

Copyright
by
Dong-Ok Hwang
2003

**The Dissertation Committee for Dong-Ok Hwang
certifies that this is the approved version of the following dissertation:**

***Moriah* for Orchestra**

Committee:

Donald Grantham, Supervisor

Russell Pinkston

Rebecca Baltzer

David Neumeyer

William Koch

***Moriah* for Orchestra**

Dong-Ok Hwang, B.M.; M.M.

Dissertation

Presented to the Faculty of the Graduate School of
The University of Texas at Austin
in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Musical Arts

The University of Texas at Austin

May 2003

Dedication

Soli Deo Gloria

Acknowledgements

I would like to express my sincere gratitude to all the members of my committee: Donald Grantham, Russell Pinkston, Rebecca Baltzer, David Neumeyer, and William Koch. I wish to thank you all for your time, patience, and valuable suggestions.

I would like to express my gratitude to my parents, who always believe in my potential and who always give me support and prayer. I would not have made it this far without them. I would also like to thank my sisters and brothers who refresh my feeling and bring me happiness.

I would like to express my special gratitude to Rev. Il-Young An, who first told me the story of *Moriah*. I also wish to express my appreciation to Pastors Bon-woong Koo, Samuel Kim and Sung Bae Kim for their spiritual support and prayer. It would be impossible to fully express my gratitude to Abigail Kim, Seon-Hi Shin, and Sung-Hee Choi for their sincere prayers. I wish to express my appreciation to my friends, Jina Kim, Euseob Choi, Sarah Reichardt and Shang-Min Choi. Most of all, I want to give my special thanks to God. Without him, I am nothing.

***Moriah* for Orchestra**

Publication No. _____

Dong-Ok Hwang, D.M.A

The University of Texas at Austin, 2003

Supervisor: Donald Grantham

MORIAH is a work for full orchestra inspired by Mount Moriah in Jerusalem. The general program for the work is based on events told in the Bible. Four themes, representing Abraham, Isaac, God and Jesus, are the main sources of musical material in the work. These four themes are related so as to represent the Father-Son relationship, both spiritual and physical, found between God-Jesus, God-Abraham, God-Isaac, and Abraham-Isaac. In the music, these relationships are also reflected through a constant process of juxtaposing and interweaving of musical material. The analysis portion of the dissertation will focus on the themes, and their interrelationship, with respect to pitch and rhythmic materials, formal, textural and orchestrational relationships.

Table of Contents

INTRODUCTION..... 1

ANALYSIS 2

 Thematic and Motivic Material used in *Moriah* 2

 God’s Theme 4

 Abraham’s Theme 7

 Isaac’s Theme 10

 Jesus’s Theme 13

 Form 14

 Pitch Materials..... 22

 3-5 (016)..... 23

 3-8 (026)..... 24

 4-Z15 (0146) 25

 4-23 (0257)..... 26

 4-22 (0247)..... 26

 4-10 (0235)..... 27

 Orchestration 28

CONCLUSION 38

SCORE 39

MORIAH for ORCHESTRA 39

VITA 131

INTRODUCTION

Mt. Moriah is in the northeastern area of Jerusalem and has been a focal point of Biblical history from the beginning. Three important events took place on Mt. Moriah: first, God tested Abraham's faith by telling him to sacrifice his son, Isaac on Mt. Moriah; second, Solomon built the first temple for God on the mountain; third, Jesus was crucified on the northern part of the mountain. For my dissertation I selected the first event (and to a certain extent, Jesus' crucifixion) because it seemed to me to be the most inspiring and dramatic event upon which to base a composition.

I composed *Moriah* as piece of program music, with four themes representing respectively God, Abraham, Jesus, and Isaac. All are part of father-son relationships both spiritually and physically. In this music these relationships are reflected and explored through a constant process of juxtaposing and interweaving the four main themes.

The discussion of my music will focus on the themes and their interrelationship with regard to intervallic, rhythmic, and pitch materials. Form, textural, and orchestration relationships will also be discussed. The purpose of this analysis is to describe how the biblical incident is absorbed into the music in harmony with these musical materials.

ANALYSIS

In Genesis 22 Abraham was asked by God to take his beloved son, Isaac, to Mt. Moriah as a sacrificial offering. For three days Abraham and his son traveled toward the mountain on foot. Isaac obediently carried the wood, knife and coals for the offering, although he questioned where the sacrificial lamb was. His father assured him that God would provide the lamb. When they reached their destination, Abraham prepared for the sacrifice and tied his son to the altar. Abraham raised his knife to kill Isaac, but stopped when he heard an angel's voice. This is a story about a man's faith and trust in God and has been a source of inspiration in the Judeo-Christian world since it was first told.

THEMATIC AND MOTIVIC MATERIAL USED IN *MORIAH*

Each theme in *Moriah* has its own scale and that scale is the basis of all the pitch material that occurs at each theme's presentation. In the Bible, the Father-Son relationship is represented both spiritually and physically via the relationships between God-Jesus, God-Abraham, God-Isaac, and Abraham-Isaac. In this piece, these relationships are reflected through a constant process of juxtaposition and overlapping of musical material. For example, when Abraham's theme begins, Isaac's theme follows immediately or even plays simultaneously as in mm. 175-191 (Example 1).



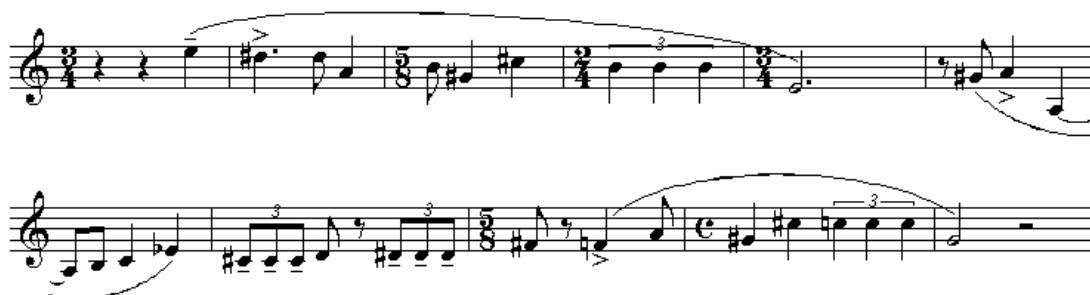
Example 1: The overlapping of phrase and motives from Abraham's and Isaac's themes.

Each theme develops as its motives are stretched or fragmented and pursue new directions according to what I feel is necessary to underline the dramatic events of the Biblical story and the unfolding of the music. However, I used the original shape of the theme at key dramatic points. The presentations of the themes are clearly identified in the music, and usually end with longer note values or are articulated by rests. A balance of ascending and descending motion is used in all themes with the exception of Isaac's theme, whose general contour is ascending. Often motivic ideas from the theme are presented in accompanying instruments, either in their original form or transformed. Motives are altered through truncation, intervallic expansion and contraction, hybridization (changing the shape), reordering (changing the pitch order), and so on. The motives are created from three and four-note cells, and usually determine the direction of the harmonic motion. In this chapter, I will concentrate on the first half of the piece

(mm. 52-282) because it is in this half that each theme and its motives are most clearly presented.

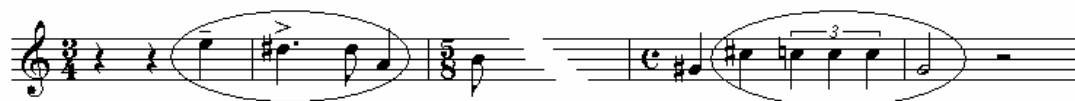
God's Theme

God's theme is the most important theme in the piece. It is first presented directly after the introduction and it also closes the work. The theme is based on eleven notes, using all notes of the chromatic scale with the exception of A#, containing all intervals from minor second through perfect fifth. Example 2 shows God's theme as it is presented beginning in m. 52 in the clarinet. After the intervals appear in descending order there is an octave leap in the melody, and then the intervals are presented in ascending motion.



Example 2: God's Theme

One of the unique characteristics of God's theme is that it starts with a descending minor second in the melody, while all other themes start with a third or a fourth. The theme's opening two measures create a three-note cell (pitch classes E-D#-A) that will be an important trichord later on. The three-note cell is a member of set class 3-5 (016) as identified in the Straus set list in [Introduction to Post-Tonal Theory](#). The final three notes of the melody, which are in descending motion, also form a (016) trichord. See Example 3.



Example 3: Statements of the 3-5 (016) in God's theme.

This set class is presented in pizzicato cello and double bass at m. 48. before God's theme enters in the clarinet in m. 52. Meanwhile, the same pitch class is stated vertically in the cello and double bass at m. 54 and regularly occurs in m. 66. The piano enters with the set class in mm. 69-76. The 3-5 set class is developed through transposition and inversion and occurs in both the melody and harmony. In the pitch material section, I will discuss this trichord in further detail.

God's theme returns eight times in different instrumentation and with a different harmonic background and orchestration. In mm.59-67, the horns have

the minor second of the motive, performing a truncated and sometimes inverted version of the opening of the theme. The horn's minor second connects the clarinet's line as the horn plays the last note of the clarinet's phrase and the opening note of the clarinet's following phrase. In m.61, the melody repeats starting on F, a half step higher than the initial presentation, and thus emphasizes the minor second at the beginning of the theme. One measure later the theme returns one more time in a contrapuntal setting so that we can clearly hear the three-note cells. The octave leap is another unique feature of the melody, and combined with the second, it develops a new motive transformed into hybrid between mm. 66-72 in the strings as shown in Example 4.

The image displays a musical score for five staves, labeled Vln. I, Vln. II, Vla., Vcl., and D.B. The score is in 3/4 time and features a key signature of one flat. The Vln. I and Vln. II staves show a melodic line with a prominent octave leap, marked with a bracket and the word 'ms.' (minor second). The Vla. staff shows a similar melodic line, also marked with 'ms.'. The Vcl. and D.B. staves show a more complex, contrapuntal setting of the theme, with various dynamics like *pp*, *mf*, and *f* indicated. The score includes various musical notations such as notes, rests, and dynamic markings.

Example 4: The octave leap motive and its transformation.

The repetition of the note in a triplet rhythm, seen in Example 2, is a rhythmic motive that is found throughout the piece. Thus, the melody includes

not only a melodic motive, but also a rhythmic one. The important aspects of God's theme are:

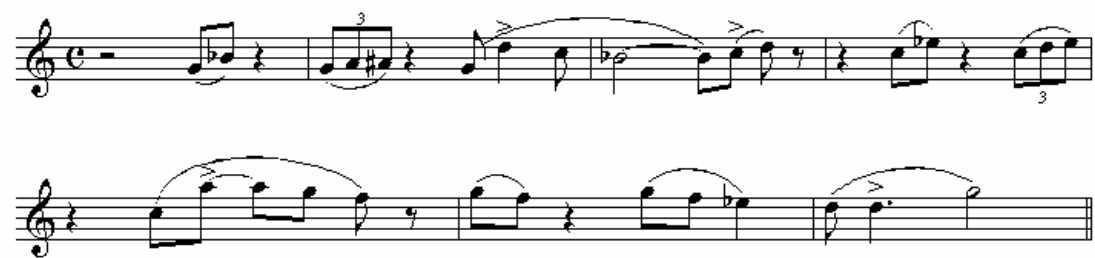
1. uses the 3-5 (016) trichord;
2. opens with a descending minor second;
3. consists of the main intervals used in the piece;
4. includes the triplet rhythmic motive;
5. connects sections and precedes the climax;
6. used at the beginning and as a conclusion.

