

The Diatonic Order

Remember that Gregorian chants, the oldest melodies preserved in Western music, were based on *modes*. This means that any chant had a crucial pitch, the *final* (since it always appeared as the last note), which defined the mode. Above or about this final, the other notes used in the chant could be set out in ascending order. We think of notes ordered in this way as a *scale*. The term *mode*, however, expresses the orientation of a chant with respect to a particular final. Thus Mode I,



As it turned out, there were 4 Church modes in the Gregorian tradition, that is, 4 final pitches (D, E, F, G), one of which the singers would expect to be the final pitch of any chant they sang. In the *Liber Usualis*, the book of chants collected for liturgical use, we see each chant marked with a number from 1 through 8, to indicate which mode it is in. This way of enumerating simply distinguishes chants that move mostly above the final (*authentic* mode) from those in which the final was more in the middle of the chant's compass (*plagal*). Hence a number 1 means Mode I authentic; 2 means Mode I plagal; 3 Mode II authentic, and so on.

We also noticed that these modes all consisted of a sequence of whole steps but with the occasional half step in between. Indeed, where the half step lies in a mode is the essential factor that defines how that melody “feels”, or what gives it a certain modal “flavor.” The location of the half and whole steps determines the actual intervals in the song (1 ½ vs. 2 steps, etc.), the exact relations the notes have to one another. For example, try singing “Hodie Christus Natus Est” with the half step in a different location and you will sense how radically a shift in mode affects the sense of this chant.

Two staves of musical notation for the chant "Hodie Christus Natus Est". The top staff is in E major mode, with a half-step on the note "e" (B). The bottom staff is in A major mode, with a half-step on the note "a" (C#). Both staves show the melody with lyrics and measure lines.

At some point people discovered that all the songs they sang were constructed according to definite whole- and half-step relations. In general, the half step always sounds as near as the voice and the ear can well distinguish to the next tone. By comparison, whole steps feel like more of a reach. Sing this modern scale, paying attention to what your voice does between the various steps. Try doing the same with a scale you make for any of the medieval modes.

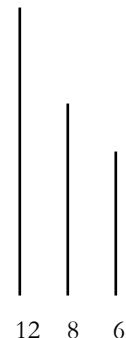
A musical staff with a treble clef and a key signature of one sharp (F#). It contains seven black dots representing notes. Below the staff, there are seven shapes: a square, a square, a triangle, a square, a square, a square, and a triangle, representing the intervals between the notes.

The Diatonic Order

For the purposes of writing music and of constructing and playing musical instruments, a convention for arranging the steps had to be established. We assign letter-names to the lines and spaces (EFGABCDEF) and set the half-steps permanently between B and C, and between E and F. We call this fixed system the diatonic order. The white keys on the piano represent this convention followed now for many hundreds of years.

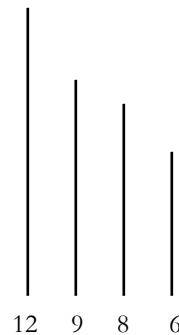
From Boethius we learned about a more surprising phenomenon that informs our diatonic order, the first discovery of which was attributed to Pythagoras. We saw on the monochord the actual lengths of two strings that sounded well-matched – consonant when played together or as a separate interval – and that these lengths reduced to simple whole number ratios. Recall, in particular, the sound and the ratios of the perfect consonances, the octave, the fifth, the fourth.

Now if one wanted to establish a *scale*, a diatonic order of steps, that respected these good-sounding ratios, then one would have to make the scale, not by building up step by step, but by dividing up these consonant intervals into the steps. First, notice that the octave can actually be divided into (or compounded out of) a fifth and a fourth. Thus, using only three strings, we have:



Verify that the lower interval of 3:2 compounded with the upper interval of 4:3 yields the interval of 2:1.

Now if one wanted to set down a good-sounding fourth just before the fifth, by adding another string:

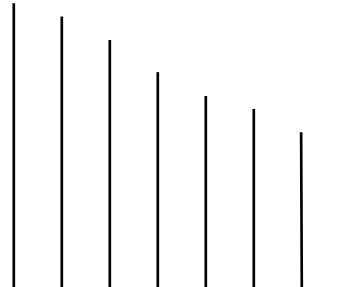


then one would have to take account of the new interval that arises between this fourth and the fifth. That is, the difference between the fifth and the fourth, the difference between the 3:2 ratio and the 4:3, is 9:8, which sounds good – indeed like which interval?

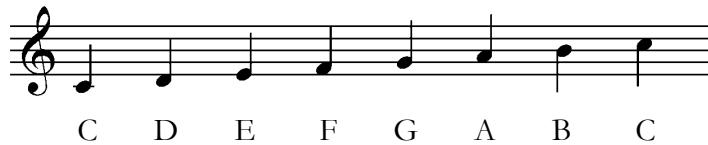
The Diatonic Order

Thus the ratio of a Tone, or whole step, is determined by our interest in preserving our good fourth and fifth, and we can proceed to finish making a complete scale by cutting up both of the fourths in our array of strings, using the new Tone or Whole step as the initial unit.

Thus



By this procedure we discovered the actual ratio of the half step (can you repeat this calculation?), the half step that was left over from the whole steps inserted sequentially into each fourth. We can now see that the scale actually consists of two parallel sequences of four notes, known as *tetrachords*. And we can fix the medieval modes in their proper locations on our fixed scale, the diatonic order, by assigning the names of notes to these pitches once and for all.



What would happen if we tried to make a scale without respecting the fourth or the fifth? In other words, can we make a scale that starts out with 3 whole steps? (Remember three whole steps, or three tones, make the interval called a tritone.) Try singing these 4 notes with whole steps uniformly between them. If you succeed in that, try to make and sing a scale with 5 notes, with all whole steps between them. What does this experiment tell us?

You may also wish to review Gregorian chant by singing this short “Ubi Caritas” and discussing its prominent features. What sort of intervals does it use and when do they appear as the melody unfolds? What striking melodic gesture gives this chant its memorable character? What is its range in relation to its final? This is an especially nice example of a *plagal* chant with F as its final.

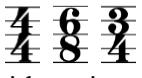
The Diatonic Order

U - bi ca - ri - tas et a - mor_, De - us i - bi est_.
Con - gre - ga - vit_ nos in u - num_ Chri - sti a - mor_. Ex -
sul te - mus - et in i - pso_ ju - cun - de - mur_. Ti - me - a -
mus_, et a - me - mus_ De - um vi - vum_. Et ex cor - de di -
li - ga - mus_ nos sin - ce - ro_. U - bi ca - ri -
tas et a - mor_, De - us i - bi est_. Si - mul er - go cum
in u - num_ con - gre - ga - mur_: Ne nos men - te_ di - vi - da - mur ,
ca - ve - a - mus_. Ces - sent jur - gi - a ma li - gna_ , ces - sent li - tes_.
Et in me - di - o no - stri - sit_ Chri - stus_ De - us_ .

Before proceeding, you will want to be sure to know by heart both the names of all the notes on the treble and bass staves and the “look” of the intervals commonly found between any two notes on these staves (seconds, thirds, fourths, fifths, and octaves). Where are the half-steps? Where are the tritones? Is the tritone in each case a diminished fifth (2 whole steps + 2 half steps) or an augmented fourth (3 whole steps)?

Rhythm

Students should review Lesson 5 of the Elements of Music in the Freshman Music Manual.

Consider especially the most typical meters and  the usual distinction made in counting the latter two meters, which look like arithmetic equivalents when their note values per measure are added up.

Fill in some measures that express plausible rhythms in these meters, using quarter notes, eighth notes, various rests, dotted quarter notes, and so on. Then try performing these rhythms together as a class.

It is especially useful to learn to count and apply the numbered beats in an actual measure of music. There is often a difference between the beats that you count and where the impulses fall in a good rhythmic pattern. Explore *syncopation*, where the emphasis may fall regularly not on the downbeat, but without destroying the sense of the established meter.



The image shows two musical staves. The top staff is in 4/4 time with a treble clef. It consists of two measures. The first measure has four quarter notes, with the first labeled '1', the second '(2) and', the third '3 and', and the fourth '4'. The second measure has four eighth notes, with the first labeled '1 and', the second '(2) and-a', the third '3 and', and the fourth '4'. The bottom staff is in 8/8 time with a treble clef. It also consists of two measures. The first measure has eight eighth notes, with the first four labeled '1 2 3' and the next four '(2) (3)'. The second measure has eight eighth notes, with the first four labeled '1 2 and 3' and the next four '(2) 2 and 3'.

All musicians have to do some rhythmic analysis when learning a tricky new piece. But then, with practice, they find that a well-wrought rhythmic pattern comes to be felt as second nature. What is written dissolves into the sign of “the beat.”

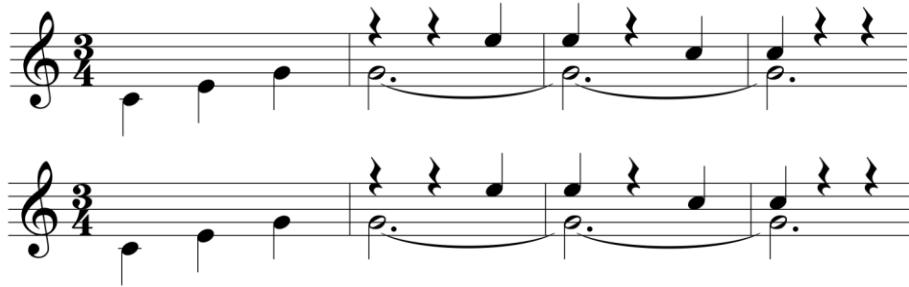
Can you think up some interesting or catchy rhythmic patterns and then express them accurately in writing? Again, it is useful to number beats counted normally in the measure (1, 1 2 3, 1 2 3) carefully, and place them under the score as in the examples above.

But can all rhythms be annotated accurately? Can you think up one that is not difficult in itself, only difficult to express in writing?

An example might be as simple as the Viennese waltz. Like most waltzes, it is in triple meter, but felt as one unit; there is strong emphasis on the first beat.

Further, in practice, beat 2 comes a little early and beat 3 a little late. This gives the waltz (Strauss' famous “Blue Danube”, for instance) a sort of lilt or bounce, a feeling almost of syncopation (with the early emphasis on 2), rather than seem like a dull mechanical metronome.

Rhythm



Also, consider a somewhat unusual meter such as: $\frac{5}{4}$ Here is the opening rhythm heard in Gustav Holst's "Mars" from *The Planets*:



Should this pattern be heard as divided into two parts? How then could we re-express that sense of the rhythm?

Finally, you may wish to practice counting or beating out both the meters and the rhythms found in the pieces of Leonin, Perotin, and Machaut, which we shall study next.

Some Preliminary Notes and Questions on Medieval Polyphony

In moving from chant (which is monophonic, having one sound sung or played at a time) to polyphonic music (having multiple sounds sung or played simultaneously), a question quickly arises: can we *actually* hear multiple sounds simultaneously, in a way that is coherent? Interestingly, this question arose in a broader theological frame during the same period that marked the development of polyphony. Thomas Aquinas, who lived toward the end of the period that witnessed the first experiments in polyphonic music, himself posed the question in a manner that points to a possible significance of this new music. Part I, Question 12, Article 10 of the *Summa Theologica* asks, “Whether those who see the Essence of God see all they see in it at the same time?” Not surprisingly, his answer is “yes.” Citing Saint Augustine, he argues: *Our thoughts will not be unstable, going to and fro from one thing to another; but we shall see all we know at one glance.*¹ And later, in Part I, Question 85, Article 4, Aquinas asks, “Whether we can understand many things at the same time?” Aquinas responds, “The intellect can, indeed, understand many things as one, but not as many, that is to say, by *one* but not by *many* intelligible species.... Therefore whatever things the intellect can understand under one species, it can understand together.”² Nonetheless, this blessing of polyphony does not excuse us from deciding for ourselves whether, and in what way, we hear simultaneous musical sounds.

Polyphonic music began in the 10th-11th century. During that time, medieval organs probably were equipped to play a drone-note called *bourdon*, like a bagpipe – and to double a melody at the 5th as well as the octave. Hence *organum*, which is the term used for the earliest polyphonic experiments. (An organum practicum will follow to pursue these experiments.)

Our specific investigation of polyphony begins in the 12th Century. Leonin (circa 1160 at the Cathedral at Notre Dame, Paris) expands organum to the whole liturgical repertoire. (Our only knowledge of the man “Leonin” comes from a brief mention of his work transforming chants from the Mass and Office into organa, a mention in a book written by someone known to us only as “Anonymous IV!”) Leonin’s *Viderunt Omnes* is an example of his new style.

¹ Saint Thomas Aquinas, *Basic Writings of Saint Thomas Aquinas*, volume 1, edited by Anton C. Pegis (Indianapolis: Hackett Publishing Company, 1997), p. 106.

² Ibid., p. 822.

Leonin: *Viderunt Omnes*: (flourished c. 1160-1170)

Some questions regarding Leonin's *Viderunt Omnes*:

1. *Why* have more than one voice? Can you hear several voices when sung simultaneously?
2. We now need to consider intervals vertically, rather than horizontally. What is the first interval? Does it sound consonant or dissonant? Does that consonance or dissonance quickly change?
3. Which is the melody – the top line or the bottom line?
4. Is this music more or less rhythmic than Gregorian chants? Why might that change in rhythmic emphasis be important? (It should be noted that any answer to this question is somewhat problematic, as modern notation may bias our reading of this music and its rhythmic qualities in ways unforeseen by the composer.)
5. Does this music, and its rhythmic quality, enhance or attenuate the role of the lyrics?
6. Notice the greater motion in the bass clef voice at m. 35. How does that motion relate to the original chant (on p.29), used for Christmas? (This effect is called *discant*.)
7. What intervals are sounded in measures 35-41? Are they consonances or dissonances?

Leonin: Viderunt Omnes: (flourished c. 1160-1170)

The musical score consists of four staves of music, likely for a four-part choir or organum. The staves are in common time (indicated by '8') and feature a mix of soprano, alto, tenor, and bass voices. The notation includes various musical markings such as dots above or below the notes, dashes through the stems, and fermatas (dots over notes). The score is divided into measures by vertical bar lines. Measure numbers 1, 5, 9, 13, and 17 are explicitly marked at the beginning of their respective staves. The vocal parts are separated by horizontal lines, and the bass part is positioned below the other three voices.

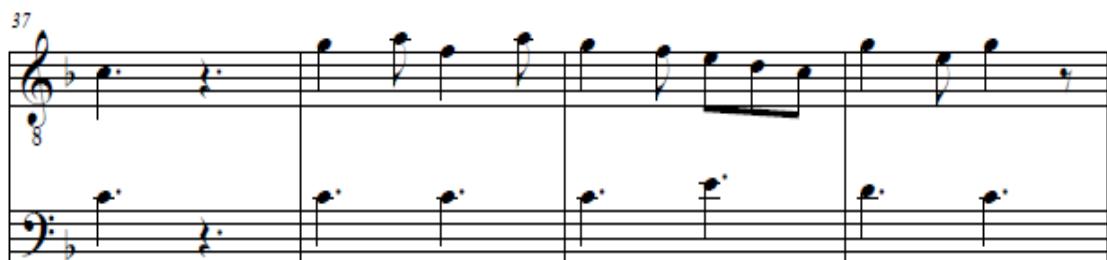
Leonin: Viderunt Omnes: (flourished c. 1160-1170)



runt



Om



Leonin: *Viderunt Omnes*: (flourished c. 1160-1170)

The musical score consists of four staves of Gregorian chant notation. The top two staves are in treble clef, and the bottom two are in bass clef. The time signature is common time (indicated by '8'). The notation uses black note heads and vertical stems. Measure 41 starts with a eighth-note followed by a sixteenth-note pair. Measure 45 begins with a quarter note. Measure 49 starts with a eighth-note followed by a sixteenth-note pair. Measure 53 begins with a eighth-note followed by a sixteenth-note pair.

Source: William G. Waite, *The Rhythm of Twelfth-Century Polyphony* (New Haven, Yale University Press, 1954), whom we thank for permission to reprint

Perotin: *Viderunt Omnes* (c. 1200)

Perotin (late 12th century–early 13th century, also of the Notre Dame School, Paris, and also known only from Anonymous IV’s manuscript as “Perotinus magnus”) takes Leonin’s idea even further. Now, as we can see in Perotin’s *Viderunt Omnes* (based upon the same chant as was Leonin’s), there are four voices instead of two.

It is important to state that, when we “analyze” a piece of music, all we are doing is asking the simple question, “how is it made?” We are looking at the musical features that give a piece its special character or interest, perhaps even its striking beauty. In many of the works we will study, these particular features often represent the composers’ highly original accomplishments, based on what we might regard as path-breaking discoveries in the world of sound. It is as if each great composer brings a new form of beauty into the world. As their students, we are interested in finding out what we can about their “secrets,” the musical innovations that are widely copied and emulated, often by their contemporaries but sometimes by later composers who have re-appreciated their art or adapted their techniques to their own idiom.

Some analytical questions regarding Perotin’s *Viderunt Omnes*:

1. How does the rhythmic pattern work? Can you clap it out?
2. Where are the locations of the consonances and dissonances? What is the logic behind the use of consonances and dissonances? To determine whether a particular vertical stack of notes, or *chord*, is consonant or dissonant, disassemble that chord into a series of pairs of notes (with four notes there are six possibilities – always start with the lower note of any given pair), and see what intervals they constitute. For example, the first chord of the piece is made up of an F in the *tenor* (the bottom note), a C in the *duplum* (the second to bottom note), an F in the *tripulum* (the second to top note), and a C in the *quadruplum*. In this case, the only intervals possible are unisons, fourths, fifths, and octaves. And we know from Boethius that unisons (or octaves), fourths, and fifths are simple ratio intervals, and hence are consonant. Contrast that with the final chord of the first *ordo*³, that is, the first chord of the fourth measure. What combination of intervals can you find there?
3. Are the voices individually characterized, or interrelated, e.g., answering or exchanging rhythmic ideas?
4. Can you describe the effect of Perotin’s *Viderunt Omnes*, as compared to Leonin’s?

³ An *ordo* is "a musical expression built from one or more statements of a rhythmic modal pattern and ending in a rest." Nowadays it is more common to speak of "systems." A system contains more than one part stacked vertically for each measure. Systems are barred or grouped together to indicate how many parts are shown for each measure. For example, the following page contains four systems, each system barring four parts together and lasting for four measures. How many *ordos* are there on the following page?

Perotin: *Viderunt Omnes* (c. 1200)

Quadruplum

Triplum

Duplum

Tenor

Vi

5

9

13

Perotin: Viderunt Omnes (c. 1200)

The image displays four staves of musical notation for three voices, likely from a medieval manuscript. The notation is in common time, with a key signature of one flat. The music consists of short note heads (likely indicating pitch) placed on vertical stems, which are grouped by horizontal bar lines. The voices are represented by three staves: a soprano staff (G clef), an alto staff (C clef), and a bass staff (F clef). The notation is organized into measures, indicated by vertical bar lines. The first measure (staff 17) begins with a note on the fourth line of the soprano staff. The second measure (staff 21) begins with a note on the third line of the soprano staff. The third measure (staff 25) begins with a note on the second line of the soprano staff. The fourth measure (staff 29) begins with a note on the first line of the soprano staff.

Perotin: Viderunt Omnes (c. 1200)

Musical score for Perotin's *Viderunt Omnes*. The score consists of four voices (three upper voices in treble clef and one bass voice in bass clef) on a staff system. Measure 33 begins with a half note in the top voice. Measures 34-35 show a continuation of the rhythmic pattern. Measure 36 concludes with a half note in the top voice.

Continuation of the musical score for Perotin's *Viderunt Omnes*. The score shows four voices continuing their rhythmic patterns. Measure 37 starts with a half note in the top voice. Measures 38-39 continue the pattern. Measure 40 concludes with a half note in the top voice.

de

Continuation of the musical score for Perotin's *Viderunt Omnes*. The score shows four voices continuing their rhythmic patterns. Measure 41 starts with a half note in the top voice. Measures 42-43 continue the pattern. Measure 44 concludes with a half note in the top voice.

Continuation of the musical score for Perotin's *Viderunt Omnes*. The score shows four voices continuing their rhythmic patterns. Measure 45 starts with a half note in the top voice. Measures 46-47 continue the pattern. Measure 48 concludes with a half note in the top voice.

Perotin: Viderunt Omnes (c. 1200)

The image displays four staves of musical notation for four voices, likely from a four-part motet. The notation is in common time, with a key signature of one flat. The voices are represented by soprano, alto, tenor, and basso parts. The music consists primarily of quarter notes and half notes, with some rests. The first staff begins with a soprano note at measure 49. The second staff begins with an alto note at measure 53. The third staff begins with a tenor note at measure 57. The fourth staff begins with a basso note at measure 61. Measures 49 through 61 are shown, with each staff containing four measures.

runt

Perotin: Viderunt Omnes (c. 1200)

The musical score consists of four systems of music, each with three voices. The voices are represented by three staves: soprano (top), alto (middle), and bass (bottom). The music is written in common time with a key signature of one flat. The notation uses black note heads and vertical stems. Measures are numbered at the top left of each system.

- System 1 (Measures 65-68):** The soprano has a sustained eighth note (F) followed by a half note (G). The alto has a sustained eighth note (E) followed by a half note (D). The bass has a sustained eighth note (B) followed by a half note (A).
- System 2 (Measures 69-72):** The soprano has a sustained eighth note (F) followed by a half note (G). The alto has a sustained eighth note (E) followed by a half note (D). The bass has a sustained eighth note (B) followed by a half note (A).
- System 3 (Measures 73-76):** The soprano has a sustained eighth note (F) followed by a half note (G). The alto has a sustained eighth note (E) followed by a half note (D). The bass has a sustained eighth note (B) followed by a half note (A).
- System 4 (Measures 77-80):** The soprano has a sustained eighth note (F) followed by a half note (G). The alto has a sustained eighth note (E) followed by a half note (D). The bass has a sustained eighth note (B) followed by a half note (A).

Perotin: Viderunt Omnes (c. 1200)

The musical score consists of four systems of music, each with three voices. The voices are represented by three staves: soprano (top), alto (middle), and bass (bottom). The music is written in common time with a key signature of one flat. The notation uses black note heads and vertical stems. Measures are separated by vertical bar lines, and measures are grouped by thick vertical bar lines. Measure numbers are indicated at the beginning of each system: 81, 85, 89, and 93.

Perotin: Viderunt Omnes (c. 1200)

The musical score consists of four systems of music, each with three voices. The voices are represented by three staves: soprano (top), alto (middle), and bass (bottom). The music is written in common time with a key signature of one flat. Measure numbers 97, 101, 105, and 109 are indicated at the beginning of each system respectively. The notation uses black note heads and vertical stems. Measures 97 and 101 begin with a soprano note, while measures 105 and 109 begin with an alto note. Measures 105 and 109 conclude with a bass note.

Perotin: Viderunt Omnes (c. 1200)

The image displays four staves of musical notation for three voices, likely from a medieval manuscript. The notation is in common time, with a key signature of one flat. The voices are represented by three staves: soprano (top), alto (middle), and bass (bottom). The music consists of short note values (likely eighth or sixteenth notes) and rests. The first staff begins with a soprano note, followed by an alto note, and then a bass note. The second staff begins with an alto note, followed by a soprano note, and then a bass note. The third staff begins with a bass note, followed by an alto note, and then a soprano note. The fourth staff begins with a soprano note, followed by a bass note, and then an alto note. The music is divided into measures by vertical bar lines. The first measure (staff 1) starts at measure 113. The second measure (staff 1) starts at measure 117. The third measure (staff 1) starts at measure 121. The fourth measure (staff 1) starts at measure 125. The notation includes various note heads and stems, with some notes having dots above them. There are also several rests throughout the music.

Perotin: Viderunt Omnes (c. 1200)

Musical score for Perotin's *Viderunt Omnes* (c. 1200), system 129. The score consists of four voices: soprano, alto, tenor, and basso. The soprano and alto voices are in treble clef, while the tenor and basso voices are in bass clef. The music is written on four-line staves. The key signature is one sharp (F# major). The time signature is common time. The vocal parts are separated by vertical bar lines.

Musical score for Perotin's *Viderunt Omnes* (c. 1200), system 133. The score consists of four voices: soprano, alto, tenor, and basso. The soprano and alto voices are in treble clef, while the tenor and basso voices are in bass clef. The music is written on four-line staves. The key signature is one sharp (F# major). The time signature is common time. The vocal parts are separated by vertical bar lines.

Musical score for Perotin's *Viderunt Omnes* (c. 1200), system 137. The score consists of four voices: soprano, alto, tenor, and basso. The soprano and alto voices are in treble clef, while the tenor and basso voices are in bass clef. The music is written on four-line staves. The key signature is one sharp (F# major). The time signature is common time. The vocal parts are separated by vertical bar lines.

Musical score for Perotin's *Viderunt Omnes* (c. 1200), system 141. The score consists of four voices: soprano, alto, tenor, and basso. The soprano and alto voices are in treble clef, while the tenor and basso voices are in bass clef. The music is written on four-line staves. The key signature is one sharp (F# major). The time signature is common time. The vocal parts are separated by vertical bar lines.

Perotin: Viderunt Omnes (c. 1200)

The musical score consists of four systems of music, each with three voices. The voices are represented by three staves: soprano (top), alto (middle), and bass (bottom). The music is written in common time with a key signature of one flat. The notation uses short vertical stems and dots to indicate pitch and duration. Measure numbers 145, 149, 153, and 157 are indicated at the top of each system respectively.

Perotin: Viderunt Omnes (c. 1200)

The musical score consists of four systems of music, each with three voices. The voices are represented by three staves: soprano (top), alto (middle), and bass (bottom). The music is written in common time with a key signature of one flat. Measure numbers 161, 165, 169, and 173 are indicated at the top of each system respectively. The notation uses black note heads and vertical stems. Measures 161-165 show a repeating pattern of eighth and sixteenth notes. Measures 169-173 show a more complex rhythmic pattern, including dotted rhythms and a sustained note in measure 173.

nes

Chant: *Viderunt Omnes*

The musical notation consists of seven staves, each starting with a treble clef and a 'C' time signature. The first staff begins with a 'G' sharp, while subsequent staves begin with a 'C'. Measure numbers '8' are placed at the start of the first, third, and fifth staves. The lyrics are written below the notes, aligned with the beginning of each measure. The music features eighth-note patterns and various rests, with melodic lines indicated by wavy lines above the staves.

8 Vi - de - runt om - - nes

fi - nes ter - rae

sa - lu - ta - re De -

i nos - tri

ju - bi - la - te De - o

om - - nis

ter - ra

Translation: All the ends of the earth have seen the salvation of our God. Rejoice in God all the earth!

Organum Practicum

For an example of organum—and a delightful way to make original music together as a class—take the text, “Vi - de - runt Om - nes,” which means “All have seen” [... the salvation of our God]. Each student should use the same time signature (say 6/8 time) and apply the same formula for introducing these syllables, for example: “Vi-” set over the first 3 measures, “de-” over measures 4, 5, 6, & 7, “runt” 8 through 11, “Om-” 12 through 15, and finally “nes” all together on measure 16. Each will write a melody tune orienting around either A or D (thus when combined we’ll make perfect fifths); and everyone must follow the rule that at the start of every new syllable, namely measures 1, 4, 8, 12 and 16, he will intone the A or D as a measure-long note. Between these measures, however, you may do anything you want, move your vocal line as you please, but perhaps repeat some interesting rhythm so that the line has a distinctive character. It should be singable and tasteful, of course. Then everyone will perform his or her composition in class simultaneously. The result will be something like Perotin’s *Viderunt Omnes* in the manual. For a less chaotic choral quality, divide up the class into three or four groups and perform only three or four students’ pieces simultaneously, now in stronger sections. Another amusing option is to plan the writing of such groups, using rests and canon or imitation: for example, plan that only group 1 should sing on measure 9 (the others rest), that group 2 come in with something similar at measure 10, and then everyone else come in on measure 11 and continue together to the end. Other combinations are possible. The result of this exercise should be a playful choral composition with wild dissonances converging regularly on consonances, in the exciting avant-garde style of the 12th century!

Sumer Is Icumen In

The 13th century saw the expanded use of pitting voices against one another, including pieces of a clearly secular nature. The idea emerges in the medieval *motet* of using various formulae for combining the voices into a single song. The *round*, “Sumer is...,” is an example of just one such formula.

Pes 1

Sing cuc - cu nu sing cuc - cu

Pes 2

Sing cuc - cu, Sing cuc - cu nu

Translation: Summer has come in—loudly sing cuckoo! The seed grows and the meadows blossom and the woods now put forth shoots. The ewe bleats for the lamb, the cow lows for the calf; the bullock ruts, the buck farts—merrily sing cuckoo! Well do you sing cuckoo; Do not ever cease now.

Performance notes: “Sumer is icumen in,” ca. 1240, England, is a four-part canon. Each of the four entrances is noted by Arabic numerals (1, 2, 3, 4); thus, the second singer or group of singers begins the melody when the first singer has reached #2. Underneath the canon, lower voices in two groups endlessly repeat Pes 1 and 2 (“Pes” means “foot,” i.e., a repeated bass motive)

Notes on *Ars Nova*

Finally, the 14th century saw the development of *Ars Nova* (the organum and discant that defined the music of Leonin and Perotin constitutes *Ars Antiqua*). *Ars Nova* is characterized by rules for *isorhythmic* musical processes: a melody (often a pre-existing chant) is transformed rhythmically by a repeating rhythmic motif, known as *talea*. Often that rhythmic pattern is quite simple (hence *isorhythmic*). The composer then adds other voices with different rhythmic formulae, some of which are almost as constrained or isorhythmic as the one imposed upon the original melody, and others that are far more complicated or free. This collection of simultaneous voices does not break down into complete chaos, since the use of occasional consonance among the voices, like what we saw in Perotin, and the use of rhythmic pauses, gives these pieces a feeling of periodicity.

Moreover, the rhythmic motifs of *Ars Nova* cannot be in any random pattern one can imagine. Instead, they must follow the general rhythmic order of the whole piece, which either is perfect or imperfect. A perfect pattern is in three, which is to say that one note of a long duration can be divided equally into three notes of a particular briefer duration (these rhythmic lengths actually were called *breves*); an imperfect pattern is in two, which means that a note of that same long duration can be divided equally into two notes of a different briefer duration. Similarly, each breve can be divided in three by *semibreves* and thus create *tempus perfectum*; dividing each breve in two creates *tempus imperfectum*. Not surprisingly, one can divide semibreves into *minims* and thus create either *perfect prolation* or *imperfect prolation*. One might construe the breve as the rhythmic duration we consider to define a measure in modern music, and semibreves and minims as the rhythmic units that define the rhythmic order within each measure.

Thus, a modern score of an *Ars Nova* piece might indicate the time signature 9/8. In the terms of the *Ars Nova* itself, that 9/8 time is an attempt to convey that the piece subscribes to a rhythmic order of perfect tempus and perfect prolation. To understand that conversion, remember the following: 9/8 means 9 eighth notes per measure, which are grouped in 3's. Each group of 3 eighth notes equals 1 dotted quarter note. As we know, there are 3 dotted quarter notes per measure in 9/8 time. If we understand each dotted quarter note as a semibreve, then we have tempus perfectum (a measure signifies a breve, which is divided by three semibreves); with 3 eighth notes per dotted quarter note, we have 3 minims per semibreve, and thus have perfect prolation as well.

Given the implied hierarchy from perfect to imperfect, our modern 9/8 time is to the medievals the most perfect time signature. 3/4 time can be understood as perfect tempus and imperfect prolation (can you see why that would be the case?), 6/8 time can be understood as imperfect tempus and perfect prolation, and 2/4 time (as well as 4/4 time) can be understood as imperfect tempus and imperfect prolation, or the most imperfect of time signatures.

However, while our modern rhythmic system determines where rhythmic emphases occur in each measure (the downbeat, etc.), the rhythmic system of *Ars Nova* makes no clear hierarchy in rhythmic emphasis, so it would be wrong to assume that *Ars Nova*'s rhythmic system is simply a different way to articulate modern time signatures. Ours is a descendent of theirs, but not identical.

And, of course, the question remains why those in the 14th century would regard dividing time in three to be perfect, while dividing it in two to be imperfect.

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)

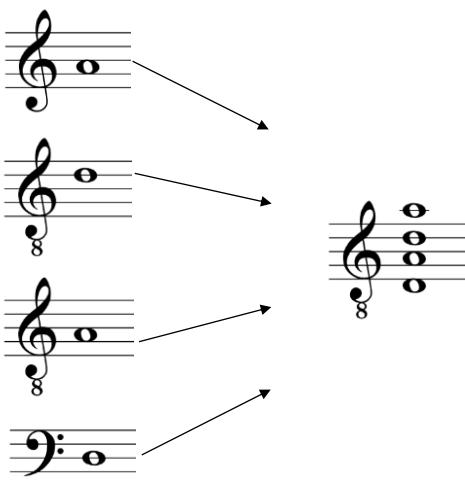
Guillaume de Machaut was among the greatest practitioners of the *Ars nova* style, and indeed brought it to its most refined heights. For this reason, many regard him to be the first great composer in the European tradition. Interestingly, he was known during his day mostly for secular music,⁴ but his most famous work today, *Messe de Nostre Dame*, is the source for his *Kyrie*, which we will study.

Some Questions and Suggestions for Machaut's *Kyrie*:

1. Like other pieces of *Ars Nova*, Machaut set rules for himself in composing *Kyrie*. Indeed, Machaut may well be the first true composer in Western Music because he brought together so many principles or rules to create his new kind of sound. (This use of principles or rules might well be construed as the characteristic of art in music composition: the subtle, never too mechanical, application of methods that work well together.) Can you discern what these rules might be? In other words, what are the rhythmic rules, and what are the melodic rules? One way to discern them might be to determine where a rhythmic pattern repeats itself. You will find that it is easiest to locate the rhythmic pattern in the *tenor* (or second from bottom line), next easiest in the *counter tenor* (bottom line), followed by the *motentus* line (second from the top), and least easy in the top line, or *triplum*. You might even find echoes of rhythmic and even melodic patterns from one line to another.
2. How would you describe the difference between the *Kyrie eleison* phrases and the *Christe eleison* phrase? How would you describe the rhythmic effect of the *Christe* phrase?
3. Is this piece in a perfect tempus or an imperfect tempus? How does the significance of the piece change depending on how you answer this question?
4. Which voice has the melody? Notice that the tenor voice sings the chant on which this piece was based (*Kyrie Cunctipotens Genitor*, p. 43 of this manual). Learn to sing the tenor line for the first section (*Kyrie eleison*). Does that, or another single line, have the melody? Is it possible actually to hear the four voices in their four individual characters – but simultaneously?
5. What might the rules governing vertical intervals be? Like Perotin, you can calculate the possible intervals from the bottom note upwards. Can you hear a different sonority from that of Perotin? Machaut's sound might well be called more continuously “harmonious.” What is his typical arrangement of vertical stacks of notes when he does not use perfect “open” fifths? Note how to compress the notes from the four vertical staves onto one staff so as to see the intervals clearly

⁴ Richard Taruskin, *The Oxford History of Western Music* (Oxford: Oxford University Press, 2005), vol. 1, 307.

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)



By so doing we can now see that Machaut is essentially filling in the fifth with the third. [Can you find examples of a fifth filled in with a third in the *Kyrie*?] This technique produces the new, richer sound that comes between his perfect intervals. Are these *chords* of fifths, with the third filled in, consonances or dissonances? How are they constructed, i.e., what two thirds always fit into a perfect fifth? Does your ear prefer the filled in fifth or the open fifth? What happens if you put two minor or two major thirds on top of each other? Does Machaut ever utilize this stack of two minor or two major thirds?

