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### Presenting Twelve-Tone Music to the Inexperienced Listener

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PRESENTING TWELVE-TONE MUSIC TO THE

INEXPERIENCED LISTENER

(TITLE)

BY

Marcia Rittmeyer Foulden

**PLAN B PAPER**

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR  
THE DEGREE MASTER OF SCIENCE IN EDUCATION  
AND PREPARED IN COURSE

501: Music of the Twentieth Century

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY,  
CHARLESTON, ILLINOIS

1966

YEAR

I HEREBY RECOMMEND THIS PLAN B PAPER BE ACCEPTED AS  
FULFILLING THIS PART OF THE DEGREE, M.S. IN ED.

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## Introduction

The teacher of music appreciation or general music classes often does not present dodecaphonic music to his students. The reasons for this neglect may be a lack of understanding of twelve-tone music and the belief that twelve-tone music is too difficult for the student to comprehend.

It is the purpose of this paper to illustrate how a music teacher may present twelve-tone music to the young or inexperienced listener. This study is directed toward teaching dodecaphonic music on the secondary level.

Through an understanding of how dodecaphonic music developed, the music teacher can recognize that twelve-tone music, even though it can be complicated, is a logical and orderly step in the development of music.

A survey of six general music song book series reveals that only one, Making Music Your Own, even mentions twelve-tone music.<sup>1</sup> The short discussion which is in the text is only a very superficial treatment of twelve-tone music.

Finding adequate textbooks for a high school music appreciation class is very difficult.<sup>2</sup> When an appreciation text is written for high school, it is often too detailed with

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<sup>1</sup>Textbooks surveyed: Discovering Music Together, Follett; Growing With Music, Prentice-Hall; Magic of Music, Ginn; Making Music Your Own, Silver Burdett; Music For Young Americans, American Book Company; This is Music, Allyn and Bacon.

<sup>2</sup>Charles R. Hoffer, Teaching Music In The Secondary Schools (Belmont, Calif.: Wadsworth Co., Inc., 1964), p. 360.

technical information, or it includes little or nothing about twentieth-century music. In view of the lack of concise materials concerning twelve-tone music for the student, this paper will present twelve-tone music to the young listener.

This paper is organized in the order in which the writer would present twelve-tone music to the students. Specific materials, procedures, and questions for discussion are included in each section of the paper. Specific aims are listed below in terms of understandings and knowledges and skills:

Understandings and Knowledges:

1. The student will understand the aesthetic purpose of twelve-tone music.
2. The student will understand the relationship between expressionism in art and expressionism in music.
3. The student will understand the development of twelve-tone music.
4. The student will be familiar with the techniques of twelve-tone composition.
5. The student will know how to chart or analyze a twelve-tone composition.
6. The student will be familiar with several twelve-tone compositions.

Skills:

1. The student will be able to listen to twelve-tone music with some understanding.
2. The student will be able to follow the score of a twelve-tone composition with some accuracy.
3. The student will be able to compose a simple twelve-tone composition.

As an introduction to the unit, the writer recommends the presentation of the recording Variations for Orchestra, by Arnold Schoenberg, asking the students how this composition is different from any other which they have heard. These differences can be listed on the chalkboard and discussed in class. Some of the differences which the students might suggest can include: "there is no melody," "it does not sound good," "the melody jumps around," and other similar statements. This introduction to dodecaphonic music can lead into a unit on twelve-tone music.

## Relationship to Art

In becoming acquainted with twelve-tone music, it is helpful to the inexperienced listener to see the relationship between painters and composers of expressionistic ideas and to understand ways in which they might have influenced each other.

