RHYTHMIC AND INTUITIVE ANALYSIS IN PERFORMANCE:
An initial presentation of methodology involving rebalancing considerations of rhythm and affective meaning with more traditional pitch analysis

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Honors Thesis
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PASS WITH DISTINCTION
TO THE UNIVERSITY HONORS COLLEGE:

As thesis advisor for Sarah Wilson,

I have read this paper and find it satisfactory.

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Feb. 22, 2003
Date
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INTRODUCTION

The preponderance of basic musicianship study - this being primarily history, theory, sight singing and keyboard skills - occurs in lessons, ensembles and public performance. Students are expected to make intelligent, well-educated choices which may lead to a 'good' or 'musical' performance, including choices regarding use of rubato, texture, phrasing - in essence choices which pertain to both pitch and rhythm. Much of this knowledge, the knowledge an intuitive performer is expected to have, is passed on verbally from teacher to student in lessons and ensembles. The application of this knowledge is widely believed to be a phenomenon that is unique to each performer, producing an outcome as individual as the person performing, while maintaining certain historical and traditional accuracies.

The traditional or 'academic' music education - including my own - on the other hand, occurs primarily in a classroom and has tended to focus almost entirely on dualistic methods for describing pitch. These include principally the analysis of chords, decorative pitches, tonalities and form, the latter based on melodic material, texture, repetition and contrast, as well as instrumentation. Students learn to analyze pitch and are required to produce dualistic answers while rarely acknowledging the possibility of multiple answers. Traditional theory and history books discuss 'good performance' without providing a concise and consistent methodology.

In an ideal musical world there would exist an altogether Gestalt method combining traditional music education with actual performance study. This would allow a performer to make choices that, while initially intuitive, may be supported by both
rhythmic and pitch analysis and would suggest that the outcomes in performance may be individual. There appears then to be a need for a rhythmic analysis methodology which would help define the application of intuitive performer choice to achieve 'good performance.' With this thesis I have embarked on the first leg of this extensive journey in an attempt to provide such a method. In the interest of length I have chosen to limit my application of rhythmic analysis to the Adagio movement of the Clarinet Concerto in A major by W.A. Mozart, K622. In so doing I have significantly limited the scope of rhythmic and performance issues that I will cover; however, my ultimate aspiration in the development of this method lies in its possible application to all music, regardless of instrumentation or era.
The scope of this review of the literature is not comprehensive, but appears to represent the most prominent theses of the time just prior to composition of Mozart’s clarinet concerto and application as apparently appropriate. Much of the literature discussed in this section deals with specific instrumentation; however, a significant portion of it appears to involve some generally applicable principles of music making. These general principles are particularly relevant when considering performance and analysis of Mozart’s clarinet concerto. Many of the concepts of rhythmic analysis are alluded to as part of what is a ‘good performance’ by the prominent scholars of Mozart’s era; however, most appear to be lacking thorough explanation. What follows is a brief look at the writings of Carl Phillip Emanuel Bach, Johann Joachim Quantz and Leopold Mozart as they apply to rhythmic analysis. Frederick Dorian’s *The History of Music in Performance* will also be discussed.

Although there exists a significant body of theory, history and other text books pertaining to musicianship that cover some aspects of rhythmic analysis, I do not propose to discuss them here, except to note that they tend to reinforce emphasis on pitch as opposed to artistic application of rhythm. I will review in greater detail, however, Anne Pierce’s doctoral dissertation on rhythmic analysis, *The Analysis of Rhythm in Tonal Music* and, through Pierce, Heinrich Schenker’s method of harmonic analysis, *Harmony*; focusing primarily on what it is that Pierce derived from Schenker and applied to rhythm.
CPE Bach, *Essay on the True Art of Playing Keyboard Instruments*

CPE Bach, son of the more famous Johann Sebastian Bach, defines the art of performance as dependant upon three closely related factors, those being 1) correct fingering, 2) good embellishments, and 3) good performance.¹ Included in this concept of ‘good performance’ is the performer’s duty,

Keyboardists whose chief asset is mere technique are clearly at a disadvantage. A performer may have the most agile fingers, be competent at single and double trills, master the art of fingering, read skillfully at sight regardless of the key...and excel in other related matters; and yet he may be something less than a clear, pleasing, or stirring keyboardist...Most technicians do nothing more than play the notes.²

Other aspects of ‘good performance’ include making the ear conscious of the “true content and affect of a composition.” Bach says that, “any passage can be so radically changed by modifying its performance that it will be scarcely recognizable.”³ Also important is adept use of ‘subject matter,’ including loudness and softness of tones, touch, legato and staccato execution, vibrato, arpeggiation as well as ritardando and accelerando. The messa di voce, or ‘shading’ (decreasing or increasing the volume while sustaining notes of longer duration) is yet another aspect. In the execution of embellishments, Bach states that the listener must “believe that he is hearing only the original note. This requires a freedom of performance that rules out everything slavish and mechanical.”⁴

Without explicitly mentioning the term, Bach does appear to allude to the use of rubato,

¹ Bach, p. 30
² Bach, p. 147
³ Bach, p. 148
⁴ Bach, p. 150
In order to avoid vagueness, rests as well as notes must be given their exact value except at fermate and cadences. Yet certain purposeful violations of the beat are often exceptionally beautiful.\(^5\)

Of dynamics and non-written emphasis Bach states that, in general, dissonances are to be played loudly and consonances softly. ‘Exceptional turns of melody’ are performed loudly to bring out the effect, deceptive progressions are played loudly ‘to complement their function.’ Bach says of repeated passages, “complete passages, including their consonances and dissonances, may be first forte and, later, piano. This is a customary procedure with both repetitions and sequences, particularly when the accompaniment is modified.”\(^6\)

**LEOPOLD MOZART, A TREATISE ON THE FUNDAMENTAL PRINCIPLES OF VIOLIN PLAYING**

Leopold Mozart appears to cover a number of aspects relating to rhythmic analysis in his violin treatise. Of time he states that, “time makes melody, therefore time is the soul of music.”\(^7\) He argues later that there is a ‘natural difference’ between a slow and a quick melody, and that “often, if other points be carefully observed, the phrase is forced into its natural speed.”\(^8\)