Which pair of thirds do you prefer? Can you find a reason why thirds should sound good? What is the ratio of the major third in our original diatonic scale? To what simple whole number ration is this closest? (Here you might bring out the monochord again to investigate this neighborhood of what Boethius called dissonance, but we might choose to call imperfect consonance.) And the minor third? What ratio do you get when you compound the simple ratios of a major and a minor third? Now look at all the intervals expressed by a filled-in fifth plus the fourth, to complete the octave.



This filled-in fifth is called a *triad*. Indeed, Machaut appears to have “discovered” the power and charm of the triad, at least for the purposes of many future centuries of classical music.

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)

6. Notice that there are far more notes with an accidental sign (sharp or flat) than we have seen before. Previously, the only accidental allowed was the B-flat, used to avoid the tritone between B and F. Here, we see, for example, an F# in measure two, used to lead our ears to the G that follows it. However, a new tritone is therefore *created* (F#-C), and so, depending on the situation, we might need to sharpen the C in order to “correct” that tritone. Yet by doing so, another tritone is introduced (C#-G), and so on! Such modifications were called *musica ficta*, and were expected to be added by the performers as needed. In our edition of Machaut’s *Kyrie*, the accidentals which actually appear in the manuscript are indicated in front of the applicable note; those indicated by the arguments of *musica ficta* are indicated above the applicable note. In different performances, you will hear different choices made.
7. At certain crucial moments, such as measures 13-14 there are two leading tones that resolve to two other tones. The C#’s in measure 13 lead to a D in measure 14; the G#’s in measure 13 leading to A’s. What effect do these double leading tones have? Do they help give a sense of closure, or *cadence*, to the piece? How?

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)

Kyrie

Guillaume de Machaut
(c. 1300-1377)

Musical score for Kyrie by Guillaume de Machaut, featuring four voices in 6/8 time. The voices are: Treble (Soprano), Alto, Tenor, and Bass. The lyrics "Ky - ri - - e" are repeated three times across the four voices.

Continuation of the musical score for Kyrie, starting at measure 5. The voices are: Treble (Soprano), Alto, Tenor, and Bass. The score shows a continuation of the melodic line and harmonic progression.

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)

The musical score consists of three staves of music, likely for a four-part setting (SATB or similar). The top staff uses a soprano C-clef, the middle staff an alto F-clef, and the bottom staff a bass G-clef. The music is in common time.

Measure 9: The vocal parts sing "e - lei - - -". The instrumental parts provide harmonic support.

Measure 13: The vocal parts sing "e - lei - - - son Chri - ste". The instrumental parts provide harmonic support. The key signature changes to one sharp (F#) at the beginning of this measure.

Measure 17: The vocal parts sing "son Chri - ste". The instrumental parts provide harmonic support. The key signature changes to one flat (B-flat) at the beginning of this measure.

The score includes various note heads (circles, squares, diamonds), rests, and dynamic markings. Measure numbers 9, 13, and 17 are indicated above the staves.

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)

The image displays three staves of musical notation for four voices, likely representing a four-part setting of the Kyrie. The notation is in common time, with quarter notes and eighth-note patterns. Measure 21 begins with a soprano note followed by a basso continuo note. Measure 25 features a melodic line in the soprano part. Measure 29 shows a basso continuo note followed by a soprano note.

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)

The musical score consists of three systems of music, each with four voices and a basso continuo staff.

System 1 (Measures 33-36):

- Voices:** Treble, Alto, Bass, Basso continuo.
- Text:** e - lei - son, e - - - lei - son, e - - - - lei - - - son, e - - - - - lei - - - son.

System 2 (Measures 37-40):

- Voices:** Treble, Alto, Bass, Basso continuo.
- Text:** Ky - - - ri - e, Ky - - - ri - e, Ky - - - - - - - ri - e, Ky - - - - - - - - e.

System 3 (Measures 41-44):

- Voices:** Treble, Alto, Bass, Basso continuo.
- Text:** (No text provided for this system.)

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)

The image shows three staves of musical notation for four voices, likely a four-part setting of the Kyrie. The notation is in common time, with various note heads and stems. The voices are represented by different clefs: soprano (G-clef), alto (C-clef), tenor (F-clef), and bass (Bass-clef). The music is divided into measures by vertical bar lines. The first staff begins at measure 45. The second staff begins at measure 49, with lyrics "e - lei - - -" appearing below the notes. The third staff begins at measure 53, with lyrics "son" appearing above the notes. The notation includes various note heads and stems, indicating rhythmic values and pitch.

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)

Musical score for Kyrie, measure 57. The score consists of four staves. The top three staves are in common time (indicated by a 'C') and the bottom staff is in common time (indicated by a 'C'). The key signature is one sharp (F#). The music includes various note heads (circles, squares, diamonds) and rests.

Musical score for Kyrie, measure 61. The score consists of four staves. The top three staves are in common time (indicated by a 'C') and the bottom staff is in common time (indicated by a 'C'). The key signature changes to two sharps (B and E). The music includes various note heads and rests.

Musical score for Kyrie, measure 65. The score consists of four staves. The top three staves are in common time (indicated by a 'C') and the bottom staff is in common time (indicated by a 'C'). The key signature changes to three sharps (G, D, A). The music includes various note heads and rests.

Guillaume de Machaut: *Kyrie* from *Messe de Notre Dame* (c. 1300 – 1377)

The image displays three staves of musical notation for four voices, likely for a choir or organum. The notation is in common time, with a key signature of one sharp (F#). The voices are represented by different clefs: soprano (G-clef), alto (C-clef), tenor (F-clef), and bass (C-clef). The music consists of short note values, primarily eighth and sixteenth notes. Measure 69 begins with a soprano entry. Measure 73 shows a more complex harmonic progression with multiple entries. Measure 78 includes vocalizations with lyrics: "e - lei - son", "e lei - son", and "e - lei - - - son". The bass line provides harmonic support throughout.

Chant: *Kyrie Cunctipotens Genitor*

The musical notation consists of six staves of Gregorian chant in common time (indicated by a 'C'). The key signature is A major (one sharp). The notation uses black note heads on a five-line staff. The lyrics are written below each staff, corresponding to the notes. The first staff begins with 'Ky - ri - e' followed by a long dash. The second staff begins with 'le - i - son__ .'. The third staff begins with 'e - - - le - i - son__ .'. The fourth staff begins with 'Ky - ri - e' followed by a long dash. The fifth staff begins with 'e - - - - - le - i - son__ .'. The sixth staff begins with 'Ky - ri - e' followed by a long dash.

Palestrina *Sicut Cervus* – Some approaches to listening

If Machaut (c.1300-1377) was the first great composer of polyphonic music, then Palestrina (c.1525-1594) was the composer who brought the art to a pinnacle of perfection hitherto unimaginable. Well into the 18th century Palestrina was still “The Master.” In the Foreward to his famous *Study of Counterpoint* (1725), Fux commemorates him as the surest guide for future musicians. On listening to *Sicut Cervus* you will notice differences from Machaut – in the beauty of Palestrina’s use of consonance and dissonance, in the way the voices retain their distinctiveness while weaving together a single fabric, and in the relative clarity of the liturgical text. These achievements are achievements of counterpoint, the art of setting one voice, one line of melody, against another.

As you learn more about counterpoint, and focus on selected note relationships in the score of *Sicut Cervus* (using music software, the piano, a CD, or a singing companion), your ear will become more sensitive to details unnoticed at first. This is how we make music theory work for us. *Theory* is not about rules imposed by academicians on the making of music. It is rather theory that follows practice; theory is distilled from the practices of great composers like Palestrina. Thus a little theory can teach us to hear *intentionally*, to hear more artistically, with increasing awareness and enjoyment.

1. Sing what you hear as the opening melody or melodic phrase. Is there one phrase expressed in all voices?
2. How is musical / textual phrasing handled – how do phrases break and start up? Is there one “most” significant break in the motion of the whole piece?
3. How has Palestrina treated the melody of each of his 4 voices – say, in comparison to Machaut? Machaut had given each voice an individual rhythmic character. Yet it might be relatively easier to follow a particular voice through *Sicut Cervus*. Why would that be?
4. After reading about Species 4 in Fux’s text, observe how syncopation/ligature/suspension is used between various voices and in different sections of *Sicut Cervus*. Circle its occurrences in the score and then listen especially for them.
5. Read the brief “Lesson on Imitation” from Fux (below in this manual). Imitation is one of the most engaging features of Renaissance polyphony. It may surprise you that such a source of musical pleasure can be reduced to a technique. But does this technique account for the beauty of Palestrina’s music? How strict is this practice on Palestrina’s part, that is, how exact is a voice’s imitation of the one it follows? What features of the imitation, what part(s) of an imitated phrase, do you actually hear?
6. How does Palestrina use the triad as compared to Machaut? For example, m. 5 begins by sounding a “G triad”: G, B, D – extracted from soprano, tenor, and alto respectively. How many different triads does he employ? G, B, D – A, C, E? – B, D, F#? – etc. Are Palestrina’s triads heard and treated as consonances or as dissonances – as places of rest or as temporary collisions of sound that require resolution? Also, observe how many different ways he can make that single G triad sound, at different moments, differently arranged, as the piece unfolds. Finally, extending 5. above, what

Palestrina *Sicut Cervus* – Some approaches to listening

role does the triad have in organizing the imitation of 3 and 4 voices? You need look at just one of your selected phrases (2. above) as an example.

Sicut Cervus

Giovanni Pierluigi da Palestrina
(1525-1594)

Musical score for *Sicut Cervus* by Giovanni Pierluigi da Palestrina. The score consists of four staves: Soprano (G clef), Alto (G clef), Tenor (F clef), and Bass (C clef). The key signature is one sharp (F#). The vocal parts are as follows:

- Soprano:** - - - - - Sic - ut
- Alto:** - - - - Sic - ut cer - vus de - si - de -
- Tenor:** 8 Sic - ut cer - vus de - si - de rat ad fon - tes a - qua -
- Bass:** - - - - - - - -

Continuation of the musical score for *Sicut Cervus*. The voices continue their parts from the previous section.

Continuation of the musical score for *Sicut Cervus*. The voices continue their parts from the previous section. Measure numbers 6 and 6 are indicated above the staves.

Palestrina: Sicut Cervus (1525-1594)

II

11

a - qua - rum Sic -

Sic - ut cer - vus de - si - de - rat ad - fon -

8 si - derat ad fon - tes a - qua -

qua - rum Sic - ut cer - vus de -

II

16

- ut cer - vus de - si - de - rat ad fon - tes a -

tes a - qua - rum de - si - de - rat ad fon - tes a - qua -

rum de - si - de - rat ad - fon -

si - de - rat ad fon - tes de - si - de - rat ad - fon -

16

si - de - rat ad fon - tes de - si - de - rat ad - fon -

Palestrina: Sicut Cervus (1525-1594)

Musical score for Palestrina's *Sicut Cervus*, featuring four staves of music with Latin lyrics. The score consists of two systems of music.

System 1 (Measures 21-22):

- Staff 1:** Treble clef, key signature of one sharp (F#). The lyrics are "qua - rum".
- Staff 2:** Treble clef, key signature of one sharp (F#). The lyrics are "rum".
- Staff 3:** Treble clef, key signature of one sharp (F#). The lyrics are "tes _____ a - qua - rum".
- Staff 4:** Bass clef, key signature of one sharp (F#). The lyrics are "i - ta de -".

System 2 (Measures 21-22):

- Staff 1:** Treble clef, key signature of one sharp (F#). The lyrics are "tes a qua - rum".
- Staff 2:** Treble clef, key signature of one sharp (F#). The lyrics are "i".
- Staff 3:** Treble clef, key signature of one sharp (F#). The lyrics are "ta de -".
- Staff 4:** Bass clef, key signature of one sharp (F#). The lyrics are "de".

System 3 (Measures 26-27):

- Staff 1:** Treble clef, key signature of one sharp (F#). The lyrics are "i - ta de - si - de".
- Staff 2:** Treble clef, key signature of one sharp (F#). The lyrics are "i - ta de - si -".
- Staff 3:** Treble clef, key signature of one sharp (F#). The lyrics are "si - de rat".
- Staff 4:** Bass clef, key signature of one sharp (F#). The lyrics are "i - ta de - si - de".

System 4 (Measures 26-27):

- Staff 1:** Treble clef, key signature of one sharp (F#). The lyrics are "si - de rat".
- Staff 2:** Treble clef, key signature of one sharp (F#). The lyrics are "de rat".
- Staff 3:** Treble clef, key signature of one sharp (F#). The lyrics are "-".
- Staff 4:** Bass clef, key signature of one sharp (F#). The lyrics are "-".

Palestrina: *Sicut Cervus* (1525-1594)

31

rat
de - rat
i - ta
ta
de - si
de - rat
de - si - de -

31

31

36

de - si - de - rat
a -
i - ta
de - si - de - rat
rat
i - ta
de - si - de -

36

36

Palestrina: *Sicut Cervus* (1525-1594)

41

41

46

Palestrina: *Sicut Cervus* (1525-1594)

The musical score consists of two systems of music. Each system contains four staves, one for each voice: Soprano (top), Alto, Tenor, and Bass (bottom). The music is in G major, indicated by a key signature of one sharp. The vocal parts sing in homophony, while the instrumental parts provide harmonic support. The lyrics are in Latin, with some words underlined. Measure numbers 51 and 56 are marked at the beginning of each system.

System 1 (Measures 51-55):

- Soprano:** a ad te, De - us.
us ad te, De - us ad te, De -
- Alto:** us ad te, De - us ad te, De -
- Tenor:** a - ni - ma me - a ad te, De - us ad
- Bass:** me - a ad te, De - us ad te, De -

System 2 (Measures 56-60):

- Soprano:** us
- Alto:** us
- Tenor:** te, De - us
- Bass:** us

System 3 (Measures 56-60):

- Soprano:** us
- Alto:** us
- Tenor:** us
- Bass:** us

Translation: As the hart panteth after the water brooks, so panteth my soul after thee, O God. (Psalm 42, 2)

Counterpoint Practica

These notes will guide you towards exercises for Fux's *Gradus ad Parnassum* (in the Norton edition entitled *The Study of Counterpoint*). This book was the essential text from which Haydn, Mozart, and Beethoven all learned the elements of composition. Begin by reading pp. 17-23, which define some crucial terms. Then begin the following exercises.

Note: Musescore versions of all compositions in the book are available through the Meem Library.

Exercise 1. (a) After reading pp. 27–top of 29, try to write a note-against-note counterpoint (also called “species 1”) above the following cantus firmus (which we will call “c.f. 1”—the same as Fux’s Fig. 4):



Here and in the following, always write your exercises on two staves, with the cantus firmus underneath or above, as required. Indicate measure numbers and write numbers indicating the intervals between the staves (i.e., 8 for an octave, 5 for a fifth, etc.) Note the following rules for this species:

Species One Rules (Whole Note Against Whole Note)

1. Use only consonances: octaves, fifths, thirds, and sixths. No fourths, tritones, seconds, or sevenths.
2. Begin with a perfect consonance (octave, fifth, or unison) and end with an octave or unison. (Note that Fux never uses unisons except at the beginning or end).
3. Any succession of fifths or of octaves is forbidden.
4. No accidentals except during the final cadence (pp. 28-29 and No. 9 below), and no leaps of a tritone, a seventh, or greater than an octave in a voice. Voices should move smoothly, by step as much as possible.
5. No direct motion to a perfect consonance. Generally, contrary motion of voices is preferred, though parallel motion to an imperfect consonance is allowed.
6. More than two successive parallel thirds or sixths are forbidden. The voices should thus be as independent as possible.
7. The greatest variety of interval type (i.e. perfect and imperfect consonances) should be used in succession.
8. Voices may not cross or exchange position.
9. The penultimate measure must contain the leading tone that will progress to the final. Either a major sixth will expand to an octave (when the counterpoint is above the cantus firmus), or a minor third will close to a unison (when the counterpoint is below).

Counterpoint Practica

In class you will put solutions on the blackboard, listen to them, and discuss both the musical merits of what has been written as well as its fidelity to the rules. You will also want to read pp. 29-40 and examine the solutions that Josephus offers.

Exercise 1. (b) Write a species 1 counterpoint under c.f. 1.

Exercise 1. (c) (optional) Write a species 1 counterpoint above c.f. 2:



Exercise 1 (d) (optional) Write a species 1 counterpoint under c.f. 2.

Exercise 2. Now read pp. 41-42 and write a species 2 counterpoint above c.f. 1. Note the way the rules develop to allow dissonance on the off-beat:

Species Two Rules (Two Half Notes Against Each Whole Note)

1. The first half note in every measure must form a consonance with the cantus firmus.
2. The second half note may be consonant or dissonant. If dissonant, it must be a passing tone. This means that in this species *dissonances are always approached and left by step, never by leap.*
3. Watch for parallel fifths or octaves on consecutive strong beats; they work if the counterpoint voice skips by more than a third to its weak beat and creates contrary motion for the parallel consonance (see pp. 44). Parallel fifths and octaves are permitted on consecutive weak beats if the counterpoint voice moves stepwise into or out of the second consonance.
4. Avoid repeating notes consecutively.
5. The penultimate measure must contain a fifth, followed by the major sixth (on the weak beat), which expands into the final octave.



You may find it helpful to work out the last measures of the counterpoint first. Also read pp. 31-49 to see how Josephus solves this problem.

Exercise 3. Read pp. 50-54 and write a species 3 counterpoint above c.f. 1. The basic rules continue in effect from species 1 and 2 with these additions:

Counterpoint Practica

Species Three Rules (Four Quarter Notes Against Each Whole Note)

1. The first quarter note must be consonant.
2. If the second quarter note is dissonant, the third quarter note must be consonant.
3. If the second and fourth quarter notes are consonant, the third quarter note may be dissonant.
4. One may go from dissonant second note to consonant third note by skip of a third (called *cambiata* or “changing note”; see p. 51)

Exercise 4. Read pp. 55-63 and write a species 4 counterpoint above c.f. 1. Again, the previous rules continue in effect with the following additions:

Species Four Rules (Syncopated Half Notes Against Whole Notes)

1. Use only syncopations (see p. 55), beginning with a half note rest on measure one and tying every succeeding half note to an identical note on the next beat.
2. If absolutely necessary, one ligature can be left out (species 2 counterpoint results). Study carefully figs. 62-63, and note that dissonances are to be resolved *downwards* (see p. 60).
3. Try to write mostly *dissonant* ligatures (see fig. 62)

Exercise 5. (optional) Read pp. 64-67 and write a species 5 counterpoint above c.f. 1.

Exercise 6. Read pp. 71-77 and write a species 1 counterpoint in three voices, with c.f. 1 in the middle voice. You can use your solution to exercise 1. (a) for the upper voice. Note that intervals should be reckoned from the lowest voice (see p. 76).

Examples of Counterpoint for Two Voices

Excerpt from *Credo*, *Missa Pange Lingua*

Josquin Des Prés (1450-1521)

The musical score consists of four staves of music for two voices. The top staff is in treble clef, G major, common time (indicated by '8'). The bottom staff is in bass clef, C major, common time (indicated by '8'). The lyrics are written below the notes. The first staff contains the words 'Pan - ge lin - gua ____ glo - ri - o ____ si ____'. The second staff begins with 'Pa - trem om - ni po - ten - - - - - - - -'. The third staff continues with 'Pa - - - trem - om - ni po - ten -' and 'tem, fac - to - - - rum coe -'. The fourth staff begins with 'li et ter - rae,' and ends with 'to - - - rem coe - - - li et ter - - - rae,'. The music features various note values including eighth and sixteenth notes, and rests.

Translation: Almighty father, maker of heaven and earth.

Examples of Counterpoint for Two Voices

Excerpt from *Credo, Mass for Three Voices*
1623)

William Byrd (1543-

8
Et in spi-ri-tum sanc-tum Do-mi-num et vi-vi-fi-cam-tem qui
8 Et _____ in spi-ri-tum san-ctum Do-mi-num et vi-vi-fi-can-tem:
7
ex pa-tre fi-li-o que pro-ce-dit, pro-ce-dit,
8 qui ex pa-tre fi-li-o que pro-ce-dit, pro-ce-dit,

Translation: [and I believe] in the holy spirit, lord and giver of life: who proceeds from the father and son.

Examples of Counterpoint for Two Voices

Beatus Vir, from *Cantiones Duarum Vocum*
1594)

Orlando di Lasso (1532?-1594)

The musical score consists of four staves of music for two voices. The top staff begins with a soprano vocal line, followed by a basso continuo line. The lyrics are written below the notes. The score is divided into four systems, indicated by the numbers 2, 3, and 4 placed above the staves.

System 1:

Be - a - tus vir, qui in sa - pi - en -
Be - a - tus vir, qui in sa - pi - en - ti - a mo -

System 2:

ti - a mo - ra - bi - tur, et qui
ra - bi - tur, et qui in just -

System 3:

in just - ti - a me - di - ta - bi - tur,
ti - a me - di - ta - bi -

System 4:

et in sen - su co - gi - ta - bit cir - cum - spec - ti -
tur, et in sen - su co - gi - ta - bit cir - cum - spec -

Examples of Counterpoint for Two Voices

The musical score consists of two staves. The top staff begins at measure 5 with a treble clef, a key signature of one sharp, and common time. The lyrics are "o - nem De - - - i cir-cum-spec - ti - o - nem De -". The bottom staff begins at measure 5 with a treble clef, a key signature of one sharp, and common time. The lyrics are "- ti - o - nem _____ De - - - i cir-cum-spec - ti - o - nem De -". Measure 6 continues with the same clefs, key signature, and lyrics. The music features various note values including eighth and sixteenth notes, and rests.

Translation: Blessed is the man who will abide in wisdom, and who will meditate on her righteousness, and who, in his mind, will consider the circumspection of God.

Imitation and Fugue from Fux's *Gradus ad Parnassum*

A Lesson on Imitation

Aloysius. I should like to instruct you now in the art of imitation and fugue.

Let us leave the restrictions that the use of the cantus firmus, or given melody, imposes and begin free composition in two parts with a Lesson on Imitation.

Imitation arises when one part follows another, after a number of rests, forming the same intervals with which the first part began and without any regard for the scale or mode in which these parts move or for the position of whole and half-tone steps. This can occur at the unison, second, third, fourth, fifth, sixth, seventh, or octave, as can be seen from the following examples:

Imitation at the unison



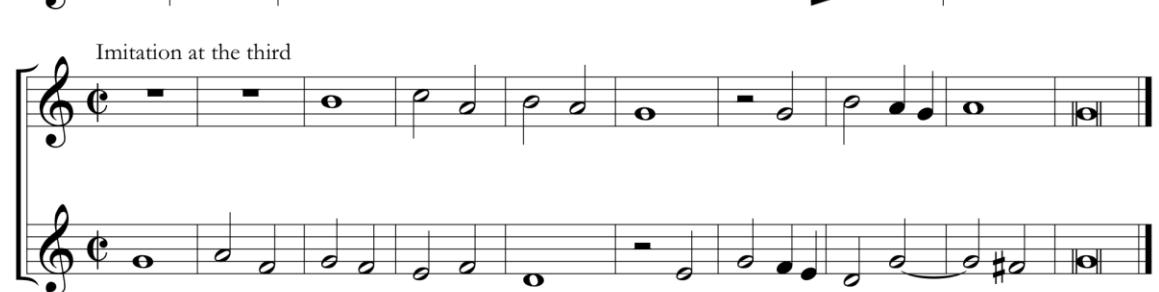
Josephus. From this first example I gather that not all notes of the part that enters first are to be taken over in the following part.

Aloysius. Yes, that would be the function of a canon, not of imitation. Here it is enough if a few notes follow those of the following part.

Imitation at the second



Imitation at the third



Imitation and Fugue from Fux's *Gradus ad Parnassum*

Imitation at the fourth

A musical score for two voices in common time. The top voice starts with a half note followed by quarter notes. The bottom voice enters with eighth notes. The music consists of two staves of five measures each.

Josephus. It seems that the last example begins in C and ends in G.

Aloysius. Have you already forgotten that I said the imitation should not be made subject to any consideration of the mode? It is sufficient if the imitating part follows in the footsteps of the preceding part, whatever the mode. Besides, imitation is used not only in the beginning of the composition but also later, where the restrictions of the mode play a less important role.

Imitation at the fifth

A musical score for two voices in common time. The top voice starts with a half note followed by quarter notes. The bottom voice enters with eighth notes. The music consists of two staves of five measures each.

Imitation at the sixth

A musical score for two voices in common time. The top voice starts with a half note followed by quarter notes. The bottom voice enters with eighth notes. The music consists of two staves of five measures each.

Imitation at the seventh

A musical score for two voices in common time. The top voice starts with a half note followed by quarter notes. The bottom voice enters with eighth notes. The music consists of two staves of five measures each.

Imitation and Fugue from Fux's *Gradus ad Parnassum*

Imitation at the octave

Aloysius. Now spend a little time following the model of these examples. Take a succession of notes made up of whatever interval progressions you choose. Then add another part, write a new melodic line in counterpoint to the one written before, and complete a two-part setting, keeping in mind the rules of good, singable writing.

Fugues in General

Aloysius. Fugue takes its name from the words *fugere* and *fugare*—to flee and to pursue—a derivation confirmed by a number of eminent authors. When one part flees, pursued by another, this is actually nothing but what has been explained as imitation. Therefore another definition is needed that will distinguish fugue from imitation.

A fugue arises when a succession of notes in one part is taken over in another part, with due regard for the mode, and especially for the position of whole- and half-tone steps. To understand this definition fully, we shall need to know what is meant by the term mode. By mode I mean that which has often been called “tone.” But obviously it is better to say the first mode or the second mode, than the first tone or the second tone, in order to avoid confusion with the tone step and the half-tone step—the intervals represented by the ratios 9:8 and 10:9—for which the same term is used. Since the matter of modes is highly intricate and not easily understood by the novice, I think that we shall be content with discussing only what is needed for our present purposes and postpone a fuller explanation until later.

A mode is comprised of a series of intervals, contained within the limits of an octave, in which the half-tone steps are irregularly placed. The word mode appears in the famous lines of Horace:

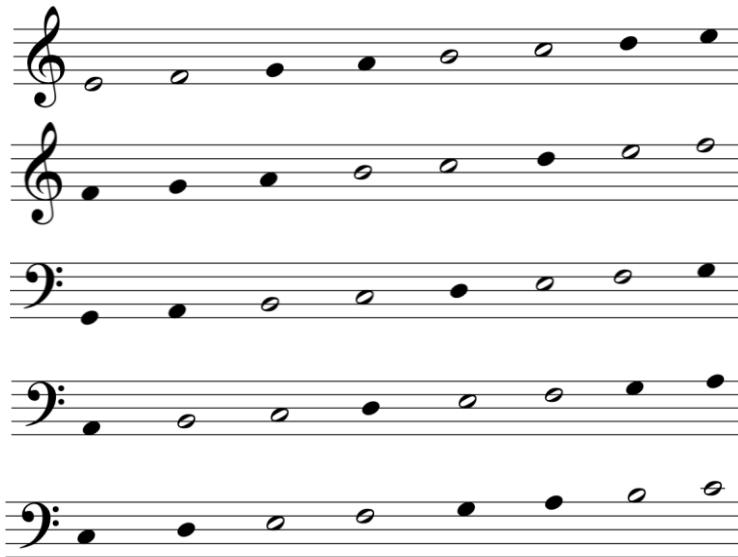
*All things are subject to a mode, a mean,
Beyond the limit of which they cannot rightly exist.⁵*

Since the placing of the half-tone steps occurs in six different manners, we shall have to specify six modes, shown in the following octave rows on the tones D, E, F, G, A, B, C.⁶

⁵*Satires, I, I, vs. 106*

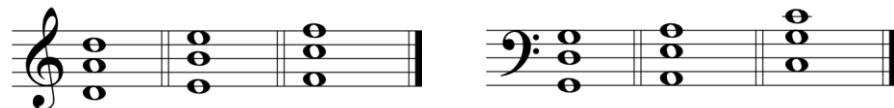
⁶Note that Fux includes the modern major (*Ionian*) scale on C, as well as the modern natural minor (*Aeolian*) scale on A, along with the traditional modes on D, E, F, and G. This shows how his practice is moving away from strict modal usage.

Imitation and Fugue from Fux's *Gradus ad Parnassum*

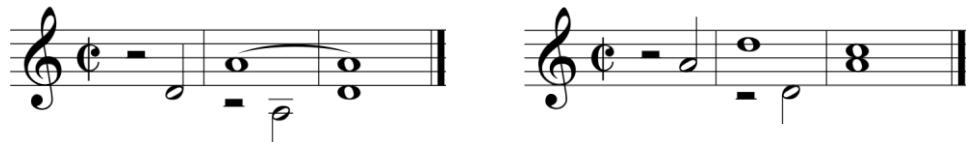


If you count each mode from the first note, you will find the half-tone steps in six different places. This difference in placing is indicated by the white notes. For the time being, we need not consider which of these modes should rightfully be the first, second, third, and so on, but we may count them in the order in which they appear here.

A mode is further characterized by the fourth and fifth which make up its octave. According to the limits set by these intervals, fugal themes will have to be arranged.

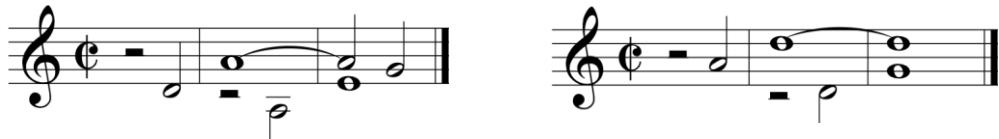


If the first part uses the skip of a fifth, the following part must use the skip of a fourth, in order not to exceed the limits of mode or octave, and vice versa:



Imitation and Fugue from Fux's *Gradus ad Parnassum*

This restriction does not apply to imitation, where it is in order to repeat the same steps or skips:



Finally, the voices of a fugue cannot start at intervals other than those that constitute a mode, that is intervals other than the unison, octave, and fifth; whereas imitation, as has been said, may occur at any interval.

Josephus. I think I have understood all that you have said about modes, imitation, and fugue. But I should like to ask that you teach me about the choice of themes and about the ways in which fugues have to be arranged and carried through, for I have often heard that the study of fugue is not known to all masters of the art of music.

Aloysius. That is true. Oratory on this subject is more common than knowledge. Therefore I want you to have all the explanations so that nothing about which you have inquired will remain obscure.

From what we have said before, it is clear that there are six different modes. It is for this reason that a theme will have to be adapted properly to each mode. You can gather from this that a theme that is suited to the first mode will not be suited to the second, third, fourth, fifth, or sixth modes because of the position of whole- and half-tone steps. Let me show you this with an example.



This theme is formed by the same whole- and half-tone steps, as it appears against the fifth in the following part:



This use of the subject would not be possible in any of the other modes. Let us see the mode of A, which in even distribution comes closest to the mode of D.

The diagram shows two staves. The left staff is labeled "Subject" and the right staff is labeled "Answer". Both staves are in treble clef and common time. The Subject (left) has notes A, B, C, D. The Answer (right) has notes E, F, G, A. This represents the mode of A.

[The next-to-last note of the answer (F) is not a whole step above the last note (E); the position of the whole- and half-tone steps is inverted.] The arrangement of the subject could not be as in the first part, except through the use of a sharp for the next-to-last note:

Imitation and Fugue from Fux's *Gradus ad Parnassum*



This, however, is not to be used in the diatonic system with which we are now dealing. We should avoid the use of any sharps or flats in our subjects, for otherwise we would never fully understand the true nature of the modes.

Fugues in Two Parts

Aloysius. I shall teach you first how to write simple two-part fugues. Choose a subject consisting of a few notes which is suited to the mode in which you intend to work. Place those notes in the part with which you have decided to start. Then, if nothing has to be altered because of the mode, use the same succession of notes in the following part which enters at the fourth or the fifth.⁷ Meanwhile, form a counterpoint with the part in which you began, using any free succession of notes, as you have learned in florid counterpoint. After a short continuation of the melodic figures, arrange the parts so that you can bring about the first cadence, at the fifth of the mode. Then resume the theme; as a rule, this is done in the part with which you started, but on a tone other than that which you used before. Mark this entrance with a full—or half—measure rest or by a larger skip without a rest. The other part might, after a rest, enter before the theme in the preceding part is finished. Following this, let the parts move freely for a short distance and then form a second cadence at the third of the mode. Finally, placing the subject in either part, let the other part follow with the subject directly in the next measure if this is possible,⁸ and thus, locking the two parts as closely as possible, complete the fugue with a cadence on the final of the mode.

Josephus. I remember that you said a while ago...

Aloysius. Let us postpone your question, for your uncertainty may be clarified by an example. I shall take the subject we have used before in discussing the nature of the modes and write a fugue on it in the manner prescribed. With this as a model before you, the road for your own work will be cleared.

⁷ The fourth below or the fifth above.

⁸ Note that Fux adopts the practice of Renaissance masters and admits rhythmic changes in imitative entrances; when voices enter at a closer distance than the original statement of the theme it is called *stretto*.

Imitation and Fugue from Fux's *Gradus ad Parnassum*

The musical score consists of four staves of music. Staff 1 (Soprano) starts with a rest followed by a dotted half note. Staff 2 (Alto) starts with a dotted half note. The music continues with various notes and rests. Measure 8 is labeled "Cadence at the fifth". Measure 16 is labeled "Cadence at the third". Measure 24 concludes the piece.

You see here the theme employed in the soprano at the fifth of the mode as soon as it is finished in the alto. Meanwhile the alto moves in florid counterpoint until the theme is finished in the soprano. A short continuation in both parts leads to a cadence on the fifth of the mode. After that, you see the subject repeated below in the alto at the fifth of the mode, without a previous rest since this entrance is accomplished by skip—whereas the soprano follows here earlier than before,⁹ namely when the subject has reached its third measure, while the alto moves freely. After the subject is finished, a second cadence is formed at the third of the mode. Finally, you find the subject taken up in the alto and the subject also introduced immediately in the next measure by the soprano and then the end formed by the cadence on the final of the mode. If you follow this simple example and apply it to the other modes, you need have no doubt that you will gradually acquire a fuller mastery of fugue.

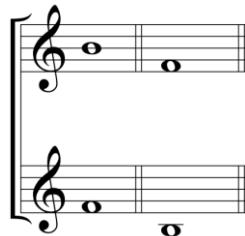
Josephus. I see that in this fugue sharps and flats are used, notwithstanding the rule that they

⁹ Here is an example of *stretto*.

Imitation and Fugue from Fux's *Gradus ad Parnassum*

should not be employed in the diatonic system.

Aloysius. Those rules are to be understood for the themes, where only natural half-tone steps are to be used, without sharps or flats, so that the nature and characteristics of the modes may be realized. It is different in the free continuation of the composition where the use of sharps and flats is not only allowed but needed in order to avoid the harsh relation of *mi* against *fa* which usually arises in the following manner:



Josephus. In distinguishing fugue from imitation you said that in a fugue the part entering later could begin only on the fifth, octave, or unison. But afterwards, when you taught me how to write a fugue, you mentioned also the fourth.

Aloysius. In the first instance we were reckoning from the fundamental tone,



with which the fourth actually is not formed. In the second instance, however, the fundamental tone does appear, and we are reckoning from the part above.



Yet even in this case the tone A could be called the fifth because the fundamental tone D is to be understood below it. Thus, in the following example the second part is to be judged as entering at the fifth.

Imitation and Fugue from Fux's *Gradus ad Parnassum*

The musical score consists of four staves of music. Staves 1 and 2 are at the top, and staves 8 and 16 are at the bottom. All staves are in common time and G major (indicated by a treble clef). Staff 1 starts with a dotted half note followed by a dotted quarter note, then a dotted eighth note tied to a sixteenth note, and so on. Staff 2 starts with a dotted half note followed by a dotted quarter note, then a dotted eighth note tied to a sixteenth note, and so on. Staff 8 starts with a dotted half note followed by a dotted quarter note, then a dotted eighth note tied to a sixteenth note, and so on. Staff 16 starts with a dotted half note followed by a dotted quarter note, then a dotted eighth note tied to a sixteenth note, and so on.