Schoenberg and his disciples are representatives of a particular movement in music called "expressionism." This movement began during the early part of the twentieth century, particularly in Austria and Germany. Like impressionism, it was taken from the graphic arts which had cultivated a style of violent emotionalism and deeply probing self-expression, in reaction to the highly refined suggestiveness of the French impressionistic school. Impressionism was concerned with the depiction of fleeting aspects of nature, i.e., an impression of nature received in a flash of the eye. The surface of nature under light and the many nuances or shadings of colors in light were very important. Impressionism tried to suggest or hint at something in a vague way, attempting to convey only the surface of things. Structure, depth, and organization were renounced for a luminous and hazy art. The theme of impressionistic painters centered around the use of light with subjects such as dancing girls, water, and nature. Although the writer does not have reproductions in this unit of impressionistic painters, works such as Poplars at Giverny by Claude Monet, and Rehearsal for the Ballet on Stage by Edgar Degas

are good examples to compare with the cited expressionistic reproductions. Other impressionist painters include Camille Pissarro, Edouard Manet, and Auguste Renoir.

Expressionism is concerned with

...man as he exists in the modern world and is described by twentieth-century psychology: isolated, helpless in the grip of forces he does not understand, prey to inner conflict, tension, anxiety, fear, and all the elemental irrational drives of the subconscious, and in irritated rebellion against established order and accepted forms.<sup>3</sup>

As Sigmund Freud worked in Vienna on his theories concerning psychoanalysis and the unconscious, artists tried to depict the inner experience or the unconscious, on the canvas. Consequently, many of the desires or impulses which man had suppressed for many years were released.

The artist began to work in the realm of the unconscious with distorted images that were contrary to traditional concepts of beauty. Some of the characteristics of expressionistic painters include: forms of objects defined by succinct, pictorial signs, clear contours, simplified linear elements, and sharp, luminous colors.

Some of the expressionistic painters who influenced Schoenberg and his followers at this time were Wassily Kandinsky, Oscar Kokoschka, Paul Klee, and Franz Marc. Some of their paintings are reproduced below for examination.

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<sup>3</sup>Donald J. Grout, A History of Western Music (New York: W. W. Norton and Co., 1960), p. 650.



Motif from Hammamet  
Water-color on paper, 1914.  
Benziger Collection, Basle.

Paul Klee



The Blue Horses. 1911.  
Walker Art Center, Minneapolis.

Franz Marc



The Tiger. 1912.  
Bernhard Koehler Collection, Berlin.

Franz Marc



As expressionist painters rejected traditional beauty, musical expressionism rejected what had been thought of as beautiful. The romantic love for overwhelming effect and high pitched emotion were replaced by concern for the strange and the grotesque. Strong plots with unusual behavior and violence became prominent in opera. Alban Berg's opera Wozzeck is a good example of this unusual behavior. The drama concerns a soldier, Wozzeck, as he tries to provide for his common-law wife, Marie, and their son. He is a victim of his surroundings and the evil psychological experiments of a doctor, ridiculed and pitied by people, betrayed by his wife, and eventually driven to murder and the taking of his own life. Expressionistic tendencies can also be found in Strauss' operas, Salome and Electra.<sup>4</sup> Salome is a decadent version of a Biblical story about the unholy love of Salome, the step-daughter of Herod. Electra is a version of Sophocles' play concerning royalty after the Trojan War. It deals with the emotions of insane hatred and revenge throughout its one act.

Expressionism strived for

...maximum intensity all the time, an unflagging, unrelenting intensity; hence it had to reject those elements-such as the consonance in music-which represented a slackening of tension. In its preoccupation with states of souls, expressionism sought ever more powerful means of communicating emotion, and soon reached boundaries of what was possible with the tonal system.<sup>5</sup>

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<sup>4</sup>Joseph Machlis, Introduction to Contemporary Music (New York: W. W. Norton and Co., 1961), p. 337.

<sup>5</sup>Ibid., p. 337.

Questions to discuss:

1. What is the purpose of expressionism in art?
2. What is the purpose of expressionism in music?
3. What are the characteristics of expressionism in art?
4. What are the characteristics of expressionism in music?
5. Name some expressionist artists.
6. Compare and contrast impressionism and expressionism.

