Yellow 1	130	C	Timpani	Slur two, tongue two	Upper neighbor	-
Orange 1	134	C	Timpani	Slur all	Previous note rule	No
Blue 3	124	C	Long	Varies	Upper neighbor	No
Gray 1	122	C	Timpani	Slur all	Directional rule	Yes
Green 1	120	-	Firm	Tongue all	Melodic	No
New York						
Yellow 1	130	C	Timpani	Slur two, tongue two	Upper neighbor	-
Orange 1	134	C	Timpani	Slur all	Previous note rule	No
Red 2	122	E	Timpani	Slur two, tongue two	Upper neighbor	-
Yellow 3	130	E	Long	Tongue all	Upper neighbor	Yes
Orange 2	120	C	Timpani	Varies	Varies	-
Purple 2	-	-	Timpani	Slur all	Upper neighbor	Yes
Yellow 2	120	E	Timpani	Slur two, tongue two	Upper neighbor	Yes
Philadelphia						
Red 4	120	Even	Timpani	Slur all	Upper neighbor (as grace note)	No
Orange 2	120	C	Timpani	Varies	Varies	-
Red 3	126	E	Long	-	Previous note rule	-
Green 1	120	-	Firm	Tongue all	Melodic	No
Purple 2	-	-	Timpani	Slur all	Upper neighbor	Yes

Haydn – Much like the Hindemith, the results for the Haydn had very few patterns within these traditions that did not match the norms established in Part I. The Cleveland and Philadelphia

traditions both chose very similar tempi, but the tempi they chose centered around the most commonly used tempo in Part I, 120 bpm. In the 'Goal of first three notes' category, the overall results were split evenly between *C* and *E* goal tones, but the Los Angeles tradition favored the *C* phrasing. The Los Angeles and Philadelphia traditions were the only two groups that did not favor the *Slur two, tongue two* method for '16th note tonguing', but neither group favored any method; the players within those traditions simply did not agree on that category. Again, neither of the training orchestra members showed commonalities differently from the rest of the trumpeters.

Table 26. Beethoven Sorted by Tradition

Musician	*Rubato* in 1st two bars	Tempo change	Shape of 8th notes in first two bars	Shape of 8th notes in last 4 bars	Volume
Boston					
Orange 1 (T)	No	Gradual	Round	Round	-
Purple 1 (T)	Yes	Gradual	Short	Round	Loud
Red 2	Yes	Gradual	Short	Short	-
Blue 3	No	Gradual	Long	Round	-
Purple 2 (T)	Yes	Gradual	Long	Short	-
Yellow 2 (T)	Yes	Gradual	Round	Short	Loud
Blue 4 (T)	Rubato (slight)	Gradual	Round	Round	Comfortable
Blue 2 (T)	Yes	Sudden	Round	Long	Comfortable
Chicago					
Yellow 4	Yes	Sudden	Short	Round	Loud
Blue 1	Rubato	Gradual	Round	Round	-
Purple 1	Yes	Gradual	Short	Round	Loud
Yellow 3	Rubato	Gradual	Round	Short	Loud
Gray 1	Rubato	Gradual	Round	Round	-
Green 4	No	Gradual	Round	Round	Comfortable
Green 1	Rubato	Gradual	Round	Round	Comfortable
Purple 2	Yes	Gradual	Long	Short	-
Yellow 2	Yes	Gradual	Round	Short	Loud
Blue 4 (T)	Rubato (slight)	Gradual	Round	Round	Comfortable
Blue 2 (T)	Yes	Sudden	Round	Long	Comfortable
Cleveland					
Red 2	Yes	Gradual	Short	Short	-
Orange 4	No (slightly long ½ notes)	Gradual	Round	Round	Loud
Purple 2	Yes	Gradual	Long	Short	-
Orange 3	Rubato	Gradual	Round	Round	Comfortable
Los Angeles					
Yellow 4	Yes	Sudden	Short	Round	Loud
Yellow 1	Yes	Sudden	Round	Short	-
Orange 1	No	Gradual	Round	Round	-
Blue 3	No	Gradual	Long	Round	-
Gray 1	Rubato	Gradual	Round	Round	-
Green 1	Rubato	Gradual	Round	Round	Comfortable
New York					
Blue 1	Rubato	Gradual	Round	Round	-
Yellow 1	Yes	Sudden	Round	Short	-
Orange 1	No	Gradual	Round	Round	-
Red 2	Yes	Gradual	Short	Short	-
Yellow 3	Rubato	Gradual	Round	Short	Loud
Orange 2	Rubato	Gradual	Round	Round	-
Purple 2	Yes	Gradual	Long	Short	-
Yellow 2	Yes	Gradual	Round	Short	Loud
Philadelphia					
Red 4	Yes	Sudden	Short	Short	-
Orange 2	Rubato	Gradual	Round	Round	-
Red 3	No	Gradual	Long	Long	-
Green 1	Rubato	Gradual	Round	Round	Comfortable
Purple 2	Yes	Gradual	Long	Short	-