Abraham's Theme

This theme is based on the scale created by two (0235) tetrachords, a set class 4-10. Both the (0235) tetrachord and the resulting scale are symmetrical. Abraham's theme first appears in m. 88 and returns fourteen more times as a complete melody either in its original form or as a variation. In the second half of the piece, this theme changes but remains in its original scale. See example 5a and 5b.



Example 5a: The original version Abraham’s theme.



Example 5b: The variation of Abraham’s theme.

The theme begins with a minor third, which is an important interval in the structure of this theme. Also, the grace note is a unique characteristic of the theme. Example 6 demonstrates how that opening melodic gesture is often fragmented and transformed rhythmically and intervallicly.



Example 6: The opening melodic gesture and its elements.

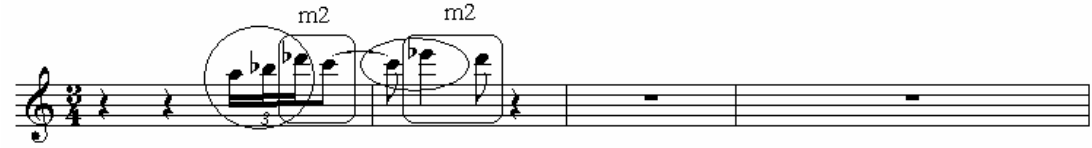
The four-note gesture is a member of set class 4-10 (0235) and is derived from the second half of the scale. The gesture also includes three important motives: the rising minor third with which it begins, the grace note with major second, and the syncopated rhythm. In m. 93, at the end of the measure, the gesture returns transposed and the intervals are expanded in the clarinets and

piano. These motives move back and forth among the instruments until m.101. In m. 97, first bassoon and contrabassoon have the gesture at the original transposition level of T₄. A 4-10 tetrachord appears in the piano in a descending sixteenth-note rhythm at m. 196 and reappears in both ascending and descending motion in various instruments until m. 207, at which point the music gradually becomes completely chromatic. Throughout the piece, Abraham’s theme appears not only as a whole melody but also in fragmented form. In m. 163, the flute plays a motive that consists of six notes in a sixteenth-note triplet rhythm. Example 7 shows that this motive originates from God’s theme, which had an eighth-note triplet rhythm. This kind of motivic derivation is also expressed in the father-son relationship (the son’s “derivation” from the father).

God's Theme



Abraham's new motive



Example 7: The motive and its origin.

The new motive, with its sixteenth-note triplet rhythm, appears in a truncated form in the transition section (mm. 301-313). The characteristics of Abraham's theme are:

1. based on a symmetrical scale (pitch-classes C-D-D#-F-G-A-A#-C);
2. contains the set class 4-10 (0235);
3. contains a triplet rhythm and syncopated rhythm followed by a grace note;
4. important intervals are the minor and major third;
5. motivic ideas are transformed so that the melodic shape is completely changed in the second half of the piece.

Isaac's Theme

Isaac's theme (Example 8) is unique because it uses exclusively triplet rhythms and, as its structural basis (see bracket notes in Ex. 8), ascending motion. The triplet rhythm, which is usually presented in the strings, is one of the main rhythmic motives of piece.



Example 8: The original presentation of Isaac's theme and its ascending motion.

This theme begins with a set class 3-8 (026) trichord, which eventually is used to create the climax of the piece (mm. 470-481). In the pitch material section, I will discuss this set in more detail. This theme also has its own scale, C-D-D#-E-F-G-G#-A-A#, which is presented in mm. 422-430 in the flutes, oboes and piccolo. Unlike the other themes, Isaac's theme usually keeps its original shape and appears in its entirety. In m. 388 (Example 9), the theme is modified by shortened note lengths, but it is evident that the same pitch materials are used.





Example 10: The presentation of Isaac's theme at different pitch levels.

Through the dissonance, one can easily imagine Isaac's physical and psychological suffering. In m. 245 Jesus' theme is presented in the brass in 2/4, against Isaac's theme in 6/8. Jesus' theme slowly replaces Isaac's theme since biblically, Jesus replaces Isaac as a sacrifice. This simultaneous presentation is intended to represent the parallel roles of these individuals: both are sacrificial offerings. The prominent characteristics of Isaac's theme are:

1. ascending motion with an eighth-note triplet rhythm;
2. contains set class 3-8 (026);
3. occurs in its entirety throughout the piece;
4. is varied rhythmically;
5. always presented linearly.

Jesus' Theme

horns).



Example 11: Jesus' theme

By using the (0257) tetrachord in both Abraham's and Jesus' representation, I

express the relationship between Abraham and Jesus. Example 12 shows that the melody both ascends and descends in stepwise motion creating a regular contour.



Example 12: The melodic contour of Jesus' theme.

The roles for and characteristics of Jesus' theme are:

1. replacement for Isaac's theme;
2. leads the piece to its first climax (in mm. 245-255) and closes the work along with God's theme (in mm. 452-459);
3. contains 4-23 (0257) and 4-Z15 (0146) tetrachord.

FORM

Moriah is a programmatic work that divides into two large sections (A and B) with an introduction and coda. However, this piece is not in a simplistic two-part structure: each main section divides into three subsections. Table 1 illustrates that the piece begins with a slow introduction after which the A section, in a faster tempo, clearly presents the four main themes along with their transformations. The transition, which uses the same musical material as that found in mm. 40-52,

begins in m. 294. The B section begins in m. 314 with the variation of Abraham’s theme and the coda begins in m. 458.

The introduction begins with the brass. The slapstick with a *sforzando* doubles the first quarter note creating a percussion sound similar to the traditional Korean instrument named *Bark*. The Bark usually plays at the beginning and ending of a work. Starting with the slapstick is a recurring feature in my music. The melody that opens *Moriah* appears only in the introduction. However, the four-note cell (created by pitch classes D-E-F-B and a member of set class 4-13 (0136)), comes back in both Abraham’s and Isaac’s theme at their original pitch levels, T₃ and T₈ respectively.

Table 1: Form of *Moriah* for Orchestra.

Introduction mm. 1-43				
Section A				
a	transition.	b	c	
mm. 44-156	157-166	167-226	227-293	

Transition mm. 294-313			
Section B			
	d mm. 314-380	e 381-421	f 422-457
Coda mm. 458-481			

The A section divides into three subsections, with each subsection being related to the other through the shared intervallic motives derived from the melodies. The *a* section, representing Genesis 22:1-4, begins with God's theme at its original pitch level. Then, Abraham's theme enters in the middle register. A new phrase begins at m. 101 with a four-note cell (pitch classes C#-E-A-A#), which is a member of set class 4-18 (0147). Meanwhile, Abraham's theme continues in the lower register (in cello and double bass) at its original transposition level. The set class 4-18 leads to the next section in which Abraham's faith is depicted. At m. 115, the trumpets begin a new theme (Example 13), which is not related to either God's or Abraham's theme, but is created out of a pentatonic scale (pitch classes F-G-G#-A-A#).



Example 13: Introducing the pentatonic scale in the trumpets.

This scale has two common notes, A and A#, with the pitch set used earlier in the music, the tetrachord (0147). These pitches work as pivot tones, allowing the basic pitch material to modulate to the pentatonic scale. This is similar to a pivot chord modulation in tonal music. As the music progresses the texture thickens in comparison to the first half of the *a* section. Octave leaps enter in the horns and arpeggio figures are introduced by the woodwind and piano, which continue until the end of the *a* subsection.

The *b* subsection begins, representing Genesis 22:5-8, with Isaac's theme at the original pitch level at m. 167. Abraham's theme then returns a major second lower. In comparison to how it occurred in the *a* section, the theme has been augmented and staccato and legato articulations are introduced. The (0257)

tetrachords appear in a syncopated rhythm at mm. 195-201, which are intended to represent Abraham's strong trust in a spirit he cannot see. God's theme returns with the augmented rhythm at its original pitch level, but only half of the theme is presented. Abraham's theme reappears at m. 224 a perfect fourth lower, in preparation for the next section.

In m. 227, the *c* subsection, depicting Genesis 22:9-12, begins with a motive that originates from Isaac's theme in a truncated and hybrid form. The entire melody is introduced by the strings at m. 229, representing the obedience of Isaac. Jesus' theme first appears in m. 245 and overlaps with iterations of Isaac's theme. The overlapping of the two themes represents the similarities between the aborted sacrifice of Isaac and the crucifixion of Jesus. In m. 256, what seems to be a new theme appears using a new set of pitch classes. However, this melody derives from Jesus' and Isaac's themes. Example 14 illustrates that the new mode is created by the common notes of the two themes using pitch classes (C-D-E-F-G-G#-A-A#). After this big moment, God's theme reappears at m. 273 at the original pitch level, representing Genesis 22:11-12. It is at this point in time that God affirms the faith of Abraham, and therefore the A section closes with God's theme.

Example 14: The new theme based on the common notes of Jesus's and Isaac's scale.

The transition begins at m. 294 using the scale unique to Abraham's theme before evolving into Isaac's scale at m. 302. Then, part of the transition that occurs between the introduction and *a* subsection (mm. 44 -48) is directly quoted beginning at m. 309.

The B section, which represents Genesis 22:13-14, also divides into three parts. Unlike the A section, the music of the B section is happy, joyful, and graceful. The length of the B section is shorter than the A section. Following the story in the Bible, Abraham's and Isaac's themes vary rhythmically but keep the

same pitches (see Examples 5 and 9). The first subsection of the B section begins with the variation of Abraham’s theme in m. 314. This variation represents the joy of Abraham. Example 15 shows that in m. 324, Abraham’s theme augments rhythmically to quarter notes but at the original pitch level. The music of this part is mainly performed by the strings with the woodwinds presenting Abraham’s theme.



Example 15: The variation of Abraham’s theme in 3/4.

In m. 361 the full orchestra plays at a *fortissimo* dynamic level. Here, at one of the climactic points of the piece, the orchestra represents Abraham being filled with joy. The timpani not only closes the *d* subsection, but also provides a connection to the *e* subsection. The meter changes to 6/8 at m. 381 and a variation of Isaac’s theme at the original pitch level is presented in the English horn, bassoon, clarinets, and violins. The 6/8 meter changes to 2/4 at m. 388 and shorter rhythms begin to appear. Isaac’s theme reappears in the shortened rhythm

of an eighth note followed by sixteenth notes. After the presentation of this gesture, Abraham's theme is condensed into a three-measure phrase doubled at the perfect fifth in the flutes (at m. 398). At m. 402 Isaac's theme also appears a minor third higher than before with a slight alteration of the opening of the theme by interval expansion. At m. 411 Isaac's theme is presented in exactly its original version by the first violin. Three measures later, the theme immediately turns into Jesus' theme (at m. 414). Meanwhile, the piccolo plays Isaac's theme a minor third higher. At this time both Jesus' and Isaac's themes begin on F and it is through this pitch that the music transitions into the *f* subsection.

