Twelve-Tone Composition

Prepared by Vaclav Nelhybel

A narrative presentation with musical examples

Scholastic Records ST 3612

Twelve-Tone Composition

prepared by Vaclav Nelhybel
musical examples by woodwind quartet
narrator: William Geib

ST 3612

Side I

TWELVE-TONE MUSIC

Band 1: FROM TONALITY TO ATONALITY
Band 2: BUILDING A TWELVE-TONE SERIES
Band 3: MUSICAL THEMES IN A TWELVE-TONE SERIES
Band 4: SERIES FORMS
Original; Retrograde; Inversion; Retrograde-Inversion
Band 5: CREATING VERTICAL PATTERNS
Two-part Composition; Three-part Composition; Four-part Composition
Band 6: TRANSPOSING A SERIES
Band 7: SYMETRIC SERIES
Band 8: ALL-INTERVAL SERIES

Side II

Demonstration of
TECHNICAL TERMINOLOGY

Band 1: HARMONY
Chords: tonic, dominant, subdominant
Tonality; Cadence
Band 2: CHORD-FOREIGN NOTES
Passing Notes; Alternating Notes; Anticipation; Retardation; Suspension
Band 3: TENSION AND RESOLUTION
Consonance and Dissonance; Tonality; Atonality; Diatonic; Chromatic
Band 4: INTERVALS
Band 5: SCALES
Chromatic; Whole-Tone; Major; Minor; Minor Melodic; Gypsy or Oriental; Chinese or Pentatonic
Band 6: TRANSPOSITION
Band 7: DEMONSTRATION OF VARIOUS TERMS
Polytonality; Horizontal; Vertical; Homophony; Polyphony
Band 8: RETROGRADE MIRROR FORM

DESCRIPTIVE NOTES ARE INSIDE POCKET

Twelve-Tone Composition Prepared by Vaclav Nelhybel

Library of Congress Catalogue Card No. R 61-1908
Produced by Folkways Records, N.Y.
Distributed by Scholastic Records, 906 Sylvan Avenue, Englewood Cliffs, N.J. 07632

Cover design by Ronald Clyne

SCHOLASTIC RECORDS Album No. ST 3612
Produced by Folkways Records, New York, ©1961

TWELVE-TONE COMPOSITION
prepared by Vaclav Nelhybel
musical examples by woodwind quartet
narrator: William Geib

SIDE I

Band 1: From Tonality To Atonality
Band 2: Building A Twelve-Tone Series
Band 3: Musical Themes In A Twelve-Tone Series
Band 4: Series Forms
original; retrograde; inversion; retrograde-inversion
Band 5: Creating Vertical Patterns
two-part composition; three-part composition; four-part composition
Band 6: Transposing A Series
Band 7: Symetric Series
Band 8: All-Interval Series

SIDE II

Band 1: Harmony
chords: tonic, dominant, subdominant
tonality; cadence
Band 2: Chord - Foreign Notes
passing notes; alternating notes; anticipation; retardation; suspension
Band 3: Tension And Resolution
consonance and dissonance; tonality; atonality; diatonic; chromatic
Band 4: Intervals
Band 5: Scales
chromatic; whole-tone; major; minor; minor melodic; Gypsy or Oriental; Chinese or pentatonic
Band 6: Transposition
Band 7: Demonstration Of Various Terms
polytonality; horizontal; vertical; homophony; polyphony
Band 8: Retrograde Mirror Form

The first side demonstrates the twelve-tone technique; the second side explains briefly the musical technical terms used in the text on side 1.

Introductory note by Prof. Dr. Franz Brenn,
Zurich, Switzerland

This record as a source of information about the twelve tone system is exactly what many music students and friends of contemporary music were waiting for.

The dodecaphony (from Greek dodeka =twelve and phonee= sound, voice) or twelve tone - or serial music (all identical terms) is not a specific musical style phenomenon, it is a technique which organizes in a strict way the twelve members of the chromatic half-tone scale within an octave.

The compositions of Anton von Webern are basically different from the compositions of his teacher Schoenberg and the serial compositions of Stravinsky or Krenek represent again two very personal styles. Nelhybel's Introduction and Allegro on this record reveals a for the serial music surprisingly new mood and character: it is a composition with the fresh and optimistic outlook of the young generation. The fact that the twelve tone technique as the basic compository device is able to produce such a stylistic variety as represented by the composers named above, is the best defense against the accusation that serial music is purely cerebral and intellectual or even the result of a number game which follows certain deliberately imposed rules.