Josephus. How does it happen that the note values of the theme are somewhat changed at the end of the fugue?

Aloysius. I should like to say not only that it is permissible to tie the otherwise free notes at times but also that this lends to the composition a particular charm. Such a division may even be necessary where several parts using the subject and entering closely one after the other cannot otherwise be combined.

Bach's *Matthew Passion*

At first blush, Bach's *Matthew Passion* likely appears quite complex. Indeed, it is scored for two orchestras, two choruses, a third choir of sopranos used in a couple of instances, and soloists that largely come from Chorus 1.

However, familiarity with a few common features will make this piece manageable, and will even allow us to investigate some of Bach's most fundamental aesthetic and theological concerns.

Musical forms found in the Matthew Passion

The *Matthew Passion* (and Bach's cantatas and other oratorios, as well as Baroque opera) works on a clearly divided dramatic structure:

1. Action or narrative portions are set in *simple recitative*. These sections are rhythmically flexible, minimally tuneful solo vocal lines accompanied only by a *continuo* group (organ or harpsichord and cello). The text of these pieces is taken directly from *The Gospel of Matthew*, chapters 26 and 27. A tenor soloist from Chorus 1, representing the Evangelist, sings narration. Other soloists from Chorus 1 sing speeches by particular characters found in the Gospel. Jesus' recitatives are accompanied by continuo, and are "haloed" by strings. Examples of simple recitatives abound, including numbers 2, 4, 6, 8, and onwards throughout the entire *Passion*.
2. Another section is listed as "Recitativo" in the score, but should be understood differently than the simple recitative, and so might be called an *elaborate recitative*. These pieces are fairly short and simple structurally, but they are more elaborately orchestrated, as well as more emotionally intense, than simple recitatives. These pieces might be considered a first reflection on the action by a character, a first look into the heart and soul of that character. It is important to note that these elaborate recitatives precede *da capo arias*, and hence are textual transitions from the narrative to highly reflective poems as well as musical transitions from the text-oriented recitative to a musically-structured aria. The texts of the elaborate recitatives (as well as all pieces of the *Matthew Passion* other than the recitatives that quote the Gospel), are by Bach's librettist, Picander. Examples of elaborate recitatives are 9, 18, 25, 28, 40, 57, and 60.
3. Perhaps the most musically extraordinary pieces are the *da capo arias*. These are reflective articulations of the emotional and spiritual substance of the action of the Passion, and, while usually sung by the same soloist as that of the preceding elaborate recitative, we should not simply presume that each aria is "another song" by the same character. Da capo arias usually are in A-B-A form, with the B-section presenting a contrasting text, accompaniment, key and other characteristics, followed by a repeat of A. Some examples of this are 10, 19, 29, and 41. Some unusual arias involve chorus (36), or unusual forms (33); the final chorus (78) is in aria (or A-B-A) form.
4. *Chorales* are interspersed throughout the narrative at crucial moments, and, though these homophonic pieces are in four parts and sung by both choruses, their melodies would have been utterly familiar to a Lutheran audience. That familiarity, and even the fact that the congregation listening to a performance of the *Matthew Passion* would

Bach's *Matthew Passion*

sing along, should give one a sense of the import of these pieces. Examples of chorales are 21, 23, 53, 63, and 72.

5. *Chorale choruses* are the largest and most complex pieces of the entire *Passion*. In these pieces, the two choruses usually are *antiphonal*, and the melodies are presented in the soprano against elaborate contrapuntal accompaniment. Examples include 1 and 35. 78, as we saw above, has the musical scale of a chorale chorus, but is in aria form.

Dance Styles

Several of the arias utilize common dance rhythms of Baroque music. Attentiveness to this feature may aid your interpretive insights; that is, why might Bach have used well known dance forms in a religious context?

1. Sarabande (a triple-timed rhythm with an accent on beat 2): arias 36, 61, and 78.
2. Siciliane (12/8 time, the origin of which is thought to be Sicily, but which has gypsy overtones): 47.
3. Allemande (4/4 time with a pickup): 66.
4. Gigue (fast compound triple time): 75.

Notes and Questions About Particular Pieces

1. The Opening Chorus.

The two choruses and orchestras are mainly in what key? Notice, though, that the sopranos di ripieno (the boys' choir, or what we can call the "lamb-choir") come in above the other choruses beginning on p. 4, m. 30 in another well-defined (albeit related) key, an effect we can call bi-modality. (Their rhythm is entirely distinct as well, which makes them easy to pick out by ear.) However, the lamb-choir is not *always* in a different key from the rest. Sometime after m. 30, for example, the two choruses and the boys' choir sing in the same key. When is that? Notice that, by m. 38, all three choruses end in one key (G Major). This process continues through the piece.

Another question to consider: How do the choruses' questions and answers correspond?

2. Nos. 9 and 10.

Notice that the preceding Recitative (No. 8) points out a difference in perspective between Jesus and the disciples. But what is the significance of that difference? In what way does the elaborate Recitative No. 9, in b minor, articulate the conflict between Jesus and the disciples?

Are there ways in which the musical accompaniment supports the text sung by the alto? Notice how No. 9, similar to all elaborate recitatives, is relatively simple in design. Indeed, the melody consists of one note per syllable of text, except for a melodic phrase in the next to last measure.

Bach's *Matthew Passion*

How is Aria No. 10 (“Buß und Reu”), in f# minor, an elaboration of the meditation of No. 9? What are the essential notes of the opening melodic line and how are they organized? What role does the structure (A-B-A) play in the power of this piece?

3. Nos. 25-26, and 33.

No. 25 (“O Schmerz”) grows out of the section of the narrative in which Jesus tells Peter that he will “deny me thrice” that night. Indeed, we should note that Chorale No. 23 is the first reaction to Jesus’ charge. Hence the entire assembled congregation denies that charge, like Peter and the other disciples. Do the keys of No. 21 and No. 23 speak to this?

Notice that this recitative includes both a tenor from Chorus I (Peter?), as well as Chorus II (the faithful?). What purpose does the musical interaction of the soloist and the chorus serve? You should note that No. 25 is in f minor (there are three flats in the key signature, as well as the frequent use of d-flat, for a total of four flats in the key signature).

No. 26 is, not surprisingly, a further meditation on Peter’s denial of Jesus. Notice the night watchman’s call motif in the treble clef of the first measure, and a rocking motif in the second half of the treble clef of the third measure (the E-flat, D, E-flat, F, E-flat). These are typical of Bach’s use of musical suggestions of real-world actions. Like No. 25, this aria sets a tenor from Chorus I antiphonally with Chorus II. Notice that the tenor line flattens occasionally, for example, at m. 33. Does the chorus follow suit?

No. 33, in e minor, is an extraordinary piece that, though labeled an aria [duetto], may best be considered a kind of chorale chorus. It is a duet between a soprano and alto from Chorus I, but also includes important interjections by Chorus II. There are any number of musical details ripe for interpretation. For example, what can we make of the ligatures (tied notes that then resolve) in the opening orchestral counterpoint? How are we to understand the interruptions of the soloist by Chorus II? What is the meaning of their question, the grand pause at m. 104, the shift of key, and even the “answer” to their question?

4. Nos. 36 and 41.

No. 36, in b minor, also interweaves solo sections and choral sections with Chorus II. Its structure, however, is more akin to an aria. We also should note that this piece is a Sarabande. Or perhaps we should say that the part associated with the alto soloist from Chorus I is in Sarabande form, for the piece changes rhythmically and texturally whenever Chorus II enters.

No. 41, in a minor, reflects on Jesus’ patience in the face of accusations against him. Notice, even in the first two measures, an alternating musical pattern, the first legato and rhythmically even, and the second syncopated and far more emotionally fraught. How well does this witness hold up “under pressure?” Also, note that this aria does not follow a strict A-B-A form.

Bach's *Matthew Passion*

5. Nos. 46 and 47.

No. 46, a recitative, articulates an extremely poignant and spiritually charged moment of the Passion. Notice that Peter's third denial of Jesus begins with the interval from F#-D, the first two notes of the extraordinary piece that follows it, No. 47.

No. 47, a Siciliane in b minor, might well be the most beautiful music, certainly the most famous music, of the entire Matthew Passion. It occupies a central moment of the story, and represents what arguably is the core of Christianity – the *Miserere*. But can despair possibly be so ravishing? How do the speechless solo violin and the vocal line relate to each other? Also consider the variety of minor scales you have learnt (the natural, the harmonic, and the melodic minor) and how Bach employs them here.

Nos. 51 and 58.

No. 51, in G Major, follows Judas' attempt to give back the pieces of silver paid to him for betraying Jesus. Does the music fit the words? How?

No. 58, in a minor, follows the governor's query about "what evil hath he done" and an elaborate recitative that reflects on that question. What perspective is this piece articulating? Why is the musical accompaniment without any lower-voiced instruments? How shall we characterize the melody, with its fermata (i.e., held notes)?

7. Chorales 21, 23, 53, 63, 72.

These chorales all utilize the same melody, one well known to a Lutheran congregation. If you listen to each of these chorales (or a subset, but be sure to listen to #72!), what overall effect do you hear? What is Bach attempting to achieve in having the congregation sing this hymn repeatedly, albeit in these changed ways? Also, consider the melody by itself, in its own right.

8. Nos. 70, 75 and 78.

No. 70, in E-Flat Major, is an extremely odd piece. Is the character of this piece in keeping with what you would expect for a crucifixion scene? What central image has Bach borrowed from the aria text? Notice that Chorus II returns with the same questions they asked in No. 1, the opening chorus.

No. 75 may also be more significant than it appears at first. Is the meter not the same as the opening chorus of the Passion? But what sort of "closure" might this aria offer us?

No. 78, the finale, in c minor, brings back both Choruses. How are we to understand sleep in this piece? In what way is this piece the conclusion of the *Passion*?

Johann Sebastian Bach: *St. Matthew Passion*:

Matthäus-Passion
Passio Domini nostri J.C. secundum
Evangelistam Matthæum
(1737)

Libretto by Picander, Mt 26-27 et al.

St Matthew Passion
The Passion of our Lord Jesus Christ
according to the Evangelist Matthew
Music by Johann Sebastian Bach

Prima Parte

Nr. 1 Chorus

Kommt, ihr Töchter, helft mir klagen.
Sehet! Wen? Den Bräutigam.
Seht ihn? Wie? Als wie ein Lamm.
Sehet? Was? Seht die Geduld.
Seht? Wohin? Auf unser Schuld.
Sehet ihn aus Lieb und Huld,
Holz zum Kreuze selber tragen.

O Lamm Gottes unschuldig
Am Stamm des Kreuzes geschlachtet.
Allzeit erfund'n geduldig
wiewohl du warest verachtet.
All Sünd hast du getragen,
sonst müßten wir verzagen.
Erbarm dich unser O Jesu!

Nr. 2 Recitativo

Da Jesus diese Rede vollendet hatte, sprach er zu seinen Jüngern, "Ihr wisset, daß nach zweien Tagen Ostern wird, und des Menschen Sohn wird überantwortet werden, daß er gekreuzigt werde."

Nr. 3 Choral

Herzliebster Jesu, was hast du verbrochen,
Daß man ein solch scharf Urteil hat gesprochen?
Was ist die Schuld, in was für Missetaten
Bist du geraten?

Nr. 4 Recitativo

Da versammelten sich die Hohenpriester und Schriftgelehrten, und die Ältesten im Volk in den Palast des Hohenpriesters, der da hieß Caiphas; und hielten Rat, wie sie Jesum mit Listen griffen und töteten. Sie Sprachen aber:

Part One

No. 1 Chorus

Come, you daughters, help me lament.
Behold! Whom? The Bridegroom.
Behold Him! How? Like a Lamb.
Behold! What? Behold His patience.
Behold! Where, where? Behold our guilt.
Behold Him, out of love and graciousness, Himself carrying the wood of the Cross.

O guiltless Lamb of God
Slaughtered on the stem of the Cross.
Always found patient,
How wast Thou despised!
All sin hast Thou borne
Else we must have despaired.
Have mercy upon us, O Jesus!

No. 2 Recitative

And it came to pass when Jesus had finished all these sayings, he said unto his disciples, "Ye know that after two days is the feast of the passover, and the son of man is betrayed to be crucified."

No. 3 Chorale

Beloved Jesus, what hast Thou done wrong
That they have pronounced so hard a sentence?
What is Thy guilt, into what sort of misdeeds
Hast Thou fallen?

No. 4 Recitative

Then assembled together the chief priests, and the scribes, and the elders of the people, unto the palace of the high priest who was called Caiaphas, and consulted that they might take Jesus by subtlety and kill him. But they said:

Johann Sebastian Bach: *St. Matthew Passion*:

Nr. 5 Chorus

Ja nicht auf das Fest, in Aufruhr werde im Volk!

Nr. 6 Recitativo

Da nun Jesus war zu Bethanien, im Hause Simonis des Aussätzigen, trat zu ihm ein Weib, das hatte ein Glas mit köstlichem Wasser, und goß es auf sein Haupt, da er zu Tische saß. Da das seine Jünger sahen, wurden sie unwillig, und sprachen:

Nr. 7 Chorus

Wozu dienet dieser Unrat? Dieses Wasser hatte mögen teuer verkauft, und den Armen gegeben werden.

Nr. 8 Recitativo

Da das Jesus merkete, sprach er zu ihnen, "Was bekümmert ihr das Weib? Sie hat ein gut Werk an mir getan! Ihr habt allezeit Arme bei euch, mich aber habt ihr nicht allezeit. Da sie dies Wasser hat auf meinen Leib gegossen, hat sie getan, daß man mich begraben wird. Wahrlich, ich sage euch: Wo dies Evangelium geprediget wird in der ganzen Welt, da wird man auch sagen zu ihrem Gedächtnis, was sie getan hat."

Nr. 9 Recitativo (Alto)

Du lieber Heiland du,
Wenn deine Jünger töricht streiten,
Daß dieses fromme Weib
Mit Salben deinen Leib
Zum Grabe will bereiten;
So lasse mir inzwischen zu,
Von meiner Augen Tränenflüssen
Ein Wasser auf dein Haupt zu gießen.

No. 5 Chorus

Not on the feast day, lest there be an uproar among the people!

No. 6 Recitative

Now when Jesus was in Bethany, in the house of Simon the leper, there came unto him a woman having an alabaster box of very precious ointment, and poured it on his head as he sat at meat. But when his disciples saw it, they had indignation, saying:

No. 7 Chorus

To what purpose is this waste? For the ointment might have been sold for much, and given to the poor.

No. 8 Recitative

When Jesus understood it, he said unto them, "Why trouble ye the woman? For she hath wrought a good work upon me. For ye have the poor always with you; but me ye have not always. For in that she hath poured this ointment on my body, she did it for my burial. Verily I say unto you, wheresoever this gospel shall be preached in the whole world, there shall also this, what this woman hath done, be told for a memorial of her."

No. 9 Recitative (Alto)

Thou dear Redeemer,
When Thy disciples foolishly quarrel
Because this pious woman
With ointment Thy body
Would prepare for the grave,
Then grant the while that I
From my eye's streams of tears
May pour water upon Thy head.

Nr. 10 Aria (Alto)

Buß und Reu,
Knirscht das Sündenherz entzwei
Daß die Tropfen meiner Zähren
Angenehme Spezerei,
Treuer Jesu, dir gebären.

Nr. 11 Recitativo

Da ging hin der Zwölfen einer, mit Namen Judas Ischarioth, zu den Hohenpriestern, und sprach, "Was wollt ihr mir geben? Ich will ihn euch verraten." Und sie boten ihm dreißig Silberlinge. Und von dem an suchte er Gelegenheit, daß er ihn verriete.

Nr. 12 Aria (Soprano)

Blute nur, du lieber Herz!
Ach, ein Kind, das du erzogen,
Das an deiner Brust gesogen,
Droht den Pfleger zu ermorden,
Denn es ist zur Schlange worden.

Nr. 13 Recitativo

Aber am ersten Tage der süßen Brot traten die Jünger zu Jesu, und sprachen zu ihm:

Nr. 14 Chorus

Wo willst du, daß wir dir bereiten das Osterlamm zu essen?

Nr. 15 Recitativo

Er sprach, "Gehet hin in die Stadt zu Einem, und sprechet zu ihm: Der Meister läßt dir sagen, 'Meine Zeit is hier, ich will bei dir die Ostern halten mit meinen Jüngern.'" Und die Jünger täten, wie ihnen Jesus befohlen hatte, und bereiteten das Osterlamm. Und am Abend satzte er sich zu Tische mit den Zwölfen. Und da sie aßen, sprach er, "Wahrlich, ich sage euch, Einer unter euch wird mich verraten." Und sie wurden sehr betrübt, und huben an, ein Jeglicher unter ihnen, und sagten zu ihm,

No. 10 Aria (Alto)

Penance and remorse
Grind the sinful heart in twain.
May the drops of my tears
An acceptable anointing
Be to Thee, faithful Jesus.

No. 11 Recitative

Then one of the twelve, called Judas Iscariot, went unto the chief priests, and said unto them, "What will ye give me, and I will deliver him unto you?" And they covenanted with him for thirty pieces of silver. And from that time he sought opportunity to betray him.

No. 12 Aria (Soprano)

Bleed on, dear heart.
Ah, a child that you raised,
That sucked at your breast,
Threatens to murder its guardian,
For it has become a serpent.

No. 13 Recitative

Now on the first day of the feast of unleavened bread the disciples came to Jesus, saying unto him:

No. 14 Chorus

Where wilt thou that we prepare for thee to eat the Passover?

No. 15 Recitative

And he said, "Go into the city to such a man, and say unto him, 'The Master saith, 'My time is at hand: I will keep the passover at thy house with my disciples.'" And the disciples did as Jesus had appointed them, and they made ready the passover. Now when the evening was come he sat down with the twelve. And as they did eat, he said, "Verily I say unto you, that one of you shall betray me." And they were exceedingly sorrowful, and began every one of them to say unto him,

Johann Sebastian Bach: *St. Matthew Passion:*

Chorus

Herr bin ich's?

Nr. 16 Choral

Ich bin's, ich sollte büßen,
An Händen und an Füßen
Gebunden in der Höll'.
Die Geißeln und die Banden,
Und was du ausgestanden,
Das hat verdienet meine Seel.

Nr. 17 Recitativo

Er antwortete und sprach, "Der mit der Hand mit mir in die Schüssel tauchet, der wird mich verraten. Des Menschen Sohn gehet zwar dahin, wie von ihm geschrieben stehet; doch wehe dem Menschen, durch welchen des Menschen Sohn verraten wird. Es wäre ihm besser, daß derselbige Mensch noch nie geboren wäre." Da antwortete Judas, der ihm verriet, und sprach, "Bin ich's, Rabbi?" Er sprach zu ihm, "Du sagest's." Da sie aber aßen, nahm Jesus das Brot, dankete und brach's und gab's den Jüngern und sprach, "Nehmet, aßet; das ist mein Leib." Und er nahm den Kelch und dankete, gab ihnen den, und sprach, "Trinket alle daraus; das ist mein Blut das neuen Testaments, welches vergossen wird für viele, zur Vergebung der Sünden. Ich sage euch: Ich werde von nun an nicht mehr von diesem Gewächs des Weinstocks trinken, bis an den Tag, da ich's neu trinken werde mit euch in meines Vaters Reich."

Nr. 18 Recitativo (Soprano)

Wie wohl mein Herz in Tränen schwimmt,
Daß Jesus von mir Abschied nimmt,
So macht mich doch sein Testament erfreut.
Sein Fleisch und Blut, o Kostbarkeit,
Vermacht er mir in meine Hände.
Wie er es auf der Welt mit denen Seinen
Nicht böse können meinen,
So liebt er sie bis an das Ende.

Chorus

Lord, is it I?

No. 16 Chorale

It is I, I should atone,
My hands and feet
Bound in hell.
The scourges and the fetters,
And all that Thou didst endure,
That has my soul earned.

No. 17 Recitative

And he answered and said, "He that dippeth his hand with me in the dish, the same shall betray me. The son of man goeth as it is written of him: but woe unto that man by whom the Son of man is betrayed! It had been good for that man if he had not been born." Then Judas, which betrayed him, answered and said, "Master, is it I?" He said unto him, "Thou hast said." And as they were eating, Jesus took bread, and blessed it, and brake it, and gave it to the disciples, and said, "Take, eat; this is my body." And he took the cup, and gave thanks, and gave it to them, saying, "Drink ye all of it; for this is my blood of the new testament, which is shed for many for the remission of sins. But I say unto you: I will not drink henceforth of this fruit of the vine, until that day when I drink it new with you in my Father's kingdom."

No. 18 Recitative (Soprano)

Although my heart swims in tears
Because Jesus takes leave of us,
Yet his testament makes me glad.
His flesh and blood, o preciousness,
He bequeaths into my hands.
As he, in the world, with his own
Could not think evil,
So he loves them to the end.

Nr. 19 Aria (Soprano)

Ich will dir mein Herze schenken,
Senke dich, mein Heil, hinein.
Ich will mich in dir versenken,
Ist dir gleich die Welt zu klein,
Ei so sollst du mir allein
Mehr als Welt und Himmel sein.

Nr. 20 Recitativo

Und da sie den Lobgesang gesprochen hatten, gingen sie hinaus an den Ölberg. Da sprach Jesus zu ihnen, "In dieser Nacht werdet ihr euch alle ärgern an mir. Denn es stehet geschrieben: Ich werde den Hirten schlagen, und die Schafe der Herde werden sich zerstreuen. Wann ich aber auferstehe, will ich vor euch hingehen in Galiläam."

Nr. 21 Choral

Erkenne mich, mein Hüter,
Mein Hirte, nimm mich an,
Von dir, Quell aller Güter,
Ist mir viel Gut's getan.
Dein Mund hat mich gelabett
Mit Milch und süßer Kost,
Dein Geist hat mich begabet
Mit mancher Himmelsslust.

Nr. 22 Recitativo

Petrus aber antwortete, und sprach zu ihm, "Wenn sie auch alle sich an dir ärgerten, so will ich doch mich nimmermehr ärgern." Jesus sprach zu ihm, "Wahrlich, ich sage dir: In dieser Nacht, ehe der Hahn krähet, wirst du mich dreimal verleugnen." Petrus sprach zu ihm, "Und wenn ich mit dir sterben müßte, so will ich dich nicht verleugnen." Desgleichen sagten auch alle Jünger.

No. 19 Aria (Soprano)

I will give my heart to thee;
Sink Thyself in it, my Salvation.
I will submerge myself in Thee.
And if the world is too small for Thee,
Ah, then for me alone shalt Thou
Be more than world and Heaven.

No. 20 Recitative

And when they had sung an hymn, they went out into the Mount of Olives. Then Saith Jesus unto them, "All ye shall be offended because of me this night: for it is written, I will smite the shepherd, and the sheep of the flock shall be scattered abroad. But after I am risen again, I will go before you into Galilee."

No. 21 Chorale

Know me, my Keeper,
My shepherd, take me to Thee.
By Thee, source of all good things,
Much good has befallen me.
Thy mouth has refreshed me
With milk and sweetmeats.
Thy spirit has favoured me
With many a heavenly longing.

No. 22 Recitative

Peter answered and said unto him, "Though all men shall be offended because of thee, yet I will never be offended." Jesus said unto him, "Verily I say unto you, that this night, before the cock crows, thou shalt deny me thrice." Peter said unto him, "Though I should die with Thee, yet I will not deny Thee." Likewise also said all the disciples.

Nr. 23 Choral

Ich will hier bei dir stehen:
Verachte mich doch nicht!
Von dir will ich nicht gehen,
Wenn dir dein Herze bricht.
Wenn dein Herz wird erblassen
Im letzten Todesstoß
Alsdenn will ich dich fassen
In meinen Arm und Schoß.

Nr. 24 Recitativo

Da kam Jesus mit ihnen zu einem Hofe, der Hieß Gethsemane, und sprach zu seinen Jüngern, "Setzet euch hier, bis daß ich dorthin gehe, und bete." Und nahm zu sich Petrum, und die zween Söhne Zebedäi, und fing an zu trauern und zu zagen. Da sprach Jesus zu ihnen, "Meine Seele ist betrübt bis an den Tod; bleibt hier und wachtet mit mir."

Nr. 25 Recitativo (Tenor mit Chorus)

O Schmerz, hier zittert das gequälte Herz!
Wie sinkt es hin, wie bleicht sein Angesicht!
Der Richter führt ihn vor Gericht,
Da ist kein Trost, kein Helfer nicht.
Er leidet alle Höllenqualen,
Er soll für fremden Raub bezahlen.
Ach könnte meine Liebe dir,
Mein Heil, dein Zittern und dein Zagen vermindern
oder helfen tragen
Wie gerne blieb ich hier!
Was ist die Ursach aller solcher Plagen?
Ach meine Sünden haben dich geschlagen!
Ich, ach Herr Jesu, habe dies verschuldet,
Was du erduldet!

Nr. 26 Aria (Tenor mit Chorus)

Ich will bei meinem Jesu wachen
So schlafen unsre Sünden ein,
Meinen Tod büßet seiner Seelen Not,
Sein Trauren machet mich voll Freuden.
Drum muß uns sein verdienstlich
Leiden recht bitter und doch süße sein

No. 23 Chorale

I would stand here beside Thee;
Do not then scorn me!
From Thee I will not depart
Even if Thy heart is breaking.
When Thy heart shall grow pale
In the last pangs of death,
Then I will grasp Thee
In my arms and lap.

No. 24 Recitative

Then cometh Jesus with them unto a place called Gethsemane, and saith unto the disciples, "Sit ye here, while I go and pray yonder." And he took with him Peter and the two sons of Zebedee, and began to be sorrowful and very heavy. Then saith he unto them, "My soul is exceedingly sorrowful, even unto death: tarry ye here, and watch with me."

No. 25 Recitative (Tenor with Chorus)

O sorrow! Here trembles the anxious heart!
How it sinks! How pales his countenance!
The judge leads him to judgment,
There is no comfort, no helper.
He suffers all the pains of hell,
He must pay for others' robbery.
Ah, could my love for Thee,
My Saviour, Thy fear and trembling diminish or
help to bear,
How gladly would I remain here!
What is the cause of all such woes?
Ah my sins have felled Thee.
Ah, Lord Jesus, I have deserved this
Which Thou art suffering!

No. 26 Aria (Tenor with Chorus)

I will watch beside my Jesus.
Then our sins go to sleep.
His soul's distress atones for my death. His mourning
makes me full of joy.
So his meritorious Passions must for us
Be truly bitter and yet sweet.

Johann Sebastian Bach: *St. Matthew Passion*:

Nr. 27 Recitativo

Und ging hin ein wenig, fiel nieder auf sein Angesicht, und betete, und sprach, "Mein Vater, ist's möglich, so gehe dieser Kelch von mir; doch nicht wie ich will, sondern wie du willst."

Nr. 28 Recitativo (Bass)

Der Heiland fällt vor seinem Vater nieder,
Dadurch erhebt er mich und alle von unserm
Falle Hinauf zu Gottes Gnade wieder.
Er ist bereit, den Kelch, des Todes Bitterkeit zu trinken
welchen Sünden dieser Welt
Gegossen sind und häßlich stinken,
Weil es dem lieben Gott gefällt.

Nr. 29 Aria (Bass)

Gerne will ich mich bequemen,
Kreuz und Becher anzunehmen,
Trink ich doch dem Heiland nach,
Denn sein Mund, der Milch und Honig fließet,
Hat den Grund und des Leidens herbe Schmach
Durch den ersten Trunk versüßet.

Nr. 30 Recitativo

Und er kam zu seinen Jüngern, und fand sie schlafend, und sprach zu ihnen, "Könnet ihr denn nicht eine Stunde mit mir wachen? Wachet und betet, daß ihr nicht in Anfechtung fallet. Der Geist ist willig, aber das Fleisch ist schwach." Zum andern Mal ging er hin, betete, und sprach, "Mein Vater, ist's nicht möglich, daß dieser Kelch von mir gehe, ich trinke ihn denn; so geschehe deine Wille."

Nr. 31 Choral

Was mein Gott will, das g'scheh allzeit,
Sein Will der ist der beste;
Zu helfen den'n er ist bereit,
Die an ihn glauben feste;
Er hilft aus Not,
Der fromme Gott,
Und züchtiget mit Maßen.
Wer Gott vertraut, fest auf ihn baut,
Den will er nicht verlassen.

No. 27 Recitative

And he went a little farther, and fell on his face, and prayed, saying, "O my Father, if it be possible, let this cup pass from me: nevertheless, not as I will, but as thou wilt."

No. 28 Recitative (Bass)

The Saviour falls down before his Father,
Thereby he raises me and all men from our
fall Upward to God's grace again.
He is ready to drink the cup, death's bitterness,
Wherein the sins of this world
Are poured and stink odiously,
Because it pleases dear God.

No. 29 Aria (Bass)

I will gladly submit myself
To take up this cross and cup,
Since I drink as my Saviour did.
For his mouth, which flows of milk and honey,
Has made the cause and the bitter shame of suffering
Sweet through his first draught.

No. 30 Recitative

And he cometh unto the disciples, and findeth them asleep, and saith unto Peter, "What, could ye not watch with me one hour? Watch and pray, that ye enter not into temptation: the spirit indeed is willing, but the flesh is weak." He went away again the second time, and prayed, saying, "O my Father, if this cup may not pass away from me, except I drink it, thy will be done."

No. 31 Chorale

What my God wills, may it ever befall.
His will it is the best,
He is ready to help them
That firmly believe in him;
He helps them in time of need,
God in his goodness,
And chastises in measure.
Who trusts in God,
builds firmly on him, He will not forsake him.

Nr. 32 Recitativo

Und er kam und fand sie aber schlafend, und ihre Augen waren voll Schlaf's. Und er ließ sie, und ging abermals hin, und betete zum dritten Mal, und redete dieselbigen Worte. Da kam er zu seinen Jüngern, und sprach zu ihnen, "Ach! wollt ihr nun schlafen und ruhen? Siehe, die Stunde ist hier, daß des Menschen Sohn in der Sünder Hände überantwortet wird. Stehet auf, lasset uns gehen; siehe, er ist da, der mich verrät." Und als er noch redete, siehe, da kam Judas, der Zwölfen einer, und mit ihm eine große Schar, mit Schwertern und mit Stangen, von den Hohenpriestern und Ältesten des Volks. Und der Verräter hatte ihnen ein Zeichen gegeben, und gesagt: Welchen ich küssem werde, der ist's, den greifet. Und alsbald trat er zu Jesum, und sprach, "Gegrüßet seist du, Rabbi!" Und küssete ihn. Jesus aber sprach zu ihm, "Mein Freund, warum bist du gekommen?" Da traten sie hinzu, und legten die Hände an Jesum, und griffen ihn.

Nr. 33 Duet (Soprano und Alto mit Chorus)

So ist mein Jesus nun gefangen.
Mond und Licht
Ist vor Schmerzen untergangen,
Weil mein Jesus ist gefangen.
Sie führen ihn, er ist gebunden.

Laßt ihn! Haltet! Bindet nicht!
Sind Blitze, sind Donner in Wolken verschwunden?
Eröffne den feurigen Abgrund, O Holle;
zertrümmre, verderbe, verschlinge, zerschelle
Mit plötzlicher Wut
Den falschen Verräter, das mördrische Blut.

No. 32 Recitative

And he came and found them asleep again: for their eyes were heavy. And he left them, and went away again, and prayed the third time, saying the same words. Then cometh he to his disciples, and saith unto them, "Sleep on now, and take your rest: behold, the hour is at hand, and the Son of man is betrayed into the hands of sinners. Rise, let us be going; behold, he is at hand that doth betray me." And while he yet spake, lo, Judas, one of the twelve, came, and with him a great multitude with swords and staves, from the chief priests and elders of the people. Now he that betrayed him gave them a sign, saying, "Whomsoever I shall kiss, that same is he: hold him fast." And forthwith he came to Jesus, and said, "Hail master," and kissed him. And Jesus said unto him, "Friend, wherefore art thou come?" Then they came, and laid hands on Jesus, and took him.

No. 33 Duet (Soprano and Alto with Chorus)

So is my Jesus captured now.
Moon and light
Are quenched for sorrow,
Because my Jesus is captured.
They lead him away, he is bound.

Loose him! Stop! Do not bind him!
Has Lightning, has thunder vanished in the clouds?
Open your fiery pit, O Hell,
Wreck, ruin, engulf, shatter
With sudden wrath
The false betrayer, the murderous blood.

Nr. 34 Recitativo

Und siehe, einer aus denen, die mit Jesu waren, reckete die Hand aus, und schlug des Hohenpriesters Knecht, und hieb ihm ein Ohr ab. Da sprach Jesus zu ihm, "Stecke dein Schwert an seinen Ort; denn wer das Schwert nimmt, der soll durchs Schwert umkommen. Oder meينest du, daß ich nicht könnte meinen Vater bitten, daß er mir zuschickte mehr denn zwölf Legion Engel? Es muß also gehen." Zu der Stund sprach Jesus zu den Scharen, "Ihr seid ausgegangen, als zu einem Mörder, mit Schwerten und mit Stangen, mich zu fahen; bin ich doch täglich bei euch gesessen, und habe gelehret im Tempel, und ihr habt mich nicht gegriffen. Aber das ist alles geschehen, daß erfüllt würden die Schriften der Propheten." Da verließen ihn alle Jünger, und flohen.

Nr. 35 Choral

O Mensch, bewein' dein Sünde Groß,
Darum Christus sein's Vaters Schoß
Äußert, und kam auf Erden.
Von einer Jungfrau rein und zart
Für uns er hei geboren ward,
Er wollt der Mittler werden.
Den'n Toten er das Leben gab,
Und legt dabei all Krankheit ab,
Bis sich die Zeit herdrange,
Daß er für uns geopfert würd,
Trug unsrer Sünden schwere Bürd'
Wohl an dem Kreuze lange.

No. 34 Recitative

And behold, one of them which were with Jesus stretched out his hand, and drew his sword, and struck a servant of the high priest, and smote off his ear. Then said Jesus unto him, "Put up again thy sword unto its place: for all they that take the sword shall perish with the sword. Thinkest thou that I cannot now pray to my Father, and he shall presently give me more than twelve legions of angels? But how then shall the scriptures be fulfilled, that thus it must be?" And that same hour said Jesus to the multitudes, "Are ye come out as against a thief with swords and staves for to take me? I sat daily with you teaching in the temple, and ye laid no hold on me. But all this was done, that the scriptures of the prophets might be fulfilled." Then all the disciples forsook him, and fled.

No. 35 Chorale

O man, bewail your great sin:
For this, Christ from his Father's bosom
Went forth and came to earth.
Of a Virgin pure and gentle
He was born here for our sake,
He was willing to mediate.
To the dead he gave life
And conquered all sickness
Until the time came
That he should be sacrificed for us,
Carry the heavy burden of our sins
Upon the Cross itself.

Parte Secunda

Nr. 36 Aria (Alto mit Chorus)

Ach! nun ist mein Jesus hin!
Ist es möglich, kann ich schauen?
Ach! mein Lamm in Tigerklauen!
Ach! Wo ist mein Jesus hin?
Ach! Was soll ich der Seele sagen,
Wenn sie mich wird ängstlich fragen?
Ach! Wo ist mein Jesus hin?

Wo ist dein Freund hingegangen
O du Schönste unter den Weibern?
Wo hat sich dein Freund hingewandt?
So wollen wir mit dir ihn suchen.