Beethoven - At first glance, there is much more agreement within the traditions on the Beethoven, but this is due primarily to the much greater conformity among all the players in the

project on the orchestral excerpts. This overall agreement is logical considering that all of the players are principally orchestral trumpeters and the orchestral excerpts have less room for personal interpretation than a solo work such as the Hindemith or Haydn.

On this excerpt , I was curious to see if the New York tradition would include all of the trumpeters who use the 'Sudden' tempo change as William Vacchiano was obviously a major influence in that tradition. Yet due to the criteria used here to categorize the traditions, there were actually *fewer* players who used this tempo change under New York. This is because one of the Vacchiano students who used the 'Sudden' tempo change did not fulfill the criteria here in order to belong to the New York tradition. This student, Yellow 4, listed Vacchiano as a primary influence because of his fondness of Vacchiano's recordings, not because he was ever able to study directly with Vacchiano. Consequently, there was less correlation here to the interpretation of Vacchiano. Again, there was no special grouping among the training orchestra members.

Table 27. Bizet Sorted by Tradition

Musician	Method used to play low E♭	Tempo	Dynamic goal of 2-bar phrases	Beginning dynamic
Boston				
Orange 1 (T)	Only low E♭	70 (?)	Downbeat	Under celli
Purple 1 (T)	Trigger opening	60	Downbeat	Mezzo forte plus
Red 2	Trigger opening	64	Downbeat	Comfortable forte
Blue 3	Trigger 1 bar (plus following 2 bars)	58	Downbeat	Mezzo forte plus
Purple 2 (T)	Trigger 1 bar	65	Downbeat	Mezzo forte
Yellow 2 (T)	Custom equipment (tuning slide)	60	Downbeat	Mezzo forte
Blue 4 (T)	Trigger 1 bar	60	Downbeat	Mezzo forte
Blue 2 (T)	Trigger 1 bar	64	Beat 3	Mezzo forte
Chicago				
Yellow 4	Trigger 1 bar	60	Downbeat	Mezzo forte plus
Blue 1	Trigger 1 bar	65	Downbeat	-
Purple 1	Trigger opening	60	Downbeat	Mezzo forte plus
Yellow 3	Pull tuning slide	64	Downbeat	Mezzo forte plus
Gray 1	Trigger 1 bar	60	Downbeat	-
Green 4	Trigger 1 bar	-	Downbeat	-
Green 1	Trigger 1 bar	65	Downbeat	Comfortable forte
Purple 2	Trigger 1 bar	65	Downbeat	Mezzo forte
Yellow 2	Custom equipment (tuning slide)	60	Downbeat	Mezzo forte
Blue 4 (T)	Trigger 1 bar	60	Downbeat	Mezzo forte
Blue 2 (T)	Trigger 1 bar	64	Beat 3	Mezzo forte
Cleveland				
Red 2	Trigger opening	64	Downbeat	Comfortable forte
Orange 4	Trigger 1 bar	60	Beat 3	Mezzo 'comfortable'
Purple 2	Trigger 1 bar	65	Downbeat	Mezzo forte
Orange 3	Trigger 1 bar	66	Downbeat	Easy forte
Los Angeles				
Yellow 4	Trigger 1 bar	60	Downbeat	Mezzo forte plus
Yellow 1	Trigger opening	75	Beat 3	Mezzo forte
Orange 1	Only low E♭	70 (?)	Downbeat	Under celli
Blue 3	Trigger 1 bar (plus following 2 bars)	58	Downbeat	Mezzo forte plus
Gray 1	Trigger 1 bar	60	Downbeat	-
Green 1	Trigger 1 bar	65	Downbeat	Comfortable forte
New York				
Blue 1	Trigger 1 bar	65	Downbeat	-
Yellow 1	Trigger opening	75	Beat 3	Mezzo forte
Orange 1	Only low E♭	70 (?)	Downbeat	Under celli
Red 2	Trigger opening	64	Downbeat	Comfortable forte
Yellow 3	Pull tuning slide	64	Downbeat	Mezzo forte plus
Orange 2	Custom equipment (The Shredder)	60	Downbeat	Mezzo forte
Purple 2	Trigger 1 bar	65	Downbeat	Mezzo forte
Yellow 2	Custom equipment (tuning slide)	60	Downbeat	Mezzo forte
Philadelphia				
Red 4	Trigger 1 bar	60	Downbeat	-
Orange 2	Custom equipment (The Shredder)	60	Downbeat	Mezzo forte
Red 3	Pull tuning slide	65	Beat 3	Mezzo forte
Green 1	Trigger 1 bar	65	Downbeat	Comfortable forte
Purple 2	Trigger 1 bar	65	Downbeat	Mezzo forte