## Evolution of Twelve-Tone Music

Twelve-tone music was not the result of an accident. It was the product of a deliberate attempt to infuse a new order into what was thought by many to be a breakdown of the traditional tonal system.

Tonality depends on a sense of stability and unity in which there is a polarity of tones or a relationship among the tones which are manipulated within this frame of reference to a central tone or key. This principle can be based on seven of the twelve tones belonging to a key, and five tones lying outside of the key. The principle can also be based on five or six tones.

Strictly tonal music is illustrated in Example 1:

Example 1, Chorale

"Crüger

The musical score for Example 1, Chorale, is presented in two staves (treble and bass) in 4/4 time. The key signature is one flat (F major). The score is divided into four measures, labeled 1, 2, 3, and 4. Below the bass staff, Roman numerals indicate the chords for each measure: I, IV, I6, IV, I, IV, I, II, I6, 115, IV, I.

Example 1 is in the key of F major with all the notes lying within that scale. The ear can perceive that F is the central tone and that the triad built upon it is the central chord. There is an order of relationships of the other chords

and tones to the key or central tone.

As the scope of composition widened, chromaticism, that is tones other than those within a specific scale, began to enrich tonality by widening the relationships of chords and tones and to weaken the basic principles in relation to the degree of importance of the chromatic elements. The addition of auxiliary tones could be used, providing the composer remained close to the central key.

Example 2 shows a use of chromaticism during the early part of the nineteenth century. One can still sense the strong key feeling of e minor:

Example 2, measures 13-25  
Prelude in E Minor, Opus 28, No. 4.

Chopin

The musical score is presented in three systems, each with a treble and bass staff. The key signature is E minor (one sharp) and the time signature is 4/4. The first system (measures 13-15) features a treble staff with a half note and a quarter note, and a bass staff with a complex chordal texture. Measure 15 is marked 'SUSPENSION'. The second system (measures 16-18) shows a treble staff with a half note and a quarter note, and a bass staff with a complex chordal texture. Measure 18 is marked 'PEDAL NOTE'. The third system (measures 19-21) shows a treble staff with a half note and a quarter note, and a bass staff with a complex chordal texture. Measure 21 is marked 'PEDAL NOTE'. The score includes various accidentals and dynamics markings.

The accidentals in this example show that its tonal basis is not as simple as that of Example 1. The harmony is in thirds with the use of suspensions (measure 2), pedal notes (measure 6), and evaded resolutions (measures 3 and 4 in brackets).

Several of the accidentals have the effect of changing or altering the quality of the chords which immediately precede the accidentals. An illustration of this can be seen in measures three and four of Example 2 (see above). The harmony at the end of the third measure is a dominant seventh chord built on the root E. At the first beat of measure four, the chord is still built on E, but is now a minor seventh chord instead of a dominant seventh chord. The dominant function, the strongest tonal function, has been changed by the change of quality. It should be observed that the resolution of this dominant to its tonic is finally reached at measure four on the final beat, showing that Chopin has not totally abandoned basic tonal principals.

Example 3, taken from Tristan und Isolde by Wagner is more strongly chromatic than is the Chopin example and the tonal center is therefore not as clear. Although there are suspensions and pedal notes similar to those of Chopin, resolutions of chord structures which have strong tonal tendencies, such as the dominant seventh on E in measure three, are here usually evaded:



Example 3, measures 1-17  
Prelude to Tristan und Isolde

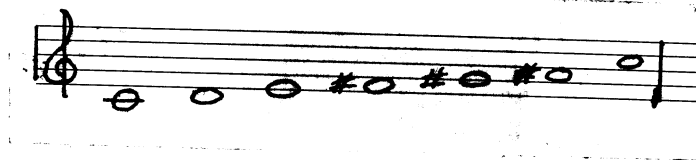
Wagner

These first three examples should illustrate to the class how chromaticism tends to widen the scope of the tonal system as it weakens its most basic principles.