The *f* subsection begins in m. 422 with a two measure phrase, based on Isaac's scale, beginning in m. 422, played by the flute, the oboe and the piccolo. The repetition of the scale emphasizes that Isaac has not been killed. At m. 431, half of Abraham's theme is restated a perfect fourth higher. God's theme occurs at the end of the *f* subsection in the full orchestra with *fortissimo* dynamic markings at its original pitch level. Simultaneously, the horns play Jesus' theme, at m. 479, representing the fact that God will give his son, Jesus, for us.

The coda begins in m. 458 with a minor third and triplet grace note gesture. The minor third and grace notes are derived from Abraham's theme, while God's theme is represented through the use of minor and major seconds, and Isaac's theme through the set class 3-8. Thus, the materials of the coda are

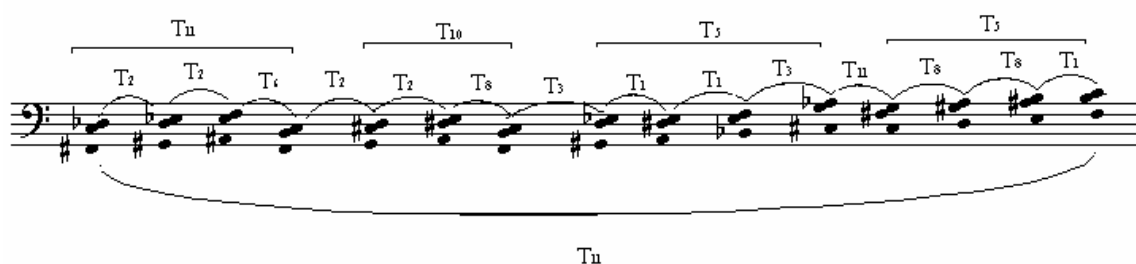
derived from previous thematic ideas. The 3-8 (026) trichord first appears at m. 470 and continues to the end of the piece at various transposition levels. By beginning the piece with pitch-class B and ending with pitch-class C, I try to represent the leading tone and tonic relationship, as a symbol of God affirming the faith of Abraham.

PITCH MATERIALS

In composing *Moriah*, I systematically used set classes throughout, presenting them both melodically and harmonically. The main set classes I employed all helped to form the four themes. In total six set classes, 3-5 (016), 3-8 (026), 4-10 (0235), 4-Z15 (0146), 4-22 (0247), and 4-23 (0257) are utilized in the piece as the main set classes. Set classes, 3-5, 3-8, 4-Z15, and 4-23 appear in the music harmonically while set classes 4-22 and 4-10 usually are presented linearly. Due to the importance of trichords and tetrachords in the piece, I have selected these set classes to analyze in this section of the paper. In analyzing a particular set class I will only discuss the particular section that contains these set classes. I will begin by examining the use of set class 3-5 (016) through its various transformations.

3-5 (016)

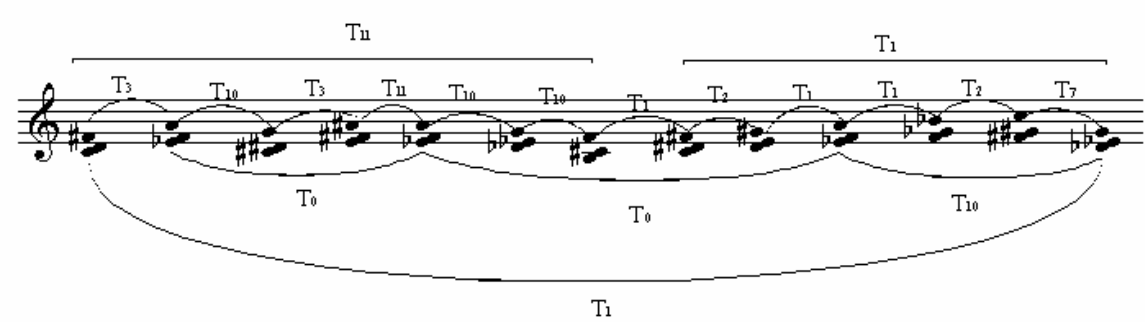
Created by a minor second and augmented fourth, multiple iterations of the (016) trichord are easy to hear in the opening and closing of God's theme. The trichord is used throughout the piece in a variety of ways. Because of its relationship to God's theme, the (016) trichord usually appears before or with the presentation of God's theme in the A section. For example, in m. 48, the cello and double bass play the set class in pizzicato. Set class 3-9 (027) follows soon after in m. 52. However, the (027) trichord contracts to the (016) trichord in mm. 56-66. To avoid sounding simplistic, the set class is accompanied by other pitch sets. For example, piano alternates between pitch sets 3-4 (025) and 3-7 (015), but plays the (016) trichord after the cello and double bass at mm. 69-76 at different pitch levels. The set class reappears a number of times in mm. 101 and 105. The 3-5 pitch set is usually presented as a chord in different instruments and transpositions. The richness of its transformation, which is shown in example 16, is one of main musical features through the first half of A section.



Example 16: The statement of transformations of 3-5 (016) at mm.56-66.

3-8 (026)

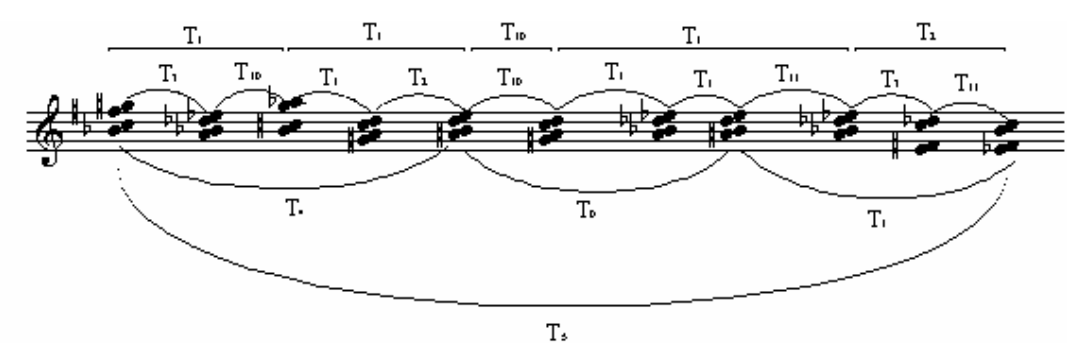
The use of (026) trichord in *Moriah* originates in Isaac's theme. Like the (016) trichord, it is presented harmonically through various transpositions. The most prominent use of the set is in the coda starting at m. 470, and it is the (026) set that brings the piece to a close. It is easy to mistake the 3-5 (016) set for the 3-8 (026) set or vice versa until the interval vectors of 3-5 (016) and 3-8 (026) are compared. The vector for 3-5 is 100011 and the vector for 3-8 is 010101. Thus, the vectors have only interval class 3 and 6 in common, giving these set classes different sonorities. As shown in Example 17, mm. 470-481 are created by a chain of (026) trichords at various transposition levels.



Example 17: The chain of 3-8 (026) trichords in mm. 470-481.

4-Z15 (0146)

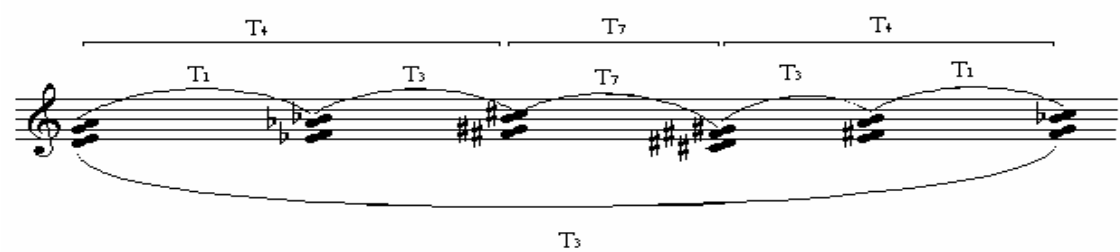
The (0146) tetrachord arises out of Jesus’ theme. In mm. 90-98 this set class appears in the flutes and oboes. Meanwhile Abraham’s theme is presented in the low instruments. This is one of the ways that the relationship between Abraham and Jesus is reflected in the piece. Example 18 shows the transformation of set class in mm. 90-98.



Example 18: The statement of transpositions of the 4-Z15 (0146) tetrachord in mm. 90-98.

4-23 (0257)

The 4-23 (0257) tetrachord comes from Jesus' theme. As previously stated, the use of the (0257) tetrachord in mm. 195-201 in the full orchestra represents Abraham's faith and the relationship between Abraham and Jesus. Similar to the use of other set classes, the 4-23 tetrachord is presented in a series of transpositions as shown in Example 19.



Example 19: A chain of (0257) tetrachord in mm. 195-201.

4-22 (0247)

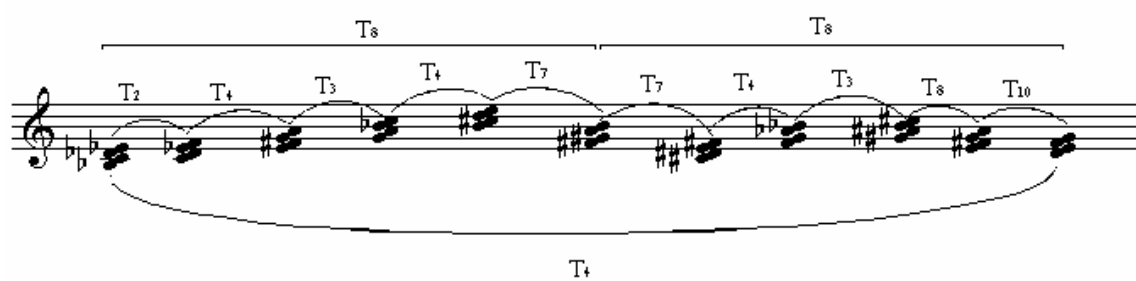
Set class 4-22 is not tied to any particular theme, but the (0247) tetrachord is similar to the tetrachord 4-23, as the vector for 4-22 is 021120 and vector for 4-23 is 021030. Only interval classes 4 and 5 are different in the interval vectors, and so these tetrachords are very similar sonorities. For this reason, I chose to use this set class in *Moriah*. Set class 4-22 appears at m. 115 in the arpeggio figure in the piano followed by the 4-23 set in the full orchestra. This set class is briefer, and though interrupted by the (0257) tetrachord at m. 117, continues until m. 126.

As shown in Example 20, all members of set class 4-22 relate to each other by transposition from mm-126.

Example 20: The chain of 4-22 (0247) tetrachords at mm.115-126.

4-10 (0235)

Set class 4-10 (0235) belongs to Abraham’s theme. The (0235) tetrachord is presented as a series of ascending pitches beginning in m 196 in the piano and then by flutes. In m. 196 the (0235) tetrachord is presented simultaneously with the (0257) tetrachord as a reflection of their relationship. The 4-10 evolves into the 4-23 and this transformation is repeated multiple times. The (0235) tetrachord appears in various instruments (the oboes, flutes, strings and piano) through the transpositions; illustrated in Example 21.