Bizet - As expected, there were no noteworthy patterns under the Bizet, as each category under this excerpt clearly aligned with the overall results. The New York tradition had the least

amount of *Trigger 1 phrase* under 'Method used to play low E♭', but this simply meant that there was no agreement at all.

Table 28. Mahler Sorted by Tradition

Musician	Method for rushing triplets	Phrasing of opening	Quarter note triplet	Tempo (half note)	Rushing of last triplets
Boston					
Orange 1 (T)	Half note frame	Terrace	Rushed	66	Slight
Purple 1 (T)	6/4	Terrace	Rushed	65	Yes
Red 2	16th notes	Terrace (but starts at mf)	Rushed	64	Yes
Blue 3	16th notes	-	Rushed	58	Yes
Purple 2 (T)	16th notes	-	Rushed	-	Yes
Yellow 2 (T)	6/4	Terrace (w/out pull back after 3rd)	Steady	52	Yes
Blue 4 (T)	6/4	Terrace (Troops marching)	Rushed	65	Yes
Blue 2 (T)	6/4	Terrace	Rushed	64	Yes
Chicago					
Yellow 4	6/4	Terrace	Steady	68	-
Blue 1	6/4	Terrace	Rushed	60	Yes
Purple 1	6/4	Terrace	Rushed	65	Yes
Yellow 3	6/4	Terrace	Steady	60	Yes
Gray 1	Half note frame	As marked	Rushed	54	Yes
Green 4	6/4	Terrace	Rushed	-	Slight
Green 1	6/4	Terrace	Rushed	62	Yes
Purple 2	16th notes	-	Rushed	-	Yes
Yellow 2	6/4	Terrace (w/out pull back after 3rd)	Steady	52	Yes
Blue 4 (T)	6/4	Terrace (Troops marching)	Rushed	65	Yes
Blue 2 (T)	6/4	Terrace	Rushed	64	Yes
Cleveland					
Red 2	16th notes	Terrace (but starts at mf)	Rushed	64	Yes
Orange 4	Half note frame	As marked	Steady	66	No
Purple 2	16th notes	-	Rushed	-	Yes
Orange 3	Half note frame	As marked	Rushed	62	Yes
Los Angeles					
Yellow 4	6/4	Terrace	Steady	68	-
Yellow 1	Half note frame	-	Steady	68	No
Orange 1	Half note frame	Terrace	Rushed	66	Slight
Blue 3	16th notes	-	Rushed	58	Yes
Gray 1	Half note frame	As marked	Rushed	54	Yes
Green 1	6/4	Terrace	Rushed	62	Yes
New York					
Blue 1	6/4	Terrace	Rushed	60	Yes
Yellow 1	Half note frame	-	Steady	68	No
Orange 1	Half note frame	Terrace	Rushed	66	Slight
Red 2	16th notes	Terrace (but starts at mf)	Rushed	64	Yes
Yellow 3	6/4	Terrace	Steady	60	Yes
Orange 2	Half note frame – (pendulum)	Terrace (using "Pendulum)	Steady	55	Slight
Purple 2	16th notes	-	Rushed	-	Yes
Yellow 2	6/4	Terrace (w/out pull back after 3rd)	Steady	52	Yes
Philadelphia					
Red 4	Half note frame	As marked	Rushed	66	Yes
Orange 2	Half note frame – (pendulum)	Terrace (using "Pendulum)	Steady	55	Slight
Red 3	Half note frame	As marked	Rushed	65	Yes
Green 1	6/4	Terrace	Rushed	62	Yes
Purple 2	16th notes	-	Rushed	-	Yes