A new departure was introduced by Claude Debussy in the use of the whole-tone scale (see Example 4). This scale was used in place of the traditional diatonic major and minor scales. A tonic or key center is difficult to find, because

leading-tone tendencies are not present in the whole-tone scale. This will become apparent to the students when a C-major scale is played in contrast to a whole-tone scale. They will notice that a scale constructed entirely of whole steps lacks tones which tend to move toward other tones and thus define a strong central tone. The variety of chord qualities is much more limited in the whole-tone scale than in the major-minor system, and the resolution of consonance to dissonance is less apparent because of a more stable dissonance-consonance level. Since the whole-tone scale tends not to define a strong central tone, chord relationships built upon whole-tone scales tend toward stable relationships rather than strong or weak ones. Therefore, a hierarchy of chord progressions is not inherent in the scale;

Example 4, Whole-Tone Scale



An example of the use of the whole-tone scale can be found below in Example 5:

Example 5, measure 32  
Prelude a L'apres-midi d'un faune

Debussy

Debussy also used non-functional harmony, that is, parallel, unrelated, tertian structures. By thus denying tonal functions of traditionally constructed harmonies, another departure from basic tonal principles occurs. In Example 6, all the chords in the right hand are parallel triads and not related to a key center. Non-functional harmony does not evade, embellish, or delay harmonic functions, but rather denies this function and uses chords which are tonally unrelated in succession:

Example 6, measures 37-41  
Prelude No. III, Book 2

Debussy

Handwritten musical score for Example 6, measures 37-41 of Debussy's Prelude No. III, Book 2. The score is written on a grand staff with two systems. The first system contains measures 37, 38, 39, and 40. The second system contains measure 41. The right hand (treble clef) features complex chords and arpeggios, with notes labeled with letters and accidentals: F<sup>b</sup>, G<sup>b</sup>, A<sup>b</sup>, G<sup>b</sup>, F<sup>b</sup>, E<sup>b</sup>, F, G, F, E<sup>b</sup>, D, e, f, e, D. The left hand (bass clef) plays a simple rhythmic pattern of eighth notes. The key signature is three flats (B<sup>b</sup>, E<sup>b</sup>, A<sup>b</sup>).

Another tonal concept which is shown as a transition to twelve-tone music is the use of polytonality, in which two or more keys are used at the same time. Many composers have used this technique. Example 7 demonstrates this polytonal writing. The right hand is in the key of G-flat, and the left hand is in the key of C:

Example 7, measures 1-12  
Mikrocosmos, Volume VI; "From the Diary of a Fly"

Bartok

The above example is polytonal. There is, however, a greater use of polychordal writing, i.e., sonorities which can best be understood as combinations of conventional chords, such as illustrated in Examples 8 and 9 on the next page. In Example 8, the final cadence has an E-major chord against a C-major chord:

Example 8  
American Ballads, No. 4<sup>6</sup>

Harris

Example 9 utilizes unrelated triads in each hand, the two hands combining to sound superimposed, unrelated triads:

Example 9  
Three Score Set No. II<sup>7</sup>

Schuman

To be historically accurate, a discussion of atonality should be presented. Atonality means literally without

<sup>6</sup>Leon Dallin, Techniques of Twentieth Century Composition (Dubuque, Iowa: Wm. C. Brown Co., 1964), p. 72.

<sup>7</sup>Ibid., p. 73.

tonality. It is a term in music "in which a definite tonal center or key is purposely avoided."<sup>8</sup> Another aspect of atonal music is its very expressive and emotional characteristics. An example should be heard in the idiom of atonality. Alban Berg's opera Wozzeck is a good example.

The writer would not have the students analyze this type of composition in this unit because of its complexity. The complete freedom from traditional tonality, the denial or resolution of dissonance, and non-tonality make it difficult for the student to hear and understand. The style is significant because Schoenberg originally devised his twelve-tone concept in an attempt to create order in this atonality. Since it does have order, twelve-tone music created an orderly relationship of tones.