Example 21: The multiple statements of the 4-10 (0235) tetrachord in mm. 195-207.

ORCHESTRATION

I created a sketch of *Moriah* for two pianos before I orchestrated the piece. While orchestrating I concentrated on giving each timbre of the four main themes its own special color so that each particular theme seemed independent and exhibited great timbral differentiation. I also used a number of special effects in my orchestration, which usually serve some particular purpose of expression. In the orchestration section, I will discuss the textural relationships, including the division into foreground and background groups, dynamics effects, and chords in the full orchestra.

Beginning in m. 256, I present an important section in tutti. The long passage begins with the English horn, clarinets and bassoons in unison doubled an octave lower in the contra bassoon. The horns also participate in a heterophonic doubling. Meanwhile, a tremolo is sustained in lower strings. In this passage a dark, vital, loud and majestic color is created through different instruments. Here,

both woodwinds and strings enter in the lower range at the same time to create a very dark and heavy sound. I scored the music this way to represent the moment that Isaac was to be killed. In contrast to this section, in m. 361 I orchestrated Abraham's joy in a unison-octave partial tutti. To connect Isaac's impending sacrifice to Abraham's great joy, I orchestrated a crescendo by adding a glissando in the woodwinds and timpani in tremolo at mm. 359-360. While Abraham's newly-altered theme is doubled at the octave by the piccolo, flute, oboe, trumpet, trombone, tuba, and viola, the harmonic background and moving bass appear in the horns, harp, piano, violins, cello and double bass. Eighth-note arpeggios are given to violins until the end of the tutti section (m. 378). The timpani not only doubles the violin's rhythm, but also connects the two sections. I combine tambourine and castanets in the percussion to suggest a dance-like music. Despite the different musical gestures and the color of the background, Abraham's theme clearly stands apart from the musical texture because of:

1. the theme doubled at the octave in woodwinds, brass, and strings;
2. one flute in unison with piccolo an octave higher, one oboe in unison with one clarinet, two trumpets in unison with lower viola, one trombone in unison with tuba an octave lower;
3. its parallel doubling at the fourth in second flute, second oboe, English horn, first clarinet, trumpet, and upper viola.

A different unison-octave tutti occurs at the climax at the end of the piece. At m. 449, God's theme is presented in a multi-octave spread at *fortisissimo* by all the instruments except the horns, percussion, harp, and piano. While the woodwinds, brass (except the horns) and strings take God's theme with parallel doubling, the horns play a countermelody, Jesus' theme, beginning in m. 450. Various articulations give the unison a certain tension: the woodwind articulations are smoothly slurred while the brass add pointed stings against the viola's tremolo. The percussion section is used to build the climax with the snare drum, bass drum, suspended cymbal, and tom-tom. Xylophone reinforces the quarter-note triplet of the theme by dividing into three eighth-note triplets. The tom-tom repeats the same rhythmic figure as the xylophone, a repeating rhythmic gesture that originates in traditional Korean music. I enlarged the doubling in this section because of the varied timbres. Further detail include:

1. all the instruments, except the horns, in the octave unison;
2. one violin in unison with one clarinet with piccolo an octave higher, one flute in unison with one oboe and one trumpet, bass clarinet in unison with one trombone and lower viola, one bassoon in unison with tuba, and contra bassoon in unison with double bass;
3. four horns in unison but against the main melody;
4. other woodwinds, brass, and strings create the harmony;
5. different articulation markings given to the instruments;
6. the upward glissando only in harp and piano.

I will now examine the orchestration in further detail in terms of foreground and background scoring of particular sections. In m. 21, the brass and low strings play the main melody with a high string accompaniment. Meanwhile, color is added by accented highlights provided by the bassoon and contra bassoon and bass clarinet. The flutes partially double the accompanying line, not the melodic line, and dovetail with the oboe and English horn entries. Example 22 illustrates the xylophone, harp, and piano enhancing certain “sting” chords performed by applying sharp accents. This material moves into the transition section via the piano. In m. 44, the intensified, short rhythmic motive alternates in the flute and piccolo, doubled by the piano. This transition section will return later at the end of the A section at m. 309. When this music returns, I add double bass and bass clarinet at the end of phrase. Example 23 shows the special sound effects created by sul ponticello with bowed tremolo in the strings, inside the piano glissandos, and bisbigliando in the harp. The tubular bells play half of God’s theme accompanied by these special sound effects.

The image displays a musical score for Example 22, spanning measures 26 to 30. The score is written for a large ensemble, including woodwinds, strings, percussion, and keyboard instruments. The key signature is one flat (B-flat), and the time signature is 4/4. The score is divided into five systems, each containing multiple staves. The instruments are labeled on the left: Hrn. 1, Hrn. 2, C. Tpt. 1, C. Tpt. 2, I. Tbn., E. Tbn., Tbn., Tmp., YpA., Perc. 1, Perc. 2, Perc. 3, Perc. 4, Hrp., and Pno. The score features a variety of musical notations, including notes, rests, and dynamic markings such as *f* (forte) and *mf* (mezzo-forte). The xylophone (YpA.), harp (Hrp.), and piano (Pno.) parts are highlighted with intensified accents, indicated by a series of vertical lines above the notes. The percussion parts (Perc. 1-4) also feature prominent accents. The woodwind and string parts provide a harmonic and melodic foundation for the ensemble.

Example 22: Intensified accents provided by xylophone, harp, and piano, mm.26-30.

The musical score for Example 23, m.81, features a complex arrangement of instruments. The top staff, labeled 'Perc 3' and 'Tubula bells', shows a series of glissandos and octave leaps. Below it, the 'Hrp' (Harp) staff has a series of chords. The 'Perc 1' (Percussion 1) staff shows a series of glissandos. The bottom staves, labeled 'Vla 1', 'Vla II', 'Vla', 'Vc' (Violoncello), and 'DB' (Double Bass), show a series of chords and glissandos. The score is written in a standard musical notation with a key signature of one flat and a time signature of 4/4.

Example 23: Special effects and God's theme in the tubular bells, m.81.

In m. 115, four distinct musical elements are combined in each instrumental group with only the brass beginning on the downbeat. These appear in strong relief because they are each assigned very distinctive color combinations. First, the brass plays the main rhythm with the melody in the trumpets. The glissando with octave leap occurs in the brass (except the trumpets) with contrasting contours, and later on in the passage the horns change to short notes that double the rhythmic gesture of the other brass at m. 121. Second, the glissando is transferred to the woodwinds, harp and piano at m.115.

Third, the strings, except the first violin and double bass, sustain long notes with fingered tremolos and move by sixteenth-notes. Finally, the quarter note with triplet grace note occurs in violin I and the remaining woodwinds. The four elements of this passage are:

1. three trumpets in unison, horns in major seconds, three trombones, and tuba;
2. two flutes and piano in descending motion, two oboes, and two clarinets, two bassoons and the harp in ascending motion;
3. second violin, viola, and cello;
4. piccolo in unison with the first violin an octave lower and English horn two octaves lower, and bass clarinet with contra bassoon another octave lower.

In m. 300, various musical elements play simultaneously with special effects in the strings. This section has a rhythmic motive, , which produces a complex interplay in the percussion, woodwinds, and strings. Further details include:

1. short rhythmic gestures with occasional harp glissando interjections;
2. two-notes glissandos in all strings except the double bass;
3. alternating the rhythmic motive between woodblock and congas;
4. sustained notes in the horns;

5. bassoons playing the rhythm while the contra bassoon highlights the eighth-note pick up with double bass giving emphasis to the eighth-note with Bartok pizzicato;

6. glissandos in the timpani.

As previously mentioned, two themes are presented simultaneously with contrasting orchestration at m. 412. I concentrated here on the treatment of three important elements sounding together to create an intricate polyphonic texture. This is the crucial point in the story where the sacrifice of Isaac is transferred to Jesus. The piccolo presents Isaac's theme with the first violin doubling the theme in a heterophonic texture. Meanwhile, Jesus' theme is played in the oboes, second violin, cello, and double bass in octave doublings. The horns and viola are doubled in unison on the same part. Also the piano plays the same music as the viola, but with the rhythm diminished from eighth-notes to sixteenth-notes. Tom-toms and snare drums alternate on a rhythmic figure using highly contrasting dynamics.

In *Moriah*, emphasized dynamic effects are often produced by percussion and by adding instruments to the texture. The percussion typically intensify climaxes, as in m.114, m. 202, m. 256 m. 400, m. 449, and m. 388. Another role of percussion in this piece is rhythmic emphasis, accents and coloring of simple rhythms. For example, xylophone doubles the piano to reinforce the accents at the beginning of the piece while the brass play the opening melody.

Throughout the piece, different types of chords are presented with different scoring. As an example, I have selected two chords that appear at the beginning and at the end of piece. As mentioned earlier, the piece begins with pitch class B and ends with C. Therefore the opening and closing chords emphasize the notes B and C. In the first chord, pitch B is doubled with the piccolo, flute, oboe, trumpet, horns, piano, and cello in different octaves and as the highest and lowest sounding pitches (Example 24-a). All type of combinations are used in the final chord to create the most powerful and strongest chord in the piece. Example 24-b shows that pitch C is doubled by most instruments, and is represented in every octave. When I orchestrated the piece, I considered the timbre, the best registral position for the instruments for doubling and coloring, and the distribution of them throughout the entire orchestral range.

(a)

(b)

Picc. Fl.
 Clr. Ob.
 E.H.
 B. Clr.
 Bsn.
 C. Bsn.
 Tpt. Hn.
 Tuba Trb.
 Timp.
 Slapstick
 Bass D.
 Piano
 Harp
 Xyl. Vln. I
 (div.) Vln. II
 (div.) Vla.
 V.C. D.B.
 (div.) D.B.

Example 24: The chords in full orchestra at m. 1 and m. 481

CONCLUSION

The story of Abraham and Isaac is one of the most dramatic in the Bible, and I have attempted to mirror that drama in my own music. In this paper, I have described what I consider to be some of the most crucial musical aspects of my depiction, and have briefly discussed my utilization of these aspects in my composition. Some of these approaches and materials were new for me and employed for the first time in *Moriah*. I hope to further explore those tools in future compositions.

