J. S. Bach Fugue 1 from The Well-Tempered Clavier I Text Setting by Peter Kalkavage (Isaiah 32:1)

J. S. Bach Fugue 4 from The Well-Tempered Clavier I
Text Setting by Peter Kalkavage (II Samuel 18:33)

Part I

Rhythm

Contents

Ave verum corpus (Plainchant) 56 Ludwig van Beethoven, Two Versions of the Ode to Joy Theme 57 Hans Leo Hassler, Mein G'müth ist mir verwirret 60 Guido of Arezzo, from Micrologus 61 On Rhythm 62 Duke Ellington, It Don't Mean a Thing ……………………………………..66 Some Characteristic Dance Rhythms 67 J. S. Bach, Gigue 71 Mozart, Theme from Piano Sonata in A major, K. 331 72 Aristotle, from Rhetoric 72 William Shakespeare, Sonnet 73 73 Plato, from The Republic 73 Baldassare Castiglione, from The Book of the Courtier 74

Ave verum corpus Pope Innocent VI (d. 1362)

Translation:

Hail, true body, born or the Virgin Mary, (who) Truly suffered, slain on the cross for mankind, From whose pierced side flowed water and blood. Be for us a foretaste in the trial of death. O Jesu dear! O Jesu compassionate! O Jesu son of Mary.

Ludwig van Beethoven Two Versions of the Ode to Joy Theme

3. Ninth Symphony, 4th Movement, mm. 241-256

“Joy, beautiful spark of the gods, daughter of Elysium, we enter your sanctuary, oh heavenly one, drunk with fire. Your magic binds again what custom has sternly parted. All men become brothers, where your gentle wings rest.”

2. Ninth Symphony, 4th Movement, mm. 543-74

¤ ¤

Guido of Arezzo
from[[sic]] *Micrologus*[1]

CHAPTER XV: ON PLEASANT[2] MELODY AND HOW IT IS COMPOSED

Just as in verses there are letters and syllables, parts and feet, and lines as well, so too in music there are *phtongi,*[3] that is, *sounds,* of which one, two, or three fit into *syllables;* and these in turn, either singly or repeated, form a *neume,*[4] that is, a *part* of a song; and one or several *parts* make a *phrase,* that is, a suitable place to take a breath. Concerning these things it must be pointed out that a whole part should be marked out and represented compactly, a syllable even more compactly.

A *hold,* on the other hand, that is, an extension of the last tone, stands out as a marker among these divisions; it is rather small on a syllable, longer on a part, and longest of all on a phrase. And so it is necessary to beat out a song as it were by metrical feet. . . . And the distribution of the neumes should be arranged so that, although the neumes are made sometimes by repeating the same sound and sometimes by connecting two or more, they nevertheless should be compared—either in the number of the tones or in the reckoning of the holds—in one of two ways: [1] at times they should relate as equals to equals, at other times as doubles or triples to units; [2] and elsewhere as three relates to two or four to three. . . .

And the musician should propose to himself which of these divisions he should use to write the advancing chant, just as the prosodiest considers which feet he should use to write a line, except that the musician need not constrain himself with so much obedience to rule, because in all respects this art adapts itself by means of a rational diversity in the disposition of tones. Although this

[1] Translated by William Pastille.

[2] Or “graceful.”

[3] From the Greek *phthongos,* sound.

[4] From the Greek *pneuma,* breath. The word is usually pronounced “noim,” because in German “eu” is pronounced “oi,” and the first scholars to begin recovering the ancient traditions of chant in the late nineteenth century were Germans. But the pronunciation “nume” is also used, presumably as an attempt to approximate the sound of the Greek diphthong.

rationality frequently escapes our comprehension, nevertheless, that which delights the mind—in which reason resides—is considered rational. . . .

Now I call chants metrical because we often sing in such a way that we seem to be scanning them by feet, like poetic lines, as happens when we sing those meters in which care must be taken lest too many disyllabic neumes continue uninterruptedly without intermingling trisyllabic or tetrasyllabic ones. For just as poets have combined now some, now other feet, so also those who write chants should compose neumes that are rationally distinct and different. But the distinction is rational only if the diversity of neumes and phrases is moderate, so that there remains some similarity in the relations of neumes to neumes and phrases to phrases; in other words, so that the similarity is dissimilar.

¤ ¤

On Rhythm[5]

Time cannot be talked about but rhythm can be analyzed. Rhythm is a common underlying ground in all of the temporal arts, whether they be instrumental or vocal music, speech, poetry, or dance. "Music," in one broad sense of the word, is the study of the rhythmic articulations of these moving marvels that live in time. It is no coincidence then that we use such words as "poetic feet," "up and down beats," or the eloquent Latin words *elevatio* and *depositio* to describe the pulsing life of these arts.

Aristotle in his treatise on rhetoric in speaking of diction (which by itself in prose or speech-making seems the least "musical" of the temporal arts) says: "But the diction that is without rhythm is indefinite. It is necessary however, that it should be bounded, though not by meter. For the infinite is unpleasant and unknown, and all things are bounded by number. The number of the figure of diction is rhythm." What is true of diction in ordinary speech and prose is more formally evident in the regularly organized lengths and parts found in poetry, song, instrumental music, and dance. The stuff or matter of these arts is different: it is our bodies and our feet, syllables and words and sentences, or the notes and drum beats of music. Sometimes, almost as in a dream, we see them all together in an inspired opera production. It may be that the ancients had some such fusion in the performances of their tragedies and comedies. These things are together in a very simple way whenever we dance and sing a song at the same time.

The irreducible elements of the rhythmic art are immediately obvious. In talking and in prose and poetry the single syllable is the unit. In music it is a single note or a percussive stroke. In dance it is a frozen position as single syllable by itself is no more musical than a single note, though both may be evocative. A single unchanging gesture or grimace is indeed a figure of death —*rigor mortis.* What gives life, what animates these elements are the relations and ratios between them, their rhythmic life. It's easy enough at this point to define rhythm as "the ordering of motion." The definition is not very fruitful however until more examples are looked at, until it can be understood what the ordering consists of, whether the "numbering" of motion is counting or ratio, and whether the ratios are Eudoxian or not. Rhythm is often confused with meter and to keep the two things separate is a delicate undertaking. Aristotle in speaking of diction said, "It is necessary that it be bounded, though not by meter." Meter has to do with a measuring of time, rhythm with an ordering of time. Meter merely counts while rhythm places elements in relation.