Mahler – The Mahler groupings contained the first notable results under tradition, and they were related to the pacing of the opening. The Boston tradition contained all three of the

trumpeters that use the *16th notes* under 'Method for rushing the triplets'. This is noteworthy, because Roger Voisin, the former principal of the Boston Symphony, was known to use and teach this method as discussed under Voisin's grouping in the previous chapter. There, only one of his students used the *16th note* method, but none of those particular students listed him as a primary influence. Yet here under the Boston tradition, we see all of the players that used the *16th note* method, and all three of them were strongly associated with the Boston tradition through their former teachers and/or their current positions. Two of them were non-Tanglewood students meaning that they received degrees from Boston institutions. However, there was still a majority of players under the Boston tradition who utilized different methods, so we cannot go so far as to claim the *16th note* method is a fixture in this city—especially considering that a majority of the trumpeters under the Boston tradition used a different method. Furthermore, two of the three musicians that use the *16th note* method, Purple 2 and Red 2, also completed degrees in Cleveland institutions, so it is possible that a prominent figure in that tradition, i.e. Bernard Adelstein, may have used the *16th note* method as well.

The second significant grouping was under the Chicago tradition of 'Method for rushing the triplets'. While the *6/4* method was the most common choice for the opening's pacing, it was not very far ahead of the *Half note frame* method. Yet the Chicago tradition was far out of proportion as only two of the eleven trumpeters did not use the *6/4* method. While I had been taught the *6/4* method by multiple teachers before beginning this project, no one had ever attributed it to a specific player. While this is only speculation, given Adolph Herseth's extremely long tenure as the principal of the Chicago Symphony Orchestra, it is quite possible that he played a role in popularizing this pacing method.

Finally, the other four traditions all had a majority of players that favored the *Half note frame* method of pacing. This is strange as only seven players in the project used this method, but they were spread out over the other four traditions in such a way that this method seemed more

popular than it actually was. The *Half note frame* method is not an overwhelming majority in any of these traditions. The other four categories of this excerpt all aligned with the norms of the overall results of the project.