Nr. 37 Recitativo

Die aber Jesum gegriffen hatten, führten ihn zu dem Hohenpriester Caiphas, dahin die Schrift gelehrt und Ältesten sich versammlet hatten. Petrus aber folgte ihm nach von ferne, bis in den Palast des Hohenpriesters; und ging hinein, und setzte sich bei den Knechten, auf daß er sähe, wo es hinaus wollte. Die Hohenpriester aber und Ältesten, und der ganze Rat suchten falsches Zeugnis wider Jesum, auf daß sie ihn töten, und funden keines.

Nr. 38 Choral

Mir hat die Welt trüglich gericht't
Mit Lügen und mit falschem G' dicht,
Viel Netz und heimlich Stricken.
Herr, nimm mein wahr
In dieser G'fahr,
B'hüt mich vor falschen Tücken.

Nr. 39 Recitativo

Und wiewohl viel falsche Zeugen herzutragen, funden sie doch keins. Zuletzt traten herzu zween falsche Zeugen, und sprachen, "Er hat gesagt, 'Ich kann den Tempel Gottes abbrechen und in dreien Tagen denselben bauen.'" Und der Hohenpriester stund auf und sprach zu ihm, "Antwortest du nichts zu dem, das diese wider dich zeugen?" Aber Jesus schwieg stille.

Part Two

No. 36 Aria (Alto with Chorus)

Ah! My Jesus has gone now.
Is it possible? Can I see it?
Ah! My lamb in the tiger's claws!
Ah! Where has my Jesus gone?
Ah! What shall I tell my soul
When it asks me full of fear?
Ah! Where has my Jesus gone?

Whither then is thy friend gone,
O thou fairest among women?
Whither has thy friend strayed?
Then we will seek him with thee.

No. 37 Recitative

And they that had laid hold of Jesus led him away to Caiaphas the high priest, where the scribes and the elders were assembled. But Peter followed him afar off unto the high priest's palace, and went in, and sat with the servants, to see the end. Now the chief priests, and elders, and all the council, sought false witness against Jesus, to put him to death. But found none.

No. 38 Chorale

The world has judged me deceitfully
With lies and with false utterance,
Many a snare and secret plot.
Lord, guard me
In this danger,
Shield me from false deceits

No. 39 Recitative

Yea, though many false witnesses came, yet found they none. At the last came two false witnesses, and said, "This fellow said, 'I am able to destroy the temple of God, and to build it in three days.'" And the high priest arose, and said unto him, "Answerest thou nothing? What is it which these witness against thee?" But Jesus held his peace.

Nr. 40 Recitativo (Tenor)

Mein Jesus schweigt
Zu falschen Lügen stille,
Um uns damit zu zeigen,
Daß sein erbarmensvoller Wille
Wor uns zum Leiden sei geneigt,
Und daß wir in dergleichen Pein
Ihm sollen ähnlich sein,
Und in Verfolgung stille schweigen.

Nr. 41 Aria (Tenor)

Geduld, Geduld!
Wenn Mich falsche Zungen stechen,
Leid ich wider meine Schuld
Schimpf und Spott,
Ei! so mag der liebe Gott
Meines Herzens Unschuld rächen.

Nr. 42 Recitativo

Und der Hohenpriester antwortete, und sprach zu ihm, "Ich beschwöre dich bei dem lebendigen Gott, daß du uns sagest, ob du seiest Christus, der Sohn Gottes." Jesus sprach zu ihm, "Du sagest's. Doch sage ich euch: Von nun an wird's geschehen, daß ihr sehen werdet des Menschen Sohn sitzen zur Rechten der Kraft, und kommen in den Wolken des Himmels." Da zerriß der Hohenpriester seine Kleider, und sprach, "Er hat Gott gelästert; was dürfen wir weiter Zeugnis? Siehe, jetzt habt ihr seine Gotteslästerung gehöret. Was dünket euch?" Sie antworteten, und sprachen, "Er ist des Todes schuldig!"

Nr. 43 Recitativo

Da speieten sie aus in sein Angesicht, und schlugen ihn mit Fäusten. Etliche aber schlugen ihn ins Angesicht, und sprachen:

Chorus

Weissage uns, Christe, wer ist's der dich schlug?

No. 40 Recitative (Tenor)

My Jesus holds his peace
Before false lies,
So as to show us
That his merciful will
Is bent on suffering for our sake;
And that, in like agony,
We should be like him,
And hold our peace in time of persecution.

No. 41 Aria (Tenor)

Patience, patience,
Even when false tongues sting me.
Contrary to my guilt I suffer
Abuse and mockery.
Ah, then, may dear God
Avenge my heart's innocence.

No. 42 Recitative

And the high priest answered and said unto him, "I adjure thee by the living God, that thou tell us whether thou be the Christ, the Son of God." Jesus saith unto him, "Thou hast said: nevertheless, I say unto you, hereafter shall ye see the Son of man sitting on the right hand of power, and coming in the clouds of heaven." Then the high priest rent his clothes, saying, "He hath spoken blasphemy; what further need have we of witnesses? Behold, now ye have heard his blasphemy. What think ye?" They answered and said, "He is of death deserving."

No. 43 Recitative

Then did they spit in his face, and buffeted him and others smote him with the palms of their hands, saying:

Chorus

Prophecy unto us, Thou Christ, who is he that smote thee?

Nr. 44 Choral

Wer hat dich so geschlagen,
Mein Heil, und dich mit Plagen
So übel zugericht?
Du bist ja nicht ein Sünder,
Wie wir und unsre Kinder;
Von Missetaten weißt du nicht

Nr. 45 Recitativo

Petrus aber saß draußen im Palast; und es trat zu ihm eine Magd, und sprach, "Und du warest auch mit dem Jesu aus Galiläa." Er leugnete aber vor ihnen allen, und sprach, "Ich weiß nicht, was du sagest." Als er aber zur Tür hinaus ging, sahe ihn eine andere, und sprach zu denen, die da waren, "Dieser war auch mit dem Jesu von Nazareth." Und er leugnete abermal, und schwur dazu, "Ich kenne des Menschen nicht." Und über eine kleine Weile traten hinzu, die da standen, und sprachen zu Petro, "Wahrlich, du bist auch einer von denen, denn deine Sprache verrat dich."

Nr. 46 Recitativo

Da hub er an sich zu verfluchen und zu schworen, "Ich kenne des Menschen nicht." Und alsbald krähete der Hahn. Da dachte Petrus an die Worte Jesu, da er zu ihm sagte, "Ehe der Hahn krähen wird, wirst du mich dreimal verleugnen." Und ging heraus, und weinete bitterlich.

Nr. 47 Aria (Alto)

Erbarme dich, Mein Gott,
Um meiner Zähen willen;
Schau hier, Herz und Auge
Weint vor dir bitterlich.
Erbarme dich!

No. 44 Chorale

Who has buffeted Thee so,
My Salvation, and with torments
So harshly used Thee?
Du bist ja nicht ein Sünder,
Wie wir und unsre Kinder;
Von Missetaten weißt du nicht.

No. 45 Recitative

Now Peter sat without in the palace: and a damsels came unto him, saying, "Thou also wast with Jesus of Galilee." But he denied before them all, saying, "I know not what thou sayest." And when he was gone out into the porch, another maid saw him, and said unto them that were there, "This fellow was also with Jesus of Nazareth." and again he denied with an oath, "I do not know the man." And after a while came unto him they that stood by, and said to Peter, "Surely thou also art one of them for thy speech betrayeth thee."

No. 46 Recitative

Then began he to curse and to swear, saying, "I know not the man." And immediately the cock crew. And Peter remembered the words of Jesus, which said unto him, "Before the cock crow, thou shalt deny me thrice." And he went out, and wept bitterly.

No. 47 Aria (Alto)

Have mercy, my God,
for my tears' sake:
Look hither, heart and eyes
Weep bitterly before Thee.
Have mercy!

Nr. 48 Choral

Bin ich gleich von dir gewichen,
Stell' ich mich doch wieder ein;
hat uns doch dein Sohn verglichen
durch sein ' Angst und Todespein.
Ich verleugne nicht die Schuld,
aber deine Gnad und Huld
ist viel größer als die Sunde,
Die ich stets in mir befinde.

Nr. 49 Recitativo

Des Morgens aber hielten alle Hohenpriester und die Ältesten des Volks einen Rat über Jesum, daß die ihn töteten. Und banden ihn, führten ihn hin, und überantworteten ihn dem Landpfleger Pontio Pilato. Da das sahe Judas, der ihn verraten hatte, daß er verdammt war zum Tode, gereuete es ihn, und brachte her wieder die dreißig Silberlinge den Hohenpriestern und Ältesten, und sprach, "Ich habe übel getan, daß ich unschuldig Blut verraten habe." Sie sprachen, "Was gehet uns das an? da siehe du zu."

Nr. 50 Recitativo

Und er warf die Silberlinge in den Tempel, hub sich davon, ging hin, und erhängte sich selbst. Aber die Hohenpriester nahmen die Silberlinge, und sprachen, "Es taugt nicht, daß wir sie in des Gotteskasten legen, denn es ist Blutgeld."

Nr. 51 Aria (Bass)

Gebt mir meinen Jesum wieder!
Seht das Geld, den Mörderlohn,
Wirft euch der verlorne Sohn
Zu den Füßen nieder.
Gebt mir meinen Jesum wieder!

No. 48 Chorale

Although I have strayed from Thee,
Yet I have returned again,
For Thy Son has reconciled us
Through his agony and mortal pain.
I do not deny my guilt
But Thy grace and favour
Is far greater than the sin
Which I ever confess in myself.

No. 49 Recitative

When the morning was come, all the chief priests and elders of the people took counsel against Jesus to put him to his death. And when they had bound him, they led him away, and delivered him to Pontius Pilate the governor. Then Judas, which had betrayed him, when he saw that he was condemned, repented himself, and brought again the thirty pieces of silver to the chief priests and elders, saying, "I have sinned in that I have betrayed the innocent blood." And they said, "What is that to us? See thou to that."

No. 50 Recitative

And he cast down the pieces of silver in the temple, and departed, and went and hanged himself. And the chief priests took the silver pieces, and said, "It is not lawful for to put them into the treasury, because it is the price of blood."

No. 51 Aria (Bass)

Give me back my Jesus!
See, the money, the wages of murder,
The lost son throws at you
Down at your feet.
Give me back my Jesus!

Nr. 52 Recitativo

Sie hielten aber einen Rat, und kauften einen Töpfers Acker darum, zum Begräbnis der Pilger. Daher ist derselbige Acker genennet der Blutacker, bis auf den heutigen Tag. Da ist erfüllt, das gesagt ist durch den Propheten Jeremias, da er spricht, ‘Sie haben genommen dreißig Silberlinge, damit bezahlet ward der Verkauft, welchen sie kauften von den Kindern Israel; und haben sie gegeben um einen Töpfer Acker; als mir der Herr befohlen hat.’ Jesus aber stand vor dem Landpfleger; und der Landpfleger fragte ihn und sprach, “Bist du der Jüden König?” Jesus aber sprach zu ihm, “Du sagest’s.” Und da er verklagt ward von den Hohenpriestern und Ältesten, antwortete er nichts. Da sprach Pilatus zu ihm, “Hörst nicht, wie hart sie dich verklagen?” Und er antwortete ihm nicht auf ein Wort, also, daß sich auch der Landpfleger sehr verwunderte.

Nr. 53 Choral

Befiehl du deine Wege
Und was dein Herze kränkt
Der allestreusten Pflege
Des, der den Himmel lenkt;
Der Wolken, Luft und Winden
Gibt Wege, Lauf und Bahn,
Der wird auch Wege finde,
Da dein Fuß gehen kann.

No. 52 Recitative

And they took counsel, and bought with them the potter's field to bury strangers in. Wherefore that field was called the field of blood unto this day. Then was fulfilled that which was spoken by Jeremiah the prophet, saying, ‘And they took the thirty pieces of silver, the price of him that was valued, whom they of the children of Israel did value; And gave them for the potter's field, as the lord appointed me.’ And Jesus stood before the governor: and the governor asked him, saying, “Art thou the King of the Jews?” And Jesus said unto him, “Thou sayest.” And when he was accused by the chief priests and elders, he answered nothing. Then said Pilate unto him, “Hearrest thou not how many things they witness against thee?” And he answered him to never a word insomuch that the governor marvelled greatly.

No. 53 Chorale

Commend your way,
And whatever troubles your heart,
To the trustiest care of him,
Who controls the heavens;
He who gives clouds, air, and winds
Their paths, course and track,
He will also find ways
Where your feet can walk

Nr. 54 Recitativo

Auf das Fest aber hätte der Landpfleger
Gewohnheit, dem Volk einen Gefangenen
loszugeben, welchen sie wollten. Er hatte aber zu der
Zeit einen Gefangenen, einen sonderlichen vor
andern, der hieß Barrabas. Und da sie versammlet
waren, sprach Pilatus zu ihnen, "Welchen wollet ihr,
daß ich euch losgebe? Barrabam, oder Jesum, von
dem gesaget wird, er sei Christus." Denn er wußte
wohl, daß sie ihn aus Neid überantwortet hatten.
Und da er auf dem Richtstuhl saß, schickete sein
Weib zu ihm, und ließ ihm sagen, "Habe du nichts
zu schaffen mit diesem Gerechten; ich habe heute
viel erlitten im Traum von seinetwegen." Aber die
Hohenpriester und die Ältesten überredeten das
Volk, daß sie um Barrabam bitten sollten, und Jesum
umbrächten. Da antwortete nun der Landpfleger,
und sprach zu ihnen, "Welchen wollt ihr unter
diesen zweien, den ich euch soll losgeben?" Sie
sprachen, "Barrabam!" Pilatus sprach zu ihnen, "Was
soll ich denn machen mit Jesu, von dem gesagt wird,
er sei Christus?" Sie sprachen, "Laß ihn kreuzigen!"

Nr. 55 Choral

Wie wunderbarlich ist doch diese Strafe!
Der gute Hirte leidet für die Schafe;
Die Schuld bezahlt der Herre, der Gerechte,
Für seinen Knechte!

Nr. 56 Recitativo

Der Landpfleger sagte, "Was hat er denn Übels
getan?"

Nr. 57 Recitativo (Soprano)

Er hat uns allen wohlgetan.
Den Blinden gab er das Gesicht,
Die Lahmen macht' er gehend;
Er sagt' uns seines Vaters Wort,
Er trieb die Teufel fort;
Betrübte hat er aufgericht'
Er nahm die Sunder auf und an;
Sonst hat mein Jesus nichts getan.

No. 54 Recitative

Now at that feast the governor was wont to release
unto the people a prisoner, whom they would. And
they had then a notable prisoner, called Barabbas.
Therefore when they were gathered together, Pilate
said unto them, "Whom will ye that I release unto
you? Barabbas, or Jesus which is called Christ?" For he
knew that for envy they had delivered him. When he
was set down on the judgment his wife sent unto him,
saying, "Have thou nothing to do with that just man:
for I have suffered many things this day in a dream
because of him." But the chief priests and elders
persuaded the multitude that they should ask for
Barabbas, and destroy Jesus. The governor answered
and said unto them, "Whether of the twain will ye that
I release unto you?" They said, "Barabbas!" Pilate saith
unto them, "What shall I do then with Jesus, which is
called Christ?" They all said unto him, "Let him be
crucified!"

No. 55 Chorale

How miraculous indeed is this punishment!
The good Shepherd suffers for the sheep;
The Master, righteous as he is pays the penalty
For his vassals!

No. 56 Recitative

And the governor said, "Why, what evil hath he
done?"

No. 57 Recitative (Soprano)

He has done good to us all.
He gave sight to the blind
The lame he made to walk;
He told us his father's word;
He drove the devils forth.
The wretched he has raised up;
He received and sheltered sinners;
Nothing else has my Jesus done.

Nr. 58 Aria (Soprano)

Aus Liebe will mein Heiland sterben,
Von einer Sünde weiß er nichts.
Daß das ewige Verderben
Und die Stafe des Gerichts
Nicht auf meiner Seele bliebe.

Nr. 59 Recitativo

Sie Schrieen aber noch mehr, und sprach, "Laß ihn kreuzigen!" Da aber Pilatus sahe, daß er nichts schaffete, sondern daß ein viel größer Getümmel ward, nahm er Wasser, und wusch die Hände vor dem Volk, und sprach, "Ich bin unschuldig an dem Blut dieses Gerechten, sehet ihr zu." Da antwortete das ganze Volk, und sprach, "Sein Blut komme über uns und unsre Kinder." Da gab er ihnen Barraban los; aber Jesum ließ er gießeln, und überantwortete ihn, daß er gekreuzigt würde.

Nr. 60 Recitativo (Alto)

Erbarm es Gott!
Hier steht der Heiland angebunden.
O Geißelung, O Schläg, O Wundern!
Ihr Henker, haltet ein!
Erweichet euch der Seelen Schmerz,
Der Anblick solchen Jammers nicht?
Ach ja, ihr habt ein Herz,
Das muß der Martersäule gleich,
Und noch viel härter sein.
Erbarmt euch, haltet ein!

Nr. 61 Aria (Alto)

Können Tränen meiner Wangen
Nichts erlangen.
Oh, so nehmt mein Herz hinein!
Aber laßt es bei den Fluten,
Wenn die Wunden milde bluten,
Auch die Opferschale sein.

No. 58 Aria (Soprano)

Out of love my Saviour is willing to die,
Though he knows nothing of any sin,
So that eternal ruin
And the punishment of judgment
May not rest upon my soul.

No. 59 Recitative

But they cried out the more saying, "Let him be crucified!" When Pilate saw that he could prevail nothing, but that rather a tumult was made, he took water, and washed his hands before the multitude saying, "I am innocent of the blood of this just person; see ye to it." Then answered all the people, and said, "His blood be on us, and on our children." Then released he Barabbas unto them; and when he had scourged Jesus, he delivered him to be crucified.

No. 60 Recitative (Alto)

Have mercy, God!
Here stands the Saviour bound.
O scourging, O blows, O wounds!
You tormentors, cease!
Are you not softened by the pain of your souls,
Nor by the sight of such grief?
Ah yes, you have a heart,
That must be like the whipping post
Or even harder still.
Have mercy, cease!

No. 61 Aria (Alto)

If the tears on my cheeks
Can achieve nothing,
O, then take my heart!
But let it for the streams,
When the wounds bleed gently,
Also be the sacrificial cup.

Nr. 62 Recitativo

Da nahmen die Kriegsknechte das Landpflegers
Jesum zu sich in das Richthaus, und sammelten über
ihn die ganze Schar; und zogen ihn aus, und legeten
ihm einen Purpurmantel an; und flochten eine
Dornenkrone, und setzten sie auf sein Haupt, und
ein Rohr in seine rechte Hand, und beugeten die
Knie vor ihm, und spotteten ihn, und sprachen,
“Gegrüßet, seist du, Jüdenkönig!” Und Speieten ihn
an, und nahmen das Rohr, und schlugen damit sein
Haupt.

Nr. 63 Choral

O Haupt voll Blut und Wunden,
Voll Schmerz und voller Hohn!
O Haupt, zu Spott gebunden
Mit einer Dornenkron!
O Haupt, sonst schön gezieret
Mit höchster Ehr und Zier,
Jetzt aber hoch schimpfieret;
Gegrüßet seist du mir!
Du edles Angesichte,
Vor dem sonst schrickt und scheut
Das große Weltgerichte,
Wie bist du so bespeit!
Wie bist du so erbleichtet,
Wer hat dein Augenlicht,
Dem sonst kein Licht nicht gleichet,
So schändlich zugericht’?

Nr. 64 Recitativo

Und da sie ihn verspottet hatten, zogen sie ihm den
Mantel aus, und zogen ihm seine Kleider an, und
führten ihn hin, daß sie ihn kreuzigten. Und indem
sie hinaus gingen, fanden sie einen Menschen von
Kyrene, mit Namen Simon; den zwangen sie, daß er
ihm sein Kreuz trug.

Nr. 65 Recitativo (Bass)

Ja, freilich will in uns das Fleisch und Blut
Zum Kreuz gezwungen sein;
Je mehr es unsrer Seele gut,
Je herber hegt es ein.

No. 62 Recitative

Then the soldiers of the governor took Jesus into
the common hall, and gathered unto him the whole
band of soldiers, and they stripped him, and put on him
scarlet robe. And when they had
platted a crown of thorns, they put it upon his head,
and a reed in his righthand; and they bowed the
knee before him, and mocked him, saying, “Hail,
King of the Jews!” And they spit upon him, and
took the reed, and smote him on the head.

No. 63 Chorale

O head, full of blood and wounds,
Full of sorrow and full of scoffing!
O head, wreathed for mockery
With a crown of thorns!
O head, once beautifully adorned
With highest honour and renown,
But now highly abused;
Let me hail Thee!
Thou noble countenance,
Before which shrinks and cowers
The great Last Judgment,
How art Thou spat upon!
Art thou pallid?
Who has treated Thine eyes' light,
That no light else can equal,
So shamefully amiss?

No. 64 Recitative

And after that they mocked him, they took the robe
off from him, and put his own raiment on him, and
led him away to crucify him. And as they came out,
they found a man of Cyrene, Simon by name; him they
compelled to bear his cross.

No. 65 Recitative (Bass)

Yes! Gladly is the flesh and blood in us
Compelled to the Cross;
The more it benefits our souls,
The more painfully it weighs.

Nr. 66 Aria (Bass)

Komm, süßes Kreuz, so will ich sagen,
Mein Jesu, gib es immer her,
Wird mir mein Leiden einst zu schwer,
So hilf du mir es selber tragen.

Nr. 67 Recitativo

Und da sie an die Stätte kamen, mit Namen Golgatha, das ist verdeutschet, Schädelstatt, gaben sie ihm Essig zu trinken mit Gallen vermischet; und da er's schmeckte, wollte er's nicht trinken. Da sie ihn aber gekreuziget hatten, teilten sei seine Kleider, und wurfen das Los darum; auf daß erfüllt würde, das gesagt ist durch den Propheten, 'Sie haben meine Kleider unter sich geteilet, und über mein Gewand haben sie das Los geworfen.' Und sie saßen allda, und hüteten sein. Und oben zu seinem Haupte hefteten sie die Ursach seines Todes beschrieben, nämlich: Dies ist Jesus, der Jüden König. Und da wurden zween Mörder mit ihm gekreuziget, einer zur Rechten, und einer zur Linken. Die aber vorüber gingen, lästerten ihn, und schüttelten ihre Köpfe, und sprachen:

Chorus

Der du den Tempel Gottes zerbrichst, und bauest ihn in dreien Tagen, hilf dir selber. Bist du Gottes Sohn, so steig herab vom Kreuz.

Recitativo

Desgleichen auch die Hohenpriester spotteten sein, samt den Schrift gelehrt und Ältesten, und sprachen:

Chorus

Andern hat er geholfen, und kann sich selber nicht helfen. Ist er der König Israels, so steige er nun vom Kreuz, so wollen wir ihm glauben. Er hat Gott vertrauet, der erlöse ihn nun, lüstet's ihn; denn er hat gesagt: Ich bin Gottes Sohn.

No. 66 Aria (Bass)

Come, sweet Cross, I will say then;
My Jesus, give it always to me,
Should my pain become too heavy,
Then help me to carry it myself.

No. 67 Recitative

And when they were come unto a place called Golgotha, that is to say, a place of a skull, they gave him vinegar to drink and mingled with gall. And when he had tasted thereof, he would not drink. And they crucified him, and parted his garments, casting lots: that it might be fulfilled which was spoken by the prophet, 'They parted my garments among them, and upon my vesture did they cast lots.' And sitting down they watched him there. And set up over his head his accusation written: This is Jesus, King of the Jews. Then were there two thieves crucified with him, one on the right hand, and another on the left. And they that passed by reviled him, wagging the heads, and saying:

Chorus

Thou that destroyest the temple buildest it in three days, save thyself. If thou be the Son of God, come down from the cross.

Recitative

Likewise also the chief priests mocking him, with the scribes and elders, said:

Chorus

He saved others; himself he cannot save. If he be the King of Israel, let him now come down from the cross, and we will believe him. He trusted in God let him deliver him now, if he will have him: for he said: I am the Son of God

Johann Sebastian Bach: *St. Matthew Passion*:

Nr. 68 Recitativo

Desgleichen schmäheten ihn auch die Mörder, die mit ihm gekreuziget wurden.

Nr. 69 Recitativo (Alto)

Ach Golgatha, unsel'ges Golgatha!
Der Herr der Herrlichkeit
Muß schimpflich hier verderben,
Der Segen und das Heil der Welt
Wird als ein Fluch ans Kreuz gestellt.
Der Schöpfer Himmels und der Erden
Soll Erd und Luft entzogen werden;
Die Unschuld muß hier schuldig sterben:
Das gehtet meiner Seele nah;
Ach Golgatha, unsel'ges Golgatha!

Nr. 70 Aria (Alto mit Chorus)

Sehet Jesus hat die Hand,
Uns zu fassen ausgespannt,
Kommt!
Wohin?
In Jesu Armen
Sucht Erlösung, nehmt Erbarmen,
Suchet!
Wo?
In Jesu Armen.
Lebet, Sterbet, ruhet hier.
Ihr verlaßnen Küchlein ihr,
Bleibet!
Wo?
In Jesu Armen.

No. 68 Recitative

The thieves also, which were crucified with him, cast the same in his teeth.

No. 69 Recitative (Alto)

Alas Golgotha, hapless Golgotha!
The Lord of Glory
Must wretchedly perish here.
The blessing and salvation of the world
Is placed on the Cross like a curse.
From the Creator of Heaven and Earth
Earth and air shall be taken away.
The guiltless must die here guilty.
That strikes deep into my soul.
Alas, Golgotha, hapless Golgotha

No. 70 Aria (Alto with Chorus)

See Jesus has His hand
Stretched out to grasp us,
Come!
Whither?
In Jesus' arms,
Seek redemption, find mercy,
Seek!
Where?
In Jesus' arms.
Live, die, rest here.
You forsaken little chicks.
Remain!
Where?
In Jesus' arms.

Nr. 71 Recitativo

Und von der sechsten Stunde an ward eine Finsternis über das ganze Land, bis zu der neunten Stunde. Und um die neunte Stunde schreee Jesus laut, und sprach, “Eli, Eli, lama, lama, asabthani?” Das ist, “Mein Gott, mein Gott, warum hast du mich verlassen?” Etliche aber, die da stunden, da sie daß horeten, sprachen sie, “Der rufet den Elias.” Und bald lieg einer unter ihnen, nahm einen Schwamm, und füllete ihn mit Essig, und Steckete ihn auf ein Rohr, und tränkte ihn. Die andern aber sprachen, “Halt, halt laß sehen ob Elias komme, und ihm helfe?” Aber Jesus schreee abermal laut, und verschied.

Nr. 72 Choral

Wenn ich einmal soll scheiden,
So scheide nicht von mir!
Wenn ich den Tod soll leiden,
So tritt du dann herfür!
Wenn mir am allerbängsten
Wird um das Herze sein,
So reiß mich aus den Ängsten
Kraft deiner Angst und Pein!

No. 71 Recitative

Now from the sixth hour there was darkness over all the land unto the ninth hour. And about the ninth hour Jesus cried with a loud voice, saying, “Eli, Eli, lama sabachthani?” That is to say, “My God, My God, why hast thou forsaken me?” Some of them that stood there when they heard that, said, “This man calleth for Elias.” And straightway one of them ran, and took a sponge and filled it with vinegar, and put it on a reed, and gave him to drink. The rest said, “Let be, let us see whether Elias will come to save him.” Jesus, when he had cried again with a loud voice, yielded up the ghost.

No. 72 Chorale

When once I must depart,
Do not depart from me!
When I must suffer death,
Then stand Thou by me!
When I most full of fear
At heart shall be,
Then snatch me from the terrors
by means of your fear and pain.

Nr. 73 Recitativo

Und siehe da, der Vorhang im Tempel zerriß in zwei Stück, von oben an bis unten aus. Und die Erde erbebete, und die Felsen zerrissen, und die Gräber taten sich auf, und stunden auf viel Leiber der Heiligen, die da schliefen; und gingen aus den Gräbern nach seiner Auferstehung, und kamen in die heilige Stadt, und erschienen vielen. Aber der Hauptmann, und die bei ihm waren, und bewahreten Jesum, da sie sahen das Erdbeben, und was da geschah, erschraken sie sehr, und sprach, "Wahrlich, dieser ist Gottes Sohn gewesen." Und es waren viel Weiber da, die von ferne zusahen, die da waren nachgefolget aus Galiläa, und hatten ihm gedienet; unter welchen war Maria Magdalena, und Maria, die Mutter Jacobi und Joses, und die Mutter der Kinder Zebedäi. Am Abend aber kam ein reicher Mann von Arimathea, der hieß Joseph, welcher auch ein Junger Jesu war. Der ging zu Pilato, und bat ihn um den Leichnam Jesu. Da befahl Pilatus, man sollte ihm ihn geben.

Nr. 74 Recitativo (Bass)

Am Abend da es kühle war,
Ward Adams Fallen offenbar.
Am Abend drücket ihn der Heiland nieder.
Am Abend kam die Tauben wieder,
Und trug ein Ölblatt in dem Munde.
O schöne Zeit! O Abendstude!
Der Friedensschluß ist nun mit Gott gemacht
Denn Jesus hat sein Kreuz vollbracht.
Sein Leichnam kommt zur Ruh.
Ach! liebe Seele, bitte du,
Geh, lasse dir den toten Jesum schenken,
O heilsames, O kostlich's Angedenken!

Nr. 75 Aria (Bass)

Mache dich, mein Herze, rein,
Ich will Jesum selbst begraben,
Denn er soll nunmehr in mir für und für, seinen
Süße Ruhe haben,
Welt, geh aus, laß Jesum ein!

No. 73 Recitative

And, behold, the veil of the temple was rent in twain from the top to the bottom; and the earth did quake, and the rocks rent. And the graves were opened and many bodies of the saints which slept arose, and came out of the graves after his resurrection, and went into the holy city, and appeared unto many. Now when the centurion, and they that were with him, watching Jesus, saw the earthquake, and those things that were done, they feared greatly, saying, "Truly this was the Son of God." And many women were there beholding afar off which had followed Jesus from Galilee, ministering unto him: among which was Mary Magdalene, and Mary the mother of James and Joseph, and the mother of Zebedee's children. When the even was come, there came a rich man of Arimathea, named Joseph, who also himself was Jesus's disciple. He went to Pilate, and begged the body of Jesus. Then Pilate commanded the body to be delivered.

No. 74 Recitative (Bass)

In the evening, when it was cool,
Adam's fall was manifest.
In the evening the Redeemer casts him down;
In the evening the dove returned
And carried an olive leaf in its mouth.
O beautiful time! O evening hour!
Peace is now made with God,
For Jesus has endured His Cross.
His body comes to rest.
Ah, dear soul, prithee
Go, bid them give thee the dead Jesus.
O wholesome, O precious keepsake!

No. 75 Aria (Bass)

Make thyself clean, my heart,
I will myself entomb Jesus,
For He shall henceforth in me, for ever and ever, Take
his sweet rest.
World, begone, let Jesus in!

Nr. 76 Recitativo

Und Joseph nahm den Leib, und wickelte ihn in ein rein Leinwand. Und legte ihn in sein eigen neu Grab, welches er hatte lassen in einen Fels hauen; und wälzte einen großen Stein vor die Tür des Grabs, und ging davon. Es war aber allda Maria Magdalena, und die andere Maria, die satzten sich gegen das Grab. Den andern Tage, der da folget nach dem Rüsttage, kamen die Hohenpriester und Pharisäer sämtlich zu Pilato, und sprachen, "Herr, wir haben gedacht, daß dieser Verführer sprach, da er noch lebete, 'Ich will nach dreien Tagen wieder auferstehen.' Darum befiehl, daß man das Grab verwahre bis an den dritten Tag, auf daß nicht seinen junger kommen, und stehlen ihm, und sagen zu dem Volk, 'Er ist auferstanden von den Toten,' und werde der letzte Betrug ärger, denn der erste." Pilatus sprach zu ihnen, "Da habt ihr die Hüter; gehet hin, und verwahret's, wie ihr wisset." Sie gingen hin, und verwahreten das Grab mit Hütern, und versiegelten den Stein.

Nr. 77 Recitativo mit Chorus

Bass: Nun ist der Herr zur Ruh gebracht.
Chorus: Mein Jesu, gute Nacht!
Tenor: Die Müh ist aus, die unsre Sünden ihm gemacht.
Chorus: Mein Jesu, gute Nacht!
Alto: O selige Gebeine, seht, wie ich euch mit Buß und Reu beweine, daß euch mein Fall in solche Not gebracht.
Chorus: Mein Jesu, gute Nacht!
Soprano: Habt lebenslang vor euer Leiden tausend Dank, daß ihr me in Seelenheil so wert geacht'.
Chorus: Mein Jesu, gute Nacht!

No. 76 Recitative

And when Joseph had taken the body, he wrapped it in a clean linen cloth, and laid it in his own new tomb, which he had hewn out in the rock; and he rolled a great stone to the door of the sepulchre, and departed. And there was Mary Magdalene, and he other Mary, sitting over against the sepulchre. Now the next day, that followed the day of the preparation, the chief priests and Pharisees came together unto Pilate, saying, "Sir, we remember that deceiver said, while he was yet alive: 'After three days I will rise again.' Command therefore that the sepulchre be made sure until the third day, lest his disciples come by night, and steal him away, and say unto the people, 'He has risen from the dead' So the last error will be greater than the first." Pilate said unto them, "Ye have a watch; go your way, make it as sure as ye can." So they went, and made the sepulchre sure, sealing the stone, and setting a watch.

No. 77 Recitative with Chorus

Bass: Now the Lord is brought to rest.
Chorus: My Jesus, good night!
Tenor: The toil is done which our sins made for him.
Chorus: My Jesus, good night!
Alto: O Blessed limbs, see, how I weep for Thee with Penance and remorse that my fall brought Thee into such distress
Chorus: My Jesus, good night!
Soprano: Take, while life lasts, a thousand thanks for Thy Passion that Thou didst prize my soul's good so dearly.
Chorus: My Jesus, good night!

Johann Sebastian Bach: *St. Matthew Passion*:

Nr. 78 Chorus

Wir setzen uns mit Tränen nieder
Und rufen dir im Grabe zu:
Ruhe sanfte, sanfte ruh!
Ruht, ihr ausgesognen Glieder!
Ruhe sanfte, sanfte ruh!
Euer Grab und Leichenstein
Soll dem ängstlichen Gewissen
Ein bequemes Ruhekissen
Und der Seelen Ruhstatt sein.
Höchst vergnügt schlummern da die Augen ein

No. 78 Chorus

We sit down in tears
And call to Thee in the tomb:
Rest softly, softly rest!
Rest, ye exhausted limbs,
Rest softly, softly rest.
Your grave and tombstone
Shall for the unquiet conscience
Be a comfortable pillow
And the soul's resting place.
In utmost bliss the eyes slumber there.

[Note: until well after Bach's time it was not considered proper for women to sing in church so that all the choral and solo parts of the Passion would have been sung by men and boys.

Note also that Bach sometimes indicates key signatures for minor keys with one fewer flat than is common in modern notation; for instance, the last chorus (#78) clearly ends in c, but is written with only two flats. Finally, it is significant to note that the two choruses are identified as "Die Tochter Zion" (Chorus I: The Daughter of Zion) and "Die Gläubige" (Chorus II: The Believer). Each chorus has its own orchestra and basso continuo; the solo voices are drawn from the two choruses indicated in the score.

The translation of the recitative given here comes from the King James version, Matthew chapters 26-27.]

INTRODUCTION TO TONAL HARMONIC ANALYSIS

2012-2013 Edition

Preface to the First Edition of the Tonal Harmony Manual:

Many thanks to students and tutors whose questions and insights over the years helped to shape this manual. Special thanks to Mary E. Schruben for her careful reading and editing and her many suggestions which significantly improved and clarified the text.