The baldest example of something metrical is that annoying little invention, the metronome. It often sits on piano teachers' pianos and soullessly ticks off so many ticks to the minute. It, in turn, depends on chronometers or clocks, which certainly measure time. All of the readers of this

[5]Edited by William Pastille. This section was written by Douglas Allanbrook under the original title *Music Manual.* It was first used at St. John's in the fall of 1963.

manual can glance at their wristwatches and measure the amount of time it is taking them to read it and hence how long a period of time is passing before it gets to saying something really trenchant about rhythm. The only thing that's going to move or bore the reader, persuade or anger, teach or confuse the reader is how the text has gone from here to there, in whatever amount of measured time it may have taken. After all, some people can sit through five hours of *Tristan and Isolde* as measured on their watches.

Drops of water falling regularly one after another may hypnotize or even cause insanity. No one, no one at all, wants to hear such a thing. Most everyone on hearing a regular succession of ticks will impose on them some kind of pattern—most generally a regular pattern. We may count the ticks but not endlessly on through the dreary and unending wastes of the whole number integers. ("For the infinite is unpleasant and unknown." "How many sheep till I get asleep?") The patterns imposed are always in counts of repeating twos or threes or in combinations and multiples of twos and threes. These kinds of patterns are what is talked about when we analyze the "metrics" of poetry and music. The piece of music, for example, is written in 3/4 time or 2/4 or 6/8 time. The verse is structured as iambic pentameter or dactylic hexameter. (Learn thoroughly at this point the metric notation of music. Be able to write down correctly upon dictation a waltz, a march, a barcarolle, etc. Be able to distinguish neatly between a 3/4 measure and a 6/8 measure. Recall and relearn if necessary the conventional nomenclature of the metrics of poetry. Compare and distinguish between the two systems.)

We generally say we "keep time" with the music when we dance, just as the people playing the music are "keeping time." On the page the players are reading from, the sheet of dance music in this case, are merely the conventional symbols of musical metrics, the sterile and abstract ratios of quarter notes, eighth notes placed alongside one another in Eudoxian ratio. It is the playing, the singing, the saying, the reciting, and the dancing that do the real ordering of motion. One of the great drawbacks of printed books, whether they be books of poetry or books of prose, is just the rhythmic blindness of print. The words must be said aloud or imagined aloud to be really alive—they must escape from behind the barrier of the teeth and flaunt their feathers. Something physical has to be done before rhythm is born, whether it is our vocal chords, our feet, or our hands striking the strings of an instrument.

If we're dancing a waltz, our feet and our bodies mark the arrival or recurrence of the first beat. This has to be prepared for. A single accented word such as "Halt!" cannot be spoken without a preparatory upbeat, not a spoken or sounded syllable but a taking in of breath. (Note the effect of a line of verse such as: "There, there, the thugs of the heart") It's a special event to take a breath on the downbeat of a dance; if you do, you are both beginning and ending something. Rhythmic life then depends upon a two-part phenomenon, breath in and breath out, foot up and foot down. Out of these two parts comes one thing, the basic poetic "foot," the elemental "iamb," the perpetual building block. It is guided by our bodies and tied firmly to our lungs. (Both the words *psyche* and *animus* meant "wind" originally. The word *soul* most properly often refers to the midriff, the place of the wind, the location of the heart, the breath that animates.) This "iamb" in various guises will be the ever-present nodule in all of poetic and rhythmic analysis. It is one event, though in talking of it we break it up into two parts. The conventional metrics of poetry catch the rhythmic foot more graphically than does the metric notation of music. If you are writing or reading the metric notation of either a waltz or a march or any such piece note carefully that the basic rhythmic unit is from the last beat of the measure over to the first beat.

([Exercise:] Take various poems with varying metric structures and attempt to catch their rhythm with the musical notation. Note that something is caught and something is violated. It's

not only that words cannot be ticked off regularly; they're shaggy things rhythmically and have a life of their own. Can length and accent be either wedded or separated in English? Think of the setting of the word "Swanee" in the song "Way Down Upon the Swanee River." Analyze carefully the rhythmic effect of the line "Bare ruin'd choirs, where late the sweet birds sang" from the sonnet which begins "That time of year, etc.")

Defining the basic poetic foot as an "iamb" means also to say that downbeats always follow upbeats and never vice versa. It is not a chicken and egg sort of paradox, though it's hardly very arguable that the chicken did not come first. There was a heretical but most poetical rabbi in the sixteenth century who pushed this understanding rather farther than is going to be done here. In discussing how much God revealed to Moses on Sinai and how much Moses himself said, [this rabbi] gave, as it seems, the ultimate mystical meaning to the "iamb." God, he said, gave the anacrusis, the upbeat, and Moses supplied the rest. Divine inspiration. God certainly gave the breath of life to Adam when he made him. The order of any of the arts in time is that of something coming to be in time; when it is over it has become and only then is it something. What fascinates, entrances, and moves us is how it comes to be. This is stating rather pedantically what everyone of the minimum sensibility is acutely aware of—memorable prose, lines of verse and sometimes whole poems, melodies and pieces of instrumental music move us again and again. They can come alive for us many times over as they pass through their lengths. Their importance does not come in any easy way from what is learned from them: that would be a misuse of them. Being artificial they are removed from us, yet they are made of lengths and ratios that come from the very stuff we are. They are like us, are imitations of part of us, being made of breath and motion, yet unlike us they have a beginning, a middle and an end in harmony. Once experienced they can in some measure be contemplated as wholes. We are suspended between life and death, subject to fortune, calamity, and disease. They, instead, are artfully contrived to move us for the duration of their harmonious span. This music present in notes, words, and dance has no meaning in the strict sense of that word. It is, if you wish, meaningless. It catches us by being a kind of copy of us. It is opposed to the anarchy of chance events, but is just as opposed to anything eternal, to anything of fixed meaning in our talk. The meaning of words and sentences and paragraphs can have no other dress than sounding speech and the meaning can be enhanced and made more vivid by the music of words. The truly pathetic fallacy is however to attribute "meaning" in any regular sense of the word to music. To forget the distinction between the movement of music and the movement of thought in discourse is to deny proper glory to poetics. It reduces music and poetics and discourse to the namby-pamby world that draws no lines and makes no proper distinctions. Limbo. (Which does not deny the fact that there is a certain comfort in ascribing transcendence to everything that moves us.)