The examples used in this section should be seen as well as heard by the students. Copies should be made available for the students' use.

Questions to discuss:

1. What are some of the changes in tonality that lead to twelve-tone music?
2. How has harmony changed?
3. What is non-functional harmony?
4. What is the difference between polytonal and polychordal music?

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<sup>8</sup>Willi Appel and Ralph T. Daniel, The Harvard Brief Dictionary of Music (New York: Washington Square Press, Inc.), p. 19.

## Definition of Twelve-Tone Music

According to Schoenberg's technique of twelve-tone writing, every composition is based on an arbitrary arrangement of the twelve chromatic tones which is called a tone row. This tone row becomes the unifying idea or basis for the composition. One might at first think that the twelve tones merely constitute a scale. However, this technique is different from scale usage in that the row serves as the basis for only one piece, whereas the scale of C major has hundreds of compositions using C as its center.

A tone row can be used in four basically different forms as seen below in the following example from Schoenberg's Wind Quintet, Opus 26:

Example 10

The image displays four musical staves illustrating the four basic forms of a twelve-tone row. The first staff, labeled 'ORIGINAL ROW', shows a sequence of twelve notes in treble clef with a key signature of one flat (B-flat). The second staff, labeled 'RETROGRADE ROW', shows the original row played in reverse order. The third staff, labeled 'INVERSION ROW', shows the original row inverted (each note is a tritone away from the original). The fourth staff, labeled 'RETROGRADE INVERSION ROW', shows the inverted row played in reverse order. Each staff includes a double bar line at the end of the row.

Each of these four versions of the tone row may begin on any tone, allowing forty-eight possibilities. The series or tone row can be used horizontally as successive tones, or vertically as simultaneous or chord tones. Counterpoint,



music consisting of two or more melodic lines sounding simultaneously, becomes an outstanding characteristic of twelve-tone music since each voice is often a melody. As long as the sequence of intervals is retained, the series may be used in transposition. Any tone of the row can be sounded in any octave, as long as the twelve tones are treated equally. For the purposes of this introduction unit, we shall be concerned with the fairly strict use of the method, even though further development and elaboration of Schoenberg's basic twelve-tone technique has occurred. These later developments can best be understood in relation to this strict usage.

Questions to discuss:

1. What are some of the elements of twelve-tone composition?
2. What is the difference between a scale and a tone row?
3. What is the difference between tonality and atonality?

## Analysis and Student Compositions

Although analyzing a piece of music does not make one appreciate that piece, it can provide a better understanding of what the composer has done or intended. Now that a definition of twelve-tone music has been established, the class can look at some simply constructed dodecaphonic compositions (see page 24). By charting a tone row and its forms in easier pieces, the inexperienced listener can see as well as hear how a twelve-tone composition is constructed. Piano compositions by George Rochberg and Ernst Krenek are reprinted on the next pages with suggestions for the student in charting a twelve-tone composition. Rochberg has eleven other Bagatelles in the same collection, all of which can be provided for the student as well as seven more compositions in Krenek's collection. An explanation on page 25 illustrates how the charting can be done.

# TWELVE BAGATELLES

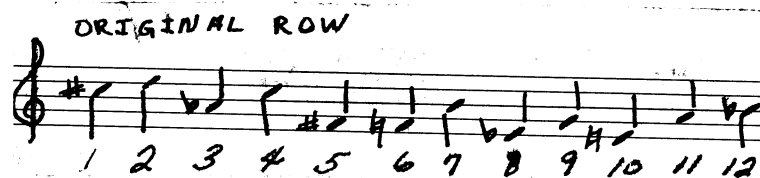
GEORGE ROCHBERG  
1952

Performance time: approx. 11 mi.