Lawrence Cave, Tutor
St. John's College, Santa Fe
Fall, 1991

Introduction to Tonal Harmonic Analysis

With the development of polyphony around 1200 A.D., composers were faced with the problem of how to adopt the musical materials of the many-mode monophonic chant repertory to a new style of multi-voiced music. The variety of intervallic orders which distinguish the various modes necessitates that music in different modes be structured in different ways. For example, each mode has a “tenor” or reciting tone which generally serves as the upper limit of the melody; but in different modes the relationship of the tenor to the “final” varies. Thus, mode 1 is characterized by an emphasis on the range of a Perfect 5th, D – A, while mode 3 lies around a Perfect 4th, E – A. Because each mode is characterized by different intervallic relationships, melodies in different modes use different characteristic designs to move the music away from and back to the final, a single point for the whole work. But in polyphonic music, with its emphasis on several simultaneous sounding pitches, how can one pitch stand out as a central organizing focus? In a polyphonic work, is each voice in the same mode with its own final? When the Machaut *Mass* ends with the notes D and A sounding simultaneously, has the piece ended in two modes?

Although the theoretical questions of modal usage in polyphonic music continued throughout the Renaissance, stylistic changes moved music further from the modal system. By 1600, the modal system had evolved into what is now called the *Tonal Harmonic System* or *Functional Tonality*, a system which controlled all Western composition well into the 20th Century. Functional Tonality differs from the earlier means of musical organization in three ways:

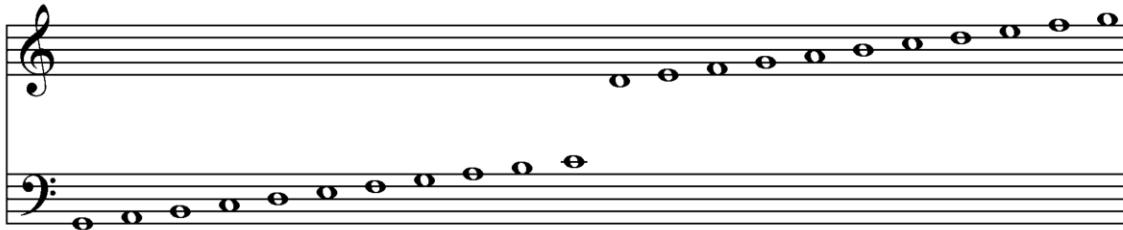
- 1.) The variety of modes are replaced by a single scale system; scales retain the exact same intervallic relationships no matter on which pitch they begin.
- 2.) Whereas modal music emphasizes individual, modally distinct lines horizontally layered or superimposed, tonal music emphasizes the vertically oriented, simultaneous sounding of consonant pitches known as a *triad*.
- 3.) Each triad in a musical passage has a specific *function*, moving the music in *harmonic progression* away from or towards the *tonic*, a point of musical “rest” and stability equivalent to the modal “final”.

The following text is an introduction to the tonal system which dominated Western Art Music from 1600 until 1900 and continues in use by many composers, both of Art and Popular music, through today. The most important section of the text is Part II, which covers the primary aspects of tonal function and harmonic motion. Part I introduces the basic materials of tonal music. Part III covers modulation (harmonic extensions beyond one tonal focus) and the large-scale structuring of musical works. Each chapter ends with short exercises. Various examples of tonal music follow Part III and should be studied in conjunction with the text.

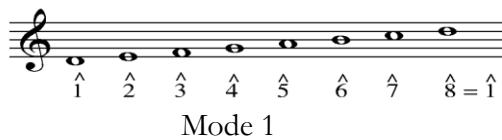
Part I: The Basic Material of Tonal Music

Chapter 1: The Major/Minor Scale System and Keys

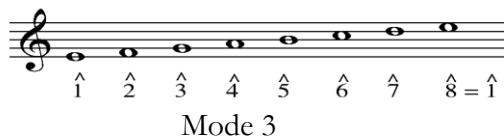
Within modal music, the basic “set” of pitches from which any mode is derived is the diatonic order, an arrangement of whole-steps and half-steps (equivalent to only the white notes on the piano).



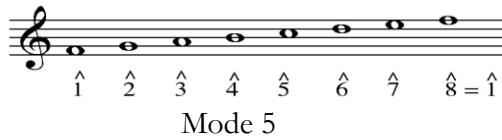
Theoretically, any diatonic pitch can serve as the beginning of a seven-note diatonic mode. In practice, there were four primary modes, one each beginning on the notes D, E, F, and G, each with a distinct intervallic order. For example, the diatonic half-steps E-F and B-C exist between different scale steps in the various modes. (Scale steps are designated by an arabic numeral under a carat ^.)



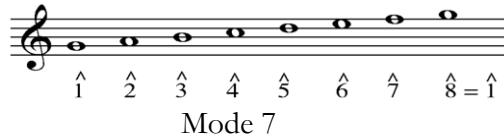
Mode 1



Mode 3



Mode 5



Mode 7

With the development of polyphony, the modes were frequently altered by “ficta” or *accidentals* (half-step alterations notated by means of sharps ♯ and flats ♭) to avoid dissonant intervals, particularly the Augmented 4th/Diminished 5th (tritone) between F and B.

Characteristically, modes 1 and 5 lowered B to B♭; modes 3 and 7 raised F to F♯.

Furthermore, throughout much of the music and especially at *final cadences*, the 7 was raised a half-step, making the interval 7-8 a half step (this is not necessary in mode 5). With these alterations modes 1 and 3 are intervallically identical, as are modes 5 and 7. In effect, the variety of interval orders of modal music had been replaced by a single scale in two forms by the beginning of the 17th century.

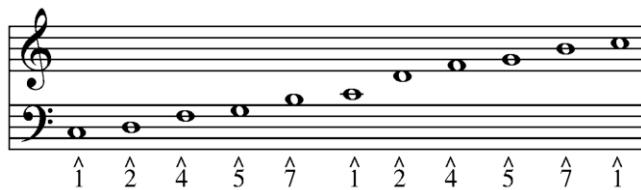
The basic set of pitches and interval relationships used in tonal music is the *major/minor scale* system. A *scale* (from the Italian “scala” or ladder) is an arrangement of pitches in ascending or descending order and is treated as the “raw material” for musical composition. Unlike modes, which are derived from the diatonic order, a tonal scale may begin on any pitch of the chromatic order, an arrangement of all possible half-steps and whole-steps (equivalent to all the black and white notes on the piano).

Chapter 1: The Major/Minor Scale System and Keys

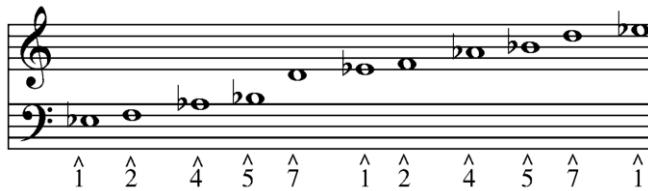


Unlike the intervallic variety of different modes, every tonal scale reproduces the same primary order regardless of the chromatic pitch on which it begins. The first and lowest note of any complete 7 note major/minor scale is called the *tonic* note; $\hat{1}$ is equivalent to $\hat{8}$, the note an octave above the tonic. The primary intervallic arrangement of the major/minor scale is:

with C as tonic:



with E \flat as tonic:



Besides the tonic ($\hat{1}$ and $\hat{8}$), there is a whole-step above the tonic ($\hat{2}$) and a half-step below it ($\hat{7}$), as well as a Perfect 4th and Perfect 5th above and below it ($\hat{4}$ and $\hat{5}$). Each of these pitches functions strongly in defining the tonic, but the most powerful member is the 7th scale step. Notice that the only half-step among these structurally significant pitches is between $\hat{7}$ and $\hat{8}$. $\hat{7}$ characteristically moves directly to $\hat{8}$ in harmonic music. Indeed a melody or harmonic progression that moves from $\hat{7}$ anywhere other than $\hat{8}$ can feel unsatisfactory, like a thwarting of one's expectations. Because of this tendency, $\hat{7}$ is called the *leading-tone* of the scale, for it leads directly and with great sense of arrival to $\hat{8}$, the tonic.

With these structural pitches and their intervallic relationship to the tonic remaining constant from scale to scale, there are two *modes* of the scale – the *major* and *minor*. But, as will be shown in Part II, the difference between the major and minor forms of the scale does not affect the functional nature of the harmony. Rather, the two forms, which may be used interchangeably without detriment to functional clarity, “color” the various harmonies. The major form generally is considered to produce “brighter” harmonies, the minor form “darker” effects. These two forms were first noted in Chapter 10 of Zarlino’s *Le Instituzioni*

Chapter 1: The Major/Minor Scale System and Keys

Harmonie. Because they alter the mood but not the function of the harmony, the forms are often called *modes* (but not in the sense of chant modes).

The *major scale* (or *major mode*) features the functional pitches given above colored by a *major 3rd* and *major 6th* above the tonic resulting in half-steps between $\hat{3}$ - $\hat{4}$ and $\hat{7}$ - $\hat{8}$. Thus the intervallic order (using “W” for whole-step and “H” for half-step) is W W H W W W H.

Notice that the major scale beginning on C is a diatonic mode, using only pitches of the diatonic order. If this intervallic order is reproduced beginning on any other pitch, the pitches are *not* exclusively diatonic. For example, the major scale reproduced on G includes the raised F♯ to force the half-step between $\hat{7}$ - $\hat{8}$.

Thus, while each chant mode retains an intervallic uniqueness based on the given final and the diatonic ordering of the mode, different major scales contain a single intervallic order despite the pitch used as the tonic and because of the use of accidentals.

The difference between a major scale starting on G and one starting on C (or any two pitches) is the difference of *key*. Key refers to the accidentals used in relation to a specific tonic to maintain the major/minor scale order. Thus, considering the two scales given above, a passage of tonal music written exclusively with diatonic pitches will be said to be in the key of C major while the continued use of F♯ would indicate that the key is G major.

The alteration from key to key caused by the changes in accidentals can be viewed in several ways. One ensures that a half-step exists between $\hat{7}$ and $\hat{8}$ of any scale. Most important for Tonal Theory is the alteration of the single diminished fifth or augmented fourth (the tritone) to a perfect interval and the creation of a new tritone. For example, in C major there is a diatonic tritone between F and B. G major uses F♯ which is a perfect 5th or perfect 4th from B; but F♯ is a tritone from C. Thus every major scale contains but one tritone, always between $\hat{4}$ and $\hat{7}$ of the scale. This phenomenon will be returned to in Chapter 5.

Each key and its corresponding scale is a unique collection of seven different pitches. By taking any chromatic pitch as 1 and using accidentals as needed to create the W W H W W W H pattern, a major scale in the key of 1 is formed. Note that no pitch name is repeated in a scale (D major is D – E – F♯ – G – etc. *not* D – E – G♭ – G – etc.) and no major scale mixes flats and sharps.

Chapter 1: The Major/Minor Scale System and Keys

The accidentals used to form any given major scale may be written throughout the music preceding the note they alter or may be placed at the beginning of the musical stave as a *key signature*, indicating the use of those accidentals in all octaves.

Bach, J.S., *Fugue in G Major*



This fugue has a key signature of one sharp, thus each notated F on the staff is played as F \sharp .

The system of notating accidentals included in a key and the relationship of keys to one another is known as the *Circle of Fifths* and is charted on the following page. Notice that sharps increase in one direction and flats increase in the other. Begin at the top of the circle with the key of C major, which requires no sharps or flats to describe the major scale pattern of whole-steps and half-steps. For each key in the sharp direction, by raising $\hat{4}$ a half-step and calling it $\hat{7}$, the pattern of intervals of a new key is described. That new key has a tonic a 5^{th} above the previous tonic. For example, in the key of C major, $\hat{4}$ is F; raise F to F \sharp and call it $\hat{7}$. F \sharp is the $\hat{7}$ of the key of G major and G is a 5^{th} above C; so G major is the key of one sharp, F \sharp . Similarly, each key in the flat direction is a 5^{th} below the previous one. Alter the $\hat{7}$ by lowering it a half-step, that note becomes the $\hat{4}$ of the new scale. For example, in the key of C major, $\hat{7}$ is B; lower B to B \flat and call it $\hat{4}$. B \flat is the $\hat{4}$ of the key of F major and F major is a 5^{th} below C so F major is the key of one flat, B \flat . And so on around the circle in both directions until the keys begin to overlap. This method yields the order of the addition of sharps and flats to the key signature.

Chapter 1: The Major/Minor Scale System and Keys

C Major | a minor

F Major | d minor

G Major | e minor

B♭ Major | g minor

D Major | b minor

E♭ Major | c minor

A Major | f♯ minor

A♭ Major | f minor

E Major | c♯ minor

D♭ Major | b♭ minor

B Major | g♯ minor

F♯ Major | d♯ minor

The keys of C♯/D♭ and F♯/G♭ are *enharmonic equivalents*, i.e., although written with different key signatures, C♯ major and D♭ major produce the same sounding notes on the piano.

[A hint for learning key signatures: in a key signature with sharps, the “last” sharp (the one most to the right) is the leading tone $\overset{\wedge}{7}$ of the key; in a signature of 2 or more flats, the “next-to-last” flat is the tonic $\overset{\wedge}{1}$ of the key.]

The *minor* scale form (or *minor mode*) used in harmonic music adds to the functional pitches a *minor 3rd* and a *minor 6th* above the tonic. Now the half-steps lie between $\overset{\wedge}{2}-\overset{\wedge}{3}$, $\overset{\wedge}{5}-\overset{\wedge}{6}$ and $\overset{\wedge}{7}-\overset{\wedge}{8}$ and an augmented whole-step (1½ steps) appears between $\overset{\wedge}{6}-\overset{\wedge}{7}$ or W H W W H W+H H.

Chapter 1: The Major/Minor Scale System and Keys

The image shows two musical staves. The left staff is in bass clef (F) and represents C minor. It has a key signature of one flat. The notes are: A (natural), B-flat, C, D, E, F, G, A. Below the staff, the notes are labeled with numbers 1 through 8, each with a small hat above it, corresponding to the solfège: do, re, mi, fa, sol, la, si, do. The right staff is in treble clef (G) and represents G minor. It has a key signature of one sharp. The notes are: E, F, G, A, B-flat, C, D, E. Below the staff, the notes are labeled with numbers 1 through 8, each with a small hat above it, corresponding to the solfège: do, re, mi, fa, sol, la, si, do.

Note that harmonic minor can mix sharps and flats in order to create the *augmented whole-step* 6-7.

This minor scale, the only form capable of creating the harmonic function discussed in Part II, is called the *harmonic minor*. For our purposes it is *the* minor scale of importance to tonal music. However, two additional forms of the minor scale have secondary roles in harmonic music. The *natural minor* scale does not have a half-step between 7-8 and thus lacks the powerful leading tone element of the *harmonic minor*.

The image shows two musical staves. The left staff is in bass clef (F) and represents C minor. It has a key signature of one flat. The notes are: A (natural), B-flat, C, D, E, F, G, A. Below the staff, the notes are labeled with numbers 1 through 8, each with a small hat above it, corresponding to the solfège: do, re, mi, fa, sol, la, si, do. The right staff is in treble clef (G) and represents G minor. It has a key signature of one sharp. The notes are: E, F, G, A, B-flat, C, D, E. Below the staff, the notes are labeled with numbers 1 through 8, each with a small hat above it, corresponding to the solfège: do, re, mi, fa, sol, la, si, do.

Unlike the harmonic minor, the natural minor can be represented as a diatonic mode:

The image shows two musical staves. The top staff is in treble clef (G) and represents the natural minor mode. It has no sharps or flats. The notes are: G, A, B-flat, C, D, E, F, G. Below the staff, the notes are labeled with numbers 1 through 8, each with a small hat above it, corresponding to the solfège: do, re, mi, fa, sol, la, si, do. The bottom staff is in bass clef (F) and represents C major. It has no sharps or flats. The notes are: C, D, E, F, G, A, B-flat, C. Below the staff, the notes are labeled with numbers 1 through 8, each with a small hat above it, corresponding to the solfège: do, re, mi, fa, sol, la, si, do.

Because the natural minor has the same key signature as the major scale a minor 3rd higher (in this example, both the a minor and the C major scale have no accidentals and thus the same key signature) they are said to be related. A minor is called the *relative minor* of C major and C major the *relative major* of a minor. This is important in naming minor keys, for within the Circle of Fifths and in determining key signatures, the natural – not the harmonic minor – is used. Upper case letters represent major keys; lower case letters represent minor keys.

Chapter 1: The Major/Minor Scale System and Keys

C Major | a minor

F Major | d minor

G Major | e minor

B♭ Major | g minor

D Major | b minor

E♭ Major | c minor

A Major | f♯ minor

E Major | c♯ minor

D♭ Major | b♭ minor

B Major | g♯ minor

F♯ Major | d♯ minor

So, one major key and one minor key share the same key signature. The minor key will, in the music itself, use the harmonic form of the minor scale with the appropriate accidentals in addition to the ones already in the key signature. For example, the harmonic minor scale starting on E includes a D♯:



Thus, a passage of music with a key signature of one sharp but with the continued use of D♯ and a tonic of E is in e minor.

Chapter 1: The Major/Minor Scale System and Keys

Bach, J.S., *Prelude No. 10 in e minor*

A musical score excerpt in G major (two sharps) and common time. The melody begins with a forte dynamic (indicated by a large 'f') on the first note. The second note is a eighth note followed by a sixteenth note, both in forte dynamic. The third note is a eighth note followed by a sixteenth note, both in piano dynamic (indicated by a small 'p'). The fourth note is a eighth note followed by a sixteenth note, both in forte dynamic. The fifth note is a eighth note followed by a sixteenth note, both in piano dynamic. The sixth note is a eighth note followed by a sixteenth note, both in forte dynamic. The seventh note is a eighth note followed by a sixteenth note, both in piano dynamic. The eighth note is a eighth note followed by a sixteenth note, both in forte dynamic.

The last form of the minor scale is the *melodic minor*, used occasionally to smooth over the awkward melodic leap of the augmented 2nd between 6 and 7 which is present in the harmonic variety. In the ascending form, 6 is raised a half-step. The descending form duplicates the natural minor, i.e. 7 is lowered a half-step:

A musical staff with seven notes. The notes are: quarter note, eighth note, eighth note, eighth note, eighth note, eighth note, eighth note. Below the staff, the numbers 5, 6, 7, 8, 7, 6, 5 are written under each note respectively.

The following example in d minor uses the ascending form of the melodic minor in the bass voice simultaneously with the descending form in the treble.

Bach, J.S., *Italian Concerto*, mvt. 3

Purcell, Henry: *Minuet*

The following Minuet by Henry Purcell is useful for identifying the concepts of major and minor modes. Listen for the “movement” from minor mode to the relative major mode and back again to minor. How does the piece manage to make these modal changes sound so seamless and graceful?

Andantino

The musical score consists of three staves of music for two voices. The top staff is in treble clef, G major (two sharps), and 3/4 time. The bottom staff is in bass clef, C major (no sharps or flats). The tempo is Andantino. The first measure starts with a dynamic *p*. The second measure has a dynamic *mp*. The third measure has a dynamic *mf*. The fourth measure has a dynamic *p*. The fifth measure has a dynamic *poco rit.* The vocal parts are separated by a vertical brace. The lyrics are indicated by *B:* above the top staff and *bz:* below the bottom staff. The music shows a transition from a minor mode (B-flat major) to a relative major mode (B major) and back again.

Chapter 1: Exercises

1.) On each diatonic (white note) pitch, construct major & harmonic minor scales. Each pitch name should be represented only once. Major scales may not mix sharps and flats. Harmonic minor scales may have a mixture of sharps and flats, but only to accommodate the augmented whole-step between $\hat{6}$ and $\hat{7}$. Determine the key signature for each of these major and minor scales.

2.) Identify the following key signatures for major and minor:



3.) The following scale fragments belong to what key(s)?



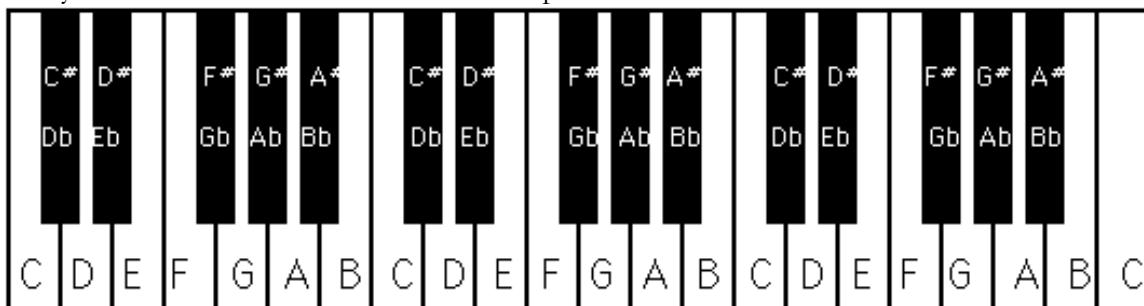
Chapter 2: Triads

From the beginnings of polyphony, a common harmonic entity or *chord* (a simultaneous sounding of different pitches) was a three-note arrangement of two stacked thirds, known as a *triad*. The presence of a 3rd in this chord made it relatively dissonant to the earliest polyphonist, but by 1400 the triad was the most prevalent sonority in multi-voiced music. By 1600 the triad was considered fully consonant, commonly used as the final chord of a work (as opposed to the earlier insistence on perfect intervals for a work's conclusion). Triads, constructed above any and all scale tones, form the primary vertical sonority of tonal music.



The basic form of a triad is three pitches encompassing two intervals of adjacent thirds. The lowest note of this basic triadic arrangement is called the *root* of the chord. The arrangement with the root as the lowest note is called *root position* of the triad. A chord is named by its root—hence a triad with a C root is called a C triad or C chord. The middle note is called the *third*, being a 3rd above the root; the highest the *fifth*, being a 5th above the root. Note that the third of a chord is not to be confused with 3 of a scale. The third or fifth of a chord may be *any* scale tone a 3rd or 5th respectively above the root, which itself may be any scale tone.

Triad Quality – Depending on the quality of the intervals above the root, triads are designated as major, minor, augmented or diminished. All examples below are given in root position. Always read the intervals from bottom to top.



Keyboard diagram included for reference

Chapter 2: Triads

- a) *Major Triad* – Above the root the two adjacent thirds are a major 3rd and a minor 3rd. The interval from root to fifth is a perfect 5th.



C is the root, C-G is a perfect 5th, C-E is a major third, the chord is designated as a C major chord or C M

- b) *Minor Triad* – Above the root the two adjacent thirds are a minor 3rd and a major 3rd. The interval from the root to the fifth is a Perfect 5th.

C is the root, C-G is a perfect 5th, C-E^b is a minor third, the chord is designated as c minor or c m



- c) *Augmented Triad* – Above the root are two major 3^{rds}. The interval from the root to the fifth is an augmented 5th.



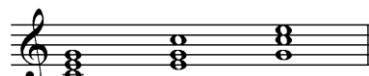
C is the root, C-G# is an augmented 5th, C-E and E-G# are major 3^{rds}, the chord is designated as C augmented or C+

- d) *Diminished Triad* – above the root are two minor 3^{rds}. The interval from the root to the fifth is a Diminished 5th.



C is the root, C-G^b is a diminished 5th, C-E^b is a minor third, the chord is designated as c diminished or c°

Inversions – In actual compositions, triads do not always appear in root position, but may appear with the third or fifth of the triad as the lowest musical voice, in which case the chord is said to be inverted. Below are three C major chords.



The first example is a root position C major triad. If the pitches of the other two are rearranged and stacked in thirds, they will also form C major root-position triads. Thus, a chord is named by its root despite its inversion; any triad not in root position must be mentally rearranged in order to find the root, which allows us to name the chord.

Chapter 2: Triads

A triad with the third of the chord as the lowest sounding note and the root and fifth somewhere above is said to be in “1st inversion”; a triad with the fifth as the lowest sounding note and the root and third somewhere above is in “2nd inversion.”

Inversions are denoted with numerical symbols derived from “figured-bass,” a form of notation in which a bass line alone is written out and numbers below the notes represent the intervals to be played or improvised above the bass. Inversion symbols tell nothing of interval quality (major, minor, augmented, diminished) or octave placement of notes (the spacing of chord tones is discussed below).

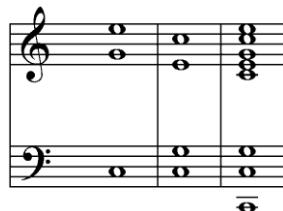
Using a C chord as an example, root position is denoted by C_3^5
(a 3rd and a 5th above the lowest note)

1st inversion is denoted by C_3^6
(a 3rd and a 6th above the lowest note)

2nd inversion is denoted by C_4^6
(a 4th and a 6th above the lowest note)

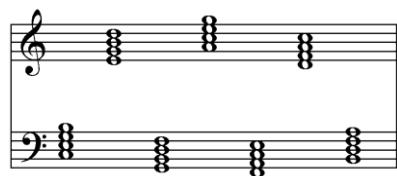
Present day notation has dropped the use of C_3^5 and simplified the use of C_3^6 to C^6 .

Spacing of Triads – In actual music, of course, triads are not merely made of three pitches in close or adjacent positions. Each of the following chords is a root position C major chord:



Pitches may be doubled (i.e. more than one C, E, or G) and octave displacement is ignored in the simple naming of the chord. The first chord in the example above has the fifth (G) an octave and a 5th above the root. Ignoring the octaves, the chord is still CM_3^5 , i.e., a C major chord in root position with an E and G above the bass C. Hence, the inversion notation system in no way indicates the spacing of the chord, the doubling of pitches or the octave placement of pitches above the lowest note.

Seventh Chords – Besides the triad (a consonant structure), seventh chords commonly appear as dissonant harmonic entities. A seventh chord is a triad with an additional 3rd, i.e., a chord of four different pitches which in root position is made of three stacked 3^{rds}.



Chapter 2: Triads

Despite the number of possible seventh chords, only a few are commonly used in tonal music (each given below in root position):

- a) *Dominant Seventh Chord* – a major triad with a minor 7th above the root



G^7

- b) *Minor Seventh Chord* – a minor triad with a minor 7th above the root



d^7

- c) *Half-Diminished Seventh Chord* – a diminished triad with a minor 7th above the root



$b^{\circ 7}$

- d) *Fully-Diminished Seventh Chord* – a diminished triad with a diminished 7th above the root



$b^{\circ 7}$

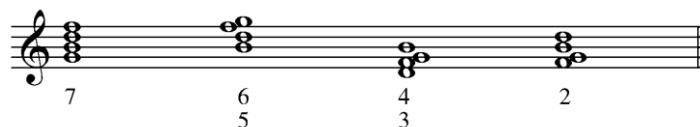
Inversions of the 7th chords are noted similarly to those of triads:

root position as G_5^7 or simply G^7

1st inversion as G_5^6

2nd inversion as G_3^4

3rd inversion as G^2



Chapter 2: Exercises

1) Write major, minor, augmented, and diminished triads with roots of G, B \flat , F \sharp , and E; write all four qualities of triad on each root.

2) Identify the following with chord name (root), quality (M, m, \circ , or +) and inversion.

A musical staff with two staves. The top staff has a treble clef and the bottom staff has a bass clef. The first chord consists of notes B-flat, D, F-sharp, and A-flat. The second chord consists of notes B-flat, D, F-sharp, and G. The third chord consists of notes E, G, B, and D. The notes are represented by open circles on the staff lines.

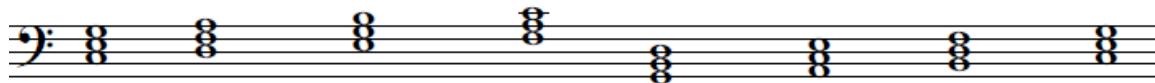
3) Write all the possible (i.e. stack of 3^{rds}) root position triads (discounting note doublings and spacings) with the following pitches as root, third, or fifth respectively; write all four qualities of triad on each root.

A musical staff with two staves. The top staff has a treble clef and the bottom staff has a bass clef. There are three groups of three notes each. The first group consists of notes C, E, and G. The second group consists of notes D, F-sharp, and A. The third group consists of notes E, G, and B. The notes are represented by open circles on the staff lines.

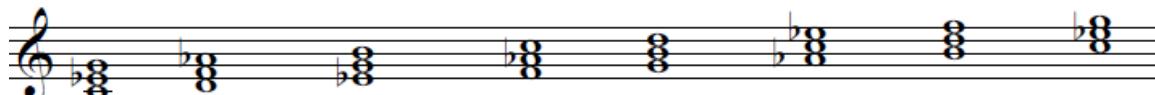
4) Write *minor seventh* chords and *fully-diminished seventh* chords with G, B \flat , F \sharp , and E as roots.

Chapter 3: Triads within the Major/Minor Key System

If one uses each note of the major scale as the root of a triad (each triad made only of notes from the key corresponding to the scale) the following arrangement of triads results:



If one uses the notes of the harmonic minor scale as the roots of triads, the result is:



Triads within a key are designated by Roman numerals indicating the consecutive order of the roots and the quality of the triad. The triad whose root is ¹A is designated as I. Upper case Roman numerals designate major triads (I) or augmented triads (III+). Lower case Roman numerals designate minor triads (ii) or diminished triads (vii°)

Triads in the major/minor scale system are named:

<u>Major</u>	<u>Minor</u>	
I	i	Tonic
ii	ii°	Supertonic
iii	III+	Mediant
IV	iv	Subdominant
V	V	Dominant
vi	VI	Submediant
vii°	vii°	Leading Tone

Notice that the only common triads between the major and the harmonic minor modes are V and vii°. The importance of this identity will be explained in Chapter 4.

Roman numeral analysis places triads within the context of a key and a scale, but ignores the precise pitch content of a given triad. Since all major or minor scales reproduce the exact same order of half-steps and whole-steps, any scale is comparable to any other, no matter the pitch on which it begins. Similarly, if the notes of a major or minor scale are used as triad roots and triads using notes from that scale are formed over those roots, the same pattern of major/minor triads will be reproduced using another scale as the set of triad roots. With Roman numeral analysis the chord progressions in a work in C major can be compared to those of a work in any other key. Similar progressions can be studied despite the key of the piece. Or, stated another way, an F major triad serves a different role in the keys of C major (where an F major triad is IV) and b b minor (where an F major triad is V). Simply designating the chord as F major does not place it in the context of a key.

Again, the Roman numeral analysis of a chord tells nothing of the spacing or doubling of notes above the bass. Inversion symbols discussed in the previous chapter are used with the Roman numeral to show chord inversions. For example, in the key of C major, an F Major triad in first inversion would be designated as *IV*⁶

Chapter 3: Exercises

1.) Identify with Roman numerals each of the following chords in the keys of G major, e minor, and C major.



2.) Identify all the possible keys and the corresponding Roman numeral in which each of the following triads could possibly appear.



3.) Analyze with Roman numerals the harmonies of the first four measures of the Mozart *Minuet* (p. 188) and the first Bach *Prelude* (p. 183) found later in this manual

Part II: Harmonic Function

Chapter 4: Basic Harmonic Functions

All polyphonic music can be heard as a combination of vertical and horizontal events: those arranged vertically in a musical score are momentary, simultaneous events, such as a chord; those arranged horizontally in a score are sequential events, moving through time. The primary vertical event of tonal music is the triad. All major and minor triads considered as isolated vertical simultaneities are consonant. However, considered horizontally or unfolding consecutively over time, the various triads within a key may be considered more or less dissonant *in relation* to the tonic of the key. A chord's relationship to the tonic or the degree of tension between the chord and the tonic is that chord's *harmonic* or *tonal function*. There are three harmonic functions in tonal music, each associated with a particular triad of the key.

- 1.) The *Tonic Function* represents ultimate stability, rest, the goal of a harmonic progression, the context for an entire passage of music. Thus, the tonic function is the only functional consonance in tonal music; all other chords are dissonant *in relation* to the tonic's stability and must resolve their dissonance by returning to a chord of tonic function. The tonic function is associated with the tonic triad and the $\hat{1}$ scale degree. Within harmonic progressions and at intermediary cadences (but not at final cadences) the submediant triad may substitute for the tonic (i.e. vi for I in major; VI for i in minor).
- 2.) The *Dominant Function* represents ultimate tension. A dominant function chord *must* resolve to the tonic or its substitute. Thus, a dominant function chord acts as the primary functional dissonance within the tonal system. Both V and vii° are dominant function chords. The conflation of V and vii° yields the Dominant Seventh Chord (V^7), which serves as an intensified form of the dominant function (see Chapter 5). The most important component of a dominant function chord is the leading tone. It is interesting to note that the chords of the dominant function are the same in the major and minor modes; this great tension, the powerful “motion force” of tonal music, cannot be varied or colored without loss of power. Thus, V is always major, i.e. $\hat{7}$ is never altered.
- 3.) The *Subdominant Function* is an intermediary tension. A subdominant function chord may return to tonic or move on to the dominant. Both IV and ii in major or iv and bVI in minor are subdominant functions. The somewhat ambivalent subdominant function, however, allows for the interchangeability of a variety of chords derived from either mode. (See Chapter 6 on Subdominant substitutions.) Subdominant function seventh chords are formed in the major mode of the conflation of ii and IV (yielding ii^7) and in the minor mode of the conflation of ii° and iv (yielding $\text{ii}^{\text{A}\sharp}7$). Each acts as an intensified subdominant (see Chapter 6).

There has been much theoretical speculation on why the three harmonic functions exist so separately and are yet so clearly related. One line of thought concerns the common tones shared by the primary triads I, IV and V representing the three functions. Note that the primary triads V and IV share only one note in common with I and none with each other. IV shares only $\hat{1}$ with I; thus movement to IV is felt as a movement from I but somewhat connected to the stability of the tonic pitch. Movement from I to V shares only $\hat{5}$, a scale

Chapter 4: Basic Harmonic Functions

degree of some tension (and certainly more tension than 1). V also contains the leading tone ^{^7} demanding resolution to ^{^8}. The movement from IV to V, having no pitches in common, is a considerable heightening of tension. The progression of V to IV is considered weak, a lessening of tension without resolution. Perhaps the reason iii or III+ serves no strong functional role is its two common tones with I and V; movement between I and iii or V and iii and vice versa seems ineffectual, hardly a movement at all.

Thus at its smallest structural level, Functionally Tonal Music can be called “dramatic,” for it is formed of chains of *harmonic progressions* leaving the tonic stability to create tensions which set up an inevitable but thoroughly satisfying return to the tonic. The three functions form only a few basic harmonic progressions: I–IV–I, I–V–I, and I–IV–V–I. But by using harmonic substitutes for various functions or extending certain functions, the composer can affect the pacing and emotional character of the work.

At the beginning of the Bach *Prelude No. 1 in C major*, we hear the three functions in a straightforward manner, creating a placid, stable effect. Each of the chords is *arpeggiated* (the individual chord tones are rhythmically displaced).

Later in the *Prelude* (mm. 24–31) the dominant tension is prolonged, withholding a completely satisfactory resolution for many measures (note the prolonged G in the bass).

Despite its minor mode, the opening of Bach’s *Prelude No. 2 in c minor* duplicates the functional progression of the major mode *Prelude No. 1*: tonic – subdominant – dominant – tonic (one function per measure). Here the figuration includes an ornamental *non-chordal tone* on the third sixteenth note of each beat in both the left and right hand.

For subtle shifts of mood or more complex emotional characteristics, the composer may mix chords from major and minor without affecting the functional clarity of a passage. The following passage from a Schumann song reproduces the tonic – subdominant – dominant – tonic of the Bach, but with the ii \varnothing^7 of the minor mode.

Schumann, *Ich Grolle Nicht*
Nicht zu schnell. *mf*

I IV⁶ 5 ii∅⁷ V⁷ I

Chapter 4: Basic Harmonic Functions

The same harmonic progression, in the hands of different composers, can be used to strikingly different effect. The opening of Mozart's *Ave Verum Corpus* reproduces the same harmonic progression as the opening of the Bach *Prelude*. The difference between the two works lies in texture and the role of melodic tones outside of the basic harmony.