The major part of our study will have to do with melodies and harmony in the ordinary modern sense. Here at the beginning of the study a common ground of analysis is being investigated which will embrace words and music. It must be spelled out with more precision. Let us begin by looking hard at punctuation marks in our written language. Written language comes from spoken language and certainly loses something by being written down. There seems no other way to do things most of the time except to write them down and those extra marks—commas, colons, semicolons, and periods—testify to the ever-present difficulties of the printed page. It is certainly true that these marks indicate [the] end of [units of] sense or [the] end of parts of sense, or subordinate clauses, or beginnings of lists, etc. They are most often grammatical signs. There are perhaps grammatical rules for their use, rules often governed by thought and its divisions as expressed in language. If we read the page out loud, these signs immediately are interpreted by stress and by rising and falling

pitch. A rising pitch, after all, can make all by itself the difference between a question and an assertion, though in a book one does it with a squiggle or a dot. The meanings and delineations and combinations of the understanding are marked, then, by rhythmic devices. Sense, suspending through a subordinate clause, keeps the tension of our breath at a certain pitch or stress and only when sense and thought are completed can the voice and the stress come down. It is also true that we have only so much breath. Written language which forgets its origins in the spoken word and which exceeds its measures of breath length is dreary stuff. Shakespeare was meant to be heard, not read, and to understand much of the punctuation in the folios one has only to think of it as musical directions for the actor who is to speak. Our word *comma* comes from the Greek word *komma,* which means a chip, or a cut, that which is struck, the stamp of a coin, hence a short clause—the first organized group in rhythmic structure above the basic foot. Among the ancient rhetoricians it has the technical meaning of an entity in discourse (either poetry or prose) composed of at least two basic feet. Our modern word *comma* refers of course to a conventional sign that marks off the end of a breathed or grammatical section of speech. It punctuates a part whereas the Greek word refers to the part. Our word *colon* comes from the Greek word *kôlon,* which means a limb, a member or a part of anything—hence, in poetic analysis it refers to a member or a clause of a sentence. *Periodos,* period, is a going round, a circuit, a map, a period of time, the orbit of a heavenly body (*periodic* tables), and hence a well-rounded sentence. Aristotle in his *Rhetoric* says that the *periodos* is the kind of speech that has in the beginning the end in view. Periods are composed of articulated members or *kôla.* The *kôla,* or members, resemble the stones that support and hold together a vaulted dome, to quote from another classic study of poetics (Demetrius, *On Style*). The proper length for these members is generally felt by Aristotle to be governed by the amount of breath. Measure is without measure if we run out of breath, and it would be merely frantic if all of our "members" were gasped out breathlessly. Certainly hexameters are for heroes and nicely modulated triplets are fit for sirens, but the numbers must be cut to fit, and the modulations depend precisely on the most human limitation of breath. Voltaire has a parody of professors who talk about things they don't know very well in a language they know even less. The reason for returning to the ancients in these matters is not because they were Greeks and hence to be approved of, but simply because in the present discussion they were closer to the spoken word than we are. There were fewer books and the cities were smaller. How a thing was said and what it had to do with what was said was a discussion of power for them. Their music for instruments and their vocal music may well have been uninteresting but it was balanced by their passion and interest and sophistication in all of the ringing changes of music with words. New tragedies and comedies constituted a civic festival and all educated men learned Homer by memory. Music was for them an imitation of the way we are. It is because of this that it was cherished and reverenced and sometimes feared. It could, for them, influence or even educate men's character. Their inclinations would be swayed by it. It was of burning concern to some of them to distinguish this power which went along with the spoken word from what the words might signify. It was a matter of professional concern to anyone in politics to be well versed in the poetics of speech. To quote again: "Liveliness of speech is in proportion to the promptness with which it causes us to seize a new idea." (Aristotle's *Rhetoric.*) "Because speech can be numbered, it can be remembered." "Number is the limitation of form which constitutes rhythm." (Hence verse is even more memorable.) Trochees are wild. Heroic feet give dignity. The Paean, another kind of foot, is apt for oratory. An ordinary iamb is most fit for ordinary language. (Particularly true in modern English.) One should begin a speech with long-short-short-short and end with short-short-short-long. There were many technical manuals. It was not an aesthetic study but a practical affair, as it had everything to do with how people were moved.

Let us review the technical terms. The *commas, kommata,* are the first cuts, the first pieces of the structure above the basic feet. The caesura in a line of English pentameter cuts off two cuts or commas. In most of our modern diatonic music there are perfectly distinguishable cuts or parts of parts. (In Gregorian chant they are the *pneumes,* another "breath" or "wind" word.) The *kôla,* or phrases or clauses or members, are the lengths of breath that will organize and number the first cuts or *kommata.* (A complete line of pentameter for example, if the line is not end-running or counterpointing. In our music it might be a four-measure phrase numbering two two-measure phrases.) At this point it becomes technically most interesting to find out what devices are used to cadence or punctuate or cut off these clauses or sections. It's obvious that in prose the sense of the clause itself determines an end of a part and leads us to do something rhythmic with our voice. In verse, however, special musical and rhythmical devices are used. Special long syllables were favored among the ancients. In English it's apt to be a matter of stress or accent. This is dependent upon the nature of the particular language to some extent. Greek is thought of as a language in which the metrics depend on quantity, on length of syllable. In English (and most other modern languages) the rhythm is dependent on stress. It is called a language of "qualitative metrics." This is not a perfectly neat analysis, as you will soon find out in looking closely at English. Rhyme is a modern invention for punctuating ends of poetic members or lines of verse. How precisely this is accomplished with notes must wait until we have left words. The *periodoi,* the periods, are the rounding of groups of these breath-lengths into a harmonious whole. (The word *harmonia,* the modern harmony, means a fitting together, a joint, a union, also a decree, an intonation, a certain temper.)