In chapter three Mozart discusses “what the pupil must observe before he begins to play,” and includes “time and the kind of movement demanded by the piece.” In chapter four he appears to discuss a form of metric accent as it relates to bowing. Mozart advocates taking the first note of a bar with down bow and the second and fourth beats with up bow, producing a slight accent at the beginning of each measure. Similarly, groups of divided notes, such as four sixteenths, should have, according to Mozart, an

\(^5\) Bach, p. 150
\(^6\) Bach, p. 163
\(^7\) Mozart, p. 30
\(^8\) Mozart, p. 33
accent on the first note of the grouping. In general, his bowings seem to reinforce certain phrasing rules; if applied to non-stringed instruments this may become especially clear. Leopold says bowings ‘give life to the notes,’ and can make or break the intended Affect of the piece. Instrumentalists other than string players have their own version of bowings, namely articulations and breath accents. Mozart says later, “that a melodic piece is not composed purely of equal notes...is known to all.”

JOHANN QUANTZ, ON PLAYING THE FLUTE

Of the previous texts, Quantz’s writings on flute playing appear to be most relevant to the application of this study, since it deals primarily with W.A. Mozart’s clarinet concerto. Unlike L. Mozart and CPE Bach, Quantz spends considerable energy on issues which are idiomatic to wind players such as breathing and embouchure. He also alludes to several aspects of rhythmic analysis.

Of phrasing, Quantz states,

Hence you must strive to learn to see clearly and grasp what constitutes a good musical phrase, and what must therefore hang together. You must be just as careful to avoid separating phrases that belong together, as you must be attentive not to link passages that obtain more than one phrase, and hence must be divided; for a great part of true expression in performance depends upon this matter.

In chapter six Quantz enters into an interesting discussion pertaining to emphasis on certain notes in music.

Here I must make a necessary observation concerning the length of time each note must be held. You must know how to make a distinction in execution between the principal notes, ordinarily called accented or in the Italian manner, good notes, and those that pass, which some foreigners call bad notes. Where it is possible, the principal notes always must be emphasized more than the passing. In consequence of this rule, the quickest notes in every piece of moderate tempo, or even in the Adagio, though they seem to have the same value, must be played a little unequally, so that the stressed notes of each figure, namely the first, third, fifth, and seventh, are held slightly longer.

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9 Mozart, p. 124
10 Quantz, p. 90
than the passing, namely the second, fourth, sixth, and eighth, although this lengthening must not be as much as if the notes were dotted.¹¹

Although Quantz does not specifically mention the term rubato here, he appears to be implying its use.

Later in the chapter Quantz discusses the importance of preserving “the dominant sentiment of a piece, and in consequence how it should be performed, that is, whether it must be flattering, melancholy, tender, gay, bold, serious, etc.”¹² He says this may be done by determining “whether the key is major or minor. Generally a major key is used for the expression of what is gay, bold, serious, and sublime, and a minor one for the expression of the flattering, melancholy, and tender.” He also states that it is important to determine “whether the intervals between the notes are great or small, and whether the notes themselves ought to be slurred or articulated. Flattery, melancholy, and tenderness are expressed by slurred and close intervals, gaiety and boldness by brief articulated notes, or those forming distant leaps...” In essence, Quantz appears to be referring to stepwise versus triadic melody, as well as manner of execution.

FREDERICK DORIAN, THE HISTORY OF MUSIC IN PERFORMANCE

Dorian discusses a wide range of musical topics through history and touches on many of the aspects that appear in my analysis which are part of the traditional performer’s palette, including breathing and bowing, articulation, rubato, dynamics and phrasing. He argues as well that, though certain aspects of performance are not explicitly

¹¹ Quantz, p. 123
¹² Quantz, p. 125
written on the page they remain a vital part of the music-making process as they have been throughout history, regardless of era.\textsuperscript{13}

In his section on tempo and metronome,\textsuperscript{14} Dorian goes into detail about the common misconception that rubato was not standard practice prior to Beethoven’s era. He easily disproves this theory with letters from W.A. Mozart to his father Leopold in which he explicitly mentions use of rubato, or ‘stolen time.’ In Dorian’s section on phrasing he maintains that prior to the classic era, very few performance instructions were explicitly written, composers assumed performers would apply their musical intuition to performance in a manner which was acceptable at the time. Dorian states that many composers were present during rehearsals of their works and were thus able to dictate phrasing verbally. In general, Dorian seems to maintain that even prior to the classic era when symbols were not abundant to explicitly indicate phrasing and articulation, their application in performance was still expected and lack of it was deplored.

\textbf{ALEXANDRA PIERCE, THE ANALYSIS OF RHYTHM IN TONAL MUSIC}

In order to begin a study of Pierce’s rhythmic analysis method, it is important to note her specific definition of rhythm. Pierce calls rhythm the “articulation of flow into parts,”\textsuperscript{15} and contends that to recognize these parts one must be able to judge their relationships. Conventional definitions of rhythm focus on “the pattern of note durations and the fundamental recurring intervals of duration such as the beat and measure…”\textsuperscript{16} In

\begin{itemize}
  \item \textsuperscript{13} Dorian, p. 163
  \item \textsuperscript{14} Dorian, p. 186
  \item \textsuperscript{15} Pierce, P. 1
  \item \textsuperscript{16} Pierce, P. 2
\end{itemize}
her thesis, Pierce argues that this is “not the only means by which the compositional flow is divided into parts...a change in any of the musical elements articulates temporal parts peculiar to that element which are heard against the fundamental recurrent unit, the beat.” The ‘changes in musical element’ Pierce refers to here include pitch, timbre, dynamics, register and texture (articulation, tone, etc). For example, it is possible to map pitch durations as an aspect of rhythm; in a measure of 4/4, three quarter-note ‘g’s followed by one quarter-note ‘a’ create a pitch rhythm of dotted-half, quarter. It is then possible to add other musical elements such as dynamics and register, mapping in the same manner. Even when applied to the simplest of musical ideas, the complexity with which these elements interact is astounding.