The requirement for the creation of a musical work of genuine values is today the same as it was in the time of Monteverdi, Bach or Beethoven: artistic integrity of the composer, which includes high intelligence, critical judgment, a sensitive ear, imagination and inborn creative faculty supported by a thorough technical training.

The history of chromaticism begins already in the church music of the early christian era, and comes to its culmination point at about 1900. Composers like Debussy, R. Strauss or Skrjabin were building complex chromatic structures, fascinating by their rich colour and expressiveness unknown till then. This was the era of the break with tonality. The complete radical break appears in the composition by Arnold Schoenberg "Klavierstuecke Opus 11" in the year 1908. The abolition of the safe ground of the tonality required a new generally valid organization. The dodecaphony is such a methodically unified system. It was developed independently by two Viennese composers: Mathias Hauer and Arnold Schoenberg. The basic principles of both composers are the same though the methods and applications vary. Nelhybel's record demonstrates the Schoenberg method.

The music examples on the record, as short as they are, reveal a new aspect of the twelve tone music which we do not encounter in Schoenberg's music: Latent points of gravity without falling back into the tonal functionalism. And in this direction, I think, lies the prospective path of music development in the future: in the synthesis of the principles of the "composition with twelve notes, related only to one another" with the (still to be exactly defined, but already audible in the music on the record) new kind of gravitational interrelations within the serial organization.

This record is very useful because it demonstrates the basic rules of the dodecaphony in word and music. The serial organization is still too new and strange to ears used to tonal music. The listener has to acquire more technical knowledge about the system and his perceptiveness has to be trained by actual listening to this music. This record offers both: the theory in word and sound.

At the present time we are witnesses of fundamental changes, re-evaluations and discoveries in the world of science. We live in times of gigantic turn in the long established order of human society and our individual egos face a new unpredictable function within it. The creative mind of the artist is the first who like a seismograph feels the mysterious eruptions of time and it is he who, anticipating time, masters problems which will concern future generations.

In the dodecaphony the human mind tries in its small area to master the chaos of world complexities.

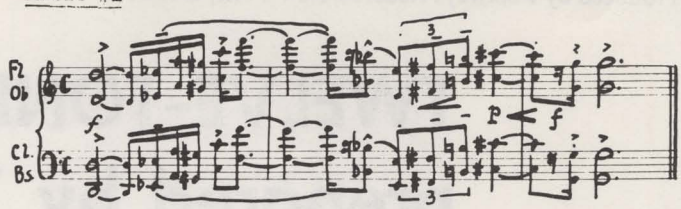
TWELVE-TONE MUSIC

SIDE ONE

Band 1:

At the present time there are three different styles employed in musical composition: first the so-called traditional music developed from the centuries old tradition of music based on tonality. Second, electronic music performed not by musical instruments played by human beings, but produced by electrical or electronic machines. This music aims at a new organization of the horizontal and vertical aspects of sounds freed from musical thinking in terms of harmony, counterpoint and so on. The third system is the twelve-tone or serial system, which is the subject of this demonstration.

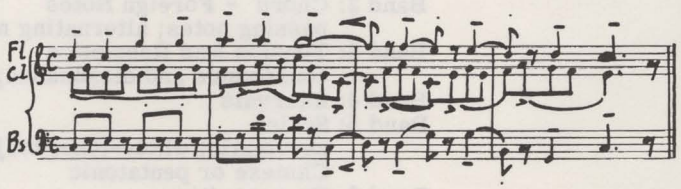
Music #1



That was a twelve-tone series. We are going to use this series in almost all demonstrations. But first we have to go back to the traditional or conventional-tonal music. All three terms are being used. The term tonal expresses the technical definition: music relating its horizontal (melodic) and its vertical (chordal) components to a focal point. The musical sound material stripped to its basic form is represented in tonal music by the scale, mostly seven-tone scale. The seven members of the diatonic scale are not just seven sound-steps differring in pitch from each other. Each step has a certain relationship to the focal point, the tonic. So the seventh step is the leading note to its adjoining higher step, the octave. The fourth has a similar leading tendency but to its adjoining lower step, the third. All other steps, depending on their chordal functions, may become leading notes in either direction.