Table 29. Mussorgsky Sorted by Tradition

Musician	Tempo	Shape of quarter notes	Goal of each phrase	Extra breath
Boston				
Orange 1 (T)	90	Sustained	Arc	Last bar
Purple 1 (T)	86	Sustained	Even	No
Red 2	90	Sustained	-	-
Blue 3	84	Lyrical	Even	Last bar
Purple 2 (T)	84	Sustained	Even	Last bar
Yellow 2 (T)	88	Bell tones	Even, except last two octave jumps	Last bar
Blue 4 (T)	88	Lyrical	Even	No
Blue 2 (T)	92	Sustained	Arc	No
Chicago				
Yellow 4	82	Sustained	Hairpin	-
Blue 1	96	Sustained	Even	No
Purple 1	86	Sustained	Even	No
Yellow 3	88	Sustained	Even	Last bar
Gray 1	92	Sustained	Even	
Green 4	90	Sustained	Hairpin (except last phrase goes to high A♭)	Last Bar
Green 1	88	Sustained	Hairpin	No
Purple 2	84	Sustained	Even	Last bar
Yellow 2	88	Bell tones	Even, except last two octave jumps	Last bar
Blue 4 (T)	88	Lyrical	Even	No
Blue 2 (T)	92	Sustained	Arc	No
Cleveland				
Red 2	90	Sustained	-	-
Orange 4	88	Lyrical	Even, then Metric Division for last two bars	Last Bar
Purple 2	84	Sustained	Even	Last bar
Orange 3	90	Bell tones	Arc	No in audition
Los Angeles				
Yellow 4	82	Sustained	Hairpin	-
Yellow 1	90	Sustained	Even	-
Orange 1	90	Sustained	Arc	Last bar
Blue 3	84	Lyrical	Even	Last bar
Gray 1	92	Sustained	Even	
Green 1	88	Sustained	Hairpin	No
New York				
Blue 1	96	Sustained	Even	No
Yellow 1	90	Sustained	Even	-
Orange 1	90	Sustained	Arc	Last bar
Red 2	90	Sustained	-	-
Yellow 3	88	Sustained	Even	Last bar
Orange 2	84	Bell tones	Even	Last bar
Purple 2	84	Sustained	Even	Last bar
Yellow 2	88	Bell tones	Even, except last two octave jumps	Last bar
Philadelphia				
Red 4	88	Sustained	Even	Last Bar
Orange 2	84	Bell tones	Even	Last bar
Red 3	92	Bell tones	Arc	No
Green 1	88	Sustained	Hairpin	No
Purple 2	84	Sustained	Even	Last bar

Mussorgsky – The results for Mussorgsky sorted by tradition were parallel to the overall results for the project. All three *Hairpin* users were listed under the Chicago tradition, but Chicago

was overwhelmingly skewed toward the *Even* phrasing. Otherwise, there were no anomalies of note.