The importance of pitch organization in the Pierce method

While Pierce recognizes changes in musical elements as part of rhythm, the organizing thread of her process concerns pitch. Traditional music analysis appears to have focused almost entirely on pitch, leaving rhythm to the foggy shades of intuition. While Pierce by no means spends her entire focus on pitch analysis, she does contend that pitch is essential to rhythm and that an understanding of the underlying harmonic structure of a piece is fundamental to rhythmic analysis.

Step one in Pierce’s method consists of recognizing and identifying the ‘temporal parts,’ or ‘parts of the pitch organization,’ based on Heinrich Schenker’s technique of harmonic analysis. According to Pierce, Schenker “…formulated a highly articulated technique of analysis of the tonal composition based on a theory of organic unity which

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17 Pierce, P. 3
selects pitch as the primary compositional element and the tonic note as the ‘one idea’ to which all other parts of the composition may be related."\textsuperscript{18}

Schenker’s organization is based on a hierarchy of ‘integrative levels’ (a series of levels of complexity). From smallest to largest they are: the single note, the motif (defined by Pierce as a ‘group of notes cohering around a nodal pitch’)\textsuperscript{19}, phrase, phrase group, section, section group and, finally, the movement as a whole. These ‘temporal parts’ can, according to Schenker, be traced back to their most fundamental level, that which Schenker calls the \textit{proto-structure}, or the “content of the background.” Schenker states that this fundamental structure is the basis of all composition and that it consists of a simple harmonic progression from tonic to dominant and back to tonic. This primitive structure provides a sort of framework, or skeleton, on which the rest of the composition is built through a series of ‘elaborations’ or ‘transformations.’ Pierce says of the \textit{proto-structure} that it “is itself an elaboration of a still more fundamental unity: the tonic pitch and the overtone series subordinate to it.”\textsuperscript{20}

Schenker’s hierarchy of complexity occurs in three main parts:

- \textbf{Background}, also called \textit{Ursatz} or \textit{proto-structure}, the most fundamental level
- \textbf{Middleground}, contains the first ‘elaborations’
- \textbf{Foreground}, the entirety, what one actually sees\textsuperscript{\ast} on the printed page

\textsuperscript{18} Pierce, P. 5
\textsuperscript{19} Pierce, P. 6
\textsuperscript{20} Pierce, P. 10

\textsuperscript{\ast} This is a prime example of the shortfall in dualistic analysis. The foreground, the part of the music that Schenker dubs to be all-encompassing, ignores or fails to mention a fundamental aspect of the musical process which is the performance of non-written ‘nuances’, the intuitive choices that every performer is expected to make and that are not explicitly represented on the printed page. These choices change emphasis and duration to small extents, yielding a result which may not concur with dualistic analyses.
The background, or Ursatz, contains the unifying tonic pitch as well as what Schenker dubs the ‘chord of nature,’ which is built on the overtone series of the tonic pitch. Passing tones, then, are defined as those pitches outside of the chord of nature which create “the imbalance which impels the piece onward.” Pierce also says of the background that “the primary characteristic of the energy established in the proto-structure is its urge toward fulfillment of a goal.” According to Schenker, this goal-driven energy is the source of all motion in music.

Rhythmic analysis

“[That which articulates the compositional flow is change] - change in any of the musical elements.” Change results in stress, stress creates accents. Pierce proposes that the ‘temporal parts’ of the composition are separated by accents, ‘no matter how slight a one.’ These accents can be organized into two ‘primary’ systems; structural accents and metrical accents.

**Structural Accents**

Pierce defines structural accents as ‘pitches of varying structural significance.’

Characterizing the structural accents are: 1) the duration of each accent, that is, of each pitch or pitch conjunction, as it is measured by the fundamental recurrent durational unit of the composition; 2) the duration of the structural group, that is of the organization of weak structural accents around a strong accent; 3) the quality of resolution - the relative finality of closure or lack of it - of the structural groups; 4) the system of “qualifying accents” resulting from the articulation of the composition by change in the subordinate musical elements - register, dynamics, timbre, density, texture, the manner of execution (legato, staccato, etc.).

Drawing again from Schenker, Pierce writes that structural accents are notes of structural significance which correspond most directly with the proto-structure of the composition

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21 Pierce, p. 17
22 Pierce, p. 21
23 Pierce, p. 25
24 Pierce, p. 26
and are embedded in the outermost foreground. They are landmarks, so to speak, that tell the most basic story of the piece.

Pierce also writes that pitch has the ability to divide time as well as bind it together. There are three pitches (3 - 2 - 1) in the upper voice of Schenker’s Ursatz progression, these form the three most basic structural accents. Of these - I/I being the strongest - 2/V is the weakest and is what Schenker would dub a ‘passing tone’, in other words, it is merely a stop on the way from tonic to tonic, albeit a structurally significant one.25 As one moves further outward toward the foreground of the composition, these structural accents, 3/I - 2/V - 1/I, become nodal points around which passing tones and less structurally significant notes and figures are organized. Using this as a guide, Pierce argues that it is possible to determine the exact level of structural accent of every note in a piece, should the need arise.26

Once the structural accents are determined, the next level of analysis becomes that of ‘harmonic rhythm.’ Pierce defines this as “the pattern of durations characterizing the succession of changing chords in what, in Schenkerian language, is the foreground of the composition.”27 One might say (applying Pierce’s terms) that harmonic rhythm refers to the time it takes to move from one structural accent to the next. There seems to be a standard rhythm to the duration of the structural accents on the most basic level; Pierce explains, “the lingering of the composition takes place before the 2/V; motion from the 2/V to the 1/I is relatively rapid; the 1/I is often the shortest part of the Ursatz.”28

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25 Pierce, P. 27
26 As I discuss in detail later, Pierce seems to imply that this classification of structural accent is not fundamentally necessary. My study depends on the assumption that performers should and do determine the precise level of structural significance of every note in a piece by the manner in which they play each note.
27 Pierce, P. 28-29
28 Pierce, P. 30
Applying this knowledge then becomes a useful part of rhythmic analysis. The question can now be posed, how long (comparatively) do the structural accents last? Often, as Pierce points out, the 1/1 - the strongest accent - has the least duration; however, as an art form music rarely follows all of the rules all of the time.