Mozart, *Ave Verum Corpus*

A musical score for Mozart's Ave Verum Corpus. It consists of two staves: treble and bass. The treble staff has a key signature of one sharp (F#). The bass staff has a key signature of one sharp (F#). The score shows a harmonic progression: I - ii² - V₅⁶ - I. The bass staff provides harmonic support, while the treble staff features melodic tones that are labeled as ornamental or auxiliary to the basic harmonic progression.

In the Mozart example, the indicated notes lie outside the triadic framework of the harmony; they are *ornamental* or *auxiliary* to the basic harmonic progression. Much of the power of functional tonality lies in its undergirding a musical passage so strongly that coherence is maintained despite a great amount of ornamental, non-harmonic activity on the surface of the music. In fact, functional clarity is so strong in tonal music, that purely melodic works (unsupported by triadic harmonies) can still be heard to be organized functionally, i.e., melody itself is governed by the “harmonic” functions.

Bach, J.S., Bouree from *Suite for Unaccompanied Cello No. 4*

A musical score for Bach's Bouree from the Suite for Unaccompanied Cello No. 4. It consists of a single bass staff in common time, with a key signature of one flat (B-flat). The score shows a harmonic progression: implied: I - ii - V⁷ - I. The bass staff provides harmonic support, and the implied harmonic progression is indicated below the staff.

Thus, Functional Tonality provides a background structure of great clarity and regularity, which can support and organize a foreground of complex, irregular, even highly dissonant detail.

Mozart, Leopold: *Minuet*

The following Minuet by Leopold Mozart (Wolfgang's father), utilizes the three harmonic functions described in this chapter. Can you hear those functions and locate them in the score? After the double bar, what function does he open with, and why? How do the harmonic functions give overall form to this little piece?

Andantino grazioso

7

f p

v v

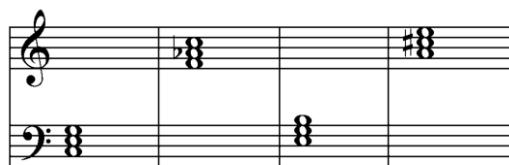
13

mf

Chapter 4: Exercises

1.) Construct the Tonic, Dominant and Subdominant function triads of each of the following keys: E major, b minor, E \flat major and g minor.

2.) Each of the following triads functions differently depending on the key in which it appears. Label the possible keys, the Roman numeral and the function within that key of each of the following chords.



3.) Write I–IV–V–I progressions in D major, f minor, A \flat major and b minor. The exercise should be written in 4 voices (soprano, alto, tenor, bass). First write the bass line, then a soprano melody and finally the inner voices. The exercise should be in simple counterpoint, following the basic rules of Fux.

4.) Harmonize the following melody from Bach's *Suite for Unaccompanied Cello No. 3*; use one chord per measure and label the chords with Roman numerals.



Chapter 5: Harmonic Function of Seventh Chords

Each of the various types of dissonant seventh chords listed at the end of Chapter 2 has a precise function:

- 1.) Any seventh chord made of a major triad with a minor seventh above the root functions as V^7 . Thus, the following chord is V^7 in the key of C or V^7/C or the dominant seventh chord.

A musical staff consisting of five horizontal lines. On the left side, there is a treble clef symbol (a C-shape with three dots) positioned above the top line. On the right side, there is a bass clef symbol (an F-shape with two dots) positioned below the bottom line.

Because the V⁷ is a conflation of V and vii^o, it contains all the strongest tendency tones of the key: the leading tone 7 which resolves to 1; 2 which falls to 1; 5 either retained as a common tone or moving to 1; and 4 which pulls down to 3. Indeed, with the exception of the tonic pitch, the V chord contains all the notes primary to the major/minor scale – 2, 4, 5 and 7 (see Chapter 1). Most importantly, the V⁷ contains the key-identifying tritone 4-7 which moves to the tonic notes 3-8. When the tritone is present as a diminished 5th it collapses in resolution to a 3rd (1st example below); when present as an augmented 4th it expands to a 6th (2nd example below).

- 2.) Any fully diminished seventh chord functions as vii^o. This is the most intense form of the dominant because it contains two tritones:

A musical staff consisting of two parts. The left part shows a melodic line in G major, starting with a G major chord (G-B-D) and moving to a B-flat major chord (B-flat-D-F#). The right part shows a harmonic progression in C major, starting with a C major chord (C-E-G), followed by a G major chord (G-B-D), and ending with a C major chord (C-E-G).

- 3.) The other two varieties of seventh chords, the minor seventh and half-diminished seventh, both commonly function as subdominants with $\hat{2}$ as the root.

A musical staff consisting of two parts. The left part features a treble clef at the top and a bass clef at the bottom, both positioned above five horizontal lines. The right part features a bass clef at the top and a treble clef at the bottom, also positioned above five horizontal lines.

Note that the Tonic Function represents complete stability and can in no way be dissonant while seventh chords provide dissonance. How does this affect the seventh chords built on $\hat{1}$ and $\hat{6}$?

Chapter 6: Subdominant Substitutions

If the tonic is the function of stability and the dominant that of motion, the subdominant might be characterized as the function of color. While there are no wholly satisfactory substitutions for the tonic or dominant functions, the subdominant is a region which may effectively mix chords of different qualities, sometimes in highly altered forms.

We shall take IV and ii as basic subdominant chords, along with their seventh chords (all examples are in the key of C major and in root position, but may appear in any inversion).

Triads & Seventh Chords

A musical staff in G major (one sharp) shows four chords in root position. The first two are simple triads: IV (F major) and ii (D minor). The next two are seventh chords: IV⁷ (F7) and ii⁷ (D7). The bass line remains constant at the F note throughout.

- 1.) First, by altering the third of IV (A changed to A♭), we move from major to minor, i.e. a modal coloration or a borrowing from c minor.

A musical staff in G major shows four chords: iv (F major), ii° (D minor), iv⁷ (F7), and ii⁰⁷ (D7). The bass line remains constant at the F note throughout.

Thus a simple I – IV – V – I progression could be evocatively colored by substituting any of the above chords for IV.

A musical staff in C major shows a progression: I (C major), ii⁰⁷ (D7), V⁷ (G7), and I (C major). The bass line remains constant at the C note throughout.

A more intensified version of ii° is the so-called Neapolitan chord built on $\overset{\wedge}{\flat} 2$, the half-step above the tonic.

A musical staff in C major shows two Neapolitan chords: bII (B-flat major) and bII (B-flat major). The bass line remains constant at the C note throughout.

This chord almost always appears in 1st inversion; hence its common name the Neapolitan Sixth chord (or N⁶). It usually progresses to V.

Chapter 6: Subdominant Substitutions

Chopin, *Valse Brillante* in a minor

A musical score in G major (three sharps) and common time. The piano part shows a sequence of chords: i (A major), N⁶ (or b II⁶) (D major), V (G major), and VI (E major). The bassoon part provides harmonic support.

i N⁶(or b II⁶) V⁷ VI

2.) The root of IV may be chromatically raised a half-step, creating the leading tone to V. These altered chords, known as secondary dominants (see Chapter 8) always progress directly to V. (in C major, F altered to F \sharp)

A diagram showing two pairs of chords in G major. The top pair consists of a major seventh chord (F \sharp -A-C-E) and a dominant seventh chord (C-G-B-E). The bottom pair consists of a major seventh chord (B-D \sharp -F-A) and a dominant seventh chord (F-B-D \sharp -A).

vii^o/V V/V vii^{ø7}/V vii^o/V V⁷/V

3.) A rarely found alteration is the raising of the 5th of IV, i.e. the alteration of 1 of the key to $\hat{1}$. The C \sharp in the following example would lead to D, probably as part of the V chord.

A diagram showing two forms of raised fourth chords in G major. The first form is labeled IV^{#5} or IV+. The second form is labeled IV_{#5}⁷.

4.) The final forms are mixed alteration, including raised 4 and flattened 6 of the key, i.e. the root of IV raised and the 3rd lowered.

A diagram showing two forms of mixed altered fourth chords in G major. The first form has a raised fourth and a lowered sixth. The second form has a raised fourth and a lowered third.

These chords are seldom used in root position, but most usually appear in first inversion. They are shown below with their proper resolutions.

A diagram showing three types of mixed altered fourth chords with their resolutions. The first type is labeled It⁶ V (Italian augmented 6th). The second type is labeled Gr⁶ I₄⁶ V (German augmented 6th). The third type is labeled Fr⁶ V (French augmented 6th).

Chapter 6: Subdominant Substitutions

These last are the *augmented sixth chords*, so called because of the interval of the augmented 6th (A ♭ to F♯) between the lowest and highest sounding notes.

Augmented sixth chords are easy to recognize as they contain a half-step above and below the 5th scale degree and are the same in major and minor keys. They are perhaps the most intensively motive of the subdominant chords as the half-steps surrounding the dominant pitch pull strongly toward 5.

The following example uses the augmented sixth to progress chromatically in the bass from IV to V.

Mozart: *Sonate 6*

A musical score excerpt showing a bass line. The top staff is in treble clef, G major (two sharps), and common time. The bottom staff is in bass clef, C major (no sharps or flats). The bass line starts at the beginning of a measure with a dotted half note (B) followed by an eighth note (A). This is labeled 'IV⁶'. The next measure shows a half note (F) followed by a half note (E), labeled 'Gr⁶'. The third measure shows a half note (D) followed by a half note (C), labeled 'V'. The music consists of eighth-note patterns in each measure.

Beethoven, Ludwig van: *Bagatelle*

The following Bagatelle, by Beethoven, utilizes a subdominant substitution to give it its special charm. Can you locate and identify it?

Moderato

The musical score consists of four staves of piano music. The top staff shows a melodic line in treble clef with dynamic *p*. The second staff shows harmonic support in bass clef. The third staff begins at measure 6, with a melodic line in treble clef and dynamic *mf*. The fourth staff begins at measure 11, with a melodic line in treble clef and dynamics *poco rit.* and *a tempo*. Measures 16 and beyond are shown in the bottom staff. Measure numbers 6, 11, and 16 are indicated above their respective staves.

Chapters 5 and 6: Exercises

In the following progressions only primary triads (I, IV, or i, iv and V) are used. Alter the progressions by using substitute harmonies or seventh chords. Label each chord with Roman numerals.

1.)

A musical staff in common time with a key signature of one sharp (F#). It consists of two five-line staves. The top staff is for the treble clef (G-clef), and the bottom staff is for the bass clef (F-clef). The staff begins with a quarter note followed by a half note. The harmonic progression is I - IV - I - IV - V - I - V - I - V. The bass line provides harmonic support, moving between the root notes of the chords.

2.)

A musical staff in common time with a key signature of two sharps (D major). It consists of two five-line staves. The top staff is for the treble clef (G-clef), and the bottom staff is for the bass clef (F-clef). The staff begins with a quarter note followed by a half note. The harmonic progression is I - IV - V - II - V - I - V - I - V. The bass line provides harmonic support, moving between the root notes of the chords.

Chapter 7: Cadences in Tonal Music

Cadence (derived from a Latin word “cadere” meaning “to fall”) is loosely used to mean any type of closure in music. Cadences end pieces as well as phrases and sections of a musical work. Types of cadences may be distinguished by the degree of finality of their closure.

- 1.) *Authentic Cadence* – movement from a dominant chord to a tonic. The strongest progression is between two root-position triads (V_3^5 to I_3^5); less final is movement from V_3^5 to I_3^6 or from V_3^6 to I_3^5 . If the tonic note appears in both the lowest and highest sounding notes, the cadence is called a “perfect authentic cadence.” Authentic cadences without the root in both the lowest and highest sounding notes are called “imperfect authentic cadences” and are considerably less “final” than the perfect form.

The image shows three musical staves side-by-side. The first staff, labeled "Perfect", shows a G major chord (B, D, G) in the bass and a C major chord (E, G, C) in the treble. The second staff, labeled "Imperfect", shows a G major chord (B, D, G) in the bass and a C major chord (E, G, C) in the treble. The third staff, also labeled "Imperfect", shows a G major chord (B, D, G) in the bass and a C major chord (E, G, C) in the treble, with the bass note E being lower than the G.

- 2.) *Deceptive Cadence* – movement from the dominant to a chord other than the tonic. Usually the deceptive resolution is to vi, the common substitute for I (or to VI in the minor). This cadence usually moves (using V – vi as an example) V_3^5 to vi_3^5 .

A single musical staff in G major. It starts with a G major chord (B, D, G) in the bass. After a short rest, it moves to a C major chord (E, G, C) in the bass, which is the vi chord.

- 3.) *Plagal Cadence* – movement from the subdominant (either IV or iv) to the tonic. This is the “Amen” cadence of Protestant hymnody. The Plagal cadence is considerably less “strong” than the Authentic cadence as it lacks the “leading tone.”

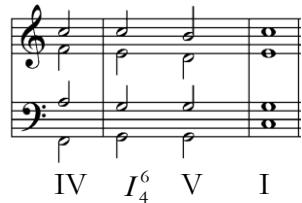
A single musical staff in G major. It starts with a C major chord (E, G, C) in the bass. After a short rest, it moves to a G major chord (B, D, G) in the bass, which is the I chord.

- 4.) *Half Cadence* – a mid-phrase arrival, usually on a rhythmically long value, of a dominant function chord.

A single musical staff in G major. It starts with a G major chord (B, D, G) in the bass. After a short rest, it moves to a D major chord (F#, A, D) in the bass, which is the dominant function chord. The bass note F# is sustained for a longer duration than the other notes.

Chapter 7: Cadences in Tonal Music

5.) *Cadential Six-Four Chord* – the I_4^6 chord, although a second inversion of the tonic triad, is very unstable, particularly since it shares its lowest sounding note with V. In fact, I_4^6 is often considered a V chord with suspensions or passing tones from the previous chord. Thus I_4^6 always falls on a strong beat in relation to the V it precedes.



Chapter 7: Exercises

- 1.) Write chord progressions ending with deceptive and perfect authentic cadences in D major and g minor. Use a I_4^6 or i_4^6 cadentially in each progression. Label all chords with Roman numerals.
 - 2.) In Mozart's *Ave Verum Corpus*, find the cadences and identify their type.

Part III: Inflection and Modulation

Chapter 8: Inflection of Chords and Secondary Dominants

Functional Tonality allows such great musical coherence that chords outside a single tonal focus or key can be used without disrupting the overall clarity of a harmonic passage. The most common outside-the-key chords are *secondary dominants*, chords which function as dominants (V, vii^o, V⁷ or vii^{o7}) of triads other than the I or i. To be a secondary dominant, a triad of a scale must be chromatically altered to resemble the dominant-function chord of the non-tonic note to which it resolves. For example, the root of the tonic chord, raised a half-step forms a diminished triad which functions like a vii^o in the key a step above the tonic. This creates a leading tone to the “new tonic” as well as the tritone above the leading tone.

A musical staff in G major (one sharp) shows a harmonic progression. The first chord is I (G major). The second chord is vii⁷/ii (F# minor), indicated by a circle with a 7 over it above the staff. The third chord is ii (A minor), indicated by a circle with an i over it below the staff.

In essence, the altered chord has been “borrowed” from another key to strongly *inflect* a triad of the first key. The use of secondary dominants provides a heightened sense of motion since any chord can be preceded by its dominant. To designate the function of a secondary dominant, the Roman numeral analysis shows the relationship of the secondary dominant to the chord to which it would resolve. The altered chord above would be designated as $\text{vii}^{\circ 7}/\text{ii}$, read as $\text{vii}^{\circ 7}$ of ii (seven diminished of two). Even if ii is not present or is itself altered, the $\text{c}\#$ diminished triad would be labeled $\text{vii}^{\circ 7}/\text{ii}$.

It is important to note that secondary dominants can be used to inflect chords *without* changing the original key of the music. The following passage, despite a plethora of accidentals, is still firmly in C major:

CM: I V⁷/V V vii⁷/vi vi V⁷/ii V⁷/V V⁷ I

Underlying this passage is a simple progression within the key of C major. From mm. 1–2, I moves to V by way of V^7/V (an altered ii chord) and resolves deceptively to vi by way of vii^{o7}/vi (an altered V⁷ chord). The end of the progression is II⁷-V⁷-I with each chord preceded by its own secondary dominant.

The common secondary dominants in C major (e.g.) are:

Chapter 8: Inflection of Chords and Secondary Dominants

A musical staff in bass clef and common time (indicated by a 'C'). It shows six chords: V (B⁷), vii^⁰ (A⁹), V^⁷ (B⁹), V (B⁷), vii^⁰ (A⁹), and V^⁷ (B⁹). The labels 'of V' and 'of vi' are placed under the first and second pairs of chords respectively.

Mozart, Wolfgang A.: *Andante*

Where are inflections in the following Andante by W. A. Mozart (K15mm)? Are there specific sections associated with specific harmonic functions? How does Mozart use accidentals? Are they expressive elements (making the melody more “songful”), for example, or do they have a role in the harmonic motion?

The musical score consists of four staves of music for two voices (Soprano and Alto) and basso continuo. The key signature is one flat, and the time signature is common time. The vocal parts are in soprano and alto voices, and the basso continuo part includes a bassoon line and a harpsichord/basso continuo line. The score is divided into four systems. System 1 (measures 1-6) starts with a dynamic of *mf*, followed by a dynamic of *p*. System 2 (measures 7-12) starts with a dynamic of *f*, followed by a dynamic of *p*. System 3 (measures 13-18) starts with a dynamic of *f*. System 4 (measures 19-24) starts with a dynamic of *p* and includes a *poco rit.* instruction.

Chapter 8: Exercises

In the following progressions, alter basic triads to make secondary dominants; label with Roman numerals.

1.)

A musical staff in common time. The key signature is C major (no sharps or flats). The top staff has a treble clef, and the bottom staff has a bass clef. The bass staff contains a continuous line of quarter notes. The top staff contains a continuous line of eighth notes.

2.)

A musical staff in common time. The key signature is C minor (one flat). The top staff has a treble clef, and the bottom staff has a bass clef. The bass staff contains a continuous line of quarter notes. The top staff contains a continuous line of eighth notes.

Chapter 9: Modulation and Large-Scale Form

In the previous chapter, secondary dominants were introduced as a means to inflect a non-tonic chord without changing keys. During inflection, secondary dominants enrich an ongoing progression in a single key. If the inflection gets “stuck,” the progression halts away from the tonic, and a non-tonic chord emphasized to the detriment of the tonic focus, a *modulation* to a new key has occurred. The difference between inflection and modulation depends on emphasis. A chord inflected by its secondary dominant continues to function within the initial key, acting in some way to return the music to the tonic. But, when modulation occurs, the inflected triad asserts for a time its primacy as tonic of a “new” key, and surrounds itself with appropriate chords and accidentals so it seems to be a tonic itself. To put it another way, when more than inflection occurs, each of the harmonic functions (subdominant, dominant, tonic) of the new key follows the inflected chord, establishing it as the tonic of the new key.

Mozart, *Minuet* mm. 5-8: modulation from F major to C major (I to V in F major)

The musical score shows two staves. The top staff is in F major (three flats) and the bottom staff is in C major (no sharps or flats). Measure 5 starts with a half note in F major followed by a series of eighth notes. Measure 6 begins with a half note in F major. Measure 7 starts with a half note in F major. Measure 8 starts with a half note in F major. Measure 9 starts with a half note in F major. The bassoon part in the bottom staff provides harmonic support throughout the measures.

F: V⁷/V ————— V
C: I ————— ii⁶ I₄⁶ V I

Eventually, the modulation will be undone and the music will return to the initial tonic, but following a modulation the music can be said to be momentarily in a “new” key which functions according to all the tendencies of tonal music discussed above.

The most common form of modulation is the *pivot-chord modulation*. One chord serves as a pivot, i.e. it functions in both the old and new keys, serving to smooth the transition from the old key and prepare for the new dominant (the secondary dominant) of the new key. For example:

The musical score shows two staves. The top staff is in C major (no sharps or flats) and the bottom staff is in G major (one sharp). The first measure shows a half note in C major followed by a half note in G major. The second measure shows a half note in G major. The third measure shows a half note in G major. The bassoon part in the bottom staff provides harmonic support throughout the measures.

C: I —————
G: IV V I

Modulation from C to G (I to V in C major)

Chapter 9: Modulation and Large-Scale Form

C: I ii –
a: – iv V i
Modulation from C to a (I to vi in C major)

Since modulation involves adding or deleting accidentals to create new dominants, the simplest modulations are to keys adjacent in the Circle of Fifths. These are referred to as modulations to *closely-related* keys. Modulations to non-adjacent keys are *distant* modulations. The most distant is between keys a tritone apart, such as C to F♯, which lie directly opposite each other on the Circle of Fifths.

Since modulation creates a sense of tension in relation to the original tonic key, modulations can act within large-scale forms as any non-tonic chord does within a smaller progression. If a piece is in three large sections, the first in the tonic key, the second in the dominant, and the final a return to tonic, the form of the whole work (I – V – I) mimics the basic chordal progressions (I – V – I) which underly the phrases of each of the sections. Thus, large scale form can have an integral relationship to the most basic details of chord-to-chord motion. On all levels of a work of tonal music, the tonic rules as a hierarchic reference point for stable organization. A modulation creates a momentary or passing “tonic” in a new key, but that tonic is related to the original tonic key and must resolve back to the primary tonic. Because of the continual reference on all structural levels to the tonic, coherent large-scale forms of great length are possible; even the most distant modulation bears a functional relationship to the hierarchy of the tonic.

Thus, the notion of *key* given in Chapter 1 (a collection of pitches and accidentals associated with a specific scale and tonic) must be expanded to include the possibility of many chromatic pitches and modulations to “other” tonics. The key of a piece does not exclude notes outside of that key, but serves as a perspective of organization from which the entire work can be understood. In this sense, key is like the “vanishing point” of perspective painting; tonality is the system of key perspective with the tonic as the horizon or vanishing point. It is possible to describe a piece of great length with many modulations as “in E♭” as opposed to “in C” or any other key, just as one would describe paintings as related to different vanishing points. For more about this notion of “key”, see the Introduction to D.F. Tovey’s *Essays in Musical Analysis*, Vol. 1.

Mozart, Wolfgang A.: *Allegro*

Like the Minuet from *Don Giovanni*, this Allegro by W. A. Mozart breaks down into sections that not only relate to harmonic function, but also progress overall in something like sonata form: a theme that divides into two segments, a miniature development, and an abbreviated recapitulation that now keeps the “themes” in the home key. Sonata form is not something imposed on such a piece. Sonata form is rather one artistic means of letting a musical drama unfold.

This piece also is good practice for hearing how harmonic function, which encompasses both the treble melody and the bass, can be implied by very few notes.

The musical score consists of four staves of music, likely for a piano or harpsichord. The top staff is treble clef, the bottom staff is bass clef, and the two middle staves are for the right and left hands respectively. The music is in common time (indicated by a 'C') and features a key signature of one flat (B-flat). The score includes measure numbers 1 through 24. Measures 1-7 show a melodic line in the treble clef staff with various note heads and stems. Measures 8-14 show a continuation of the melodic line with some changes in pitch and rhythm. Measures 15-21 show a further development of the melody. Measures 22-24 show a return to a earlier section of the piece. The bass staff provides harmonic support throughout, and the right and left hand staves provide harmonic and rhythmic complexity.

Chapter 9: Exercises

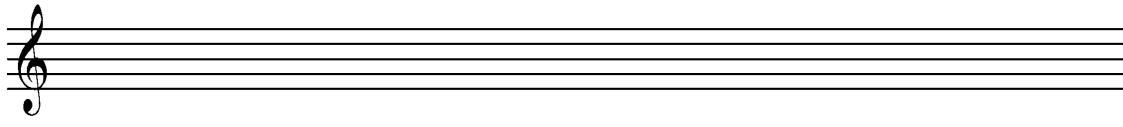
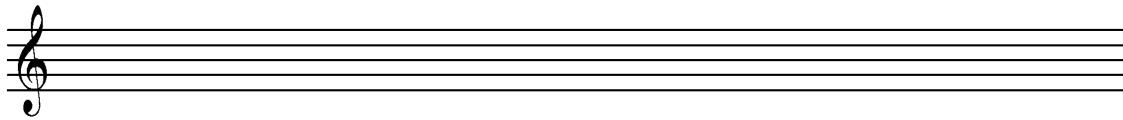
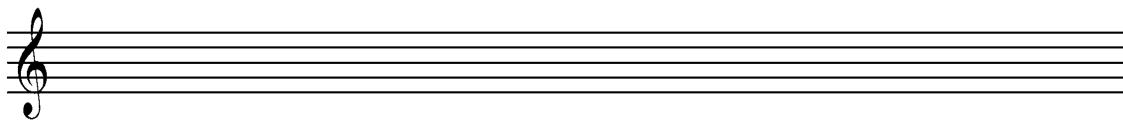
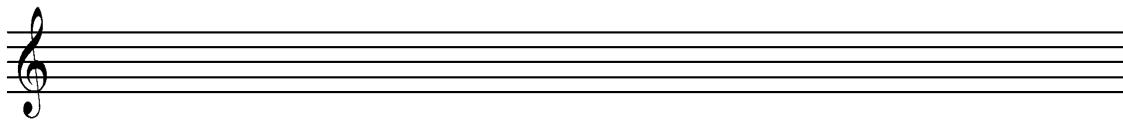
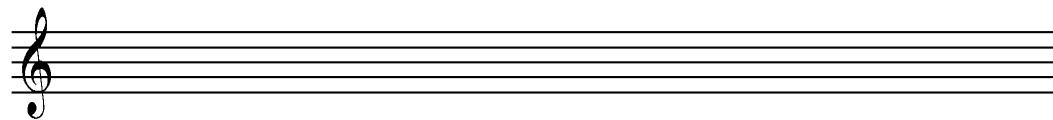
1.) Write pivot chord modulations from G major to each of the following keys: a minor, b minor, C major, D major, e minor, F major.

2.) Analyze the *Minuet* from *Don Giovanni* by Mozart: consider not only the harmonies (analyzed with Roman numerals and inversion symbols) but also the melodic structure and rhythmic variations. Using Mozart's work as a model, compose a Minuet:

- a) Retaining the triple meter and the rhythmic placement of Mozart's harmonies with the meter, first compose a treble melody clearly underlined by this harmonic arrangement.
- b) Then write the harmonic accompaniment, which may be chordal, arpeggiated or a combination of figurations.

3.) Analyze completely the first movement of the *Sonata in G Major* by Mozart. Consider not only the "local" chord progressions, but also the larger "key plan" created by modulations to different tonal regions and the manner in which contrasting melodies underscore or articulate the key changes and the overall form of the movement.

Blank Staves, to be Copied for Exercises



Materials for Analysis

A Note on Bach's First Prelude

This piece is the first in the collection of 48 Preludes and Fugues called the *Well-Tempered Clavier*, consisting of one prelude and fugue each for every possible key, in major and minor modes. The “prelude” as a genre emerged from a tradition of keyboard improvisation, the old and still-trodden path to becoming a composer. This famous prelude of Bach might be looked at as written-out improvisation, a way for the master to introduce his style in this art to the new student. Indeed, this prelude is a marvel of keyboard pedagogy for the beginner.

As always, we ask of a piece of music how is it made? First, notice that each measure is comprised of an *arpeggio* (from the Italian “harp”), sounding the notes of a chord in sequence. The arpeggio changes from one measure to the next. Can we see implied in the changing arpeggio the motion of different “voices”? Watching the arpeggio notes alter, like so many voices, allows us to follow Bach’s implicit counterpoint, his “voice leading” from measure to measure. This also gives the grace to the movement of the player’s hands.

In Chapter 3 we analyzed the harmony of the initial 4 measures, with one harmonic function per measure. We will want to see and hear how the prelude grows organically out of this opening fragment. How many parts does the prelude have and how are they parts of this whole? The basic “parts” or sections might first be determined by listening for the *cadences* (cf. Chapter 7).

Ultimately we might reflect on the question of how the prelude has deployed or displayed the key of C major?

But let’s look closely at Bach’s procedure after m. 4. Consider two “middle sections,” mm. 5-11 and mm. 12-19. How are these passages structured? Harmonic motion accompanying a little melodic figure, when repeated but displaced one step (usually downwards) in the scale—

A musical score for Bach's First Prelude, showing measures 5 through 8. The score is in G major (indicated by a G clef) and common time. It consists of two staves: treble and bass. Measure 5 starts with a bass note followed by a treble arpeggio. Measures 6-7 show a continuation of the arpeggios. Measure 8 begins with a bass note followed by a treble melodic figure: a dotted half note followed by an eighth note, then a quarter note, and finally another eighth note.

—creates an audible pattern called *sequencing*. (Sequencing is a very common procedure in Baroque music and in Bach in particular: you might listen for it in any of the orchestral introductions of the arias in the *St. Matthew Passion*.) Now hear how m. 9 *suspends* or carries over the treble chord, followed by the resolution in mm. 10-11. Taking mm. 5-11 as a unit of some sort, the music proceeds Sequence, Suspension, Closure. Can we say how this “unit” might be a *harmonic* elaboration of the first 4-measure fragment? By what functions does the

A Note on Bach's First Prelude

harmony progress in mm. 5-11? Once that is settled, we're ready to analyze mm. 12-19 similarly and compare that passage with the previous one (5-11).

Also look at the bass line of these two sections, mm. 5-11 and 12-19. How does the bass move? How does this motion divide up the C major scale?

Keep in mind this pattern of the motion of the bass as you listen to, read, and analyze the rest of the Prelude. The deep bass assumes an especially important role as the piece builds to a close. Can you hear it become an independent layer on the second page of the Prelude? When and how is this effect inaugurated—what is happening at mm. 22-24? How does this foundational bass now move vis-à-vis the pattern established for all the other “voices?” Why does this treatment seem appropriate? This employment of the deep bass is called “Pedal Point,” from a common practice in composing for the organ. We want to remain flexible with our “analysis” (whether noting aspects of counterpoint you learned earlier, or harmonic analysis) such that it can reflect this impressive design

Bach, J.S., *Prelude No. 1 in C Major*

[Allegro]

The musical score consists of six staves of piano music. The top two staves are for the treble clef (G-clef) voice, and the bottom two staves are for the bass clef (F-clef) voice. The third staff is also for the bass clef voice. The music is in common time (indicated by 'C'). The key signature changes from C major (no sharps or flats) to G major (one sharp) at measure 9. Measure numbers 1 through 15 are indicated above the staves. The notation includes various note values (eighth and sixteenth notes), rests, and dynamic markings like forte (f) and piano (p). Measures 1-8 show a repeating pattern of eighth-note pairs. Measures 9-12 show a similar pattern with a key change. Measures 13-15 show a continuation of the pattern.

Bach, J.S., *Prelude No. 1 in C Major*

The musical score consists of two staves: treble and bass. The treble staff uses a common time signature, indicated by a 'C'. The bass staff uses a bass clef and a common time signature. Measure 18 starts with eighth-note pairs in the treble staff and quarter notes in the bass staff. Measures 19-20 show eighth-note pairs in both staves. Measures 21-22 introduce a bass note with a sharp sign. Measures 23-24 continue the eighth-note pattern. Measures 25-26 show eighth-note pairs in both staves. Measures 27-28 introduce a bass note with a sharp sign. Measures 29-30 continue the eighth-note pattern. Measure 31 begins with eighth-note pairs in the treble staff, followed by a sixteenth-note run in the bass staff. Measure 32 shows eighth-note pairs in both staves. Measure 33 concludes with a bass note followed by a fermata over the bass staff.

Bach, J.S., *Prelude No. 2 in c minor*

[Allegro Vivace]

The musical score consists of six staves of piano music. The top two staves are for the treble clef (G-clef) voice, and the bottom four staves are for the bass clef (F-clef) voice. The key signature is one flat (B-flat), and the time signature is common time (indicated by a 'C'). The tempo is Allegro Vivace, as indicated by the dynamic marking above the first staff. The music is divided into measures by vertical bar lines. Measure 1 starts with eighth-note patterns in the treble and bass staves. Measures 2 and 3 continue this pattern. Measures 4 through 8 show more complex rhythmic patterns, including sixteenth notes and eighth-note chords. Measures 9 and 10 conclude the section with a final cadence.

Bach, J.S., *Prelude No. 2 in c minor*

The musical score consists of two staves: treble and bass. The key signature is one flat (C minor). Measure 13 starts with eighth-note pairs in the treble staff. Measures 14-16 show sixteenth-note patterns. Measures 17-19 continue the sixteenth-note patterns. Measures 20-22 show eighth-note pairs. Measures 23-25 show sixteenth-note patterns.

13

14

15

16

17

18

19

20

21

22

23

24

25

Bach, J.S., *Prelude No. 2 in c minor*

The musical score consists of two staves: treble and bass. The key signature is one flat (C minor). Measure 27 starts with a sixteenth-note pattern in the treble staff, followed by eighth-note pairs in the bass. Measure 28 begins with eighth-note pairs in the treble staff. Measure 29 features eighth-note pairs in both staves. Measures 30 and 31 show sixteenth-note patterns in the treble staff, with bass notes providing harmonic support. Measure 32 continues the sixteenth-note patterns. Measure 33 is a rest. Measure 34 is a transition, marked [Adagio], featuring sustained notes and a harmonic shift. Measure 35 is marked [Allegro] and returns to the faster tempo with sixteenth-note patterns. Measure 36 is a rest. Measure 37 concludes the section with a sixteenth-note pattern in the treble staff.

Mozart, W.A., *Minuet from Don Giovanni*

Moderato

mf dolce

cresc.

dim.

9

13

cresc.

Mozart, W.A., *Ave Verum Corpus*

Soprano

Alto

Tenor

Bass

Piano

sotto voce

Adagio

A - ve, a - ve ve - rum
sotto voce

A - ve, a - ve ver - rum
sotto voce

A - ve, a - ve ve - rum
sotto voce

Adagio

sotto voce

6

cor - pus, na - tum de Ma - ri - a vir - gi - ne, ve - re

cor - pus, na - tum de Ma - ri - a vir - gi - ne, ve - re

cor - pus, na - tum de Ma - ri - a vir - gi - ne, ve - re

cor - pus, na - tum de Ma - ri - a vir - gi - ne, ve - re

Piano

Mozart, W.A., *Ave Verum Corpus*

12

pas - sum, im - mo - la - tum in cru - ce pro ho - mi -
pas - sum im - mo - la - tum in cru - ce pro ho - mi -
pas - sum, im - mo - la - tum in cru - ce pro ho - mi -
pas - sum, im - mo - la - tum in cru - ce pro ho - mi -
12
ne. Cu - jus la - tus
ne. Cu - jus la - tus
ne. Cu - jus la - tus
ne. Cu - jus la - tus

18

Cu - jus la - tus

Mozart, W.A., *Ave Verum Corpus*

The musical score consists of two systems of music, each with four staves. The top system starts at measure 24 and the bottom system starts at measure 30. The music is written in common time with a key signature of one sharp (F#). The vocal parts are in soprano, alto, tenor, and bass. The piano accompaniment is in the bass and treble staves. The lyrics are in Latin and are repeated in each system.

System 1 (Measures 24-27):

per - fo - ra - tum un - da flu - xit et san - gui - ne;
per - fo - ra - tum un - da flu - xit et san - gui - ne;
per - fo - ra - tum un - da flu - xit et san - gui - ne;

System 2 (Measures 30-33):

e - sto no - bis prea - gu - sta - tum in mor - - - - tis ex -
e - sto no - bis prea - gu - sta - tum in mor - - - - tis ex -
e - sto no - bis prea - gu - sta - tum in mor - - - - tis ex -

Mozart, W.A., *Ave Verum Corpus*

Musical score for Mozart's Ave Verum Corpus, showing staves for voices and piano/bass. The score consists of two systems of music.