Table 30. Respighi Sorted by Tradition

Musician	Tempo	*Rubato*	Vibrato	Phrasing methods	Last note
Boston					
Orange 1 (T)	70	Beat	Yes	Upper neighbor	Partial
Purple 1 (T)	60	Slight	Yes	Upper neighbor	-
Red 2	66	Beat	Yes	Upper neighbor (through vibrato)	-
Blue 3	58	Beat	Yes	Upper neighbor	End (but slows)
Purple 2 (T)	64	No	Yes	Upper neighbor	-
Yellow 2 (T)	55	Slight	Yes	Upper neighbor	None
Blue 4 (T)	62	Beat	Yes	Upper neighbor	Partial
Blue 2 (T)	60	Phrase	Yes	Upper neighbor	End
Chicago					
Yellow 4	62	Beat	Yes	-	Partial
Blue 1	60	Slight	Yes	Contour	Partial
Purple 1	60	Slight	Yes	Upper neighbor	-
Yellow 3	64	Beat	Yes	Upper neighbor (through vibrato)	End
Gray 1	72	Beat	Yes	Upper neighbor (through vibrato)	-
Green 4	66	Beat	Yes	Upper neighbor	End
Green 1	62	Beat	Yes	Upper neighbor	Partial
Purple 2	64	No	Yes	Upper neighbor	-
Yellow 2	55	Slight	Yes	Upper neighbor	None
Blue 4 (T)	62	Beat	Yes	Upper neighbor	Partial
Blue 2 (T)	60	Phrase	Yes	Upper neighbor	End
Cleveland					
Red 2	66	Beat	Yes	Upper neighbor (through vibrato)	-
Orange 4	64	Beat	Yes	Upper neighbor (most of the time)	Partial
Purple 2	64	No	Yes	Upper neighbor	-
Orange 3	60	No	Yes	Contour	Partial
Los Angeles					
Yellow 4	62	Beat	Yes	-	Partial
Yellow 1	70	Beat	Yes	Contour	Partial
Orange 1	70	Beat	Yes	Upper neighbor	Partial
Blue 3	58	Beat	Yes	Upper neighbor	End (but slows)
Gray 1	72	Beat	Yes	Upper neighbor (through vibrato)	-
Green 1	62	Beat	Yes	Upper neighbor	Partial
New York					
Blue 1	60	Slight	Yes	Contour	Partial
Yellow 1	70	Beat	Yes	Contour	Partial
Orange 1	70	Beat	Yes	Upper neighbor	Partial
Red 2	66	Beat	Yes	Upper neighbor (through vibrato)	-
Yellow 3	64	Beat	Yes	Upper neighbor (through vibrato)	End
Orange 2	56	Beat	Yes	Upper neighbor	Partial
Purple 2	64	No	Yes	Upper neighbor	-
Yellow 2	55	Slight	Yes	Upper neighbor	None
Philadelphia					
Red 4	60	-	Yes	Upper neighbor	-
Orange 2	56	Beat	Yes	Upper neighbor	Partial
Red 3	68	Phrase	Yes	Upper neighbor	End
Green 1	62	Beat	Yes	Upper neighbor	Partial
Purple 2	64	No	Yes	Upper neighbor	-

Respighi – As mentioned previously, the overall results for the Respighi were similar to the Bizet excerpt in that they were fairly consistent among all the project's musicians. So it is no surprise that there was strong grouping within the various traditions, but this was mostly attributed to the overall results for this excerpt. Excluding categories in which there were no outliers, i.e. 'Vibrato', there were actually categories that were unanimous within traditions. The 'Rubato' category of Los Angeles and the 'Phrasing methods' category of Boston and Philadelphia were two such examples. I do not believe these results imply anything in particular other than these categories were agreed upon by most of the professional players in the country today. The 'Rubato' category among the Boston tradition was the one grouping in the Respighi which was not as uniform as the overall results, although there was no obvious conclusion to be drawn from this. Again, the training orchestra members did not differentiate their interpretations from the others.

Overall conclusions for comparisons by tradition

For the most part, this chapter was subtraction through addition. While there were some similarities within the tradition trees, particularly on the Mahler excerpt, these players were too individualistic to be able to sort them down into one tradition. It was not surprising then that there was no particular grouping among the training orchestra members. While I was told by many of the players that Tanglewood was a life-changing experience, there was simply not enough contact over the short time the festival is in session to have a pronounced effect on interpretations of each of these excerpts. Furthermore, the repertoire changed each summer meaning that each student that attended would have a unique experience.

Most significantly, the results of this chapter further reinforce my hypothesis that these individuals' musical interpretations are too complicated to be broken down into simplistic labels such as East Coast or Midwest; the traditional 'schools' are fading across the country. This is not to say that the individual orchestras do not have a particular style, but it does imply that the style is

dependent more on immediate influences, such as the principal trumpeter and/or the conductor setting a style and the rest of the section having the ability and willingness to support that decision.

Conclusion

The categories used to analyze each excerpt were chosen because each could be described in objective terms and produced quantifiable results on the subject of interpretation. Yet by definition, music is subjective, and the art of interpretation is the key to establishing one's performance style. Therefore, it is conceivable that these trumpeters shared some bond which cannot be quantified and studied, and it is this subjective material that determined the reason these trumpeters ended up playing together in a particular orchestra.