The next step in Pierce's process is determining the duration of the structural groups. By this she means the 'formal parts' of the composition such as the movement, section, phrase-group, etc. Pierce gives each structural group a specific place in the hierarchal organization, beginning with the Ursatz, which represents the piece as a whole, moving 'forward' to the middleground which represents the sections, and finally to the foreground, which represents the phrase-groups, phrases, sub-phrases and motifs.29 Lengths of duration of structural groups can vary at all levels, creating yet another point of contention for analysis. How, then, to recognize a structural group? One way is to look for change of harmony, another is by definition of the group itself - for example, in their Handbook of Tonal Forms, Eldon Obrecht and Tom Turner say of the phrase, "like the sentence, a phrase ends with a cadence, and also may possess subdivisions called...segments."30

As structural groups are created, so they must resolve. While the resolution of a structural group occurs at only one ontological point, preparation for that resolution begins the moment the group itself begins. Pierce says that structural groups exist in differing degrees of incompletion (assuming the last structural group of the composition to be the only complete one). She distinguishes resolutions into two types; contrapuntal progression of upper-line and bass voices (cadential harmony), and upper-line over a

29 Pierce, P. 33
30 Pierce, P. 7
stationary base (single harmony). The first of the two is more complete; according to Pierce it moves from high (foreground) to low (background) structural accent; however the degree of completion varies depending on where the soprano voice lies in the tonic triad and also whether the penultimate chord is inverted or in root position. Another type of resolution which fits into the first category contains the half and deceptive cadences (I-V and V-VI). These are not as final-sounding.

The second type of resolution - the single harmony - moves from high to low structural accent as well, but has less closure than the cadential harmony. Most often this type of resolution refers to the smaller groupings of phrase and sub-phrase.

In general:

\[
\begin{array}{ll}
\text{CADENTIAL HARMONY (more closure)} & \text{SINGLE HARMONY (less closure)} \\
V-I & V \\
2/V - 1/I & 3/V - 2/V \\
harmonic resolution & \text{melodic resolution} \\
larger structural group & \text{smaller structural group}
\end{array}
\]

Pierce cites three aspects (excluding pitch) which increase resolution finality: 1) when resolution coincides with metrical accent, 2) when the ‘notes of resolution’ are long, 3) when there is silence following the resolution. In the comparison of phrases then, it is important to discover which are the most and which are the least final, and whether the metrical accents add to finality by coinciding, or decrease it by not coinciding.

Pierce’s last aspect of structural accent systems is what she calls the ‘qualifying accent,’ which, again, is the “change in any of the subordinate musical elements,” of

31 Pierce, P. 37
32 Pierce, P. 40
register, dynamics, articulation, timbre and texture. Pierce outlines the important issues related to qualifying accents, including the location of dynamic climaxes and the exploration of chord tones and how they function (for example, some chord tones may function on two levels simultaneously - 6 of V is also 3 of I and is therefore both a strong and weak structural accent).

METRICAL ACCENT

By the term "metrical accent" I mean primarily the accent on the first obvious subdivision of the measure (for example, on the first quarter-note of a 2/4, ¾ or 4/4 measure; on the first dotted quarter-note of a 6/8, 9/8, or 12/8 measure). I also mean the accent on the first subdivision of recurrent durational groups shorter than the measure (for example, on the first eighth-note of a dotted quarter-note beat in 6/8 meter, etc.)

Though it may seem as though Pierce is describing a dynamic stress at the beginning of each measure, she goes on to explain the accent is not literal in the case of performance, at least not universally. She also contends that the recurrent durational groups do not depend entirely on stress at the beginning, "any stimulus occurring at regular intervals of time is sufficient to establish the recurrent durational group." Some examples of these stimuli might be a change in harmony at a regularly occurring interval or the repetition of melodic fragments.

The organization and measurement of metrical accent, and possibly of Pierce's entire system, depends on what she calls the 'fundamental recurrent durational unit,' or the chronos protos. It is important to note that this does not refer to the beat, but instead the "shortest unit of common metrical activity in the composition." The chronos protos

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33 Pierce, P. 47 - It is important to note that Pierce's use of the term 'subdivision' is not entirely accurate given the context of her statement. In her example she refers to the first quarter-note of a 2/4 measure as 'the first obvious subdivision of the measure.' The term 'division' without its qualifying prefix 'sub' would perhaps be more accurate; 'subdivision' implies division of the first division (in this case, division of the quarter note into eighth notes). I note this oversight primarily to stress the importance of using rhythmic vocabulary as accurately as has been historically insisted upon in relation to pitch.

34 Pierce, P. 47
is, for the most part, not divided, although it may be occasionally. Pierce points out a possible parallel between the hierarchal organization of pitch and the apparent grouping of *chronos protos* into beats, half-measures, sub-phrases, phrases, motifs, etc\(^{35}\), but goes on to explain that “the combinations of the *chronos protos* into particular recurrent durational groups are the result of structural choices on the part of the composer.” In other words, the listener hears them as structural groups because the composer built them that way, by choice.

The combination of metrical accent and structural accent in music seems to be a primary focus in Pierce’s rhythmic analysis method. The choice of whether or not these two coincide, according to Pierce, is “one of the primary agents of expression in the tonal composition.”\(^{36}\) She also says, “Normally structural and metrical accents in the tonal composition do coincide. That is, the chord tones of a melodic line as a norm fall on the metrical accents, the non-chord tones fall on the weak parts of the metrical group.”\(^{37}\) Pierce points out however that often, structurally significant notes appear on weak beats of the measure and are then repeated on the metric accent, a form of anticipation.

**Pierce’s outline of rhythmic analysis**\(^{38}\)

I) begins with the analysis of the hierarchical pitch organization, and

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\(^{35}\) Pierce, P. 50  
^{36} Pierce, P. 54  
^{37} Pierce, P. 55 - Again Pierce is proposing a dualistic ‘answer’ which serves her purposes quite well, but neglects what I feel to be a basic tenet in composition and music in general, that being the raising of questions. (More of this elsewhere, re: the appoggiatura.)  
^{38} Pierce, P. 58
II) on the basis of this discusses the way in which the pitch organization, or organization of structural accents, divides up the temporal span of the passage or composition. The foci of this part of the analysis are the following:

A. The relationship between structural accents and metrical accents: where the two types of accent coincide and thereby reinforce one another, and where they do not coincide.