([Exercise:] Take the poems you have looked at earlier and analyze them fully. Distinguish carefully the kinds of feet, the cuts which are made from these feat, the members made from these cuts, and, if you feel they are present, the rounded periods made up of the members. Note carefully whether the sense of the words cadences with the rhythm or whether it counterpoints against it. Note carefully lines that run over. Analyze carefully the Schubert *Impromptu* in A-flat major as to lengths of time gone by. Find its periods, its members, and its cuts. When thinking of the basic feet in the Schubert, do not forget that measure lines almost always cut the foot in half.)

([Exercise:] Take the poems and the Schubert piece again and consider them as follows: In the sonnet "That time of year, etc." the first foot is "that time." The second foot is "of year." Compare the weights and lengths of "that" and "of." "That" is to "time" in the rhythmic life of the first foot in not precisely the same way as "of" is to "year." Is there a rhythmic relation between "That time" and "of year" that is in any way comparable to the relation between "that" and "time" or between "of" and "year"? Balance carefully on your tongue the two parts of the whole line—"That time of year" and "thou may'st in me behold." Do the same with "Bare ruined choirs, where late the sweet birds sang." Compare the weights and balances of all four of the lines of the quatrains. Note the rhythmic effect of the couplet at the end and the shock of the closer rhyme. In the Schubert again try to analyze rhythmically from the basic feet up to increasingly larger rhythmic units.)

It Don't Mean a Thing

Some Characteristic Dance Rhythms[6]

> Every beginner who wishes to gain a firm foundation in composition should become familiar with the organization of all forms of the dance, because in them all sorts of characters and rhythms appear and are executed most precisely. If he has no facility in these characteristic pieces, it is simply not possible for him to give a piece a particular

[6]From Wye Allanbrook's *Tonal Harmony* (edited by William Pastille), first used at St. John's in 1969.

character.

—J. P. Kirnberger[7]

Dances in Triple Meter

MINUET— 3/4

Of moderate tempo, with nearly even accentuation of all three beats; noble in character; found in a moderately quick and a slower version (slowed by the characteristic figure):

Mozart, Aria "Se vuol ballare" from The Marriage of Figaro

Mozart, Minuet from Don Giovanni

SARABANDE — 3/4, 3/2

Of slow tempo, restrained and noble execution, with the frequently recurring rhythmic pattern

Schubert, Impromptu in A-flat major, Opus 142, No. 2

WALTZ — 3/4, 3/8

[Exuberant dance in quick tempo] with strong downbeat and light, lilting upbeat:

Emil Waldteufel, Skaters' Waltz

POLONAISE — 3/4

Moderately slow in tempo, dignified and noble in character, usually cadencing on the third beat of the measure with an ornamented appoggiatura:

Mozart, Polonaise from Divertimento No. 12 (K. 252)

MAZURKA — 3/4

Dignified and noble Polish dance with a characteristic dotted figure on the first beat of the measure and frequent accents on weak beats:

Chopin, Mazurka, Opus 7, No. 1

Dances in Duple Meter

MARCH — 4/4, 2/4, 6/8

The rhythmic accompaniment of a measured walk, with greater stress on beat 1, lesser on beat 3; of moderately brisk tempo for military marches, slower for processionals, funeral marches, and so on:

Mozart, March (K. 215)

BOUREE —4/4

More artful version of the brisk walk, characterized by an upbeat and frequent syncopated measures:

J. A. Hiller, Bourrée

GAVOTTE — 4/4, 2/4

Most artful rearrangement of the march measure, with its two halves reversed: measured and decorous, sometimes rather prim or coy, frequently with pastoral and bucolic associations:

Mozart, Violin Sonata (K. 547a), Third Movement

CONTREDANSE —2/4

[Exuberant dance in quick tempo] (contredanse is perhaps derived from "country dance"), essentially a quick walk through complicated figures like our square dance or Virginia reel:

Mozart, Quartet (K. 465), Fourth Movement

Dances in compound Duple Meter

GIGUE — 6/8

[7]Translated by William Pastille. Johann Philipp Kirnberger (1721-1783) studied with J. S. Bach from 1739-1741. This passage is from *Die Kunst des reinen Satzes in der Musik (The Art of Pure Composition in Music,* 1774), now thought to have been written by one of Kirnberger's pupils.

[Light rustic dance in quick tempo], with a pattern which can be counted on both the eighth-note and quarter-note levels:

Mozart, Quartet (K. 458), First Movement

SICILIANO — 6/8, 12/8

Slow rustic dance, often with dotted pattern: of serene, and frequently nostalgic, languid, or melancholy character:

Bach, St. Matthew Passion, Aria No. 47, "Erbarme dich"

MUSETTE

The contredanse, gigue, and gavotte, if accompanied by a "drone" or bagpipe bass (tonic or dominant pedal point), take on even more of a pastoral air, and are called musettes (after the French version of the bagpipe):

Mozart, Musette-gavotte from Idomeneo, ballet music

NOTES

¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤ J. S. Bach Gigue (Partita in A, BWV 832)

Mozart from Piano Sonata in A major, K. 331

¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤¤

Aristotle
from Rhetoric[8]

It's necessary for the style of speaking to be either strung-together and made one by a bond, like dithyrambic preludes, or turned-back and similar to the antistrophes of the old poets. The strung-together style is the old one: "This is the setting forth of the inquiry of Herodotus of Thurii." For all men employed this style before; now not many do. By a "strung-together" style I mean one that doesn't have an end in itself, until the matter spoken of reaches its end. It's unpleasant because of its unboundedness, for all men wish to keep the end in view. That's why people pant and collapse at finish lines: beforehand, while seeing the boundary line before them, they don't grow weary. Now the strung-together style is this one, while the turned-back one consists of periods. And by a "period" I mean a style that has its own beginning and end in itself and an easily seen magnitude. Such a style is pleasant and easy to learn. It's pleasant because its condition is contrary to that of the unbounded, and because the listener always thinks he's got something that's come to completion, in some way, by itself—and that to perceive nothing beforehand and to achieve nothing is an unpleasant thing. It's easy to learn because it's easy to remember. And this is so because the style that consists of periods has number, which is the easiest thing of all to remember. That's why all men remember what's in meter, too, more than what just pours out; for it has a number by which it's measured. But the period must reach its end in thought, too, and not be chopped off like these iambs of Sophocles:

This spot is Calydon, land of Pelop's earth

for by this division it's possible to understand what's contrary, as, in the case of these words, that Calydon belongs to the Peloponnesus.