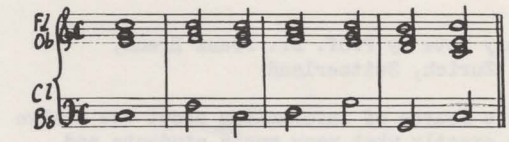
The identification of the tonality is given by the succession of four chords: on the first step, the tonic, on the fourth, the sub-dominant, the fifth, the dominant and its resolution back to the first step, the tonic. Let's play a very simple tonal passage:

Music #2



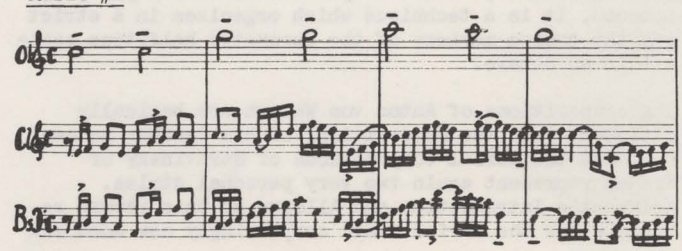
In such a simple example it is very easy to hear the classical cadence carrying the vertical structure, sustaining the simple melody. Here is the chord progression without the melody and without any instrumental-stylistic embellishments:

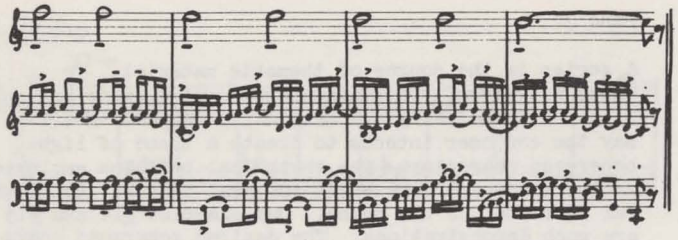
Music #3



To avoid the stagnation of simple chord progressions the basic chords are varied by diatonic passing or alternating notes, anticipations etc.

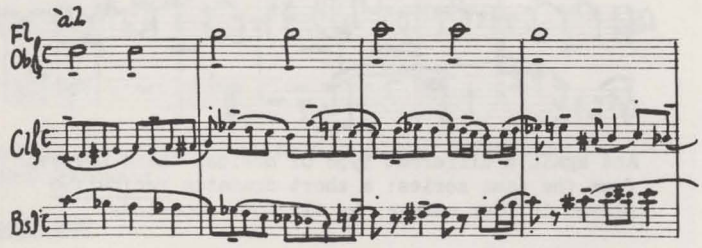
Music #4

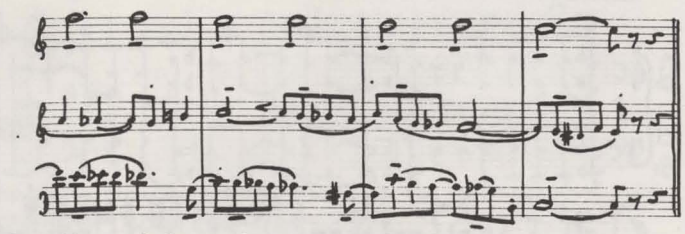




The next step toward the enrichment of the vertical structure is the introduction of chromatic notes as artificial leading notes and chromatic-key-foreign passing or alternating notes.

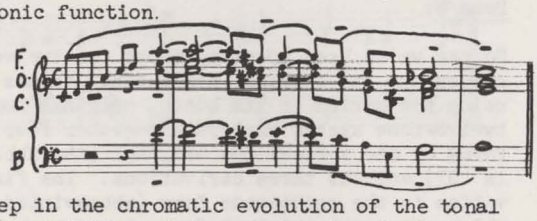
Music #5





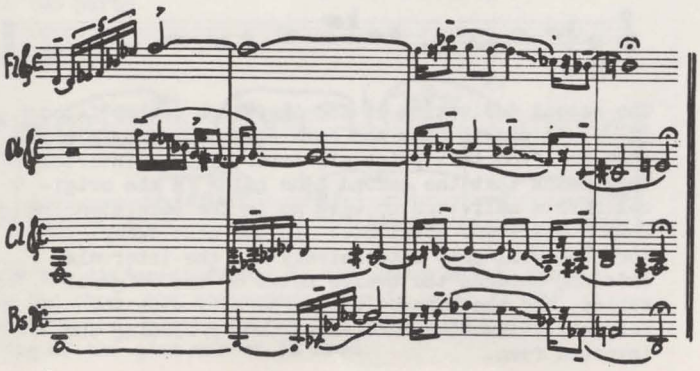
Despite a whole variety of key-foreign notes, the functional meaning of the melody remains unchanged. In the search for new expression we encounter a different type of vertical organization, the parallel leading of several voices. This technique which adds to the melody two or more voices and keeps them constantly in parallel motion with it has more a "coloring" effect than a harmonic function.