## I

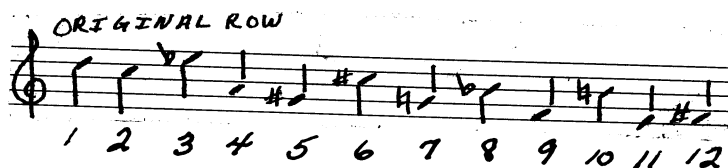
*Drammaticamente e con un tempo libero* (♩ = ca. 60)

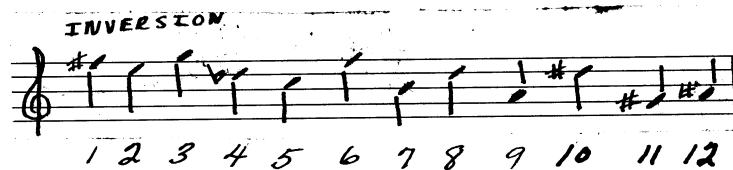
The image shows a handwritten musical score for the first movement of 'Twelve Bagatelles' by George Rochberg. The score is written for piano in 4/8 time and consists of four systems of music. The key signature is one flat (B-flat major or D minor). The tempo is marked 'Drammaticamente e con un tempo libero' with a quarter note equal to approximately 60 beats per minute. The score is heavily annotated with red ink, including circled numbers 1 through 8, red lines connecting notes across staves, and various performance markings such as *sf*, *ff*, *p*, *mf*, *pp*, *ppp*, *espr.*, *dolce*, *meno mosso*, *come prima*, *poco accel.*, *accl. e cresc.*, *rit.*, *dolcissimo*, and *ff accel.*. The first system is in 4/8 time. The second system includes markings for 'meno mosso' and 'come prima'. The third system includes 'dolce' and 'dolcissimo'. The fourth system includes 'ppp poco rit.' and 'ff accel.'. The score is divided into measures by vertical lines, and some measures are grouped with brackets. The red annotations appear to be a performer's or editor's markings, possibly indicating phrasing or fingerings.

Chart for Bagatelles No. 1 by George Rochberg:

The original row appears eight times.  
Notice in the final two chords that note nine appears before note eight in the piece.

When students analyze this piano selection, it is suggested they first determine the original row and mark it with a colored pencil each time it appears in the piece of music. Then choose another colored pencil to mark the tone row when it appears in retrograde form, another color for inversion, and a different color for the retrograde inversion form. Also number the twelve tones of the row as they appear and chart the number of times the row occurs. (See pages 24 and 27 for examples of how the row can be charted.) Notice that one may chart under the row or draw on the row for more clarity.

Chart for "Etude" No. 1 from Eight Piano Pieces by Ernst Krenek:



Everything has been moved up a major third from the original form.

Charting of the piece for the inexperienced student should proceed as in the previous piece.

FIVE FIFTH D'G  
EIGHT PIANO PIECES

1. Etude

ERNST KRENEK

Allegro

*mf non legato*

The musical score consists of five systems of piano and treble staves. The first system (measures 1-12) includes a tempo marking of 'Allegro' and a dynamic marking of '*mf non legato*'. The second system (measures 13-24) continues the piece. The third system (measures 25-36) includes a dynamic marking of '*p*'. The fourth system (measures 37-48) includes a dynamic marking of '*legato*'. The fifth system (measures 49-60) includes a dynamic marking of '*rit.*'. The score is heavily annotated with red and green lines, circles, and numbers, indicating specific musical techniques and fingerings. The piano part is written in bass clef and the treble part in treble clef. The key signature has one sharp (F#) and the time signature is 3/8.

\* Notes in the composition technique of these pieces will be found on pages 11-12.

After an analysis or charting of a twelve-tone composition, discuss some of the characteristics which the composer has utilized in his compositions, such as the use of various octaves, repeated notes, vertical and horizontal writing, and an interest in rhythm.

The writer has composed a short twelve-tone composition (see Example 11), which illustrates the type of piece the class members can compose. The actual composition is on page 29.