B. The characterization of the structural accents by:
   1. Their specific durations.
   2. The durations of the structural groups.
   3. The quality of resolution between the structural groups.
   4. Qualifying accents.
METHODODOLOGY

The key to my methodology is the application of intuition as fundamental to decision making about how one performs a piece of music. While other methods are aimed at providing dualistic answers regarding basic rhythmic structure or basic pitch structure, my system depends upon an intuitive environment and concerns primarily the raising of questions.

Fundamental to performance are slight differences in time and emphasis from one presentation to the next and, likewise, from one performer to the next. No two are ever the same, nor would audiences or musicians desire them to be. It is vital then, and is indeed the focus of this study, to be able to qualify these intuitive choices and combine them effectively with existing dualistic analysis methods. An explanation of my methodology follows.

I. MAKE AN INITIAL RECORDING

The purpose of this step is to have on record an initial intuitive analysis. Pierce states in her dissertation that “it is theoretically possible to conceive the precise level of structural accent for every note in a composition.”39 This brief statement leads the way to the heart of my study. That it is ‘theoretically possible’ to determine the precise level of structural accent for every note is irrelevant. The foreground - the entirety, what one actually sees on the printed page - is fundamentally irrelevant. Performers by definition regularly determine the precise level of structural accent of every note in a piece through intuition, considered analysis and, ultimately, by sound. They do this primarily not on paper, but by the way they present each note which, it is important to mention, can and

39 Pierce, P. 28
frequently does vary from one performance to the next. Audiences do not see a printed page, audiences hear. It is then, the duty of the performer to convey various levels of structural accents through actual performance, regardless of or in conjunction with dualistic, paper analysis. Many musicians do this to some degree intuitively.

II. LISTEN TO OTHER RECORDINGS

This step provides an immediate means of comparison with the initial recording and introduces the intuitive and considered choices of other performers. Both the initial recording and subsequent recordings provide the material for later analysis; a fundamental difference between this method and the Pierce method which determines levels of structural accents exclusively through dualistic harmonic and pitch analysis and without performance data.

III. PROPOSE AFFECTIVE WORDS TO DESCRIBE WHAT APPEAR TO BE FORMAL SECTIONS

This portion of the analysis stems from philosophies of the baroque and other eras and the writings of the prominent musical scholars at respective times. The idea is not exactly synonymous with program music, but relies upon that historical element which has been present in the Greek Doctrine of Ethos and later church modes - and through the classic and incipiently the baroque era - which is assignment of affect to key. Quantz, in discussing proper sentiments of the Adagio, says,

To play an Adagio well, you must enter as much as possible into a calm and almost melancholy mood, so that you execute what you have to play in the same state of mind as that in which the composer wrote it. A true Adagio must resemble a flattering petition. For just as anyone who wishes to request something from a person to whom he owes particular respect will scarcely achieve his object with bold and impudent threats, so here you will scarcely engage, soften, and

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touch your listeners with a bold and bizarre manner of playing. For that which does not come from the heart does not easily reach the heart.\textsuperscript{40}

He goes on to discuss the differences regarding various types of Adagios, which he characterizes as being factors of specific key as well as meter and initial tempo marking. It is imperative then to note these affective words as they apply to the piece in question, as Quantz has done in referral to the ‘melancholy mood’ of the true Adagio.

One of the distinguishing characteristics of baroque era music is its adherence to a single affect or ‘passion’ throughout a work. In the classic era, Mozart and his contemporaries began introducing more than one passion, and thus took a different view of the philosophies which ruled the older generation. In her appendix to Leopold Mozart’s violin treatise, Editha Knocker states,

Leopold Mozart is at pains to insist that before a player can perform a piece of music in accordance with the composer’s intention he must understand the ‘Affect’ from which the music originated. So rooted in the eighteenth-century mind was this doctrine that a work could delineate \textit{only one} ‘passion’ that some aestheticians even contended that the new sonata, with its attempt to run in harness together two ‘passions’, represented by two utterly contrasted subjects, was an impracticable form.\textsuperscript{41}

This statement exemplifies the necessity in the classic era to find more than one affective word for a given piece.\textsuperscript{42} On a smaller scale, these affective words may be applied to individual sections of a piece, from the movement entire down to the smallest ‘integrative levels’ - borrowing again from Pierce - of the phrase and motif and ultimately to individual notes.

\textsuperscript{40} Quantz, P. 163
\textsuperscript{41} From \textit{A Treatise on the Fundamental Principles of Violin Playing}, by Leopold Mozart, translated by Editha Knocker, second edition, P. 233
\textsuperscript{42} The idea of ‘passions’ and expression is not to be confused with the full-blown individual expressivities of the romantic era, however. The doctrine of affections had advanced in the classic era to the point where, because of the growth of the middle class, there was an attempt to be expressive in an abstract manner. Thus, in the classic era were pieces about love in general, whereas in the romantic era the focus was expression of individual love and all the exuberances and tragedies that come with it.
IV. APPLICATION OF THE DUALISTIC ANALYSIS OF PITCH AND RHYTHMIC ELEMENTS

Once an extensive assignment of affective words has been made, the next step is to relate these intuitive choices to evidence from the world of traditional music theory instruction, that is, application of the standard pitch and rhythmic considerations as evidence in support of or contrast with intuitive choices.

It is in this step that the work of Pierce and Schenker may be most directly applied. Though I have argued the dualistic nature of their analyses elsewhere in my thesis, I must concede here that dualistic analysis is a vital aspect of the performance process. The type of black-and-white answers that Schenkerian analysis provides, for example, may lend depth and detail to an initially intuition-based methodology, which, while scholars may question its empirical validity, is nonetheless the only truly “known” essence of taste: “it sounds good.” Having completed this portion of the process the performer is then able to make any number of intuitive choices with the knowledge that each may be theoretically and consistently detailed.