Music #6



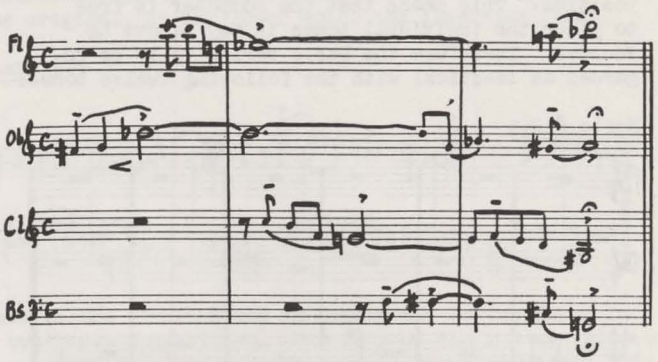
The next step in the cnromatic evolution of the tonal system is the abolition of the strict classical cadence as the carrying force of the vertical structure. The composer choses deliberately the points of vertical gravity. The following example has one gravity point, the tone D. All voices are circulating around it, as if they tried to escape from it.

Music #7



The next step is the abolition even of the deliberate gravity points. This means that there are no forces which lead certain notes into certain adjoining steps; the created tensions are not resolve, one dissonant structure is followed by another dissonant structure. No generally valid rules are established as to how to treat the vertical structures, the only generally valid rule is the avoidance of the consonance.

Music #8



This system which negates the basic law of tonality, the resolution of a created tension, is called atonality, let's say free atonality. Every composer establishes his own rules. Very often the rules are valid for only one composition. In the free atonal music there is no established, generally valid law which could be applied to any type of musical composition as it was the case in tonal music.

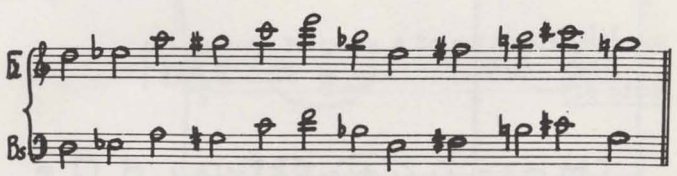
Band 2:

The composition with twelve notes dissolves completely the functionalism of the tonal music and it introducues new generally valid rules of the vertical and horizontal treatment of the musical material. The twelve-tone system is atonality with generally valid rules.

The departing point for any twelve-tone composition is a series of twelve different tones. The order of the twelve tones within the series is up to the composer. First we shall build a series; later we shall see what should be avoided in the formation of the twelve-notes order. As the first note for the series we choose the tone D.

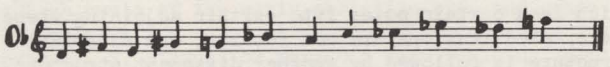
The second tone: E-flat, the third tone: A natural, the fourth tone: G sharp, the fifth tone: C natural, the sixth tone: F natural, the seventh tone: B-flat, the eighth tone: E natural, the ninth: F-sharp, the tenth: B natural, the eleventh: C-sharp, and the last, the twelfth tone: G natural. The flute and the bassoon will now play the whole series.

Music #10



This series contains a variety of intervals and no strong tonal elements, therefore it can be used for twelve tone composition. We are going to play another series, which is a chain of two intervals only: ascending thirds and descending seconds.

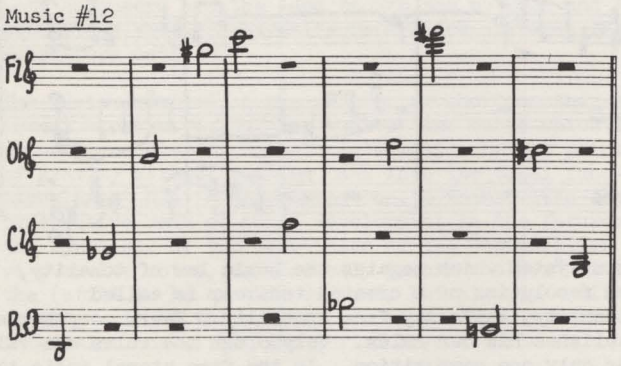
Music #11



Naturally the repetition of two intervals is monotonous and should be avoided.