The names of the twelve chromatic tones were written on a piece of paper. Next, the twelve tones were arranged arbitrarily, keeping in mind a need for unity and variety. The two voices state the original row (measures 1 through 3). The upper voice in the next three measures (measures 4 through 6), is in retrograde form of the row while the lower voice repeats the original row. The upper voice in measures seven, eight, and nine is transposed up one-half step while the lower voice is in retrograde form on the original pitches:

Example 11

The image shows two staves of musical notation. The top staff is labeled "ORIGINAL ROW" and contains a sequence of twelve notes: C4, D4, E4, F4, G4, A4, B4, C5, D5, E5, F5, G5. The bottom staff is labeled "INVERSION" and contains a sequence of twelve notes: C#4, D#4, E#4, F#4, G#4, A#4, B#4, C#5, D#5, E#5, F#5, G#5. Both staves use a treble clef and a key signature of one sharp (F#).

Red--original form  
 Green--retrograde form  
 Brown--inverted form

The image shows a handwritten musical score for a twelve-tone composition. It consists of two systems of staves. The first system contains measures 1 through 5, and the second system contains measures 6 through 9. Each measure is numbered above the staff. The notation includes treble and bass clefs, a 4/4 time signature, and various rhythmic values and accidentals. The notes are arranged in a way that suggests a specific twelve-tone row and its transformations.

In a similar manner the class may construct an original tone row, writing the twelve chromatic tones on the chalkboard. Then, keeping in mind the characteristics of twelve-tone composition, the students may suggest the order of their row. Next a rhythm may be selected to fit the tone row. The students may compose a short piece from this row as a class, writing horizontally in two voices or vertically in chords, or they may prefer to work individually.

After the compositions are written (they may need to be completed at home), the students should play their pieces in class on the piano or melody instrument. One



student might play the upper part on a recorder as the other plays the lower part on the piano. The teacher and students must remember to compensate for transposing instruments.

Questions to discuss:

1. What are some of the problems of writing a twelve-tone composition?
2. What are some of the variations in the use of the tone row which we wrote in class?

## Listening

In the study of twelve-tone compositions it is important that the student understand how to listen. The tone row is usually not to be regarded as a melody of a piece as we know the tune or theme of Beethoven's Fifth Symphony or "When Johnny Comes Marching Home." The tone row as such is not what the listener should attempt to identify, for it is almost impossible to hear.

Machlis says,

since the row determines the choice and succession of intervals, it inevitably shapes the overall sound. More important, it pervades the thinking of the composer, providing him with the framework for his piece, even if that framework is no more visible to the beholder than is the steel skeleton that holds up a building.<sup>9</sup>

As the students listen to some recordings, scores should be provided for them to follow so they may see as well as hear the composition. The students will soon discover in their listening that most composers do not follow the strict rules of twelve-tone composition.

Since the tone row cannot be heard, the listener should concentrate on other aspects of the music. Some of the characteristics one should listen for include: the rhythm, the thickness or thinness of the structure, and the contrapuntal line. The over-all effect of the piece should be considered when listening to a twelve-tone composition and how the composer works his materials.

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<sup>9</sup>Machlis, loc. cit., p. 342.

There are two opposing factors in twelve-tone music which are unique. On the one hand the music can be very expressive and ultrachromatic, whereas it can also be very rigid in form because of the selection of the row.

To compare many of these characteristics, play Variations for Piano, Opus 21 by Webern and "Walzer," No. 5 from Five Piano Pieces by Schoenberg. The contrapuntal line, sparsity of voices, rhythm, and the over-all expression of the pieces should be discussed.

After listening to a twelve-tone composition the student may not like the sound any better than he did in the beginning of the unit. While this is not the primary purpose of such a unit, the student should, however, appreciate and understand more a type of composition which is too often ignored. The student should now be familiar with techniques of twelve-tone music as well as understand the total relationship of expressionism in music and expressionism in art.