A. Pitch

I. HARMONY AND TONALITY

Key and tonality relate to mood, providing the groundwork for step III (proposing affective words to describe what appear to be formal sections). As a piece modulates away from tonic, sections - and frequently moods - are often implied. The same assumption appears to be applicable to shifts in mode as well, especially regarding the
occurrence - in passages of major tonality - of prominently placed minor triads.\(^4^3\) C.P.E. Bach discusses performance options relating to mode shifts in his *Essay on the True Art of Playing Keyboard Instruments*:

> Passages in a piece in the major mode which are repeated in the minor may be broadened somewhat on their repetition in order to heighten the affect. On entering a *fermata* expressive of languidness, tenderness, or sadness, it is customary to broaden slightly.\(^4^4\)

Harmony and tonality also provide a basic framework within which structural units such as the phrase and phrase group, section, and ultimately the entire movement, may be defined. The phrase can be defined as a musical thought punctuated by a cadence.\(^4^5\) As Pierce stated, cadences come in varying degrees of finality. They are defined in this study as; 1) terminal, a cadence on the tonic of the home key; 2) transient terminal, a cadence on the tonic of a key other than the home key; 3) progressive, all other cadences, regardless of key.\(^4^6\) The last grouping would include, for example, deceptive and half cadences.

**III. MELODY**

Melody, like harmony and tonality, creates character and mood. This character, or mood, may be generalized into several categories, those being 1) triadic melodies which appear to be pronouncement-oriented; 2) stepwise melodies which, in contrast, appear to be more expressive; 3) diatonic melodies; 4) melodies that include pitches outside of the key, or chromatic melodies; 5) ascending lines and, finally, 6) descending lines. These generalizations appear to be applicable to higher integrative levels as well -

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\(^4^3\) This applies primarily to deceptive cadences, but also includes minor tonalities within a phrase (those of ii, iii, and vi) which may briefly imply a different mood or character.

\(^4^4\) C.P.E. Bach, p. 161

\(^4^5\) Turner and Obrecht, p. 1

\(^4^6\) Christ and DeLone
an example might be a motif or phrase whose sequence forms a triad versus one that is sequenced in steps.

**B. RHYTHM**

I. RUBATO

Frederick Dorian addresses rubato in his section on tempo and metronome:

In reading the Mozart correspondence, a certain term occurs—gestohlenes Tempo, in Father Leopold’s German—the English translation of which is “stolen tempo.” It is, however, in its Italian form, tempo Rubato, that the term has become familiar to musicians. Everyone knows that this conception of Rubato stands today for a specific technique of time variation, for a slight increase or decrease in the tempo of any passage. In other words, time is “stolen” where the values of the notes are augmented or diminished for the sake of expression.47

C.P.E. Bach defines rubato as indicated by

...the presence of more or fewer notes than are contained in the normal division of the bar... A whole bar, part of one, or several bars may be, so to speak, distorted in this manner...When the execution is such that one hand seems to play against the bar and the other strictly with it, it may be said that the performer is doing everything that can be required of him. It is only rarely that all parts are struck simultaneously...as soon as the upper part begins slavishly to follow the bar, the essence of the rubato is lost, for then all other parts must be played in time.48

Both authors appear to support a statement made earlier in this text, that fundamental to performance is slight difference of time and emphasis. In my analysis, consideration of rubato will include the occurrence of a) appoggiatura; b) slice of time, which in essence refers to very short, non-written pauses or ‘breath marks’, as well as, c) the character of the shortest note value, similar to Pierce’s *protos chronos*, but including room for intuitive performer choice.

a) Appoggiatura

Music is full of appoggiaturas- a term that commonly refers to non-chord tones occurring in accented positions. This definition may contradict Pierce’s statement that

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47 Dorian, p. 187
48 C.P.E. Bach, p. 161
“the non-chord tones fall on the weak part of the metrical group.”49 Often, what appears to be a less-stable harmonic element will occur in a metrically accented position. Pierce and Schenker seem to define this as embellishment; however, there appear to be a number of possibilities - and outcomes - for analysis in these situations. For example, in a hypothetical composition the notes e--g--c appear as a chord in a metrically strong position; the ‘c’ in the melody moves down by step to ‘b’. Dualistic analysis seems to propose that ‘b’ is a non-chord tone in this situation; however, the root position triad is e--g--b, e--g--c- is a first inversion triad. The question becomes then, which way to analyze the measure? Dualistic analysis seeks a definitive answer; however, my method contends that composers rarely intend dualistic answers and instead communicate primarily through the raising of rhetorical questions. With this in mind, the musician is presented with a number of performance options, depending on which element he or she would like to bring to the listener’s attention.

b) Slice of time

The slice of time is an important part of non-written rhythm. There are occasions where some form of a break in tempo is explicitly written - the fermata is one example; however, the majority do not appear on the printed page. This analysis will address the following; 1) non-written breath marks, the space a performer may add for breathing; 2) cadences, after which - depending upon the degree of finality - the performer may choose to add non-written space; 3) sudden dynamic change; for example, a passage that begins at forte and is later marked piano without a decrescendo. These slices of time, when applied thoughtfully and gracefully, may add character and clarity to music.

c) Character of the shortest note value

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49 Pierce, p. 55
This portion of analysis considers the affect or character of the shortest note value. Not all divisions have character; one would not typically assign character to the notes in a trill, for example. In slow tempo, sixteenth notes will nearly always have character. Often, thirty-second notes will have definitive character as well; however, this does not usually apply to rapid tempos. In the instance it does apply, a tempo adjustment is usually necessary to accommodate the shift in emphasis.

The shortest note value in a piece is often rapid relative to the overall tempo. These rapid note values often possess a kinetic character, moving energy from one long note value to the next and are at times, and to varying degrees, ornamental. They appear to be less ornamental (and therefore less kinetic) when they have melodic shape, and particularly when they contain chromatic alterations. In both instances the performer may stress different notes to accentuate a specific character, be it kinetic or melodically significant.

II. PIERCE’S QUALIFYING ACCENTS

Pierce defines these as “change in any of the subordinate musical elements of the tonal composition,” and states that they produce an emphasis, “a ‘qualifying accent.’” They include register, density, timbre, dynamics, texture and manner of execution.

III. STRONG AND WEAK MEASURES

Just as individual notes have varying degrees of structural accents, so do measures. Some measures may appear to have more weight than others due to their harmonic content or triadic versus stepwise melody.