System 1 (Measures 36-37): The vocal parts (Soprano, Alto, Tenor, Bass) sing "a - mi - ne, in mor - - - - tis ex -" three times. The piano/bass part provides harmonic support with chords and bass notes. Measure 37 begins with a forte dynamic.

System 2 (Measures 42-43): The vocal parts sing "a - - - mi - ne." three times. The piano/bass part features a sustained note in measure 42 followed by a trill in measure 43.

Preparatory Questions for Mozart's *Sonata in G Major, K.283*, 1st Mvt.

Today some people look back at Mozart's music as the perfection of classical form, with its balanced phrases, its harmonic clarity, and its economy of means conveying deliberate restraint. But this tells us as much about what has happened to music since Mozart as it does about Mozart. In his own day, he seemed rather the composer who had brought the art to new heights of emotional expressiveness, who could write a sonata as thrilling as an opera.

- 1.) How many measures is the first "segment," making the "first theme," before you hear the near repetition of melodic material? What makes this theme so lovely or gives it character? Does it mix or contrast textures? ("Texture" includes, for example, block chords, agile runs, polyphony, rhythmic pulse and articulation, arching or flowing melody – whatever elements create the pattern of sound.)
- 2.) After this segment (first theme) closes, as announced by the repeated material, what follows? (Do we go directly to a second theme?) When does the music make its way to a new key—and how (cleverly, with wit, or not)? To what key?
- 3.) How is the "second theme" constructed, i.e. does it have any related or similar phrases? How does it contrast in *feel* with the first theme?
- 4.) As for the rest of the exposition (up to the double bar at m. 53), from where, in the part of the exposition we have already heard, do its final musical ideas come? Should we call this a third theme? In what key is this material? Has Mozart proceeded by making phrases regular, one exactly balanced against the other?
- 5.) How long is the "development," before you hear the opening theme of the sonata return? What key or keys are implied in the development? How are the melodic and bass figures here inspired or suggested by the themes heard in the exposition? What image would you use to describe the musical interaction of elements (drawn from the original themes) now taking place?
- 6.) How is the return to the beginning, the "recapitulation" section, *not* a literal recapitulation but rather a transformation of that original material? (The French like to call this section not the recapitulation but the *dénouement*, suggesting the final act of a play.) What are the new gestures, phrases, or inflected keys? How do any of these new events follow dramatically from the adventure – the *intrigue* – of the development?

Mozart, W.A., *Sonata in G Major, K. 283*, First Movement – Allegro

Allegro.

16

20

Mozart, W.A., *Sonata in G Major, K. 283*, First Movement – Allegro

The musical score consists of two staves. The top staff uses a treble clef and the bottom staff uses a bass clef. The key signature is one sharp (G major). Measure 25 starts with eighth-note pairs in the treble staff, followed by sixteenth-note patterns in the bass staff. Measure 29 begins with eighth-note pairs in the treble staff, followed by sixteenth-note patterns in the bass staff. Measure 33 starts with eighth-note pairs in the treble staff, followed by sixteenth-note patterns in the bass staff. Measure 37 starts with eighth-note pairs in the treble staff, followed by sixteenth-note patterns in the bass staff. Measure 41 starts with eighth-note pairs in the treble staff, followed by sixteenth-note patterns in the bass staff. Dynamic markings include *p* (piano), *f* (forte), and *tr* (trill).

Mozart, W.A., *Sonata in G Major, K. 283*, First Movement – Allegro

44

tr

p

48

f

f

51

p

p

55

60

f p

Mozart, W.A., *Sonata in G Major, K. 283*, First Movement – Allegro

The musical score for Mozart's Sonata in G Major, K. 283, First Movement – Allegro, featuring five staves of music for two voices (Soprano and Bass) and piano.

Staff 1 (Top): Soprano and Piano. Dynamics: f , p^3 , f , p^3 , f .

Staff 2 (Second from Top): Bass. Dynamics: $f\ p$, $f\ p$, f .

Staff 3 (Third from Top): Soprano. Dynamics: f , p .

Staff 4 (Fourth from Top): Bass. Dynamics: p .

Staff 5 (Bottom): Bass. Dynamics: p , f .

Mozart, W.A., *Sonata in G Major, K. 283*, First Movement – Allegro

The musical score consists of two staves: Treble (top) and Bass (bottom). The key signature is one sharp (G major). Measure 88 starts with eighth-note pairs in the treble staff, followed by a dynamic *p*. Measure 93 features eighth-note pairs in the bass staff. Measure 96 shows sixteenth-note patterns in both staves, with dynamics *f*, *p*, *f*, *p*, *f*. Measure 100 includes a dynamic *p* and *f*. Measure 104 concludes the page with a dynamic *p* and *f*.

Mozart, W.A., *Sonata in G Major, K. 283*, First Movement – Allegro

108

III

111

115

118

Appendix

Another View of Tonality

The system of harmonic analysis introduced in this manual was first codified by the German theorist Hugo Riemann (1849-1919) following on earlier theories, including those of Jean Phillippe Rameau (1683-1764). These analytic systems explore tonality primarily through means of chordal analysis, with emphasis on triads. Chains of chord progressions are seen to build up the form of the piece of music, with excursions to various keys as the highlight of tonal motion. The limitations of such harmonic analysis are clear (as was pointed out by Rameau's contemporary, J.S. Bach): no attempt is made in the primary analysis to consider aspects of melodic construction, counterpoint, or rhythm.

The Austrian theorist, musicologist, and composer Heinrich Schenker (1868-1935) created another approach to tonal analysis which takes into account the melodic motion and contrapuntal layering of the music as well as its harmonic structure. Schenker attempts in his analyses to show that a work of tonal music is an organic whole, an elaboration of simple, archetypic structures which recur in and give coherence to every tonal work.

The nature of tonality as conceived by Schenker is not just of functional motion, but of gravitation of non-tonic pitches toward the tonic. The entire form of a piece of tonal music involves the gradual fall (never ascent—why?) of a melodic line to the tonic; the fall at times stalls, overshoots, neighbors, but eventually and inevitably settles on the tonic. Similarly other lines, particularly the bass voice move away from the tonic but eventually return. Form is created by the urge of all to become tonic and is essentially linear, not chordal in conception.

The *eidos* of tonal form is the *Ursatz* or *Fundamental Structure*, represented as the topmost line of the following graphic analysis of Bach's *C major Prelude* (one might wonder what this graphic format reveals that other analyses lack). The Ursatz acts as the *background* of the piece, not perceived directly, but responsible for the formal coherence of the work and its intelligibility to the listener. The Ursatz contains two elements, shown as whole notes: the *Urlinie* or *fundamental line*, which descends over the course of the piece from 3 to 1; and the *Grundbass* or *fundamental bass*, which moves from the tonic pitch to the dominant and back. Significantly these two parts together look like a simple counterpoint exercise; Schenker was convinced that contrapuntal procedures underlie all compositional processes. The Ursatz of the Bach *Prelude* is also the fundamental structure of hundreds of tonal pieces, from the shortest to lengthy symphonic movements in sonata form. The small notes in the graph fill out the harmony and enrich the counterpoint; note especially the voice that falls from 5 through 4, the seventh of the dominant chord, to 3.

On the second line of the graph, the *middleground*, Schenker shows the unique *composing-out* of the fundamental structure. All composition according to this theory is elaboration or ornamentation of the basic structure. Bach elaborates the primary melodic line by overshooting the tonic and connecting or *coupling* the high E to the low E. This then moves to the D, the second of the Urlinie, but in the wrong octave. The *Prelude* is only complete when the line returns and cadences in the proper octave, which is shown by the beamed half

Another View of Tonality

notes in the upper register. Simultaneously, the second tone of the fundamental bass is elaborated by a lower neighbor, significantly harmonized as IV⁷; the bass voice resolves earlier than the Urlinie, creating a sort of middleground suspension that resolutely drives the melody to the tonic. Thus the form of this *Prelude* is most precisely shown in the middleground graph as an elaboration or variation of the Ursatz. Note that, for Schenker, the form of the piece is *not* a succession of melodies or even keys; the second, dominant key theme of a sonata form movement would represent only a middleground elaboration of a single non-tonic pitch of the simple Ursatz.

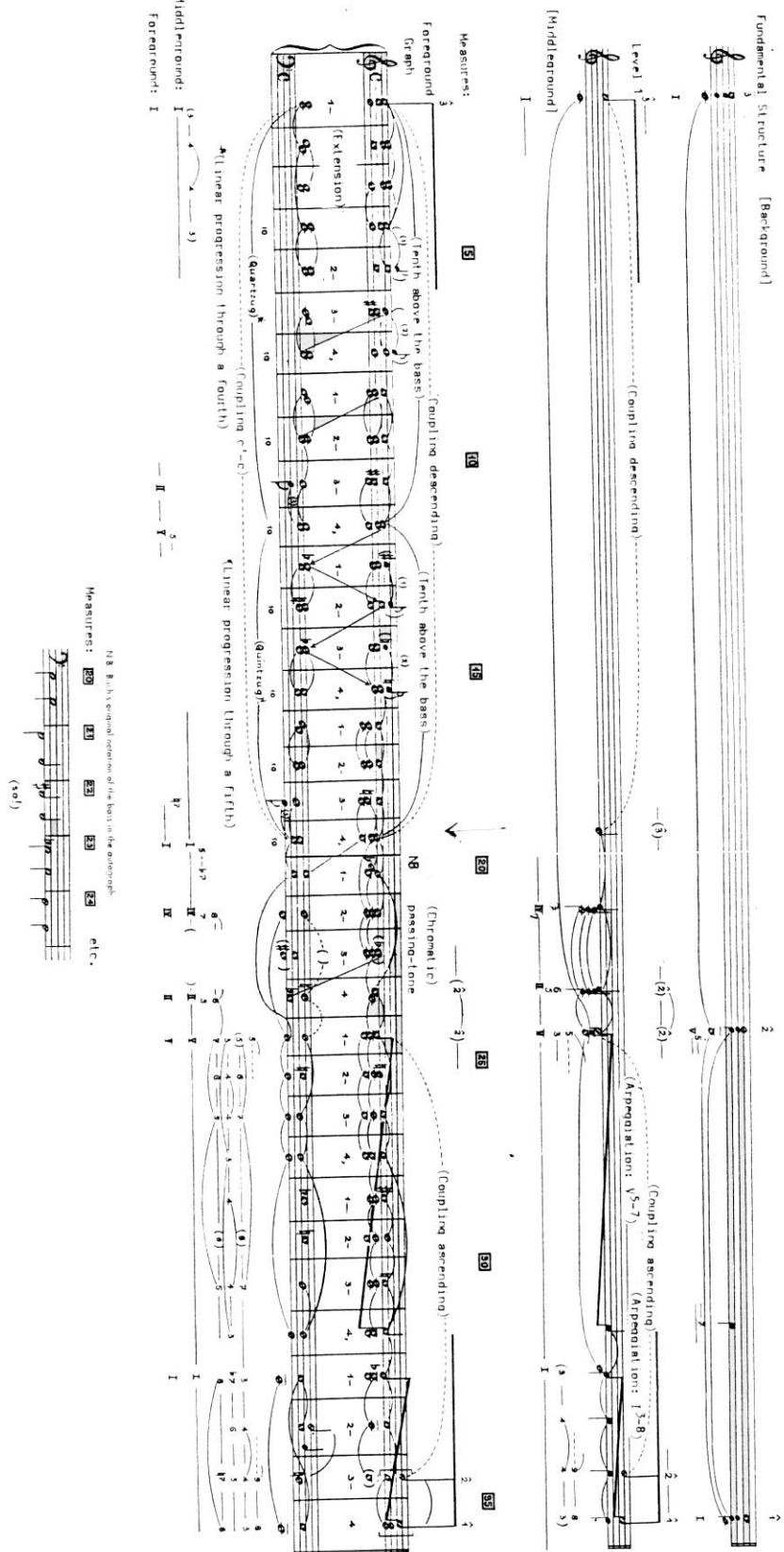
The final level of the analysis, the *foreground*, is most accessible to the casual listener. Here by various forms of notation (beamed half notes, various types of slurring, ties to show contrapuntal suspensions, highlighted eighth notes, and figured bass symbols) Schenker shows the melodic, contrapuntal, and harmonic interrelationships of the piece. Notice that Schenker resorts to Roman numeral harmonic analysis only for the most important harmonic arrival points; moreover he provides a separate harmonic analysis for the middleground and the background, and no chord-by-chord foreground analysis. The most significant departure from standard theoretical thought is Schenker's insight that the first four measures are only a composing-out of the tonic harmony in the foreground; in the middleground, the first 19 measures are a composing-out of the tonic; and finally the whole piece, via the Ursatz, is the composing-out of the tonic. Thus the same compositional principles work on all levels of the *Prelude*, making it an organic, integrated whole not unlike Goethe's concept of metamorphosis based on an archetypic *Urplantz* or primordial plant.

Finally, Schenker cites the original bass notation of measures 20-24. Schenker was one of the first musicians to turn to the autograph copies of scores for insights into the compositional processes of composers. Only in measures 21 and 22 does Bach write the bass half notes with stems upward, an indication, Schenker believes, of his understanding of the unique contrapuntal nature of this succession of notes. What do you think he would have us understand about this passage (particularly considering that some early editors thought measure 22 spurious)?

Schenker thought that his concept of tonality was much more revealing of the way composers wrote and the manner in which they heard music. Music for him was primarily a linear event, unfolding over time; the primary structure is the horizontal line and not the vertical sonority. Furthermore he did not regard this form of analysis as reductionist (his detractors would say he reduced all pieces to a single chord!); rather, he emphasized the middleground and foreground aspect of a composition in his great treatise *Der freie Satz* (*Free Composition* – 1935). But he also felt that no great music could be written without an Ursatz-based tonal system. He discounted both earlier modal music and the non-tonal works of the early 20th century as essentially formless. Interestingly, his most ardent students have adapted his techniques to all sorts of music, suggesting that there is not merely an *eidos* of tonal music but of all music.

Another View of Tonality

HEINRICH SCHENKER, GRAPHICAL ANALYSIS OF J. S. BACH'S PRELUDE I
FROM THE WELL-TEMPERED CLAVIER Book I



SPRING SOPHOMORE MUSIC MANUAL

A Note on Beethoven's Third Symphony, "Eroica": First Movement

What did Beethoven intend by subtitling his 3rd Symphony "the Heroic"? We know that he had originally composed the work in honor of Napoleon; but after Napoleon declared himself emperor, Beethoven changed the original dedication and left only the designation "Eroica".



We also know that around 1801 the composer was facing the onset of deafness and admitting his condition to his closest friends. Suddenly from the time of Beethoven's middle or "heroic" period forward, the inner experience of a composer becomes more relevant to understanding a piece of great music. Beethoven engages listeners in vicarious turmoil, in a soul's struggle against fate, with a force hardly heard in music before. Audiences feel a new level of emotional demand being made on them.

Indeed, can anyone resist identifying with the music of the *Eroica* – resist assigning special "meaning" to certain passages?

On a practical level, we might begin by familiarizing ourselves with the opening melody in the bass clef, inaugurated at m. 3. How does it compare to initial melodies you have witnessed in any sonata(s) written before this work of Beethoven? In particular, we have to decide what to make of that accidental, the C#, coming so early on. What does it do to or for the emerging melody? Can we analyze the chord in which it appears as part of the harmonic progression of the phrase? Does the C# help or hinder the melody's coming to completion? (How does one argue that – on what kind of evidence – for a piece of music?)

A Note on Beethoven's Third Symphony, "Eroica": First Movement

Does Beethoven's use of rhythm, or orchestration, for example, provide any clue?) What does this first theme thus express?

This may be hard to answer right off the bat. As with the exposition of other sonata-form pieces, one needs to experience the different mutations and re-appearances of this first theme as the movement progresses. The whole career of such a melody must figure into its meaning. And the notorious C#? You will want to attend to its particular deeds or sufferings, to sense what role they have in this "heroic" quest. Don't forget that a C# might re-appear enharmonically: it might be treated as a Db. As a melodic dissonance, it might also (eventually) seek some resolution, which you can listen for. It might even press for excursions into the key it names.

A good general question to keep in mind with Beethoven is: what guides him in the musical choices he makes? At each dramatic moment, what artistic effect is he after?

What other themes in the exposition does the composer take up and rework as the movement develops?

What is happening – melodically, rhythmically, harmonically – in mm. 244 through 283? (The harmony looks more difficult than it really is, as many chords are simply repeated.)

With respect to Beethoven's rhythmic outbursts, again one might trace such convulsions to their first appearance in the exposition. When did we first hear such rhythmic ruptures or dislocations? What do they mean?

Even the first two measures of the symphony, a last minute insertion on Beethoven's part, call for some explanation, perhaps more easily ventured once the listener is acquainted with the whole movement. To what end did he add those blasts before the opening melody?

Is that a new theme at m. 285? What is its significance or why does it seem necessary?

Recalling the opening melody with the poignant C#: when does this theme first begin to come into its own (so to speak)? When is it fully realized?

The solo horn entrance at 394 – that *coup de théâtre* before the officially designated Recapitulation: what's that about?

Why does this movement need a Coda (m. 557 f.)? What is accomplished in it? Why is it so long?

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

(+1) See Preface, 1. (+2) Preface, 2. (+3) Not the traditional Introduction, but merely a brief harmonic and rhythmic herald. (+4) Preface, 3, 4. (+5) Preface, 18; also 19. (+6) Preface, 5.

Copyright MCMXXXIX by Oliver Ditson Company

76301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

2

Subordinate Theme (*Two-part Song-form*) (+7)

Part I (Phrase-group)

45 Ohne
p dolce Strings

Clar.

Flute

Violin

50

55 ff Full Orch.

Repetition

Part II (Phrase-group)

60 cresc.

65 f Full Orch.

70

75

(+7) Preface, 6. The Subordinate Theme is in B-flat major. See also Preface 14, 15. —

74.101-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

3

Extension

80 ff

Coda I (+8)

Wood-wind cresa 85 *sf* *p Strings cresa*

f 90 *p* *cresa* 95 *p Basses*

Ob. *Fl.* *V* 100 *pp Strings*

Repet. *Extension* *V* *Coda II*

105 *Full Orch.* 110 *sf* *sf*

Repetition (+9)

sf *sf* *sf* 115 *sf* *sf*

(+8) Preface, 7. — (+9) In this repetition Beethoven reverts for the first time to the rhythm of the Subordinate Theme. —

78301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

¹⁰) These measures, the first time, are a return to the beginning, for the repetition of the Exposition. The second time, they lead into the Development. — ⁽¹¹⁾ Preface, 8. The origin of each Section is easily definable. —

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

5

Extension

Section 2

dolce

cresc.

sf

p

Fl.

Bassoon

Violin

L.H.

pp Strings

cresc.

p

D. M. A.

190

76301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

6

195

cresc.

Restatement

ff

200

p

205

p

cresc.

210

cresc.

ff

Extension

215

76301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

The image shows a page from a musical score, likely for orchestra or band, featuring six staves of music. The key signature is B-flat major (two flats). The score includes parts for Clarinet (Clar.), Bassoon (Bassoon), Flute (Fl.), Violin, and Trombones (Trom.). The music is divided into three sections: Section 5, Section 6 (+12), and Section 7 (+13). The score includes dynamic markings such as *p*, *fp*, *sf*, *cresc.*, and *ff*. Performance instructions like "Ped." and "Ped. ten." are also present. Measure numbers 220, 225, 230, 235, 240, 245, 250, 255, and 260 are indicated throughout the score.

(+12) From the 4th measure of the Subordinate Theme. Note the contrapuntal treatment. (+13) Grows out of the foregoing measures. Note the 6-measure Phrases. — 28301-5

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

8

265 *sf* *sf*

270 *sf* *sf*

275 *sf* *sf*

280 *f* *decresc.* *p*

285 *sfz p*

290 *cresc.*

295 *sf*

300 *f*

V. Strings

Section 8 (+14) *Oboe*

*Cello**

Restatement

Section 9

(+14 Here the genius of Beethoven recognized the necessity of a change: This Section presents a wholly new melodic Phrase. (Preface, 8). —

76301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

9

v

305

sf

ff

sf

310

sf

ff

sf

315

sf

ff

sf

p

sf

p

sf decresc.

dolce

325

Section 10

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

The musical score consists of six staves of music for orchestra. Measure 10 starts with a dynamic *cresc*, followed by a dynamic *p* at measure 330. Measures 11 and 12 show various dynamics including *p*, *sfp*, *p*, and *sfp*. Measure 13 begins with a dynamic *sfp* at 345, followed by *p* at 350. Measure 14 shows a dynamic *cresc* at 355, followed by *p* at 360. Measure 15 is marked *ff Full Orch.*. Measure 16 begins with a dynamic *f* for Oboes, followed by *f* for Bassoons and *f* for Strings. Measure 17 begins with a dynamic *p* at 370. The score includes rehearsal marks V, 1, 2, 3, 4, 5, and 6, and section markings for 'Section 11. Retransition (+15)' and 'Section 12'.

(+15) Preface, 9. — (+16) Compare the rhythmic form of measures 29-30; and of Section 7. —

76301-62

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

11

11

p decresc. 375 *pp* 380

pp Violins Hood Horns 385 *sempre pp*

390

pp Horn 395

f Full Orch. *ff* *f* *p* Strings

400 cresc. *sf* *p* 405

(+17) RECAPITULATION (+18)
Principal Theme (Group-form)
First Group

(+17) This is the famous untimely entrance of the horn (Tonic, against Dominant harmony). It was not a blunder, but the bold, intentional, foreshadowing of the principal motive. Note the *pp*. — (+18) Preface, 10. —

76301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

12 *Extension*

34 *Second Group*

Horns dolce

410

cresc. 415 *Flute*

i *Re.* * 4

420 *cresc.* *decresc.* *2p*

Re.

Extension

425 *cresc.*

Third Group; Transition

f Full Orch. 430

Re.

sforz. 435 *più f*

Re.

The musical score consists of six staves of music. The first three staves are labeled 'Extension' and 'Second Group'. The first staff features two woodwind parts (oboe and bassoon) with dynamic markings 'tr.' and 'Horns dolce'. The second staff shows a flute part with dynamic 'p'. The third staff includes a bassoon part with dynamic '2p'. Measures 410 and 415 show a transition with dynamics 'cresc.' and 'decresc.'. Measures 420 through 425 are labeled 'Third Group; Transition' and feature a full orchestra dynamic 'f' at measure 430. The score concludes with a dynamic 'più f' at measure 435.

7-301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

(+19) The Subordinate Theme is here in E \flat major, the principal key. _____

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

14

475

480

cresc.

ff

485

p

cresc.

sf

490

Strings cresc.

sf

500

pp Strings

505

Clar. Ob.

Wood-wind

495 cresc.

sf

p Basses

500

505

Clar. Ob.

V

500

505

76301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

15

Extension

Codetta II.

510

ff *Full Orch.* *sf*

515 *sf* *ff* *sf* *sf* *sf*

Pd. * *Pd.* * *Pd.* * *Pd.* * *Pd.* * *Pd.* *

520 *Strings* *sf*

sf *sf* *sf* 525 *ff*

sf *sf* *sf* *sf* *sf* *sf*

Extension

530 *sf* *sf* *sf* *sf* *sf* *sf*

Horns

Violins *p* 535

540

78801-82

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

16

Cresc.

545

ff Full Orch. *sf*

Codetta III

V (+20)

Wood-wind

550 *f p Strings*

pp 555

Coda .(+21)
Section 1.

p 560 *ff Full Orch.*

Ped.

V Section 2.

p 565 *Strings decresc.*

pp

f

570

575

Violins

p

sffz

Section 3. (+22)

580

585 *sffz*

cresc.

sf

p

Restatement

(+20) Compare this with the end of the Exposition. Here it is final.

(+21) Preface, II. — (4-22) Like Section 8 of the Development. Compare note (+14)

76301-82

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

17

590 595 Section 4.
decresc.
595

600

Section 5.
pp
605
(+ 23) fz

sf * p fz
espr.

610 sfz
* fz

cresc. 615
sfz

(+ 23) Compare note (+ 16).

76301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

18

V

cresc.

620

decresc.

p

625

cresc.

V

Section 6 (Period, with Repetitions)

Strings

p

fp

Ob.

630

5p.

V

First Repetition

635

V

(d.)

640

sffz

V

(d.)

Second Repetition

cresc.

Full Orch.

sf

650

76301-52

Beethoven, Ludwig van: Symphony No. 3, "Eroica," First Movement

19

V Third Repetition

655

col. Ped.

660

sf

665

Ped.

V

V Extension

670

ff

15

675

Ped.

V Repetition

cresc.

680

Full Orch.

f f f

685

690

Ped. *

V

(+24) From Part II of the Subordinate Theme.

76301-62

Brahms, Johannes: Intermezzo for Piano, Op. 118, No. 2

Andante teneramente

5

9

13

18

Brahms, Johannes: Intermezzo for Piano, Op. 118, No. 2

The musical score consists of two staves of piano music. The top staff is for the right hand (treble clef) and the bottom staff is for the left hand (bass clef). Measure 23 starts with eighth-note chords in the bass and eighth-note patterns in the treble. Measure 24 continues with eighth-note chords and patterns. Measure 25 begins with a melodic line in the treble, marked *legato*, followed by eighth-note chords in the bass. Measures 26-27 show eighth-note patterns in both hands. Measure 28 starts with eighth-note chords in the bass, followed by a melodic line in the treble marked *espress.* and *p dim.* Measures 29-32 continue with eighth-note patterns. Measure 33 is marked *calando* and *dolce*, featuring eighth-note chords in the bass and eighth-note patterns in the treble. Measures 34-37 continue with eighth-note patterns. Measure 38 is marked *cresc. un poco animato*, showing eighth-note chords in the bass and eighth-note patterns in the treble. Measures 39-42 show eighth-note patterns. Measure 43 is marked *rit.* and *più lento*, with eighth-note chords in the bass and eighth-note patterns in the treble. Measure 44 is marked *in tempo*, continuing with eighth-note patterns. Measure 45 concludes the page.

Brahms, Johannes: Intermezzo for Piano, Op. 118, No. 2

53

57 *più lento*

pp

legato

una corda

63 *Tempo I*

p

cresc.

espress.

rit.

tre corde

68 *f*

72 *p rit.*

dolce pp

77 *rif.*

dolce

Brahms, Johannes: Intermezzo for Piano, Op. 118, No. 2

82
87
92
98
104
110

espress.
cresc.
legato
espress. *p dim.* *calando* *dolce*
cresc. un poco animato
rit. - *- più lento* *p*

Chopin, Frédéric: *Preludes* 1, 4 and 7

Agitato

1.

The musical score consists of five staves of piano music. Staff 1 starts with a dynamic 'v' and a tempo marking 'Agitato'. Staff 2 begins with a dynamic '7'. Staff 3 features a dynamic 'cresc.' and a tempo marking 'stretto'. Staff 4 has a dynamic '(3)'. Staff 5 concludes with a dynamic '(3)'.

Chopin, Frédéric: *Preludes* 1, 4 and 7

Prelude 4

Largo

4.

stretto

s. espressivo

f dim. p

smorz. pp

Chopin, Frédéric: *Preludes* 1, 4 and 7

Prelude 7

Andantino

7.

The musical score consists of two staves of piano music. The top staff begins with a dynamic of *p dolce*. The music features eighth-note patterns and sustained notes. The bottom staff continues the pattern. Both staves include performance instructions: '2a' with an asterisk (*) under it, '2a', '2a', '2a*', and '2a*' with an asterisk (*) under it. The score is in common time, with a key signature of one sharp (F#).

We have now considered all the fine arts in the general way suitable to our point of view. We began with architecture, whose aim as such is to elucidate the objectification of the will at the lowest grade of its visibility, where it shows itself as the dumb striving of the mass, devoid of knowledge and conforming to law; yet it already reveals discord with itself and conflict, namely that between gravity and rigidity. Our observations ended with tragedy, which presents to us in terrible magnitude and distinctness at the highest grade of the will's objectification that very conflict of the will with itself. After this, we find that there is yet another fine art that remains excluded, and was bound to be excluded, from our consideration, for in the systematic connexion of our discussion there was no fitting place for it; this art is music. It stands quite apart from all the others. In it we do not recognize the copy, the repetition, of any Idea of the inner nature of the world. Yet it is such a great and exceedingly fine art, its effect on man's innermost nature is so powerful, and it is so completely and profoundly understood by him in his innermost being as an entirely universal language, whose distinctness surpasses even that of the world of perception itself, that in it we certainly have to look for more than that exercitium arithmeticæ occultum nescientis se numerare animi which Leibniz took it to be.¹⁶ Yet he was quite right, in so far as he considered only its immediate and outward significance, its exterior. But if it were nothing more, the satisfaction afforded by it would inevitably be similar to that which we feel when a sum in arithmetic comes out right, and could not be that profound pleasure with which we see the deepest recesses of our nature find expression. Therefore, from our standpoint, where the aesthetic effect is the thing we have in mind, we must attribute to music a far more serious and profound significance that refers to the innermost being of the world and of our own self. In this regard the numerical ratios into which it can be resolved are related not as the thing signified, but only as the sign. That in some sense music must be related to the world as the depiction to the thing depicted, as the copy to the original, we can infer from the analogy with the remaining arts, to all of which this character is peculiar; from their effect on us, it can be inferred that that of music is on the whole of the same nature, only stronger, more rapid, more necessary and infallible. Further, its imitative reference to the world must be very profound, infinitely true, and really striking, since it is instantly understood by everyone, and presents a certain infallibility by the fact that its form can be reduced to quite definite rules expressible in numbers, from which it cannot possibly depart without entirely ceasing to be music. Yet the point of comparison between music and the world, the regard in which it stands to the world in the relation of a copy or a repetition, is very obscure. Men have practised music at all times without being able to give an account of this; content to understand it immediately, they renounce any abstract conception of this direct understanding itself. I have devoted my mind entirely to the impression of music in its many different forms; and then I have returned again to reflection and to the train of my thought expounded in the present work, and have arrived at an explanation of the inner essence of music, and the nature of its imitative relation to the world, necessarily to be presupposed from analogy. This explanation is quite sufficient for me, and satisfactory for my investigation, and will be just as illuminating also to the man who has followed me thus

¹⁶ Leibniz' Letters, Kortholt's edition, ep. 154. "An unconscious exercise in arithmetic in which the mind does not know it is counting."

far, and has agreed with my view of the world. I recognize, however, that it is essentially impossible to demonstrate this explanation, for it assumes and establishes a relation of music as a representation to that which of its essence can never be representation, and claims to regard music as the copy of an original that can itself never be directly represented.

Therefore, I can do no more than state here at the end of this third book, devoted mainly to a consideration of the arts, this explanation of the wonderful art of tones which is sufficient for me. I must leave the acceptance or denial of my view to the effect that both music and the whole thought communicated in this work have on each reader. Moreover, I regard it as necessary, in order that a man may assent with genuine conviction to the explanation of the significance of music here to be given, that he should often listen to music with constant reflection on this; and this again requires that he should be already very familiar with the whole thought which I expound. The (Platonic) Ideas are the adequate objectification of the will. To stimulate the knowledge of these by depicting individual things (for works of art are themselves always such) is the aim of all the other arts (and is possible with a corresponding change in the knowing subject). Hence all of them objectify the will only indirectly, in other words, by means of the Ideas. As our world is nothing but the phenomenon or appearance of the Ideas in plurality through entrance into the principium individuationis (the form of knowledge possible to the individual as such), music, since it passes over the Ideas, is also quite independent of the phenomenal world, positively ignores it, and, to a certain extent, could still exist even if there were no world at all, which cannot be said of the other arts.

Thus music is as immediate an objectification and copy of the whole will as the world itself is, indeed as the Ideas are, the multiplied phenomenon of which constitutes the world of individual things. Therefore music is by no means like the other arts, namely a copy of the Ideas, but a copy of the will itself, the objectivity of which are the Ideas. For this reason the effect of music is so very much more powerful and penetrating than is that of the other arts, for these others speak only of the shadow, but music of the essence. However, as it is the same will that objectifies itself both in the Ideas and in music, though in quite a different way in each, there must be, not indeed an absolutely direct likeness, but yet a parallel, an analogy, between music and the Ideas, the phenomenon of which in plurality and in incompleteness is the visible world. The demonstration of this analogy will make easier, as an illustration, an understanding of this explanation, which is difficult because of the obscurity of the subject. I recognize in the deepest tones of harmony, in the ground-bass, the lowest grades of the will's objectification, inorganic nature, the mass of the planet. It is well known that all the high notes, light, tremulous, and dying away more rapidly, may be regarded as resulting from the simultaneous vibrations of the deep bass-note. With the sounding of the low note, the high notes always sound faintly at the same time, and it is a law of harmony that a bass-note may be accompanied only by those high notes that actually sound automatically and simultaneously with it (its sons harmoniques) through the accompanying vibrations. Now this is analogous to the fact that all the bodies and organizations of nature must be regarded as having come into existence through gradual development out of the mass of the planet. This is both their supporter and their source, and the high notes have the same relation to the ground-bass. There is a limit to the depth, beyond which no sound is any longer audible. This corresponds to the fact that no matter is perceptible without form and quality, in other words, without the manifestation of a force incapable of further explanation, in which an

Idea expresses itself, and, more generally, that no matter can be entirely without will. Therefore, just as a certain degree of pitch is inseparable from the tone as such, so a certain grade of the will's manifestation is inseparable from matter. Therefore, for us the ground-bass is in harmony what inorganic nature, the crudest mass on which everything rests and from which everything originates and develops, is in the world. Further, in the whole of the ripienos that produce the harmony, between the bass and the leading voice singing the melody, I recognize the whole gradation of the Ideas in which the will objectifies itself. Those nearer to the bass are the lower of those grades, namely the still inorganic bodies manifesting themselves, however, in many ways. Those that are higher represent to me the plant and animal worlds. The definite intervals of the scale are parallel to the definite grades of the will's objectification, the definite species in nature. The departure from the arithmetical correctness of the intervals through some temperament, or produced by the selected key, is analogous to the departure of the individual from the type of the species. In fact, the impure discords, giving no definite interval, can be compared to the monstrous abortions between two species of animals, or between man and animal. But all these bass-notes and ripienos that constitute the harmony, lack that sequence and continuity of progress which belong only to the upper voice that sings the melody. This voice alone moves rapidly and lightly in modulations and runs, while all the others have only a slower movement without a connexion existing in each by itself. The deep bass moves most ponderously, the representative of the crudest mass; its rising and falling occur only in large intervals, in thirds, fourths, fifths, never by one tone, unless it be a bass transposed by double counterpoint. This slow movement is also physically essential to it; a quick run or trill in the low notes cannot even be imagined. The higher ripienos, running parallel to the animal world, move more rapidly, yet without melodious connexion and significant progress. The disconnected course of the ripienos and their determination by laws are analogous to the fact that in the whole irrational world, from the crystal to the most perfect animal, no being has a really connected consciousness that would make its life into a significant whole. No being experiences a succession of mental developments, none perfects itself by training or instruction, but at any time everything exists uniformly according to its nature, determined by a fixed law. Finally, in the melody, in the high, singing, principal voice, leading the whole and progressing with unrestrained freedom, in the uninterrupted significant connexion of one thought from beginning to end, and expressing a whole, I recognize the highest grade of the will's objectification, the intellectual life and endeavour of man. He alone, because endowed with the faculty of reason, is always looking before and after on the path of his actual life and of its innumerable possibilities, and so achieves a course of life that is intellectual, and is thus connected as a whole. In keeping with this, melody alone has significant and intentional connexion from beginning to end. Consequently, it relates the story of the intellectually enlightened will, the copy or impression whereof in actual life is the series of its deeds. Melody, however, says more; it relates the most secret history of the intellectually enlightened will, portrays every agitation, every effort, every movement of the will, everything which the faculty of reason summarizes under the wide and negative concept of feeling, and which cannot be further taken up into the abstractions of reason. Hence it has always been said that music is the language of feeling and of passion, just as words are the language of reason. Plato explains it as ή τῶν μελῶν κίνησις μεμιμημένη, ἐν τοῖς

παθήμασιν ὅταν ψυχὴ γίνηται (melodiarum motus, animi affectus imitans),¹⁷ Laws, VIII [812c]; and Aristotle also says: διὰ τί οἱ ρύθμοὶ καὶ τὰ μέλη, φωνὴ οὐσα, ἥθεσιν ἔσικε; (Cur numeri musici et modi, qui voces sunt, moribus similes sese exhibent?), Problemata, c. 19.¹⁸ Now the nature of man consists in the fact that his will strives, is satisfied, strives anew, and so on and on; in fact his happiness and well-being consist only in the transition from desire to satisfaction, and from this to a fresh desire, such transition going forward rapidly. For the nonappearance of satisfaction is suffering; the empty longing for a new desire is languor, boredom. Thus, corresponding to this, the nature of melody is a constant digression and deviation from the keynote in a thousand ways, not only to the harmonious intervals, the third and dominant, but to every tone, to the dissonant seventh, and to the extreme intervals; yet there always follows a final return to the keynote. In all these ways, melody expresses the many different forms of the will's efforts, but also its satisfaction by ultimately finding again a harmonious interval, and still more the keynote. The invention of melody, the disclosure in it of all the deepest secrets of human willing and feeling, is the work of genius, whose effect is more apparent here than anywhere else, is far removed from all reflection and conscious intention, and might be called an inspiration. Here, as everywhere in art, the concept is unproductive. The composer reveals the innermost nature of the world, and expresses the profoundest wisdom in a language that his reasoning faculty does not understand, just as a magnetic somnambulist gives information about things of which she has no conception when she is awake. Therefore in the composer, more than in any other artist, the man is entirely separate and distinct from the artist. Even in the explanation of this wonderful art, the concept shows its inadequacy and its limits; however, I will try to carry out our analogy. Now, as rapid transition from wish to satisfaction and from this to a new wish are happiness and well-being, so rapid melodies without great deviations are cheerful. Slow melodies that strike painful discords and wind back to the keynote only through many bars, are sad, on the analogy of delayed and hard-won satisfaction. Delay in the new excitement of the will, namely languor, could have no other expression than the sustained keynote, the effect of which would soon be intolerable; very monotonous and meaningless melodies approximate to this. The short, intelligible phrases of rapid dance music seem to speak only of ordinary happiness which is easy of attainment. On the other hand, the allegro maestoso in great phrases, long passages, and wide deviations expresses a greater, nobler effort towards a distant goal, and its final attainment. The adagio speaks of the suffering of a great and noble endeavour that despairs all trifling happiness. But how marvellous is the effect of minor and major! How astonishing that the change of half a tone, the entrance of a minor third instead of a major, at once and inevitably forces on us an anxious and painful feeling, from which we are again delivered just as instantaneously by the major! The adagio in the minor key reaches the expression of the keenest pain, and becomes the most convulsive lament. Dance music in the minor key seems to express the failure of the trifling happiness that we ought rather to disdain; it appears to speak of the attainment of a low end with toil and trouble. The inexhaustibleness of possible melodies corresponds to the inexhaustibleness of nature in

¹⁷ Leibniz' Letters, Kortholt's edition, ep. 154. "An unconscious exercise in arithmetic in which the mind does not know it is counting."