The twelve tones stated in a basic series are a succession of tones with no respect to their octave position. This means that the composer is free to place the individual tones in any octave he decides. Therefore the basic series is to be regarded as identical with the following twelve tones:

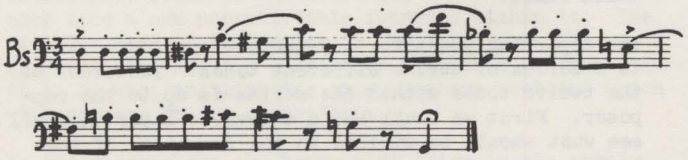
Music #12



The notes are the same, only their octave position is differently arranged.

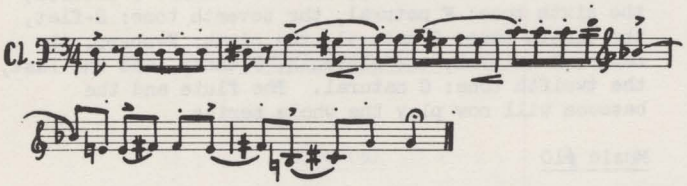
The important rule in the construction of twelve-tone series is that no tone should be repeated. (12 different tones!) However, when shaping the basic series into a musical theme, the composer is free to repeat one note or even a group of several notes several times. Here the repetition of one note:

Music #13



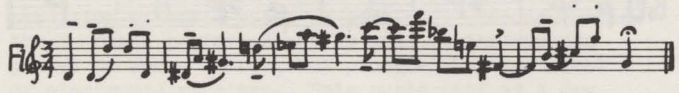
The repetition of two adjoining notes:

Music #14



Now the repetition of a group of four notes:

Music #15

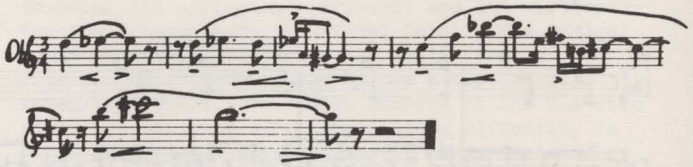


However, the repetition of notes should be carefully handled and used only if the character of the musical theme requires it.

Band 3:

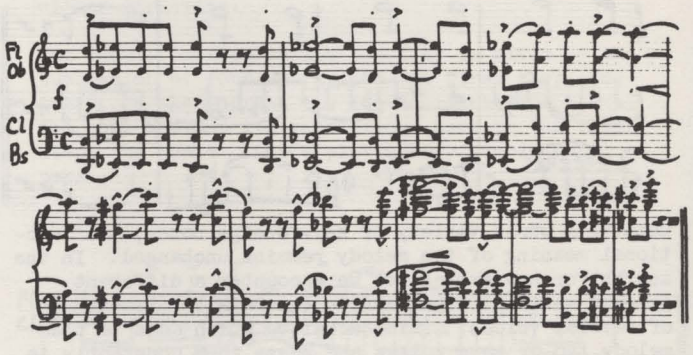
A series is the source of thematic material. To build a theme of a certain character the basic series must be rhythmically and metrically shaped. Let's say the composer intends to create a theme of light scherzoso character. The rhythmical patterns employed in the shaping of the basic row must produce the playful character of the theme. Our examples #14 and #15 are such demonstrations. The desired scherzoso character is produced by the repetition of one, or two notes. The complete change in phrasing is obvious, when trying to shape the same series into a nostalgic adagio-type theme.

Music #16



And again a different type of musical theme derived from the same series: a short dramatic recitativo played in four octaves by all four woodwinds.