50 Pierce, P. 42
V. APPLICATION OF DIRECTIONAL (HORIZONTAL) AND VERTICAL MUSIC

I. STRUCTURAL VERSUS METRICAL ACCENT

Tension is created when structural and metrical accents do not coincide. This tension yearns to resolve, creating a forward-flowing (horizontal) momentum. When structural and metrical accents do coincide, and particularly when this occurs sequentially, the motion has more of a vertical, ‘chunky’ feel.

III. POINTS OF EMPHASIS IN THE SMALLER METRICAL UNITS

In the case of sixteenth note groupings, for example, non-written emphasis may be placed in various positions in order to accentuate chromaticism or melodic shape. This may affect the overall directional feel of a line as well. For example, \( \frac{2}{4} \) \[ \text{\texttt{|}\texttt{|}\texttt{|}\texttt{|}} \] tends to emphasize a vertical feel, whereas \( \frac{2}{4} \) \[ \text{\texttt{|}\texttt{|}\texttt{|}\texttt{|}} \] seems more directional, or horizontal.

VI. MAKE A FINAL RECORDING

The purpose of this step is application of the analysis process. The next step is to compare the final recording - containing all of the planned nuances - with the initial intuitive analysis.
RHYTHMIC ANALYSIS OF SELECTED EXAMPLES  
W.A. Mozart: Clarinet Concerto in A major, K.622  
Adagio

INTRODUCTION

In this section I will discuss examples from the Adagio movement of K.622. My intent is not to provide an exhaustive analysis of the Adagio, though I have applied my analysis to the entire movement, but to present examples as they appear to demonstrate concepts covered in the methodology. In the interest of space I have included a marked copy of the score in Appendix A to which all discussion will refer, as well as a brief list of symbols and their applications in Appendix B.

I chose three recorded performances of the K.622 Adagio; the performers are Sabine Meyer, Charles Neidich and Alessandro Carbonare. To avoid extreme lengths I will combine steps I, II and III of my analysis in this discussion.

I, II and III. The formal sections, as I have analyzed them, are as follows:

‘A’ music - m. 1-32

‘B’ music - m. 33-58
*Cadenza area - m. 54-59

Return of ‘A’ music - m.60-83

Codetta - m.84-98

The following are three examples from the Adagio which appear to demonstrate application of affective words on different levels.

1) The Adagio movement as a whole seems to imply a sort of abstract reverence. Although the tempo marking states ‘Adagio’, it does not appear to be melancholy - as
Quantz says of the 'true Adagio' - but rather contemplative or meditative. Both Carbonare and Neidich seem to invoke these affective descriptions; Sabine Meyer appears to have a different interpretation. Meyer’s recording is significantly more lively and upbeat with fuller tone and a lighter, more detached feeling overall.

2) A repeat, or return to previous material, may never be an exact replica of the first time through since it occurs at a unique ontological point in the movement. To this effect, many performers choose to play returning music in such a way as to accentuate this difference, or ‘second ness.’ When the ‘A’ music returns at measure 60 in the K.622 Adagio, all three performances - to varying degrees - were noticeably softer, less 'rubaticized' and generally more abstract than the previous statement.

3) The ‘A’ and ‘B’ music appear to have two distinct characters. In contrast to the introductory and contemplative nature of the ‘A’ music, the ‘B’ section implies a more declamatory, regal presence.

IV. A.

1. As noted earlier, Quantz states of the ‘true Adagio’ that it is melancholy in nature. K.622 however, is in D major and appears to imply a sort of cheerful contemplation rather than melancholy reflection. The ‘A’ section is in D major, however; the ‘B’ section appears to imply the dominant key of A major which may create a declamatory or celebratory feeling in the new section.

2. In measure nineteen there is a brief implication of the minor supertonic key. This quick passage through e minor in the middle of a phrase group brings with it a dark
character and seems to create tension, effectively driving the line forward to its resolution in measure twenty-four.

3. a) The contrasting characters of stepwise versus triadic melodies may be demonstrated by comparison of the melodic material in measures one through four to that of measures seventeen through twenty-one. Measures one through four are primarily triadic and appear to be declamatory; whereas measures seventeen through twenty-one are primarily stepwise and appear to have a more contemplative, answering character. One could choose to generalize measures one through sixteen as an antecedent statement and measures seventeen through twenty-four as the consequent statement.

b) There appears to be an interesting use of simultaneous ascending and descending lines in measures seventeen through twenty-one. On one level, each of three sub-phrases (beginning in measure seventeen, nineteen and twenty-one, respectively) consists of a descending line. At lower magnification, however; the first note of each sub-phrase outlines an ascending, stepwise line, from (written) a′′ to c′′. Some performers may choose to portray either or both of these scenarios; Sabine Meyer, for example, brings out the rising melodic sequence by playing each sub-phrase louder than the last.

c) Mozart introduces some chromaticism in the solo line of the codetta section, beginning in measure 84. This chromatic alteration occurs over a relatively harmonically-stable accompaniment, and appears to invoke a playful aspect to the phrase with no rush to cadence.
B.

1. a) There may be number of possibilities for performance of measure twenty-three. The sixteenth-note figure on beat one in the solo line begins with an appoggiatura to the implied tonic (e minor, for beat one). Some performers may wish to emphasize the f# using rubato, while others may wish instead to emphasize the resolution on the tonic-six/four triad in beat two (A major, beats two and three). A third possibility might include both rubato on the f# appoggiatura and emphasis on the resolution in A major on beat two. In comparing recordings, Carbonare appears to emphasize beat one, Neidich seems to highlight both events, while Sabine Meyer does not noticeably appear to emphasize either.

   b) Meyer, Neidich and Carbonare provide three unique interpretations of the area surrounding and including measure ninety, two of which include a ‘slice of time.’ The Meyer recording includes an obvious slice of time between the two eighth-notes of beat one which, in conjunction with the register change creates a dramatic effect; Carbonare appears to hold back the last two sixteenths of eighty-nine with no space between the first two eighths of ninety; Neidich seems to combine both of the previous effects, creating a cadenza-like effect. All three approaches appear to emphasize the progressive cadence in measure eighty-nine which is completed on beat one of measure ninety.