¹⁸ "How is it that rhythms and melodies, although only sound, resemble states of the soul?"

the difference of individuals, physiognomies, and courses of life. The transition from one key into quite a different one, since it entirely abolishes the connexion with what went before, is like death inasmuch as the individual ends in it. Yet the will that appeared in this individual lives on just the same as before, appearing in other individuals, whose consciousness, however, has no connexion with that of the first. But we must never forget when referring to all these analogies I have brought forward, that music has no direct relation to them, but only an indirect one; for it never expresses the phenomenon, but only the inner nature, the in-itself, of every phenomenon, the will itself. Therefore music does not express this or that particular and definite pleasure, this or that affliction, pain, sorrow, horror, gaiety, merriment, or peace of mind, but joy, pain, sorrow, horror, gaiety, merriment, peace of mind themselves, to a certain extent in the abstract, their essential nature, without any accessories, and so also without the motives for them. Nevertheless, we understand them perfectly in this extracted quintessence. Hence it arises that our imagination is so easily stirred by music, and tries to shape that invisible, yet vividly aroused, spirit-world that speaks to us directly, to clothe it with flesh and bone, and thus to embody it in an analogous example. This is the origin of the song with words, and finally of the opera. For this reason they should never forsake that subordinate position in order to make themselves the chief thing, and the music a mere means of expressing the song, since this is a great misconception and an utter absurdity. Everywhere music expresses only the quintessence of life and of its events, never these themselves, and therefore their differences do not always influence it. It is just this universality that belongs uniquely to music, together with the most precise distinctness, that gives it that high value as the panacea of all our sorrows. Therefore, if music tries to stick too closely to the words, and to mould itself according to the events, it is endeavouring to speak a language not its own. No one has kept so free from this mistake as Rossini; hence his music speaks its own language so distinctly and purely that it requires no words at all, and therefore produces its full effect even when rendered by instruments alone. As a result of all this, we can regard the phenomenal world, or nature, and music as two different expressions of the same thing; and this thing itself is therefore the only medium of their analogy, a knowledge of which is required if we are to understand that analogy.

Accordingly, music, if regarded as an expression of the world, is in the highest degree a universal language that is related to the universality of concepts much as these are related to the particular things. Yet its universality is by no means that empty universality of abstraction, but is of quite a different kind; it is united with thorough and unmistakable distinctness. In this respect it is like geometrical figures and numbers, which are the universal forms of all possible objects of experience and are *a priori* applicable to them all, and yet are not abstract, but perceptible and thoroughly definite. All possible efforts, stirrings, and manifestations of the will, all the events that occur within man himself and are included by the reasoning faculty in the wide, negative concept of feeling, can be expressed by the infinite number of possible melodies, but always in the universality of mere form without the material, always only according to the in itself, not to the phenomenon, as it were the innermost soul of the phenomenon without the body. This close relation that music has to the true nature of all things can also explain the fact that, when music suitable to any scene, action, event, or environment is played, it seems to disclose to us its most secret meaning, and appears to be the most accurate and distinct commentary on it. Moreover, to the man

who gives himself up entirely to the impression of a symphony, it is as if he saw all the possible events of life and of the world passing by within himself. Yet if he reflects, he cannot assert any likeness between that piece of music and the things that passed through his mind. For, as we have said, music differs from all the other arts by the fact that it is not a copy of the phenomenon, or, more exactly, of the will's adequate objectivity, but is directly a copy of the will itself, and therefore expresses the metaphysical to everything physical in the world, the thing-in-itself to every phenomenon. Accordingly, we could just as well call the world embodied music as embodied will; this is the reason why music makes every picture, indeed every scene from real life and from the world, at once appear in enhanced significance, and this is, of course, all the greater, the more analogous its melody is to the inner spirit of the given phenomenon. It is due to this that we are able to set a poem to music as a song, or a perceptive presentation as a pantomime, or both as an opera. Such individual pictures of human life, set to the universal language of music, are never bound to it or correspond to it with absolute necessity, but stand to it only in the relation of an example, chosen at random, to a universal concept. They express in the distinctness of reality what music asserts in the universality of mere form. For, to a certain extent, melodies are, like universal concepts, an abstraction from reality. This reality, and hence the world of particular things, furnishes what is perceptive, special, and individual, the particular case, both to the universality of the concepts and to that of the melodies. These two universalities, however, are in a certain respect opposed to each other, since the concepts contain only the forms, first of all abstracted from perception, so to speak the stripped-off outer shell of things; hence they are quite properly abstracta. Music, on the other hand, gives the innermost kernel preceding all form, or the heart of things. This relation could very well be expressed in the language of the scholastics by saying that the concepts are the universalia post rem, but music gives the universalia ante rem, and reality the universalia in re. Even other examples, just as arbitrarily chosen, of the universal expressed in a poem could correspond in the same degree to the general significance of the melody assigned to this poem; and so the same composition is suitable to many verses; hence also the vaudeville. But that generally a relation between a composition and a perceptive expression is possible is due, as we have said, to the fact that the two are simply quite different expressions of the same inner nature of the world. Now when in the particular case such a relation actually exists, thus when the composer has known how to express in the universal language of music the stirrings of will that constitute the kernel of an event, then the melody of the song, the music of the opera, is expressive. But the analogy discovered by the composer between these two must have come from the immediate knowledge of the inner nature of the world unknown to his faculty of reason; it cannot be an imitation brought about with conscious intention by means of concepts, otherwise the music does not express the inner nature of the will itself, but merely imitates its phenomenon inadequately. All really imitative music does this; for example, *The Seasons* by Haydn, also many passages of his *Creation*, where phenomena of the world of perception are directly imitated; also in all battle pieces. All this is to be entirely rejected. The inexpressible depth of all music, by virtue of which it floats past us as a paradise quite familiar and yet eternally remote, and is so easy to understand and yet so inexplicable, is due to the fact that it reproduces all the emotions of our innermost being, but entirely without reality and remote from its pain. In the same way, the seriousness

essential to it and wholly excluding the ludicrous from its direct and peculiar province is to be explained from the fact that its object is not the representation, in regard to which deception and ridiculousness alone are possible, but that this object is directly the will; and this is essentially the most serious of all things, as being that on which all depends. How full of meaning and significance the language of music is we see from the repetition signs, as well as from the Da capo which would be intolerable in the case of works composed in the language of words. In music, however, they are very appropriate and beneficial; for to comprehend it fully, we must hear it twice. In the whole of this discussion on music I have been trying to make it clear that music expresses in an exceedingly universal language, in a homogeneous material, that is, in mere tones, and with the greatest distinctness and truth, the inner being, the in-itself, of the world, which we think of under the concept of will, according to its most distinct manifestation. Further, according to my view and contention, philosophy is nothing but a complete and accurate repetition and expression of the inner nature of the world in very general concepts, for only in these is it possible to obtain a view of that entire inner nature which is everywhere adequate and applicable. Thus whoever has followed me and has entered into my way of thinking will not find it so very paradoxical when I say that, supposing we succeeded in giving a perfectly accurate and complete explanation of music which goes into detail, and thus a detailed repetition in concepts of what it expresses, this would also be at once a sufficient repetition and explanation of the world in concepts, or one wholly corresponding thereto, and hence the true philosophy. Consequently, we can parody in the following way the above-mentioned saying of Leibniz, in the sense of our higher view of music, for it is quite correct from a lower point of view: *Musica est exercitium metaphysics occultum nescientis se philosophari animi.*¹⁹ For scire, to know, always means to have couched in abstract concepts. But further, in virtue of the truth of the saying of Leibniz, corroborated in many ways, music, apart from its aesthetic or inner significance, and considered merely externally and purely empirically, is nothing but the means of grasping, immediately and in the concrete, larger numbers and more complex numerical ratios that we can otherwise know only indirectly by comprehension in concepts. Therefore, by the union of these two very different yet correct views of music, we can now arrive at a conception of the possibility of a philosophy of numbers, like that of Pythagoras and of the Chinese in the I Ching, and then interpret in this sense that saying of the Pythagoreans quoted by Sextus Empiricus (*Adversus Mathematicos*, Bk. vii [§ 94]): τῷ ἀριθμῷ δὲ τὰ πάντα ἐπέοικεν (numero cuncta assimilantur).²⁰ And if, finally, we apply this view to our above-mentioned interpretation of harmony and melody, we shall find a mere moral philosophy without an explanation of nature, such as Socrates tried to introduce, to be wholly analogous to a melody without harmony, desired exclusively by Rousseau; and in contrast to this, mere physics and metaphysics without ethics will correspond to mere harmony without melody. Allow me to add to these occasional observations a few more remarks concerning the analogy of music with the phenomenal world. We found in the previous book that the highest grade of the will's objectification, namely man, could not

¹⁹ “Music is an unconscious exercise in metaphysics in which the mind does not know it is philosophizing.”

²⁰ “All things are similar to number.”

appear alone and isolated, but that this presupposed the grades under him, and these again presupposed lower and lower grades. Now music, which, like the world, immediately objectifies the will, is also perfect only in complete harmony. In order to produce its full impression, the high leading voice of melody requires the accompaniment of all the other voices down to the lowest bass which is to be regarded as the origin of all. The melody itself intervenes as an integral part in the harmony, as the harmony does in the melody, and only thus, in the full-toned whole, does music express what it intends to express. Thus the one will outside time finds its complete objectification only in the complete union of all the grades that reveal its inner nature in the innumerable degrees of enhanced distinctness. The following analogy is also remarkable. In the previous book we saw that, notwithstanding the self-adaptation of all the phenomena of the will to one another as regards the species, which gives rise to the teleological view, there yet remains an unending conflict between those phenomena as individuals. It is visible at all grades of individuals, and makes the world a permanent battlefield of all those phenomena of one and the same will; and in this way the will's inner contradiction with itself becomes visible. In music there is also something corresponding to this; thus a perfectly pure harmonious system of tones is impossible not only physically, but even arithmetically. The numbers themselves, by which the tones can be expressed, have insoluble irrationalities. No scale can ever be computed within which every fifth would be related to the keynote as 2 to 3, every major third as 4 to 5, every minor third as 5 to 6, and so on. For if the tones are correctly related to the keynote, they no longer are so to one another, because, for example, the fifth would have to be the minor third to the third, and so on. For the notes of the scale can be compared to actors, who have to play now one part, now another. Therefore a perfectly correct music cannot even be conceived, much less worked out; and for this reason all possible music deviates from perfect purity. It can merely conceal the discords essential to it by dividing these among all the notes, i.e., by temperament. On this see Chladni's Akustik, § 30, and his Kurze Übersicht der Schall- und Klanglehre, p. 12. I might still have much to add on the way in which music is perceived, namely in and through time alone, with absolute exclusion of space, even without the influence of the knowledge of causality, and thus of the understanding. For the tones make the aesthetic impression as effect, and this without our going back to their causes, as in the case of perception. But I do not wish to make these remarks still more lengthy, as I have perhaps already gone too much into detail with regard to many things in this third book, or have dwelt too much on particulars. However, my aim made it necessary, and will be the less disapproved of, if the importance and high value of art, seldom sufficiently recognized, are realized. According to our view, the whole of the visible world is only the objectification, the mirror, of the will, accompanying it to knowledge of itself, and indeed, as we shall soon see, to the possibility of its salvation. At the same time, the world as representation, if we consider it in isolation, by tearing ourselves from willing, and letting it alone take possession of our consciousness, is the most delightful, and the only innocent, side of life. We have to regard art as the greater enhancement, the more perfect development, of all this; for essentially it achieves just the same thing as is achieved by the visible world itself, only with greater concentration, perfection, intention, and intelligence; and therefore, in the full sense of the word, it may be called the flower of life. If the whole world as representation is only the visibility of the will, then art is the elucidation of this visibility, the camera obscura which

shows the objects more purely, and enables us to survey and comprehend them better. It is the play within the play, the stage on the stage in Hamlet. The pleasure of everything beautiful, the consolation afforded by art, the enthusiasm of the artist which enables him to forget the cares of life, this one advantage of the genius over other men alone compensating him for the suffering that is heightened in proportion to the clearness of consciousness, and for the desert loneliness among a different race of men, all this is due to the fact that, as we shall see later on, the in-itself of life, the will, existence itself, is a constant suffering, and is partly woeful, partly fearful. The same thing, on the other hand, as representation alone, purely contemplated, or repeated through art, free from pain, presents us with a significant spectacle. This purely knowable side of the world and its repetition in any art is the element of the artist. He is captivated by a consideration of the spectacle of the will's objectification. He sticks to this, and does not get tired of contemplating it, and of repeating it in his descriptions. Meanwhile, he himself bears the cost of producing that play; in other words, he himself is the will objectifying itself and remaining in constant suffering. That pure, true, and profound knowledge of the inner nature of the world now becomes for him an end in itself; at it he stops. Therefore it does not become for him a quieter of the will, as we shall see in the following book in the case of the saint who has attained resignation; it does not deliver him from life for ever, but only for a few moments. For him it is not the way out of life, but only an occasional consolation in it, until his power, enhanced by this contemplation, finally becomes tired of the spectacle, and seizes the serious side of things. The St. Cecilia of Raphael can be regarded as a symbol of this transition. Therefore we will now in the following book turn to the serious side.

Schopenhauer, Arthur, and E. F. J. Payne. *The World as Will and Representation*. Falcon Press, 1958.

The Story of *Tristan und Isolde*

ACT I. Against her will, the proud Irish princess Isolde is being conducted by the knight Tristan over the seas to the court of his uncle, King Mark of Cornwall, whom she is to marry. Taunted by the songs of a sailor, she rails at her captor and, through her maid Brangaene, bids him come forward and face her wrath. When Tristan declines, Isolde tells Brangaene how, long before, he had fought with the Irish knight Morold, who had gone to Cornwall to collect the tribute due to Ireland, and to whom Isolde had been engaged. Morold had been killed, Isolde continues, and Tristan injured, and she relates how she made the mistake of nursing the knight back to health in Ireland instead of slaying him in vengeance. Recalling how Tristan repaid her tenderness by returning to claim her for his uncle, she concludes with a curse upon his head. Overwhelmed by shame and bitterness, the princess decides to drink a death potion, which she bids her maid prepare from a magic store bequeathed her by her mother. Tristan enters when the shouts of the sailors reveal that the ship is nearing land. Calling on him to atone for the murder of Morold, Isolde refuses to put him to death by the sword, as he suggests, but bids him drink the death potion with her. Meanwhile the horrified Brangaene has substituted a love philter in the cup that Tristan and Isolde now raise to their lips. After a pause they are overcome by the magic and yield to the passion that had hitherto been stifled. Aghast at what she has done, Brangaene rushes to separate the lovers as the ship approaches Cornwall, where they are greeted by King Mark's court. .

ACT II. In the castle garden, Isolde hears the horns of the king's hunting party recede into the twilight and tells Brangaene to signal Tristan that it is safe for him to enter. The princess absolves the maid of responsibility for her act, bidding her now to keep watch for Mark's return. Tristan rushes in; the lovers exchange passionate declarations as they invoke the longed-for night to descend upon them. Lost in each other's embrace, they ignore Brangaene's repeated warnings that the hours are flying and so are surprised by the king, who appears with his party and halts in consternation. There is a long pause; day begins to dawn. At last Mark sorrowfully berates Tristan for his treachery, calling upon all to see how the truest of the true has proved false. Tristan, offering no defense, tenderly invites Isolde to share his dark future and, when she agrees, kisses her gently on the forehead. Mark's knight Melot draws his sword in fury and advances on Tristan, who drops his guard and allows himself to be wounded.

ACT III. Tristan awaits Isolde in his ruined castle of Kareol in Brittany, where a shepherd pipes mournfully to indicate that no ship can be seen. Lying on a couch, the knight wakes from a fevered sleep and turns to Kurvenal, the faithful servant who has brought him from Cornwall to recuperate from his wound. In his delirium Tristan assures Kurvenal of Isolde's return, painting a vivid picture of the ship that will bring her to him. After a while the shepherd's pipe is heard playing merrily. Beside himself with joy, the knight listens as his servant describes the actual ship's arrival, and when Isolde is sighted he wildly tears the bandage from his wound. She rushes in and Tristan dies in her arms. Mark and Melot, who have pursued Isolde, burst upon the scene and are engaged in battle by the grief-stricken Kurvenal, who slays Melot and in turn is mortally wounded by the king's defenders. The senseless Isolde is revived by Brangaene, who reveals that she has told Mark of the love potion and that he has come not to punish but to forgive. But the magnanimous king is too late. Isolde, gazing with rapture upon Tristan's face, breathes a final invocation and then sinks, lifeless and transfigured, upon his body.

An Introduction to Richard Wagner's *Tristan und Isolde*

To approach Wagner's opera it is best to begin by studying the libretto. The poetic text is essential to understanding the composer's "total work of art" (*Gesamtkunstwerk*), for Wagner himself is the poet. Starting with the libretto will also help insofar as the reader has to reconstruct the events, described late in Act 1, that precede those of the opera's first scene and that bear on Tristan's and Isolde's original acquaintance. There are riddles too; for example, that of Isolde's apparent abandonment of Tristan between Act 2 and her entrance in Act 3. This is a striking lacuna in the plot, which might be crucial to this drama of ill-fated love.

But *Tristan and Isolde* is no ordinary romantic tragedy. Romantic heroes and heroines do not usually adopt mutually assured self-destruction as their conscious project. *Tristan* takes the "un-repression" of eros to its extreme conclusion. It is no accident that our hero Tristan first encountered Isolde incognito as "Tan-tris:" Wagner thus hints at the ancient Yoga practice that heightens sexual desire to its utmost spiritual expression and demand.

What effect do obstacles or prohibitions have on the passion of Isolde and Tristan? Do legendary lovers *have* to be political enemies? Is Tristan and Isolde's enmity over and done with? Hatred turned into love can be a high stakes game: how do you know that your former foe and death-devoted lover has a perfectly pure design? In that vein we have to decide what significance to assign to the death potion that Isolde pours for Tristan and herself in Act 1, though her maid Brangane has substituted the love potion in its place. Tristan's betrayal inflames Isolde's outrage when Act 1 opens: once the pair has drunk the love philter, is her anger of no further import for the events of Acts 2 and 3?

If Wagner's libretto fails to spell out what precisely motivates the lovers' actions, his music is there to help. Here the double meaning of the word "motive" is illuminating. Wagner's orchestral accompaniment is famous for its use of melodic motives or motifs; and these have symbolic significance, sometimes hinting at the unconscious "motives" of the characters onstage. Published scores will sometimes preface the music with a list of *leitmotiven*, the meaningful melodic phrases, like so many players about to appear in the drama.

Example: "Death"

A musical score excerpt in 3/4 time, B-flat major. The vocal line consists of two parts: a soprano part and a bass part. The soprano part begins with a dynamic of **f** (fortissimo) and a melodic line consisting of eighth and sixteenth notes. The lyrics are "Tod - ge- weih tes Haupt!" (Death - de-vot-ed head!). The bass part enters with a dynamic of **p** (pianissimo) and a melodic line consisting of eighth and sixteenth notes. The lyrics are "Tod - ge- weih tes Herz!" (Death - de-vot-ed heart!). The vocal parts are separated by a vertical bar line.

Using a list of motives as a method of interpreting *Tristan* may be useful. But it may also become a reduction of the artwork and an impoverishment of the listener's experience. Wagner's "total" musical drama employs all sorts of devices to suggest meaning in sound. (Writers of music for the cinema still utilize his techniques.) With respect to the conventional listing of melodic motives, it is important to recognize that these fragments are born continuously out of the sea of sound. The composer does not present separate melodic elements, already formed. The motives are rather like shapes the seething waves make when the ocean is turbulent. The Prelude to *Tristan* is the supreme example of this Wagnerian art.

An Introduction to Richard Wagner's *Tristan und Isolde*

The Prelude

One might first listen to the Prelude in light of Wagner's "metaphysical" design for this music – to express an analogy between the origin of the World, according to certain Buddhist speculations, and the birth of Desire. Some of Wagner's "Buddhism" derived, we know, from Schopenhauer. As we saw in our selection from the philosopher's work, Schopenhauer conceived music as the pure representation of the World as a whole. He hypothesized that

the whole of the visible world is only the objectification, the mirror, of the will, accompanying it to knowledge of itself, and indeed...to the possibility of salvation.

The nature of existence cannot be separated from the yearning by which all beings strive and evolve. How did Wagner imagine the birth of this world-as-will? In a letter he describes the "troubling of the primal cloudless heavens by a breath that swells and swells and finally condenses into our visible world." The opening motif of *Tristan* is this primordial breath. Listening to the Prelude, do we sense the cosmic significance of the opening phrases, bathed in silence?

As the world condenses, and the primal Oneness dissolves, painful consciousness is born – an unquenchable thirst for reunion in love. Again in Wagner's own words, the Prelude portrays an

insatiable longing...that grows through anxious sighing, hope and apprehension, plaints and desires, rapture and torment, [grows] finally to the most powerful impulse, the most violent attempt to find a breach in the dyke that might open a way for the inexhaustibly craving heart to enter the sea of love's endless delight. In vain! The swooning heart sinks back again, to pine away in yearning desire, a yearning that never reaches its goal, since each attainment of such a goal brings only renewed desire.

As you study the whole opera, you will want to see how Tristan and Isolde discover a "breach in the dyke" of appearances, a way to the "sea of endless delight" that the Prelude strives after but fails to achieve.

To consider more closely Wagner's compositional method in the overture: How many melodic motifs are contained in the opening 3 measures (with their 8th-note pick-up)? What might they signify in relation to each other? Listen to the chord at the downbeat of measure 2 – the notorious Tristan chord. How to analyze it? Try resolving this chord, or the chord at the close of the first phrase, with some tonic (I or i) chord in a plausible key. Do such resolutions sound right? Are the Tristan chord and the chord where the phrase comes to temporary rest related?

The problem with, and the power of, chords like the Tristan chord is that, as listeners grow accustomed to them, they may go deaf to traditional tonal harmony. They may find themselves longing only to hear these Wagnerian sirens – these voices from the abyss. What would such susceptibility say about the ear and the soul? In any case, we shall notice the stark contrast between two harmonic worlds – between the music of Night and the

An Introduction to Richard Wagner's *Tristan und Isolde*

music of Day – in every act of *Tristan*. Be attentive to the effects of these two poles of tonality.

To continue with the Prelude. Compare the first three expressions of that opening 3-measure arch, through measure 11, especially the first note and the final chord in each phrase. What key is indicated per phrase? How are these keys related? Then there is the key indicated suddenly by measure 17. Was that a cadence? How is this chord on the accented downbeat (resounding pizzicato in the bass) related to the keys implied so far? Should we even be using the word “key” here, or rather something like “tonal center?” In brief, is there some logic to Wagner’s tonal motion? What type of chord do we hear as a “resolution” in each of these 3-measure phrases – what counts as an island of repose in this new sonorous sea? In other words, what chord do we hear as the tension and what as its resolution? How does such treatment of chords reflect Wagner’s (above-mentioned) theory of Desire?

Alternatively, we can look at Wagner’s counterpoint. How are the treble melodic lines related from one 3-measure phrase to the next? Can we describe this relation in terms of the suspensions employed in traditional counterpoint, where one voice is momentarily stable and another moves? By what steps do the voices “lead?” (If you have studied Chopin’s “Prelude no. 4” for piano, you can compare Wagner’s voice-leading to Chopin’s expressive procedure.) Also observe the way Wagner moves his bass line.

At some point in the Prelude we arrive at a fully formed “motive” or theme. Notice how one motive morphs into another. Several different motives come to birth, all of which will return repeatedly and significantly later in the opera. (Catch, for example, the melody emerging in the bass at mm. 28-31.) One might check these melodic fragments with a list of motives for *Tristan* to see if that helps decipher the Prelude’s musical narrative.

Some further questions about the opera

1. What is Wagner saying about the meaning of music and our sensitivity to it? When we first see Isolde, she is outraged by the sailor’s song. Later, at the start of Act 2, when Isolde is anxiously expecting her lover’s arrival, she literally does not hear what Brangaene hears – the hunting horns (on the stage). How does Wagner’s orchestral accompaniment convey these competing auditory “points of view?” This opening of the second act is a brilliant musical mise-en-scene. But by the time we reach the Finale of Act 3, Isolde’s hearing problem will have cleared up dramatically. She will hear a music that no one else is aware of. (Consider her lyrics there. What is going on as she “sinks” into the ocean of sound?)
2. Act 2 gives us the famous long love duet sung by the heroic couple. What is it about? Listen to the long tuneful section that begins with Tristan singing, “O sink hernieder . . .” (Oh, close around us), initiating a melody made from the four notes of the Tristan chord. This *Liebestod*, the famous Love-death music, begins in earnest at “So sturben wir, um ungetrennt” (So should we die we would not part). Who persuades whom of what? Is it, as Nietzsche thought, really metaphysics the lovers are singing about – the secrets of existence? How can music give concrete form to such abstract dialogue, purporting to open our ears to the nature of Being? How does this duet attempt to erase our hero and heroine’s identities? (At one point, for example, Wagner makes the soloists exchange 9/8 and 3/4 time

An Introduction to Richard Wagner's *Tristan und Isolde*

signatures. Is there any *musical* necessity for that?)

3. But can the famous love duet resolve? Notice when Act 2 goes into the key signature of B major and approaches a climax, only to be interrupted – on what chord? The love duet's theme will have to be taken up later and completed by Isolde (solo) to conclude the story. The return of that theme in Act 3 begins with the text “Mild und leise” (Gently, softly). (Wagner had titled this music *Liebestod* for a concert version in 1863, but for the opera he referred to it as Isolde's *Verklaerung* or *Transfiguration*.) What is the significance of her recapitulating this music the lovers had sung together? In concluding, the harmony of desire will resolve itself for the first time on its own, without the intrusion of classical harmony from the world of King Mark. Eerily, the Tristan chord returns for its final appearance, resolved by the closing chord of the opera. How does Wagner manage the ambiguous chord now?
4. Notice that Wagner has put Music “on the stage” in every act – the king's brass at the close of Act 1, the “hunting” horns in pursuit of Tristan in Act 2, and the English horn (a.k.a. shepherd's pipe) at the start of Act 3. This last episode is especially significant: music has finally been recognized as a vital force by one of the characters. The Shepherd's old tune is calling Tristan to some crucial recollection. (One could analyze the English horn melody with profit, its struggle with its key of f minor.) What is Tristan's musical suffering about in Act 3? How is he released from the pipe's sad tune? Remember how Monteverdi brought the figure Musica down from Parnassus at the opening of *Orfeo*, and how Mozart told the tale of a magical flute. Now Wagner's *Tristan* indicates some teaching about our spiritual kinship with Music. With Tristan on his deathbed, Wagner may be indulging in a particular irony, since he appears to reverse his organic method of writing: the composer now de-composes Tristan. Having opened the scene with the complete English horn solo (the shepherd's pipe that haunts Tristan), he slowly breaks the tune into fragments. But to what end?
5. Another indication of the composer's wit and love of poetic detail: to conclude the long opera, the whole orchestra swells on the last chord, the dying gasp of the cosmos. But check the orchestral score. Wagner has made an exception of our friend the English horn. The score removes it from the last billow of sound, assigning it a “solo” rest in the final measure. Meaning...?
6. Has Wagner gone beyond Schopenhauer in his thinking about the power of music?

Tristan and Isolda. | Tristan und Isolde.
Drama in three Acts | Handlung in drei Aufzügen
by | von
RICHARD WAGNER.

English translation by H. & F. Corder.

(SELECTIONS)

First Act.. Erster Aufzug.

Introduction. | Einleitung.

Lento e languido.
Langsam und schmachtend.

The musical score consists of five staves of music, each with a treble clef and a key signature of one sharp. The first staff begins with a dynamic of *p* and includes markings for *cresc.*, *dim.*, and *p*. The second staff features a dynamic of *cresc.* followed by *p*. The third staff includes *più* and *dim.* markings. The fourth staff contains *poco rall.*, *cresc.*, *riten.*, *a tempo*, *dolce sano*, and *dim.* markings. The fifth staff concludes with *dim.* and *cresc.* markings.

Wagner, Richard: *Tristan und Isolde*, "Prelude"

3

espress.

cresc.

dolce
sart

ten.

animato
belebt

Animando.
Belebend.

cresc.

molto cresc.

rallent.

a tempo

dolce

dim.

ff dim.

cresc.

p

cresc.

p

cresc.

p

cresc.

p

più f

ff

meno f

espress.

sempre più f

Wagner, Richard: *Tristan und Isolde*, "Prelude"

Musical score for Wagner's "Prelude" from *Tristan und Isolde*. The score consists of eight staves of music, each with a treble clef and a key signature of two sharps. The music is divided into measures by vertical bar lines. Various dynamics and performance instructions are included, such as "marcato", "più f", "molto espress.", "sempre f", and "rit." (ritardando). Measure 1 starts with a "marcato" instruction. Measure 2 includes a dynamic "f". Measure 3 features a "più f" instruction. Measures 4 and 5 contain "molto espress." markings. Measure 6 begins with a dynamic "rit.". Measure 7 starts with "sempre f". Measure 8 concludes with a "più f" instruction.

Wagner, Richard: *Tristan und Isolde*, "Prelude"

4

più f

p

espress.

dim.

trem.
dolce zart

cresc.

dim.

p

cresc.

p

p

più p

trem.

pp
(The Curtain rises.)
(Der Vorhang geht auf.)

Debussy, Claude: *Voiles* (from *Preludes, Book I*)

Modéré ($\text{♩} = 88$)
Dans un rythme sans rigueur et caressant

The musical score consists of four staves of piano music. Staff 1 (top) shows a treble clef, common time, and a key signature of one sharp. It includes dynamic markings *p très doux*, *p*, and *più p*. Staff 2 (second from top) shows a bass clef, common time, and a key signature of one sharp. It includes dynamic markings *pp expressif* and *toujours pp*. Staff 3 (third from top) shows a treble clef, common time, and a key signature of one sharp. It includes dynamic marking *très doux*. Staff 4 (bottom) shows a bass clef, common time, and a key signature of one sharp. It includes dynamic markings *pp* and *pp*.

Debussy, Claude: *Voiles* (from *Preludes, Book I*)

Musical score for Debussy's *Voiles*, showing five staves of music:

- Staff 1 (Treble Clef): Measures 18-19. Dynamics: *p*, *p*. Measure 19 ends with *pp*.
- Staff 2 (Bass Clef): Measures 18-19. Bass notes with fermatas.
- Staff 3 (Treble Clef): Measure 20 starts with *pp très souple*. Measures 21-22 end with *pp*.
- Staff 4 (Bass Clef): Measures 20-22. Bass notes with fermatas.
- Staff 5 (Treble Clef): Measure 23 starts with *Cédez*. Measures 24-25 end with *pp*.
- Staff 6 (Bass Clef): Measures 23-25. Bass notes with fermatas.
- Staff 7 (Treble Clef): Measure 26 starts with *a Tempo*. Dynamics: *p*, *p*. Measures 27-28 end with *pp*.
- Staff 8 (Bass Clef): Measures 26-28. Bass notes with fermatas.
- Staff 9 (Treble Clef): Measure 29 starts with *Cédez*. Dynamics: *p*, *p*, *dim.*. Measures 30-31 end with *dim.*
- Staff 10 (Bass Clef): Measures 29-31. Bass notes with fermatas.

Debussy, Claude: *Voiles* (from *Preludes, Book I*)

33

pp

36

pp *p*

Serrez - - - // Cédez - - - //

p *dim. molto* *s*

En animant

p *mf* *(rapide)* *cresc.* *molto* *mf*

Emporté

42

f *molto* *p* *più p* *pp* *più pp*

Très retenu

44

Debussy, Claude: *Voiles* (from *Preludes, Book I*)

au Mouv:

48 (comme un très léger glissando) *pp*

doucement en dehors

51

54 *pp*

Très apaisé et très atténué jusqu'à la fin

58 *più pp*

62 *pianissimo*

(...Voiles)

The musical score consists of five staves of piano music. Staff 1 starts at measure 48 with a dynamic of *pp*, indicated as 'comme un très léger glissando'. The instruction *au Mouv:* is written above the staff. Measure 51 begins with a dynamic of *pp*. Staff 2 starts at measure 54 with a dynamic of *pp*. The instruction *doucement en dehors* is written above the staff. Staff 3 starts at measure 58 with a dynamic of *più pp*. The instruction *Très apaisé et très atténué jusqu'à la fin* is written above the staff. Staff 4 starts at measure 62 with a dynamic of *pianissimo*.