MORIAH

for ORCHESTRA

(2003)

INSTRUMENTATION

3 Flutes (3 doubling piccolo)
3 Oboes (3 doubling English Horn in F)
3 Clarinets in Bb (3 doubling Bass Clarinet in Bb)
3 Bassoons (3 doubling Contra Bassoon)

4 Horns in F
3 Trumpets in C
2 Trombones
Bass Trombone
Tuba

4 Timpani

Percussion I – Xylophone, Bass Drum, Triangle, Maracas
Percussion II – Wood Block, Tam-Tam, Vibraphone, Bass Drum (shared with Per. I), Maracas, Castanets
Percussion III – Suspended Cymbal, Glockenspiel, Slap Stick, Snare Drum, Tubular Bells, Castanets,
Triangle
Percussion IV – 4 Tom-Toms, 2 Congas, Tambourine

Harp

Piano

Strings

The score is written at actual pitch with the exception of the following:

- Piccolo, Xylophone, Harp harmonics: sound one octave higher than written
- Glockenspiel: sound two octaves higher than written
- Contrabassoon and Double Bass: sound one octave lower than written

MORIAH

"Abraham and Isaac"

Dong-Ok Hwang (b.1971)

Andante ♩ = 60

Piccolo

Flute

Oboe

English Horn

Clarinet in B $\flat$

Bass Clarinet

Bassoon

Contrabassoon

Horn in F 1

Horn in F 2

Trumpet in C 1

Trumpet in C 2

Tenor Trombone

Bass Trombone

Tuba

Timpani

Xylophone

Percussion 1

Vibraphone

Percussion 2

Percussion 3

Percussion 4

Harp

Piano

Violin I

Violin II

Viola

Cello

Double Bass

mf

6

Picc. *sfz* *mf* *sfz*

Fl. *sfz* *mf* *sfz*

Ob. *sfz* *mf* *sfz*

E. Hn. *sfz* *mf* *sfz*

B♭ Cl. *sfz* *mf* *sfz*

B. Cl. *sfz* *mf* *sfz* *ff* 3

Bsn. *sfz* *mf* *sfz*

C. Bn. *sfz* *mf* *sfz* *ff* 3

Hn. 1 *mf* *f*

Hn. 2 *mf* *f*

C Tpt. 1 *f* *ff*

C Tpt. 2 *f* *ff*

T. Tbn. *f* *ff*

B. Tbn. *ff*

Tba. *ff*

Timp. *ff*

Xyl. *ff*

Perc. 1

Vib.

Perc. 2 *mf*

Perc. 3 *mf*

Perc. 4 *ff* Snare Drum

Hp.

Pno. *ff*

Vln. I

Vln. II

Vla.

Vc. *f* 3

D.B. *f* 3

11

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

mf

sfz *mp*

sfz *mp*

sfz *mp*

sfz *p*

sfz *p*

p

p

ff

fp

sfz

E F G A
B♭ C# D

div. *mf*

div. *mf*

div. *sfz* *mf*

div. *sfz* *mf*

p

p

mp *unis.*

mp

This page of the musical score is divided into two systems. The first system contains staves for the following instruments: Picc., Fl., Ob., E. Hn., B♭ Cl., B. Cl., Bsn., C. Bn., Hn. 1, Hn. 2, C Tpt. 1, C Tpt. 2, T. Tbn., B. Tbn., Tba., Timp., Xyl., Perc. 1, Vib., Perc. 2 (Wood Block), Perc. 3, Perc. 4, Hp., Pno., Vln. I, Vln. II, Vla., Vc., and D.B. The second system continues the same instruments. The music is in 4/4 time and features complex rhythmic patterns, including triplets and sixteenth notes. Dynamics such as *mf*, *f*, and *ff* are indicated throughout. The score is written in a key signature of one sharp (F#) and includes various musical notations like slurs, ties, and articulation marks.

44

31

Picc. *mp*

Fl. *mf* Bring Out

Ob. *mf*

E. Hn. *mf*

B♭ Cl. *mp* *mf*

B. Cl. *mf*

Bsn. *mf* Bring Out

C. Bn. *mf*

Hn. 1 *mp*

Hn. 2 *mp*

C Tpt. 1 *mp*

C Tpt. 2 *mp*

T. Tbn. *mp*

B. Tbn. *mp*

Tba. *mp*

Timp. *mp*

Xyl. *mp*

Perc. 1

Vib.

Perc. 2 *mf* *p*

Perc. 3 Glockenspiel *mp*

Perc. 4 *mp*

Hp. *mf*

Pno. *mf*

Vln. I *mp* div.

Vln. II *mp*

Vla. *mp*

Vc. *mf*

D.B. *mf*

36

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

36

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

41

$\bullet = 100$

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

41

$\bullet = 100$

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

G Ab

$\bullet = 100$

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

46

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

f

mf

sfz

p

sfz

fp

p

mp

p

fp

f

mp

mp

pizz.

pizz.

mp

mp

E F# G A
Bb C D

56

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1.

Hn. 2.

C Tpt. 1.

C Tpt. 2.

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1.

Vib.

Perc. 2.

Perc. 3.

Perc. 4.

Hp.

Pno.

Vln. I.

Vln. II.

Vla.

Vc.

D.B.

61

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

61

Ob.

E. Hn.

B♭ Cl.

Hn. 1

Hn. 2

Timp.

Xyl.

Perc. 4

Pno.

61

Ob.

E. Hn.

B♭ Cl.

Hn. 1

Hn. 2

Timp.

Xyl.

Perc. 4

Pno.

61

Ob.

E. Hn.

B♭ Cl.

Hn. 1

Hn. 2

Timp.

Xyl.

Perc. 4

Pno.

61

Ob.

E. Hn.

B♭ Cl.

Hn. 1

Hn. 2

Timp.

Xyl.

Perc. 4

Pno.

61

Ob.

E. Hn.

B♭ Cl.

Hn. 1

Hn. 2

Timp.

Xyl.

Perc. 4

Pno.

66

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

66

Temp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

4 Tom-Toms

Hp.

Pno.

66

Vln. I

Vln. II

Vla.

Vc.

D.B.

[illegible]

76

Picc.

Fl.

mp

pp

Ob.

mp

pp

E. Hn.

p

pp

B♭ Cl.

p

pp

B. Cl.

mf

p

Bsn.

p

pp

mp

C. Bn.

Hn. 1

pp

Hn. 2

mp

sfz

p

C Tpt. 1

C Tpt. 2

T. Tbn.

p

mp

pp

B. Tbn.

p

mp

p

Tba.

Timp.

76

> fp

Xyl.

Perc. 1

Vib.

mp

mf

p

p

Perc. 2

Perc. 3

Perc. 4

Hp.

bisbigliando

E F G Ab
Bb C D

mp

Pno.

mp

sfz

inside piano

mp

Vln. I

76

sul pont.

p

Vln. II

sul pont.

p

Vla.

sul pont.

p

Vc.

(Senza Sord.)

sul pont.

p

D.B.

(Senza Sord.)

sul pont.

p

81

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

p

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

mf

p

Glissando

Gliss.

[illegible]

This page of the musical score contains measures 91 through 94. The instrumentation includes a wide variety of orchestral instruments, with woodwinds and strings prominently featured. The score is written in a single system with multiple staves. Key musical elements include:

- Measures 91-94:** The page covers four measures of music, each with a 4/4 time signature.
- Instrumentation:** The instruments listed on the left include Picc., Fl., Ob., E. Hn., B♭ Cl., B. Cl., Bsn., C. Bn., Hn. 1, Hn. 2, C Tpt. 1, C Tpt. 2, T. Tbn., B. Tbn., Tba., Timp., Xyl., Perc. 1, Vib., Perc. 2, Perc. 3, Perc. 4, Hp., Pno., Vln. I, Vln. II, Vla., Vc., and D.B.
- Dynamics and Articulation:** The score uses various dynamic markings such as *mf* (mezzo-forte), *f* (forte), *ff* (fortissimo), *mp* (mezzo-piano), and *p* (piano). Articulation marks like accents and slurs are also present.
- Key Signature and Time Signature:** The key signature is one flat (B-flat major or D minor), and the time signature is 4/4.

This page of a musical score is for a symphony, featuring multiple staves for various instruments. The instruments listed on the left include Picc., Fl., Ob., E. Hn., B♭ Cl., B. Cl., Bsn., C. Bn., Hn. 1, Hn. 2, C Tpt. 1, C Tpt. 2, T. Tbn., B. Tbn., Tba., Timp., Xyl., Perc. 1, Vib., Perc. 2, Perc. 3, Perc. 4, Hp., Pno., Vln. I, Vln. II, Vla., Vc., and D.B. The score is written in 4/4 time and includes various dynamic markings such as *f*, *mf*, *ff*, *p*, *mp*, and *sfz*. It also features articulation marks like accents and slurs, and tempo changes indicated by "accel." and a metronome mark of 110. The page number 96 is visible in the top left corner.

101

Picc. *mp*

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn. *I.* *mp*

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1 (via sord.)

C Tpt. 2 (via sord.)

T. Tbn. (via sord.)

B. Tbn. (via sord.)

Tba.

Timp.

Xyl.

Perc. 1

Vib. *mp*

Perc. 2 *pp*

Perc. 3

Perc. 4

Hp. *mp*

Pno. *p* *mp*

Vln. I

Vln. II

Vla.

Vc. *mf* *loure*

D.B. *mf* *pizz.*

106

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

mp

p

rit. ----- ♩ = 90

111

Picc. *ff* *a2*

Fl. *f*

Ob. *f*

E. Hn. *ff* *a2*

B♭ Cl. *f* *a2*

B. Cl. *ff* *a2*

Bsn. *f*

C. Bn. *ff*

Hn. 1 *ff* *a2* *f*

Hn. 2 *ff* *a2* *f*

C Tpt. 1 *ff* *a2* *f*

C Tpt. 2 *ff* *a2* *f*

T. Tbn. *mp* *ff* *a2* *f*

B. Tbn. *ff* *f*

Tba. *ff* *f*

Timp. 111 *mp* *ff*

Xyl. 111

Perc. 1

Vib. *ff*

Perc. 2 *ff* *Bass D.*

Perc. 3 *ff*

Perc. 4 *mp* *f* *ff* *3* *3* *3* *3*

Hp. *ff* *gliss.* *E F G A B♭ C♯ D*

Pno. *ff*

Vln. I 111 *ff*

Vln. II *f*

Vla. *f*

Vc. *f*

D.B. *arco* *ff*

This page of the musical score covers measures 116 through 120. The instrumentation includes a large orchestra and string ensemble. The woodwind section (Piccolo, Flute, Oboe, English Horn, Bassoon, Clarinet, Bassoon, Contrabassoon) and brass section (Horn 1, Horn 2, Trumpet 1, Trumpet 2, Trombone, Bass Trombone, Tuba) are prominent. The percussion section (Timpani, Xylophone, Percussion 1, Vibraphone, Percussion 2, Percussion 3, Percussion 4) and harp/piano (Hp., Pno.) provide rhythmic and harmonic support. The string section (Violin I, Violin II, Viola, Violoncello, Double Bass) forms the foundation of the music. The score is written in 3/4 time and features complex rhythmic patterns, including triplets and sixteenth notes, with various dynamics and articulations.

121

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

8va

ff

f

Maracas

Wood Block

pizz.

mf

f

mf

mf

This page of the musical score contains measures 126 through 130. The instrumentation includes a wide variety of orchestral instruments. The woodwinds (Piccolo, Flute, Oboe, English Horn, Bassoon, Clarinet, Bassoon, Contrabass) and brass (Horn 1, Horn 2, Trumpet 1, Trumpet 2, Trombone 1, Trombone 2, Trombone 3) sections are prominently featured. The percussion section includes Timpani, Xylophone, and four different Percussion parts. The strings (Violin I, Violin II, Viola, Violoncello, Double Bass) provide a solid foundation. The Harp and Piano are also present. The score is written in a standard musical notation with various dynamics and articulation marks.