Measures fifty-one and fifty-two create yet another area of possible rubato. There appears to be a phrase-group beginning in measure forty-nine and ending at measure fifty-four. This phrase-group may be split into two phrases, the second beginning at measure fifty-two. Out of the three recordings, Neidich seems to be the only performer to emphasize the split, he does so by adding a slight slice of time and beginning the new
phrase with a sudden dynamic change (from forte in measure fifty-one to subito-piano in measure fifty-two).

c) At the beginning of section ‘B’, measure thirty-three, the sixteenth-note is the shortest note value and appears to have a definite celebratory, declamatory character. In measure thirty-five, however, the primary unit appears to change with the appearance of descending thirty-seconds on beat one in the solo line. To play these thirty-seconds in strict tempo would be to ignore their obvious character; therefore, many performers choose to briefly adjust the tempo in the first third of the bar.

2. a) Emphasis via change in register abounds in Mozart’s clarinet music, and it appears the K.622 Adagio is no exception. Measure forty-one, measures fifty, fifty-one and fifty-two and measure ninety appear to demonstrate the use of register changes as ‘qualifying accents’.

b) The most densely-orchestrated sections of the Adagio occur in the tutti at measures nine, twenty-five, and seventy-six. All three tutti are marked forte, a significant contrast from the nearby solo sections, which are nearly always marked piano.

c) I will regard the issue of timbre to be primarily one of tone quality in this analysis, though this may not reflect Pierce’s original intention. There are many possibilities for expressive use of tone quality on the clarinet; Carbonare in particular seems to employ several in his rendition of the Adagio. One obvious example occurs at measure sixty with the return of the ‘A’ music. At this point clarinet and orchestra present the ‘A’ music at a significantly softer dynamic than the original statement;

51 The original version of K.622 for basset clarinet may yield a different analysis in this area due to the extended range of the instrument. In the writing of an ‘A’ clarinet version several passages were transposed up an octave, thus creating a register change which Mozart may not have explicitly intended.
however, Carbonare also employs a subtle change in tone quality from a more focused, centered sound in the beginning to a lighter, ‘floaty’ sound at measure sixty.

d) Although no specific dynamic marking appears under the solo line at measure thirty-three, some performers - including Sabine Meyer - choose to play this ‘B’ section at a fuller dynamic. In Meyer’s recording there appears to be a significant contrast between dynamic level at measure thirty-three and at the opening of the movement.

e) I have included texture in my discussion of density, section b).

f) In measure forty-nine of his performance, Charles Neidich plays the sixteenth-note six-let with a slightly elongated staccato. This articulation is certainly not written and appears to be an individual performer choice which effectively serves to accent the cadence on beat one of measure fifty. Neidich may also have chosen this articulation to bring out the contrasting durational units between beats two and three of measure forty-nine.

2. The first and second phrases of the Adagio provide numerous possibilities for analysis and performance on the basis of strong versus weak measures. In my own performance I chose to emphasize the second measure of both phrases, creating a weak-strong, weak-strong pattern. Some performers, however; may choose to accent the first measure of each phrase group in a strong-weak, strong-weak pattern. Dualistic pitch analysis appears to support both choices.

V.

1. Both the accompaniment and solo-line in measures forty-one through forty-four provide ample opportunity for interpretation on the basis of directional versus vertical
music. Neidich, Carbonare and Meyer again provide three unique approaches to this phrase. Carbonare appears to be the most vertical of the three, clearly emphasizing the metrical accents on each beat of measure forty-two, although beat one of measure forty-three seems to be slightly more directional. On the opposite end, Sabine Meyer crescendos the entire phrase into measure forty-four on beat one, creating a distinctly directional feel. Neidich appears to take the middle approach, incorporating both directional and vertical application in measure forty-two.

2. The cadence in measure forty-four which concludes this phrase occurs on beat two, making it a weak-beat cadence. This progression from the leading-tone of the mediant to the mediant appears to be less harmonically final, effectively moving forward energy into the next phrase.

VI. I will address this issue in the conclusion section.
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VI. I will address this issue in the conclusion section.
CONCLUSIONS AND AREAS FOR FURTHER RESEARCH

With this method, I have merely begun the journey of attempting to catalog the ways intuitive-based form and analysis can be married to the more dualistically taught forms. Performance is fundamentally re-creative research; taking a pre-existing piece of art and re-creating it is like an experiment in which the methodology is clear, but the data is personally selected and personally entered and will therefore produce a personal result, which is then subject to the definition of what is beautiful, but is also definable as appealing or not and is therefore critique-able. It would appear, as stated earlier, that a comprehensive application of both pitch analysis and this sort of beginning of a rhythmic analysis approach would have enormous implications for all performers.

In application of my method to the Mozart K.622 Adagio, I found the results to be supportive of my initial intuitive choices as well as bringing to my attention several performance possibilities I had not previously considered. Whether or not I choose to apply each possibility will most likely vary from performance to performance; however, I have found the entire process to be extremely useful in the expansion of my musical palette. I also discovered that there were elements of what I chose to do that were present in the other performances. This may suggest that these performers went through a similar process; however, it appears more likely that they came to their performance decisions by educated intuition and experience, as I did in my own initial rendition of the Adagio.
APPENDIX A
ADAGIO FROM THE CLARINET CONCERTO, W.A. MOZART. K622
**) Vorschläge zur Ausführung der Fermate:
Tutti Bassi

DM.
Terminal
Cadence
APPENDIX B

ant. antecedent phrase
cons. consequent phrase
A 'A' music of ternary form
B 'B' music of ternary form
A' return of 'A' music
* cadenza area
[ ] brackets represent phrases and phrase-groups as I have analyzed them. Larger brackets represent the larger formal sections.
\ slur markings indicate smaller formal groups, for example, the phrase or sub-phrase.
( ) parenthesis around individual notes indicate the possibility of non-chord tones
app. appoggiatura
// a brief 'slice of time'
\ slight ritardando
sp subito or sudden piano
> indicates a qualifying accent
(mf), (f) dynamic markings in parenthesis indicate the choices of one or more performers and do not necessarily refer to any original score or editorial marking
w weak measure
s strong measure
↑ vertical music
→ directional music