As a fortunate side-benefit of this project, I was able to attend at least one performance, and often multiple rehearsals additionally, of each of these participating orchestras, and every trumpet section not only blended timbres but had a unique approach to the music. There are a myriad of possibilities to explain this phenomenon, such as the conductor or performance space. Having sat next to each of these players for multiple hours, however, I feel that the most likely, albeit contradictory, explanation for their togetherness while performing as a section lies in their individual talents.

If there was one major commonality among these trumpeters it was their incredibly high technical proficiency. They all had strong musical opinions and were able to convey these because the mechanical and physiological difficulties of playing the trumpet never impeded their musical vocabulary. When these players discussed what they listen for in an audition, the most consistent comment was that your interpretations should stay "inside the box." They said this is because the committee is not looking for a musician who takes the most musical risks; the committee wants the musician who communicates well-informed and inspiring ideas in the easiest and most consistent manner; this is the person with whom it will be easiest for the committee members to perform.

I am not implying that any of these musicians were less than the highest caliber of artist, simply that because of the subjective nature of music, these musicians understood that other great performers will likely have different musical ideas. Therefore the difference between the winner of an audition and the others is the ability to form a musical idea and convey it in a near-flawless manner. Red 3 summarized this with the following analogy.

> Shakespeare was an extraordinarily creative person, but that would not have meant anything if he sucked at the English language. Not only did he have good ideas, but he communicated them in a brilliant way. This is what we have to do on the trumpet. Be creative, but make sure you don't trip yourself trying to get that idea out.

These results have profound implications for all aspiring orchestral trumpeters on the audition circuit. When preparing for an audition, many trumpeters worry that their interpretations need to be adjusted depending on the orchestra for which they are auditioning, yet the results above clearly say otherwise. None of the orchestra sections showed truly consistent agreements on how they interpreted these excerpts. Each trumpeter had a unique sound and personality, but they were all technically proficient at the highest level. I walked out of most of these lessons feeling that the correct interpretation was whatever I had just been told, even when those opinions often disagreed with what I had been told by the instructor's colleague only a day earlier. Each teacher believed in his interpretations and was able to utilize his massive technique to convey musical decisions in a way that left me convinced. This was the difference in their ability to win an audition, and while many of them went about achieving this in their own unique way, I believe this project has proven that if a performer's musical ideas are informed and compelling, they will not stand in his or her way of winning a position.

The principal of Orchestra Purple finished our lesson with the following story, and I feel it is a fitting way in which to conclude this paper.

> I was already in [Orchestra Purple], and I went to Chicago to play for some very 'prominent' friends. It was kind of therapeutic, you know, going back to the roots of my playing. I was there for 3 or 4 days; I played for several people; and I kept a notebook and wrote down all the notes. After going through these notes over the

next couple of days, I got rid of every single note except one. Every note was a valid argument from an accomplished musician, but it wasn't me. It wasn't how I played. Whatever you take from this, it has to sound like you. You have to be comfortable playing that way. You have to like it. You have to love it. You have to like your sound, your playing, and possibly more importantly, you have to like yourself. Otherwise, it will never be convincing, and if you're doing it for some contrived reason, the audience, whether it's a packed hall or some stupid committee, will know you're faking it. Just be yourself.

BIBLIOGRAPHY

Because this project relies heavily on twenty-one anonymous interviews, this bibliography has been divided into three sections for easier reference. The first section lists all sources except interviews and audio recordings; this includes books, dissertations, theses, journal articles, scores and most websites. The second section is a listing of anonymous interviews with the dates of their recordings, and the final section lists all other audio and visual media referenced in this document.

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2. INTERVIEWS

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Interview with Purple 1, March 4, 2010.

Interview with Purple 2, March 5, 2010.

Interview with Red 2, July 15, 2010.

Interview with Red 3, July 13, 2010.

Interview with Red 4, July 13, 2010.

Interview with Yellow 1, February 9, 2010.

Interview with Yellow 2, February 11, 2010.

Interview with Yellow 3, February 8, 2010.

Interview with Yellow 4, February 11, 2010.

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3. RECORDINGS

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