Questions to discuss:

1. What should one listen for when listening to a twelve-tone composition? How is this different from a tonal composition?
2. Are there any different characteristics that the student has noticed after following a score?

## Evaluation of Study

An evaluation of this unit is necessary. By assigning various projects to the students, the teacher can see if the stated aims of the unit were achieved and if a high level of motivation was maintained. Some of these projects might include: comparison of impressionism to expressionism in art, comparison of impressionism to expressionism in music, search for paintings by expressionist artists and discussion of their expressionistic characteristics, composition of a twelve-tone piece charting the use of the row as illustrated on page 25, description of the techniques involved in writing a twelve-tone composition to be written down on paper. The students may write a paper on their own evaluation of twelve-tone music or they might suggest topics which interested them in the unit.

If the student, in presenting his project, responds with some enthusiasm and understanding concerning the topic, the teacher has been successful in presenting the unit. The validity of this understanding may be measured by a written or oral test, seeking the students' knowledge and understanding and skill concerning aspects of twelve-tone music and expressionism as discussed in the unit.

## STUDENT AND TEACHER VOCABULARY

atonality: without tonality; tonal relationships are rejected.

counterpoint: two or more melodies played simultaneously.

dodecaphonic: dodeca: a prefix meaning twelve; used synonymous with twelve-tone which refers to a method of composition started by Arnold Schoenberg in the early twentieth century, replacing the familiar aspects of music such as melody, harmony, and tonality with motivic structure and atonality.<sup>10</sup>

expressionism: a term referring to a trend in twentieth century music which grew from German painters. A style of strong emotionalism and deeply probing self-expression were in reaction to the refined French impressionistic school.<sup>11</sup>

impressionism: a late nineteenth and early twentieth century movement by Claude Debussy and other Frenchmen. Its purpose is to hint rather than state.<sup>12</sup>

polychordal: the simultaneous sounding of superimposed chords.

polytonal: the simultaneous sounding of several tonalities or keys.

tonality: with tonality; often synonymous with key; tonality also denotes the entire system of all the major and minor keys.

tone row: the succession of tones which a composer has chosen as the basis for a twelve-tone composition. (a tone row does not always have twelve notes)

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<sup>10</sup>Ibid., p. 318.

<sup>11</sup>Willi Apel and Ralph T. Daniel, The Harvard Brief Dictionary of Music (New York: Washington Square Press, Inc.), p. 96.

<sup>12</sup>Ibid., p. 140.

## SUGGESTED MATERIALS

Recordings:

- "Wie Bin Ich Froh," from Three Songs, Opus 25-Anton Webern  
Variations for Piano, Opus 27, (1936)-Anton Webern  
String Quartet, No. 4-Arnold Schoenberg  
Piano Concerto, Opus 42-Arnold Schoenberg  
Variations for Orchestra, Opus 31-Arnold Schoenberg  
Suite for Piano, Arnold Schoenberg  
Piano Concerto, (1934)-Frank Martin  
String Quartet, (1936)-Frank Martin  
Concerto for Violin and Orchestra, (1935)-Alban Berg  
Concerto for Jazzband and Symphony Orchestra, (1954)-Rolf  
 Liebermann  
Twelve-tone Composition, prepared by Vaclav Nelhybel  
 (narration and examples)-Folkways Records FT 3612

Analysis for the Inexperienced Listener:

(Not all of the suggested materials are easy but are good for comparison purposes.)

- \*"Twelve Bagatelles"-George Rochberg  
 \*"Eight Piano Pieces"-Ernst Krenek (contains Krenek's analysis and suggestions for interpretation)  
 "Three Piano Pieces," Opus 2-Arnold Schoenberg  
 "Fuga Contraria," (1950)-Roger Goeb  
 "Walzer," No. 5 from Five Piano Pieces, Opus 23-Arnold Schoenberg  
 "Five Bagatelles," (1939)-Ben Weber  
 \*Especially good for chart analysis

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