William Shakespeare Sonnet 73

That time of year thou mayst in me behold
When yellow leaves, or none, or few, do hang
Upon those boughs which shake against the cold,

[8]Book 3, Chapter 9, 1409a-b. Translated by Eric Salem.

Bare ruined choirs[9] where late the sweet birds sang.
In me thou see'st the twilight of such day
As after sunset fadeth in the west,
Which by and by black night doth take away,
Death's second self, that seals up[10] all in rest.
In me thou see'st the glowing of such fire,
That on the ashes of his youth doth lie
As the deathbed whereon it must expire,
Consumed with that which it was nourished by.
This thou perceivest, which makes thy love more strong,
To love that well which thou must leave ere long.

¤ ¤

Plato
from The Republic[11]

"So then, Glaucon," said I, "isn't this why upbringing in music is most sovereign? It's because rhythm and concord most of all sink down into the inmost part of the soul and cling to her most vigorously as they bring gracefulness with them; and they make a man graceful if he's brought up correctly, but if not, then the opposite. Moreover, it's because the man properly brought up on them would have the sharpest sense for what's been left out and not beautifully made, either by craft or nature. And precisely because he had correct dislikes, he would praise beautiful things and, delighting in them and receiving them into his soul, would be nourished on them and become a man of fine character [*kalos te k'agathos*]. He would correctly blame and hate what was ugly while he was still young, before he was able to grasp reasonable speech. And when reasonable speech did come, the man who was brought up in this way would welcome it with particular delight, recognizing it through his kinship with it?"

"At least in my opinion," he said, "it's for such reasons that there's upbringing in music."

Baldassare Castiglione
from The Book of the Courtier[12]

[Cesare:] . . . you have said [that grace] is often a gift of nature and of heaven, and in addition that when it is not perfect as is, it can be much improved by study and work. . . . of those who have from nature only enough ability to enable them to become graceful with the addition of work, industry, and study, I would like to know: what is the art, the discipline, and the method by which they can acquire this grace, both in the movements of the body . . . and also in everything else that is said or done?

[The Count:] . . . having deliberated with myself quite often in the past about how this grace arises (leaving aside those who have it from the stars), I find one very general rule that seems to me to apply more than any other to all human speech and action, and that is: to avoid affectation

[9]The part of a cathedral in which services are conducted. The image is of a ruined cathedral without a roof, which resembles an avenue of leafless trees.
[10]Finishes, concludes.
[11]401D5-402A6. Translated by Peter Kalkavage.
[12]Translated by William Pastille. Baldassare Castiglione (1478-1529) was an Italian writer and courtier. In the service of the court of the dukes of Urbino, he came in contact with many famous men of letters in Renaissance Italy. His principal work, *Il Corteggiano* (known in English as *The Book of the Courtier*) describes the life of Renaissance court society.

as much as one can, as if it were a very rocky and perilous shoal; and to use in all things a sort of *sprezzatura*[13]—to coin a new term, perhaps—which conceals artifice and presents that which is said or done as though it came to be done without work and without deliberation. I believe that this is in large part the source of grace, because everyone knows the difficulty of exceptional and well-performed actions, so that facility in these things produces the greatest amazement; and, on the contrary, struggling and pulling out one's hair, as they say, shows exceeding lack of grace, and causes people to belittle everything, no matter how impressive it may be in itself.

[13]The word is formed from the verb *sprezzare (to show little concern),* which derives from the Late Latin *expretiare (to place at low value, to put little stock in, to undervalue).* The English word nearest its connotation is perhaps *nonchalance* (from French *non chaloir, not to be concerned,* which is derived from the Latin *non calere, not to be heated,* but that is another story.) Since the context makes it clear that the object of depreciation is one's own effort, what is Castiglione describing here? Is it a kind of modesty? Is it false modesty? Or is it *irony,* which Aristotle defines in the *Nichomachean Ethics* (Book 4, Chapter 7) as disclaiming or belittling one's actual virtues—a trait, he says, that makes its possessor seem cultivated? In any case, why does this *sprezzatura* cast a glowing light on the speech or action in which it is involved?

Part II

Texture and Structure

Contents

Franz Schubert, Zum Sanctus 77 Dona nobis pacem 78 Flood of Babylon 79 William Byrd, Non nobis, Domine 79

Franz Schubert Zum Sanctus (from Deutsche Messe, D872)

Dona nobis pacem Flood of Babylon

William Byrd Non nobis, Domine

“Not to us, oh Lord, not to us, but give glory to Your name, but give glory to Your name.”

Part III

Polyphony

Contents

Heinrich Isaac, Innsbruck, ich muss dich lassen 82 Heinrich Schütz, Introitus from St.Matthew Passion …….. 83 Josquin des Prez, Kyrie from Missa Pange lingua 84 Organum, Rex coeli 85 William Byrd, Kyrie from Mass for Three Voices 85 Council of Trent, Canon on Music to be Used in the Mass 86 Giovanni Pierluigi da Palestrina, Dedication from Second Book of Masses 87 Johannes Kepler, from The Harmonies of the World 88 William Byrd, from The Dedication of Book I of the Gradulia 88 Orlando di Lasso, Beatus vir 89 Palestrina, Sicut cervus 90 St. Augustine, from Confessions 95 Gioseffo Zarlino, Selections from The Art of Counterpoint 99 Composition in Simple Counterpoint 128

Heinrich Schütz Introitus from St. Matthew Passion

The Passion of our Lord, Jesus Christ, as recorded by the holy evangelist, Matthew. Josquin des Prez Kyrie from Missa Pange lingua Organum: Rex coeli (One of the earliest examples of polyphony, c 850 A.D.) Anonymous

O Lord, King of the heavens and the sonorous deep, Your humble servants, dutifully beseeching you, With its sea monsters, scaly and glistening in the sun, Entreat you to deliver them from all that is harmful.