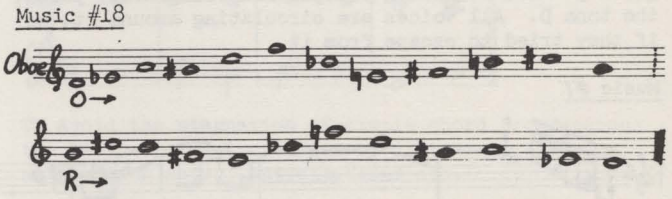
Music #17



Band 4:

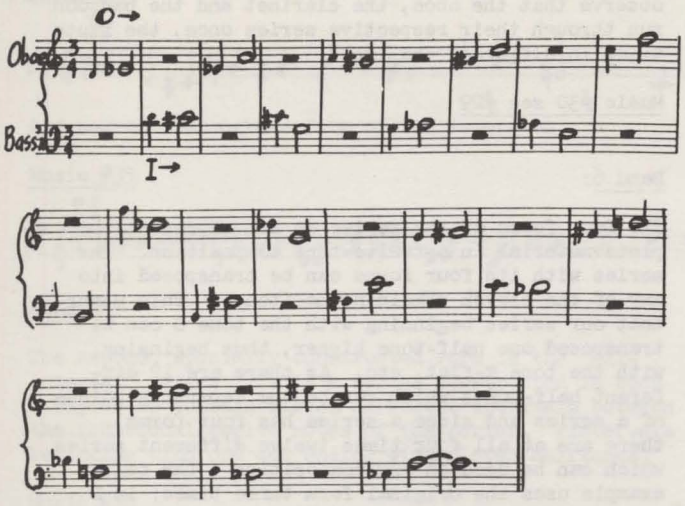
So far we've been speaking about the twelve-tone series and its shaping into musical themes while using the series in its basic, original form. The twelve-tone system employs altogether four different forms of one series: the original (the abbreviation is "O") and its three derivations. The first derivation is the retrograde form (abbreviated "R"), which means the original form played backwards. The oboe will play the original form, followed by its retrograde form.

Music #18



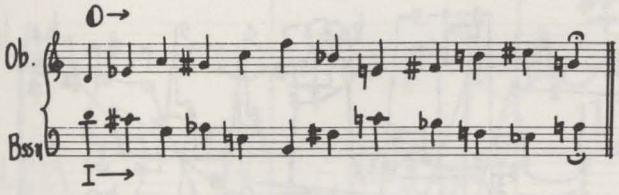
The second derivation is the inversion (abbreviated "I"). It starts with the same note as the original form and from this point all intervals are inverted. This means that the second tone going in the original form a half-tone up will go in the inversion form a half-tone down, etc. In the next example the oboe will play successively all the intervals existing between the twelve notes of the original series, and the bassoon will alternate with the respective inverted intervals, thus producing the inverted form.

Music #19



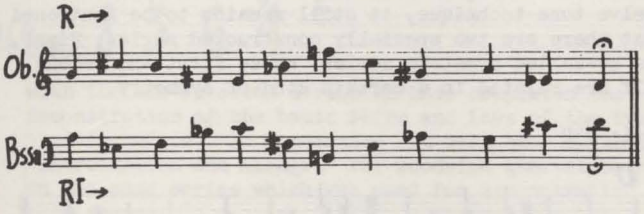
Now the oboe and the bassoon will play both forms simultaneously.

Music #20



The last, the fourth derivation is the retrograde form of the inversion (abbreviated "RI"). You will hear the oboe playing the retrograde and the bassoon the retrograde of the inversion simultaneously.

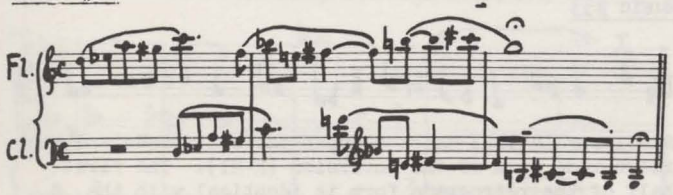
Music #21



Band 5:

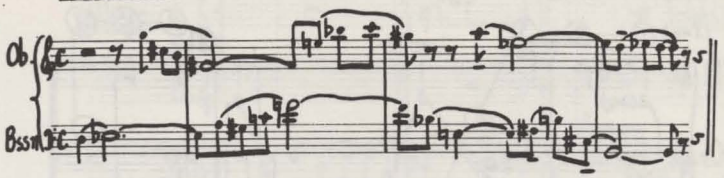
Let's now procede to the employment of the series and its four forms in creating vertical patterns. First a two-parts composition. The composer is free to use any two of the four existing forms. The following example uses in both parts the same form (the original form). It is a canon-imitation type in two parts.