131

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

131

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

131

Vln. I

Vln. II

Vla.

Vc.

D.B.

136

Picc. *f* *mf*

Fl.

Ob.

E. Hn.

B♭ Cl. *f* *mf*

B. Cl.

Bsn. *f*

C. Bn. *f*

Hn. 1 *ff* *sfz*

Hn. 2 *ff* *sfz*

C Tpt. 1 *ff* *sfz*

C Tpt. 2 *sfz* *mf* *f* *ff* *sfz*

T. Tbn. *mf* *f* *ff* *sfz*

B. Tbn. *mf* *f* *ff* *sfz*

Tba. *f* *ff* *sfz*

Timp. *f* *mf* *ff*

Xyl.

Perc. 1 *mp* *mf*

Vib.

Perc. 2 Tam-Tam *mf*

Perc. 3

Perc. 4 *sfz* *mf* *mp* *mf* *mp* *f* *ff* *sfz*

Sus. Cym. *f* *sfz*

Hp.

Pno. *ff*

Vln. I *f* *mf*

Vln. II *div.* *sfz* *unis.* *f* *mf* *f* *ff*

Vla. *div.* *sfz* *f* *ff*

Vc. *arco* *sfz* *f* *ff*

D.B. *arco div.* *sfz* *f* *ff* *uni.* *sfz*

[illegible]

[illegible]

150

Picc. *mf*

Fl. *mf*

Ob. *mf*

E. Hn. *mf*

B♭ Cl. *mf* 1. *mp* 3 *mf*

B. Cl. *f* *mf*

Bsn. *f* *mf*

C. Bn. *mf*

Hn. 1 *mf* *mp* *mf*

Hn. 2 *mf* *p*

C Tpt. 1 (Con Sord.) *mf*

C Tpt. 2 (Con Sord.) *mf*

T. Tbn. (Con Sord.) *mf*

B. Tbn. *mf*

Tba. *mf*

Timp. *mp* *mf*

Xyl.

Perc. 1 Bass D. w/ Snare D. sticks *p*

Vib.

Perc. 2 *mf*

Perc. 3

Perc. 4 *mf* *mf* *p* *mf*

Hp.

Pno. *f* 8va

Vln. I *mf*

Vln. II *mf*

Vla. *mf* *mp*

Vc. *f* *mp* arco

D.B. *mf* *mp*

155

Picc. *mf* *f*

Fl. *f* a2 8va

Ob. *f* a2

E. Hn. *f*

B♭ Cl. *mp* *f* *mp* a2

B. Cl. *f*

Bsn. *f* *mf*

C. Bn. *f* *mf*

Hn. 1 *mp* *mf* *f*

Hn. 2 *mf* *f*

C Tpt. 1 *f*

C Tpt. 2 *f*

T. Tbn. *f*

B. Tbn. *f*

Tba. *f* *mp*

Timp. 155 *f* *ff* *mp* *p*

Xyl. 155

Perc. 1 *mf* *f* *mp*

Vib. *mp*

Perc. 2 Maracas *ff* *mp*

Perc. 3 *f*

Perc. 4 *f*

Hp.

Pno. *f* *mf*

Vln. I 155 *f*

Vln. II *f* pizz. *mf* div. pizz. *mf*

Vla. *f*

Vc. *f* pizz. *mf*

D.B. *mf* *f* *mf*

* Bartok pizz.

160

Picc. *mf*

Fl.

Ob. *mf*

E. Hn.

B♭ Cl. *p*

B. Cl.

Bsn.

C. Bn.

Hn. 1 *mp* a2 *mf*

Hn. 2 *mp* a2

C Tpt. 1

C Tpt. 2

T. Tbn. *mf* *mp*

B. Tbn. *mp*

Tba. *mp*

Timp. *mf* *p*

Xyl.

Perc. 1 *p*

Vib.

Perc. 2

Perc. 3

Perc. 4 *mp*

Hp.

Pno.

Vln. I *f* *mp* *f* *mp* *f* *mp*

Vln. II *mf*

Vla. *mf*

Vc.

D.B. div.

175

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

175

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

175

Vln. I

Vln. II

Vla.

Vcl.

D.B.

This page contains the musical notation for measures 180 through 184 of a symphony. The instrumentation includes woodwinds (Picc., Fl., Ob., E. Hn., B♭ Cl., B. Cl., Bsn., C. Bn.), brasses (Hn. 1 & 2, C Tpt. 1 & 2, T. Tbn., B. Tbn., Tba.), percussion (Timp., Xyl., Perc. 1-4), harp (Hp.), piano (Pno.), and strings (Vln. I & II, Vla., Vc., D.B.). The score shows complex rhythmic patterns, including triplets and sixteenth-note runs, particularly in the woodwinds and strings. Dynamics range from pianissimo (pp) to fortissimo (f). Notable features include a large crescendo in the strings leading to a forte passage at measure 184, and intricate woodwind passages in measures 181 and 182.

185

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

mf

f

mp

f

mf

p

mp

p

mf

arco

pizz.

Bass D.

This image shows a page of a musical score, likely for a symphony orchestra. The score is written for various instruments, including Piccolo, Flute, Oboe, Horns, Clarinets, Bassoon, Trumpets, Trombones, Tuba, Timpani, Xylophone, Percussion, Harp, Piano, Violins, Viola, Violoncello, and Double Bass. The score includes musical notation, dynamics, and a rehearsal mark 190. The instruments are arranged in a standard orchestral layout, with woodwinds and brass in the upper staves, percussion in the middle, and strings in the lower staves. The score is written in a single system, with measures 190 through 194 visible. The key signature is one flat (B-flat), and the time signature is 2/4. The score includes various musical notations such as notes, rests, beams, and slurs, as well as dynamic markings like *mf*, *f*, *sfz*, *mp*, *fmp*, *p*, and *f*. There are also performance instructions like *arco* and *pizz.* (pizzicato). The score is a page from a larger manuscript, as indicated by the rehearsal mark 190 at the top left.

195

Picc. *mf* *sfz* *sfz* *sfz* *sfz*

Fl. *sfz* *sfz* *sfz* *sfz* *sfz*

Ob. *sfz* *mf* *sfz* *sfz* *sfz*

E. Hn. *sfz* *fz* *sfz* *sfz* *sfz*

B♭ Cl. *sfz* *fz* *sfz* *sfz* *sfz*

B. Cl. *fmp* *sfz* *sfz* *sfz* *sfz*

Bsn. *fmp* *sfz* *sfz* *sfz* *f*

C. Bn. *sfz* *sfz* *sfz* *sfz* *f*

Hn. 1 *a2* *sfz* *sfz* *sfz* *sfz*

Hn. 2 *a2* *sfz* *sfz* *sfz* *sfz*

C Tpt. 1 *sfz* *sfz* *sfz* *sfz* *sfz*

C Tpt. 2 *sfz* *sfz* *sfz* *sfz* *sfz*

T. Tbn. *ff* *f* *ff* *f* *ff*

B. Tbn. *sfz* *sfz* *sfz* *sfz* *sfz*

Tba. *sfz* *sfz* *sfz* *sfz* *sfz*

Timp. *fmp* *fmp* *fmp* *fmp* *fmp*

Xyl. *sfz* *sfz* *sfz* *sfz* *sfz*

Perc. 1 *sfz* *sfz* *sfz* *sfz* *sfz*

Vib. *sfz* *sfz* *sfz* *sfz* *sfz*

Perc. 2 Wood Block *f* *sfz* *sfz* *sfz* *sfz*

Perc. 3 *sfz* *sfz* *sfz* *sfz* *sfz*

Perc. 4 *f* *mf* *f* *mf* *fmp*

Hp. *sfz* *sfz* *sfz* *sfz* *sfz*

Pno. *sfz* *sfz* *sfz* *sfz* *sfz*

Vln. I *sfz* *sfz* *fp* *sfz* *sfz*

Vln. II *sfz* *div.* *sfz* *sfz* *sfz*

Vla. *ff* *sfz* *sfz* *sfz* *sfz*

Vc. *fp* *sfz* *sfz* *sfz* *fp*

D.B. *sfz* *sfz* *sfz* *sfz* *sfz*

205

Picc. *mf* *f* *mp*

Fl. *f*

Ob. *mf* *f*

E. Hn. *f*

B♭ Cl. *a2*

B. Cl. *mf* *f* *mf*

Bsn. *a2* *mf*

C. Bn.

Hn. 1 *mf* *f* *mf* *f*

Hn. 2

C Tpt. 1 *f* *mf* *f*

C Tpt. 2 *f*

T. Tbn. *mf* *f* *mf*

B. Tbn. *mf* *mf* *f*

Tba. *mf*

Timp. *p* *f* *mp* *f* *mp* *f*

Xyl.

Perc. 1 *f* *mp* *f*

Vib.

Perc. 2

Perc. 3

Perc. 4 *f* *mf* *f*

Hp.

Pno. *f*

Vln. I *f* *mf*

Vln. II *f* *mf*

Vla. *mf* *f* *mf*

Vc. *f* *mf*

D.B. *arco* *gliss* *mf*

[illegible]

215

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

215

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

215

Vln. I

Vln. II

Vla.

Vc.

D.B.

mf

mp

p

(via sord.)

Wood Block

E F# G A
B C D

E♭ G#

F

arco

[illegible]

225 $\bullet = 78$

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

mp

fmp

mf

fp

p

f

mp

f

245

Picc. *f*

Fl. *f*

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1 *f*

Hn. 2 *f*

C Tpt. 1 *f*

C Tpt. 2 *f*

T. Tbn. *f*

B. Tbn. *f*

Tba. *f*

Timp. *ff*

Xyl. 245

Perc. 1

Vib.

Perc. 2

Perc. 3 *f*

Perc. 4 *mf*

Hp.

Pno.

Vln. I 245

Vln. II

Vla.

Vc.

D.B.

250

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

250

Timp.

250

Xyl.

Perc. 1

Bass D.w/ Snare D. sticks

Vib.

Perc. 2

Perc. 3

Perc. 4

3

2

f

3

3

3

3

Hp.

Pno.

250

Vln. I

Vln. II

Vla.

Vc.

D.B.

255

♩ = 120

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

255

♩ = 120

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

255

♩ = 120

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

255

♩ = 120

Vln. I

Vln. II

Vla.

Vc.

D.B.

260

Picc. Fl. Ob. E. Hn. B♭ Cl. B. Cl. Bsn. C. Bn.

Hn. 1 Hn. 2 C Tpt. 1 C Tpt. 2 T. Tbn. B. Tbn. Tba.

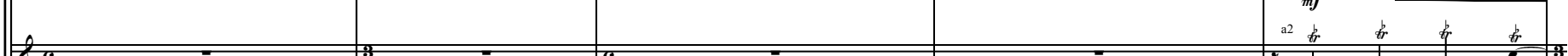
Timp. Xyl. Perc. 1 Vib. Perc. 2 Perc. 3 Perc. 4

Hp. Pno. Vln. I Vln. II Vla. Vc. D.B.

mf *f* *mf* *ff* *ff* *f* *mf* *secco* *f* *p* *mp* *mf* *mp* *p*

265

Picc. 