William Byrd Kyrie from Mass for Three Voices

Council of Trent
Canon on Music to be Used in the Mass[14]

September, 1562

All things should indeed be so ordered that the Masses, whether they be celebrated with or without singing, may reach tranquilly into the ears and hearts of those who hear them, when everything is executed clearly and at the right speed. In the case of those Masses which are celebrated with singing and with organ, let nothing profane be intermingled, but only hymns and divine praises. The whole plan of singing in musical modes should be constituted not to give empty pleasure to the ear, but in such a way that the words be clearly understood by all, and thus the hearts of the listeners be drawn to desire of heavenly harmonies, in the contemplation of the joys of the blessed. . . . They shall also banish from church all music that contains, whether in the singing or in the organ playing, things that are lascivious or impure.[15]

Giovanni Pierluigi da Palestrina
Dedication *from* Second Book of Masses[16]
Rome, 1567

To Philip of Austria, Catholic and Invincible King:

Since the utility and pleasure afforded by the art of music is a gift of heaven greater than all human teachings and since it is particularly valued and approved by the ancient and authoritative

[14]This selection is taken from *Giovanni Pierluigi da Palestrina: Pope Marcellus Mass,* ed. Lewis Lockwood (New York: W. W. Norton, 1975), 19.

[15]From A. Theiner Acta . . . Concilii Tridentini . . ., II (1874) p. 122; the translation appears in Gustave Reese, *Music in the Renaissance,* New York, 1954, p. 449. This canon was submitted by a committee of deputies to the entire body of the Council of Trent in September, 1562, and was approved. It formed the basis for the abbreviated and very loosely worded general ban on "worldly and impure melodies" that became an official part of the council's decrees. [Editor's note.]

[16]This selection is taken from *Giovanni Pierluigi da Palestrina: Pope Marcellus Mass,* ed. Lewis Lockwood (New York: W. W. Norton, 1975), 22-3.

writings of Holy Scripture, so it appears that this art can be properly exercised upon holy and divine subjects. I, therefore who have been engaged in this art for many years, not wholly unsuccessfully (if I may rely on the judgment of others more than on my own), have considered it my task, in accordance with the views of most serious and most religious-minded men, to bend all my knowledge, effort, and industry toward that which is the holiest and most divine of all things in the Christian religion—that is, to adorn the holy sacrifice of the Mass in a new manner.[17] I have therefore worked out these Masses with the greatest possible care, to do honor to the worship of almighty God, to which this gift, as small as it may be, is offered and accommodated. And these products of my spirit—not the first, but, as I hope, the more successful—I decided to dedicate to your Majesty, who have taken your own name from the tradition of the Catholic faith and who also guard the purity of the orthodox religion most ardently, and who honor and adorn the sacred services through the works and ministrations of most excellent musicians. Accept, then most mighty and God-fearing king, these my labors as testimony of my perpetual loyalty toward your Majesty—and accept them with that kingly greatness of spirit with which you are wont to receive such gifts. If these labors should please you, then I would consider it their greatest success if they should satisfy your judgment. If they should not please you, then nonetheless my loyal affection will not waver toward the magnanimous and noble king, whom may God, the bestower of kingdoms and giver of all good things, keep for Christendom in health and well-being as long as may be possible, and grant all good wishes of honorable men. Farewell, ornament and bulwark of all who bear the name of Christians.

Giovanni Petroaloysio Palestrina

Johannes Kepler
from The Harmonies of the World[18]

The motions of the heavens, then, are nothing other than a sort of everlasting polyphony (rational, not vocal) that passes through dissonant tensions, directing syncopations, as it were, and cadences (by which men imitate those natural dissonances) into definite and prescribed contrapuntal patterns, each having six components (like six voices), and marking as well as dividing the immensity of time by means of these notes. So it is no longer a wonder that man, the ape of his Creator, eventually invented a way of singing in polyphony, which was unknown to the ancients, so that he might actually enjoy the perpetuity of all created time during some brief portion of an hour by means of the artful concordance of several voices, and so that he might taste in some measure the delight of God the Artisan in His works through the exceedingly sweet sensation of pleasure that comes from this type of music, which imitates God.

William Byrd
from The Dedication of Book I of the Gradualia

[17] Virtually the same thought is expressed by Palestrina's Roman contemporary Giovanni Animuccia (c.1520–c.1571) in the preface to his First Book of Masses, issued at Rome in the same year as this Second Book by Palestrina and by the same publisher (the heirs of Valerio and Aloysio Dorico...). Animuccia had succeeded Palestrina as *magister cantorum* at the Cappella Giulia in 1555 and held this post until his death in 1571, when Palestrina took it back again. In his preface of 1567 Animuccia writes: "Being led to this by the judgment of these men, I have sought to adorn these divine prayers and praises of God in such a way that the music may disturb the hearing of the text as little as possible, but nevertheless in such a way that it may not be entirely devoid of artifice and may contribute in some degree to the listener's pleasure." Neither Palestrina nor Animuceia names the men to whom they make reference in these dedications of 1567. Palestrina's reference to a "new manner" has been taken by most writers to refer to the greater use of chordal writing in the Gloria and Credo of the *Pope Marcellus Mass,* in the service of intelligibility, than had been customary in his earlier Masses. [Editor's note.]

[18] Book 5, Chapter 7, conclusion. Translated by William Pastille.

to the Earl of Northampton[19]

For even as among artisans it is shameful in a craftsman to make a rude piece of work from some precious material, so indeed to sacred words in which the praises of God and of the Heavenly host are sung, none but some celestial harmony (so far as our powers avail) will be proper. Moreover in these words, as I have learned by trial, there is such a profound and hidden power that to one thinking upon things divine and diligently and earnestly pondering them, all the fittest numbers [melodies] occur as if of themselves and freely offer themselves to the mind which is not indolent or inert.

Orlando di Lasso Beatus vir from Cantiones duarum vocum Palestrina Sicut cervus

As the hart longs for flowing waters, so longs my soul for You, O God.