Fl.  *a2* *mf* 

Ob.  *a2* *mf* 

E. Hn. *ff* 

B♭ Cl. *ff*  *mf* 

B. Cl. *ff* 

Bsn. *ff* 

C. Bn. *ff* 

Hn. 1 *ff* 

Hn. 2 *ff* 

C Tpt. 1 

C Tpt. 2 

T. Tbn. 

B. Tbn. 

Tba. 

Timp. *ff*  *f* 

Xyl. 

Perc. 1 *ff* 

Vib. 

Perc. 2 

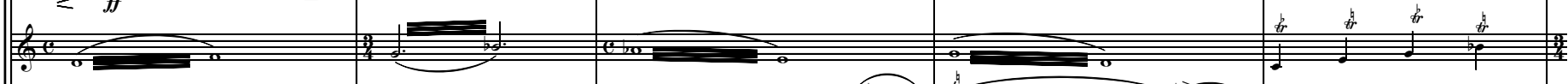
Perc. 3 *ff*  *f* 

Perc. 4  *mf* 

Hp. 

Pno. *ff* 

Vln. I *ff* 

Vln. II *ff*  *mf* 

Vla. *ff*  *mf* 

Vc. *ff*  *mf* 

D.B. *ff*  *mf* 

a little slower $\bullet = 90$

Picc. *f* *ff* *mp* *mf*

Fl. *ff* *mp* *mf*

Ob. *ff*

E. Hn.

B♭ Cl. *ff*

B. Cl.

Bsn.

C. Bn.

Hn. 1 **a little slower** $\bullet = 90$

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp. *ff* *mp* *mf*

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4 *f* *ff* *pp*

Hp. **a little slower** $\bullet = 90$

Pno.

Vln. I **a little slower** $\bullet = 90$ *fp*

Vln. II *fp* *p*

Vla. *f* *mp* *p*

Vc. *mp* *p*

D.B. *f* *mp* *p*

275

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

275

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

275

Timp.

275

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

275

Vln. I

Vln. II

Vla.

Vc.

D.B.

mp

mf

pp

p

mf

8^{va}

This image shows a page of a musical score, likely for a symphony, featuring various instruments. The score is written in standard musical notation, including staves, notes, rests, and dynamic markings.

The instruments listed on the left side of the page are:

- Picc.
- Fl.
- Ob.
- E. Hn.
- Bs. Cl.
- B. Cl.
- Bsn.
- C. Bn.
- Hn. 1
- Hn. 2
- C Tpt. 1
- C Tpt. 2
- T. Tbn.
- B. Tbn.
- Tba.
- Timp.
- Xyl.
- Perc. 1
- Vib.
- Perc. 2
- Perc. 3
- Perc. 4
- Hp.
- Pno.
- Vln. I
- Vln. II
- Vla.
- Vc.
- D.B.

The score includes musical notation, dynamics (p, mp, mf, f), and a rehearsal mark at measure 280. The page is numbered 280 in the top left corner.

285

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

285

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

285

Timp.

285

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

285

Vln. I

Vln. II

Vla.

Vc.

D.B.

290

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

p

mf

(via sord.)

p ✱

Tam-Tam

Sus. Cym.

damp

Congas w/sticks

mf

[illegible]

[illegible]

305 $\bullet = 100$

Picc. $mf < f$

Fl. mf

Ob. mp f

E. Hn. mp p

B♭ Cl. mf

B. Cl.

Bsn. mp

C. Bn. p mp

Hn. 1 p

Hn. 2 p

C Tpt. 1 mp

C Tpt. 2 mp

T. Tbn. $> p$ mf p mf p

B. Tbn. mf p mf p

Tba.

Timp. mf p mf p p mf

Xyl.

Perc. 1

Vib.

Perc. 2 mp 3

Perc. 3

Perc. 4 mp 3

Hp. mf f mp mf mp

Pno. f

Vln. I $8va$ $\bullet = 100$

Vln. II

Vla. 3

Vc. 3

D.B. $arco$ mp mf

E F G A♭
B C♯

100

[illegible]

322 $\bullet = 120$

Picc. *f*

Fl. *f* *mf*

Bsn. *mf*

T. Tbn. *p*

B. Tbn. *p*

Timp. *f* *mp*

Perc. I *mf* *mp*

Hp.

Pno.

Vln. I *mf* pizz.

Vln. II *mf* div.

Vla. *mf* div.

Vc. *mf*

D.B. *mf* pizz.

327

Fl. *f* *mp* *mf*

Ob. *f*

B♭ Cl. *p* *mf* *mp*

Bsn.

Timp. *mf*

Vln. I *mp* arco

Vln. II

Vla.

Vc.

D.B.

332

Picc.

Fl.

Ob.

B♭ Cl.

Timp.

Perc. 4

Vln. I

Vln. II

Vla.

Vc.

D.B.

ff

f

mp

mp

f

mp

mf

ff

Tambourine

8va

f

mf

f

337

Picc.

Fl.

Ob.

B♭ Cl.

Timp.

Perc. 1

Perc. 4

Vln. I

Vln. II

Vla.

Vc.

D.B.

> mp

mf

mf

f

mf

mf

342

Fl.

B♭ Cl.

Timp.

Perc. 1

Perc. 4

Vln. I

Vln. II

Vla.

Vc.

D.B.

mf

ff

mp

mf

mp

mf

Bass D.

mp

ff

f

mp

pizz.

arco

347

Picc.

Fl.

Ob.

Hr. 1

Timp.

Perc. 1

Perc. 4

Vln. I

Vln. II

Vla.

Vc.

D.B.

mf

f

a2

mf

f

mp

mp

mf

mp

f

mf

mf

p

f

352

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

352

Timp.

352

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

352

Vln. I

Vln. II

Vla.

Vc.

D.B.

f

a2

f

tr

mp

f

mf

f

357

Picc. *f* *ff*

Fl. *f* *ff*

Ob. *f* *ff*

E. Hn. *f* *ff*

B♭ Cl. *f* *ff*

B. Cl. *mf* *ff*

Bsn. *mf* *ff*

C. Bn. *mf* *ff*

Hn. 1 *mf* *ff*

Hn. 2 *mf* *ff*

C Tpt. 1 *f* *ff*

C Tpt. 2 *f* *ff*

T. Tbn. *ff*

B. Tbn. *mf* *ff*

Tba. *mf* *ff*

Timp. *f* *ff*

Xyl. *f* *ff*

Perc. 1 *mp* *f*

Vib. *ff*

Perc. 2 Castanets *ff*

Perc. 3 *ff*

Perc. 4 *ff*

Hp. *f* *fff*

Pno. *fff*

Vln. I *mf* *f* *ff*

Vln. II *ff*

Vla. *ff*

Vc. *ff*

D.B. *pizz.* *ff*

E F G Ab
B C# D

362

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

This image shows a page of a musical score, measures 367-371. The score is for a symphony and includes parts for the following instruments:

- Picc.
- Fl.
- Ob.
- E. Hn.
- B♭ Cl.
- B. Cl.
- Bsn.
- C. Bn.
- Hn. 1
- Hn. 2
- C Tpt. 1
- C Tpt. 2
- T. Tbn.
- B. Tbn.
- Tba.
- Timp.
- Xyl.
- Perc. 1
- Vib.
- Perc. 2
- Perc. 3
- Perc. 4
- Hp.
- Pno.
- Vln. I
- Vln. II
- Vla.
- Vc.
- D.B.

The score is in 4/4 time. The key signature has one flat (B♭). The dynamics include *mf* (mezzo-forte) and *sfz* (sforzando). The score includes various musical notations such as notes, rests, slurs, and articulation marks.

372

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

mf

sfz *mp* *f*

mp *sfz* *sfz*

mp *sfz* *sfz*

mp *sfz* *sfz*

mp *sfz* *sfz*

f

f *ff*

f

8va *Ab* *E F G A Bb C D#*

377 *rit.* $\bullet = 54$

Picc. *ff* *mp*

Fl. *ff* *mp*

Ob. *ff* *mp* 1.

E. Hn. *ff* *mp*

B $\flat$ Cl. *ff* *mp*

B. Cl. *ff* *mp*

Bsn. *ff* *mp*

C. Bn. *ff* *mp*

Hn. 1 *ff* *mp* *rit.* $\bullet = 54$

Hn. 2 *ff* *mp*

C Tpt. 1 *ff* *mp*

C Tpt. 2 *ff* *mp*

T. Tbn. *ff* *mp*

B. Tbn. *ff* *mp*

Tba. *ff* *mp*

Timp. 377 *ff* *mp* *p* *rit.* $\bullet = 54$

Xyl. 377 *ff* *mp*

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4 *mf*

Hp. *ff* *mp* $\bullet = 54$

Pno. *mf*

Vln. I 377 *ff* *rit.* $\bullet = 54$

Vln. II *ff* *mp*

Vla. *f* *mf* *pp*

Vc. *f* *pp*

D.B. *f* *pp*

382

Picc.

Fl.

Ob.

E. Hn.

mp

B♭ Cl.

mp

p

B. Cl.

Bsn.

mp

C. Bn.

Hn. 1

382

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

mp

Timp.

382

mp

Xyl.

382

Perc. 1

Bass D.

p

Vib.

Perc. 2

Perc. 3

Perc. 4

Congas

mp

Hp.

Pno.

Vln. I

382

mf

Vln. II

mf

Vla.

Vc.

D.B.

This page of the musical score covers measures 391 through 394. The instrumentation includes a wide range of orchestral instruments. The woodwinds (Oboe, English Horn, Bassoon, Clarinet, Bassoon, Contrabassoon) and brass (Horn 1, Horn 2, Trumpet 1, Trumpet 2, Trombone 1, Trombone 2, Trombone 3) sections are active, with the Trombone 1 and 2 parts marked with a forte (*f*) dynamic. The percussion section (Perc. 1, Perc. 2, Perc. 3, Perc. 4) provides rhythmic support. The strings (Violin I, Violin II, Viola, Violoncello, Double Bass) are also present, with the Viola part marked with a mezzo-forte (*mf*) dynamic. The score is written in 2/4 time and features various musical notations, including notes, rests, and dynamic markings.

397

Picc.

Fl.

mf

f

p

Ob.

E. Hn.

B♭ Cl.

p

B. Cl.

Bsn.

p

mf

C. Bn.

mf

Hn. 1.

397 I.

mf

Hn. 2.

C Tpt. 1.

p

C Tpt. 2.

T. Tbn.

(via sord.)

mf

B. Tbn.

mp

Tba.

mf

Timp.

397

p

Xyl.

Perc. 1.

Vib.

mp

Perc. 2.

Perc. 3.

Perc. 4.

Tom-Toms

p

mf

Hp.

Pno.

Vln. I.

397

Vln. II.

pizz.

mp

Vla.

mp

p

Vc.

pizz.

mp

D.B.

pizz.

mp

402

Picc. *mp* *p*

Fl. *mp* a2

Ob. *mp*

E. Hn.

B♭ Cl. *mp*

B. Cl. *p* *mf*

Bsn.