St. Augustine
from Confessions[20]

Book X
Chapter 33

The pleasures of hearing used to snare and bind me more tenaciously [than those of taste or smell], but You have unfettered me and set me free. At present, I admit, I am delighted somewhat by tones into which Your discourses breathe life, if they are sung by a pleasing and skillful voice—not so delighted that I am transfixed, but rather that I may get up whenever I wish. And yet these tones, in order to enter into me alongside the words that give them life, seek to obtain a station of some influence in my heart, and I have difficulty providing a suitable one. For at times I seem to regard them more highly than I should, insofar as I perceive that our souls are kindled more reverently and ardently into a flame of devotion by these same words when sung in this way than when not sung in this way, and that all the various affections of our spirit have their corresponding representations in tone and melody, which evoke them by means of I know not what secret kinship. (And yet the gratification of my flesh—which should not be allowed to debilitate the mind—often intrudes upon me until sensation is not content to follow behind reason, but instead tries to run ahead and take the lead, though it gained access only because of its association with reason. Thus in these things I sin without realizing it, and I realize it afterwards.)

At other times, however, (when I am more immoderate in defending against this intrusion) I err on the side of excessive austerity—and sometimes so much that I wish all the melodies of the old songs accompanying the recitation of David's Psalter could be removed both from my ears and from those of the Church itself, and it seems to me safer to do what I well remember often being told by Athenasius, bishop of Alexandria, who used to make the reader of the psalm recite with such a modest inflection of the voice that it was more like declaiming than singing. But then again, when I recall the tears I poured out at the songs of the Church in the first days after regaining my faith, and when I bring to mind even now that I am moved not by the song but by the things being sung (when they are sung with a fluid voice and a most appropriate modulation) then I recognize once again the great benefit of this old practice. Thus I waver between the danger of sensuality and the experience of deliverance, and I am more inclined (without making an irrevocable pronouncement) to countenance the custom of singing in the Church, so that the less vigorous soul may raise itself up toward the affection of devotion through the delights of hearing. Nevertheless, when it happens

[19] *Source Readings in Music History,* Selected and Annotated by Oliver Strunk, Norton and Company: New York, 1950, pp. 327-328.

[20] Translated by William Pastille.

that the song moves me more than the thing being sung, I confess that I sin culpably, and then I would prefer not to hear the singer. See what a state I am in! Weep with me and weep for me, you who possess within yourselves something good from which your actions proceed, for these things do not move those of you who do not possess such a principle. But You, O Lord my God, hear me, look upon me, see me, have mercy on me, and heal me, You in whose presence I have become an enigma to myself, and *this is my infirmity.*[21]

Book XI
Chapter 28

I am about to recite a psalm I have learned: before I begin, my expectation tends[22] toward the whole, but once I have begun, my memory too tends toward as much of the past as I have snatched away from expectation, and so the life of this activity of mine distends[23] into memory (on account of what I have finished reciting) and into expectation (on account of what I am going to recite). Also present, however, and presiding over all this is my attention,[24] by which what was to come is traversed so that it becomes what has passed by. The repetition of this process increases memory by decreasing expectation, until all expectation is consumed, at which point the entire completed activity passes over into memory. And that which happens in the whole psalm also happens in each of its subdivisions as well as in each of its syllables, and also in the more comprehensive activity of which this psalm may be a subdivision, and also in a man's whole life, the parts of which are all the activities of the man, and also in the whole age of the sons of man, the parts of which are all the lives of men.[25]

Chapter 29

But because *thy lovingkindness is better than life,*[26] behold: my life is distention,[27] but *thy right hand upholdeth me*[28] in my Lord, the son of man, the mediator between You, who are one, and we, who are many, amidst and in the presence of many things, so that through him *I may*

[21] Ps. 77.10.

[22] In these chapters from Book XI, Augustine uses several words that share the root TEN, meaning *to stretch* or *to reach.* I have tried to keep this wordplay in translation, at the risk of occasional awkwardness.

[23] *Distendere* means *to stretch apart* and *to distend* (like a wineskin filling with wine), but also *to distract,* and Augustine plays on the several meanings.

[24] *Attentio,* from *attendere,* meaning *to stretch to.* Attention is the faculty of mind that stretches out to grasp one of the innumerable potential objects of sensation or thought. It is always active, at least so long as we are conscious.

[25] Here the experience of reciting a psalm becomes an analogy for God's "reciting" of Creation: as we speak out a psalm from an idea that exists fully formed within us before we speak it, so too does God "speak out" all of Creation from its idea fully formed within Him before he speaks it. Two points of comparison deserve special notice. First, the psalm recitation comes into being by the continuous and selfsame activity of our attention, which works in an eternal present, focusing on parts of the preexisting idea; the eternally present, unchanging action of our attention may be a fruitful point of departure for contemplating the kinship between human and divine activity. Second, as the "life" of a psalm recitation is part of a person's life that comes into being through attention acting on an idea that exists before, so are our lives parts (and very tiny parts, at that) of the "life" of Creation, which comes into being through the action of God's "attention" on an idea that exists before. The idea and the attention "come before" in the order of responsibility. (Compare the use of the phrase *the things which are before* in the next chapter.) But how, then, can we ever come to understand our lives? How can we ever apprehend the divine idea in which we ourselves, along with the infinitude of Creation, are apprehended? That question is the topic of the next chapter.

[26] Ps. 63.3.

[27] Or distraction.

[28] Ps. 63.8.

apprehend that in which also I am apprehended,[29] and so that I may be collected from my former occupations to follow one thing: *forgetting those things which are behind, and reaching forth* (that is, not *dis*tended but *ex*tended[30]) *unto those things that are before* (that is, not unto those things that are to come and pass away), *I press* (that is, not after the manner of *dis*tention, but after the manner of *in*tention[31]) *toward the mark for the prize of the high calling,*[32] where I may hear the voice of praise and contemplate Your beauty, which neither comes into being nor passes away. Now truly *my life is spent with grief*[33] and You are my refuge, O Lord, my eternal father; indeed I myself have broken the bank, spilling out into times whose order I do not understand,[34] and my thoughts are torn asunder by abrupt changes in the inmost parts of my soul, until I flow together into You, clarified and molten in the fire of Your love.[35]

Chapter 30

And I will stand and be made firm in You, in my mould, Your truth, and I will not suffer the questionings of men whose besetting illness causes them to thirst for more than they can hold and who say, "What was God doing before He made heaven and earth?" or "Why did it come into His mind to make something when previously He never made anything?" Grant, O Lord, that they may consider carefully what they say, and discover that *never* does not apply where time does not exist. (For what is the sense of *never made*? What else does it mean but *made at no time*?) Then let them see that no time can exist without Creation, and let them cease speaking such foolishness.[36] Grant also that they may be extended toward *the things that are before,*[37] and let them understand that You are before all times the eternal author of all times, and that no times are co-eternal with You, nor any part of Creation, even if there is some part of Creation beyond all times.

Chapter 31

[29] Phil. 3.13. Augustine adapts the Biblical text a bit to suit his intentions; it actually reads "that *for* which also I have been apprehended." This is part of Augustine's answer to the question of understanding our lives: in order to approach the divine idea, we need a mediator (from *mediare, to be between*), one who has himself grasped it, who can go between us and it, and through whom we may learn about it.

[30] *Distentus,* that is, *stretched apart* or *distracted,* is here contrasted with *extentus,* that is, *stretched out* or *directed toward.* The distended person wastes energy by letting his attention be attracted toward past memories, present trifles, and future expectations. The extended person collects and focuses energy by keeping attention directed toward the present purpose. In a sermon (Sermons, 240.6), Augustine underscores the significance of this contrast: "May the One extend us, lest the Many distend us, and sever us from the One."

[31] That is, not *stretched apart,* but *stretched into;* not distracted but concentrated.

[32] Phil. 3.13-14. St. Paul likens his striving for eternal life to a race in which the prize is set up at the finish line; the runner, by forgetting all extraneous matters and focusing attention solely on the prize, keeps alive the inspiration to continue toward the goal. Augustine applies the passage to his own concern: in order to apprehend the divine idea, which alone can explain our lives to us, we must leave behind the distractions that come from memory, from expectation, and from present diversions; instead, we must concentrate our attention and stretch forth with all our might toward the divine idea and toward the mediator through whom we can receive it.

[33] Ps. 31.10.

[34] The image of a river flooding over its banks is used to express the experience of seeking out distraction actively, of darting back and forth from the present moment to memories of the past to imaginations of the future, thereby confusing the temporal succession and making chaos out of order.

[35] The image of the rampant river flowing back into its normal course symbolizes the focusing of attention back into its natural channel of the eternal present. This image passes over, by way of the notion of confluence, into the image of wax being melted down for casting in a mould, as is made clear at the start of the next chapter.

[36] The argument here is sketchy. Since before Creation there was no time (as Augustine showed to his satisfaction in XI.13), and since *never* means *at no time,* the statement *God never made anything before Creation* really signifies *At no time before there was time did God make anything.* This may be a tautology or it may be utter nonsense, but in either case it is, as Augustine says, foolishness.

[37] Phil. 3.13.

O Lord my God, what is that sanctum of Your deep solitude and how far from that place have I been driven forth by the consequences of my failings? Cure my eyes and let me rejoice in Your light. Surely, if there is a soul so mighty in sublime knowledge and foreknowledge, to whom all things past and future are known just as one thoroughly familiar psalm is known to me, then that soul is exceedingly marvelous, and stupendous to the point of terror; for indeed, neither the portion of the ages that is completed nor the portion that is left to come would be hidden from such a one, any more than I, when singing that psalm, am prevented from seeing how much of it has passed by from the outset and how much remains until the end. But far be it from You—author of the universe, author of bodies and souls—far be it from You to know all things future and past in this manner. You know them far, far more marvelously and far more mysteriously. It is not as with things known to a singer or as with a psalm known to a listener, where affection is changed and awareness distended by expectation of sounds to come and memory of those past; for nothing happens in this way to You, who are immutably eternal, which is in truth to say, the eternal creator of minds. Therefore, just as in the beginning You knew heaven and earth without changing Your knowledge, so also in the beginning You made heaven and earth without varying Your activity. Let him who understands this confess it to You, and let him who does not understand this confess it to You. O how exalted You are, yet the humble at heart are Your dwelling place! For You *raiseth them that are bowed down,*[38] and they do not fall who have You to lift them up.

Gioseffo Zarlino
Selections from The Art of Counterpoint[39]

Selection 1
From Chapter 1,
What Counterpoint Is and Why It is So Called

Counterpoint is a kind of harmony that contains diverse variations of sounds or steps, using rational intervallic proportions and temporal measurements. . . . is an artful union of diverse sounds reduced to concordance. . . . The art of counterpoint is a discipline which teaches one to recognize the various elements in a composition and to arrange the sounds with proportional ratios and temporal measure.

Musicians once composed with only a few dots or points. Hence they called this *counterpoint.* They placed one against another as we now place one note against another. A dot represented a tone: just as a point is the beginning of a line as well as its end, a sound or tone marks the beginning and end of a melody and forms the consonance out of which counterpoint is made. Perhaps it would have been more reasonable to name this *countersound* rather than *counterpoint,* since one sound was placed against the other. Not to depart from popular usage, I have continued to call it counterpoint, by which we understand point against point or note against note.

There are two kinds of counterpoint: simple and diminished.[40] The simple is composed solely of consonances and equal note-values—whatever these may be—placed against one another. Dimin-

[38] Ps. 146.8.

[39] All passages have been excerpted from *The Art of Counterpoint: Part III of LE ISTITUTIONI HARMONICHE, 1558,* trans. Guy A. Marco and Claude V. Palisca (New Haven: Yale University Press, 1968), and have been edited by Wye Jamison Allanbrook and William Pastille. Notes are by the editors, unless otherwise indicated. Gioseffo Zarlino (1517–1590) was a Franciscan monk, composer, and music theorist who was very active in musical circles in Venice in the second half of the sixteenth century. He was master of the chapel at St. Mark's from 1565 until his death, though his works on music theory continued to be influential long after his own music had been forgotten.

[40] By simple counterpoint Zarlino means note-against-note, and by diminished, all counterpoint in which one note is set against several notes of lesser temporal value (the shorter notes are *diminutions* of the longer).

ished counterpoint has dissonances as well as consonances, and may employ every kind of note-value, as the composer wishes. It proceeds by intervals or singable spaces, and its values are reckoned according to the measure of its tempus.[41] It is in the nature of counterpoint that its various sounds or steps ascend and descend simultaneously in contrary motion, using intervals whose proportions are suited to consonance: for harmony has its origin in the joining together of a diversity of opposed elements.

[41]The tempus is a unit roughly equivalent to the measure, though not nearly as palpable. It admits of duple or triple division.