C. Bn.

Hn. 1 *mp*

Hn. 2 *mp*

C Tpt. 1

C Tpt. 2

T. Tbn. *p*

B. Tbn. *p*

Tba.

Timp. *mp* *p*

Xyl. *mp*

Perc. 1

Vib. *

Perc. 2 *

Perc. 3 Tubular Bells *mf*

Perc. 4 *p* *mf*

Hp.

Pno.

Vln. I *p*

Vln. II

Vla. *p*

Vc.

D.B.

407 a little slower $\bullet = 60$

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

p

mf

mp

p

mf

p

mp

p

mf

412 *rit.* *a tempo*

Picc. *f*

Fl.

Ob. *f*

E. Hn.

B♭ Cl. *mf* *p*

B. Cl.

Bsn.

C. Bn.

Hn. 1 *a2* *mf* *p*

Hn. 2 *a2* *mf* *p* *mf* *p*

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp. *f* *p*

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4 *Snare D.* *fmp* *p* *f* *sfz* *mp* *sfz* *mp* *sfz*

Hp.

Pno. *mf*

Vln. I *8va* *f*

Vln. II *mf* *f*

Vla. *mf*

Vc. *f*

D.B. *f*

417

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

f

mp *mf*

f

f

mf *f*

fmp *sfz* *mp* *sfz* *mp* *sfz* *mp* *sfz* *mp* *sfz*

Sus. Cym. w/ brushes

ff

p

p

p

p

p

422

Picc.

Fl.

Ob.

E. Hn.

B $\flat$ Cl.

B. Cl.

Bsn.

C. Bn.

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

Timp.

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832</

427

Picc. *mp*

Fl.

Ob.

E. Hn.

B♭ Cl. *p*

B. Cl.

Bsn. *p*

C. Bn.

Hn. 1

Hn. 2 *mp*

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn. *mp*

Tba. *mp*

Timp. *p*

Xyl. *p*

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4 *p*

Hp. *mf*

Pno. *mf*

Vln. I *mp* *p* *mf* *spiccato*

Vln. II *mp* *mp*

Vla. *mp*

Vc. *p* *mf* *div.* *mp*

D.B. *mf* *arco* *pizz.* *mp*

[illegible]

437 $\bullet = 96$

Picc. *mp* *mf*

Fl. *mf*

Ob. *mf*

E. Hn. *mf*

B♭ Cl. *mp* *mf*

B. Cl.

Bsn. *mf*

C. Bn. *mf*

Hn. 1 437 $\bullet = 96$

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn. *mp* *pp*

B. Tbn.

Tba.

Timp. 437 $\bullet = 96$ *mp*

Xyl.

Perc. 1

Vib. *mf*

Perc. 2

Perc. 3

Perc. 4

Hp. $\text{F}\sharp$ $\text{D}\flat$ *mf* E

Pno. (8^{th})

Vln. I 437 $\bullet = 96$

Vln. II *arco*

Vla.

Vc. $>$

D.B.

This image shows a page from a musical score, specifically measures 442 through 446. The score is written for a large ensemble, including woodwinds, brass, percussion, harp, piano, and strings. The key signature has one sharp (F#) and the time signature is 4/4. Measures 442-445 are marked with a first ending bracket and measure repeat signs at the beginning. Measure 446 begins with a second ending bracket. The instrumentation includes Piccolo, Flute, Oboe, English Horn, Bassoon, Contrabassoon, Horns 1 & 2, Trumpets 1 & 2, Trombones 1, 2, & 3, Tuba, Timpani, Xylophone, Percussion 1-4, Harp, Piano, Violins I & II, Viola, Violoncello, and Double Bass. The score features various musical notations such as triplets, slurs, ties, and dynamic markings like *mf*, *fmp*, *p*, and *f*. There are also performance instructions like "div." (divide) and "arco" (arco). A rehearsal mark "8va" is present above the string section in measure 442. In measure 446, there are specific notes for E, F#, G, A and B, C, D# indicated for the strings.

447 $\bullet = 110$

Picc. *ff*

Fl. *ff*

Ob. *mf* *ff*

E. Hn. *ff*

B♭ Cl. *ff*

B. Cl. *ff*

Bsn. *ff*

C. Bn. *ff*

Hn. 1 *mf* *f* *mf* *ff*

Hn. 2 *mf* *f* *mf* *ff*

C Tpt. 1 *ff*

C Tpt. 2 *ff*

T. Tbn. *ff*

B. Tbn. *ff*

Tba. *ff*

Timp. *f* *mp* *ff*

Xyl. *ff*

Perc. 1 Bass D. w/ mallets *mp* *ff*

Vib. *ff*

Perc. 2 *mp* *ff*

Perc. 3 *ff*

Perc. 4 *mp* *ff*

Hp. *ff* *ff* *ff* *ff*

Pno. *mf* *f* *mf* *ff* *ff*

Vln. I *p* *mf* *ff* *ff*

Vln. II *p* *mf* *ff* *ff*

Vla. *p* *mf* *ff* *ff*

Vc. *mp* *ff*

D.B. *mp* *ff*

This image shows a page of a musical score, likely for a symphony or concert band. The score is written for a large ensemble, including woodwinds, brass, percussion, strings, and piano. The page is numbered 452 in the top left corner. The score is written in a standard musical notation, with notes, rests, and dynamic markings. The woodwind section includes Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), English Horn (E. Hn.), Bass Clarinet (B♭ Cl.), Contrabass Clarinet (C. Bn.), Horn 1 (Hn. 1), Horn 2 (Hn. 2), Cor Anglais (C Tpt. 1), Cor Anglais (C Tpt. 2), Trombone (T. Tbn.), Bass Trombone (B. Tbn.), and Tuba (Tba.). The brass section includes Trumpet (Tpt.), Trombone (Tbn.), and Tuba (Tba.). The percussion section includes Timpani (Timp.), Xylophone (Xyl.), Percussion 1 (Perc. 1), Vibraphone (Vib.), Percussion 2 (Perc. 2), Percussion 3 (Perc. 3), and Percussion 4 (Perc. 4). The string section includes Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), Violoncello (Vc.), and Double Bass (D.B.). The piano (Pno.) is also included. The score features various musical notations, including notes, rests, and dynamic markings such as *ff* (fortissimo) and *f* (forte). The page is divided into measures by vertical bar lines, and the music is written in a standard musical notation.

Allegro con spirito

457

Picc.

Fl.

Ob.

E. Hn.

B♭ Cl.

B. Cl.

Bsn.

C. Bn.

Allegro con spirito

Hn. 1

Hn. 2

C Tpt. 1

C Tpt. 2

T. Tbn.

B. Tbn.

Tba.

457

Allegro con spirito

Timp.

457

Xyl.

Perc. 1

Vib.

Perc. 2

Perc. 3

Perc. 4

Allegro con spirito

Hp.

Pno.

Allegro con spirito

Vln. I

Vln. II

Vla.

Vc.

D. B.

This image displays a page from a musical score, likely for a symphony, featuring multiple staves for various instruments. The instruments listed on the left include Picc., Fl., Ob., E. Hn., B♭ Cl., B. Cl., Bsn., C. Bn., Hn. 1, Hn. 2, C Tpt. 1, C Tpt. 2, T. Tbn., B. Tbn., Tba., Timp., Xyl., Perc. 1, Vib., Perc. 2, Perc. 3, Perc. 4, Hp., Pno., Vln. I, Vln. II, Vla., Vc., and D.B. The score is written in 4/4 time and includes dynamic markings such as *sfz*, *sf*, *f*, *ff*, *mf*, and *mp*. The page is divided into measures by vertical bar lines, and the instruments are grouped into systems. The score includes various musical notations, including notes, rests, and articulation marks.

472

Picc. *fff*

Fl. *fff*

Ob. *fff*

E. Hn. *fff*

B♭ Cl. *fff*

B. Cl. *fff*

Bsn. *fff*

C. Bn. *fff*

Hn. 1 *fff*

Hn. 2 *fff*

C Tpt. 1 *fff*

C Tpt. 2 *fff*

T. Tbn. *fff*

B. Tbn. *fff*

Tba. *fff*

Timp. *f* *fff*

Xyl. *fff*

Perc. 1

Vib.

Perc. 2 *f* *fff* Tam-Tam

Perc. 3 *fff*

Perc. 4 *fff*

Hp. *fff* [C] [Ab]

Pno. *fff*

Vln. I *f*

Vln. II *f* *div.*

Vla. *f*

Vc. *f*

D.B. *f*

This page of the musical score covers measures 476 to 500. The instrumentation includes a wide range of orchestral instruments. The woodwinds (Piccolo, Flute, Oboe, English Horn, Bass Clarinet, Baritone Clarinet, Bassoon, Contrabassoon) and brass (Horns 1 and 2, Trumpets 1 and 2, Trombones 1, 2, and 3, Tuba) sections are heavily featured with complex rhythmic patterns, including many triplets and sixteenth notes. The percussion section (Timpani, Xylophone, Percussion 1-4) provides a strong rhythmic foundation, with the timpani and xylophone playing prominent roles. The strings (Violins I and II, Viola, Violoncello, Double Bass) and piano/harp provide harmonic support. The score is marked with various dynamics, including 'ff' (fortissimo) and 'ffz' (fortissimo crescendo), indicating a powerful and intense musical passage.

This image shows a page of a musical score, page 480, for a large orchestra. The score is written for various instruments, including woodwinds, brass, percussion, and strings. The notation includes notes, rests, dynamics (ff, f), and articulation marks. The page is numbered 480 at the top left.

The instruments listed on the left side of the page are:

- Picc.
- Fl.
- Ob.
- E. Hn.
- B $\flat$ Cl.
- B. Cl.
- Bsn.
- C. Bn.
- Hn. 1
- Hn. 2
- C Tpt. 1
- C Tpt. 2
- T. Tbn.
- B. Tbn.
- Tba.
- Timp.
- Xyl.
- Perc. 1
- Vib.
- Perc. 2
- Perc. 3
- Perc. 4
- Hp.
- Pno.
- Vln. I
- Vln. II
- Vla.
- Vc.
- D.B.

The score is written in a standard musical notation with a key signature of one sharp (F#) and a time signature of 4/4. The dynamics range from *ff* (fortissimo) to *f* (forte). The page is numbered 480 at the top left.

VITA

Dong-Ok Hwang was born in Seoul, Korea on November 27, 1971, the daughter of Ik-Soon Hwang and Eun-Ja Hur. After completing her work at JungShin Women's High School in Seoul in 1990, she entered KyungWon University in Kyungkido, where she received the degree of Bachelor of Music in Composition in 1994. In 1995, she entered the New England Conservatory in Boston, where she received the degree of Master of Music in 1997 and the degree of Graduate Diploma in 1998 both in Composition. In August 1998, she entered the Graduate School of The University of Texas at Austin.

Permanent Address: 13-1003 Asia Village ChamShil-7 Dong, SongPa-Gu, Seoul, Korea (ROK)

This dissertation was typed by the author.