Music #22



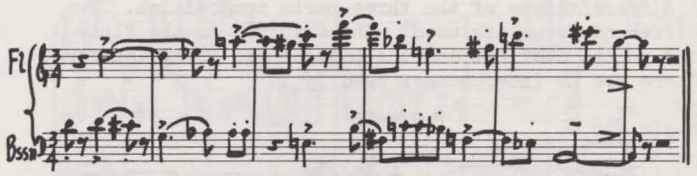
Now two different forms: in the upper voice, played by the oboe, the retrograde form is used; in the lower voice, played by the bassoon, the original form of the same series is used.

Music #23



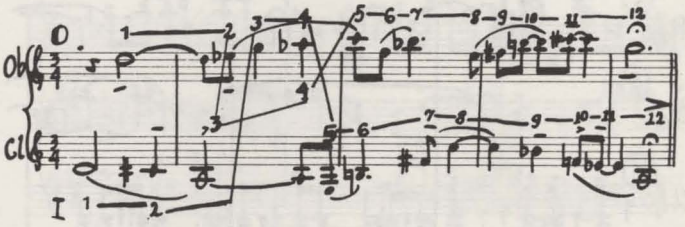
Another two-parts example using in the upper voice the original, in the lower voice the inversion form.

Music #24



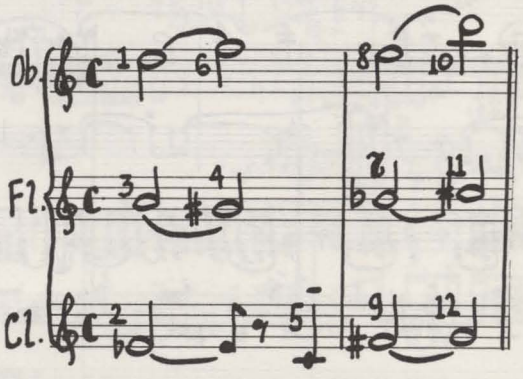
This is the simplest way to employ two series forms in a two-parts composition. One form of the row assigned to a melodic line (and one instrument) remained within this line and there were no interchanges of single tones with the other melodic line (and another instrument). This is not a "must". In the next example played by the oboe and the clarinet, there is one interchange. The third note of the original form played by the upper oboe is replaced by the third note of the inversion form played by the lower clarinet. Further, if we follow the inversion form in the clarinet we will not find the fourth note (A-flat). The A-flat is in the upper oboe, as is, incidentally, also its fourth tone. To avoid unnecessary duplication of the same note in the octave, we omitted the A-flat in the lower clarinet line.

Music #25



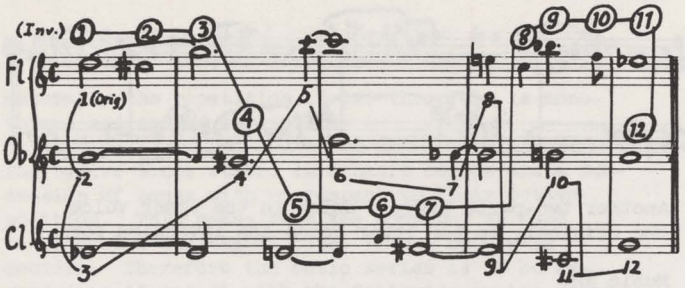
Later we will find more complicated examples of interchanging. Now we progress to the three-part composition. One form, the original, is used. The twelve notes are devided into four chords, each containing three different notes.

Music #26



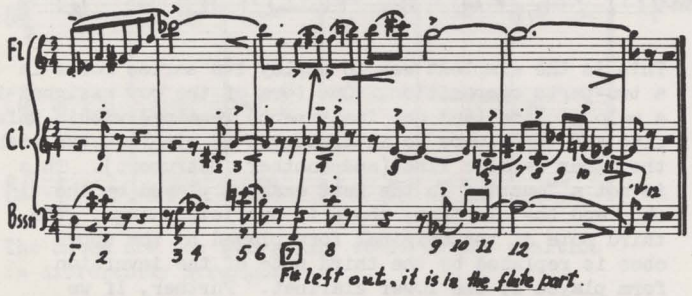
Using two different forms and interchanges between them increases the possibilities of building more fluent melodic lines. In this example the original and the inverted form is used.

Music #27



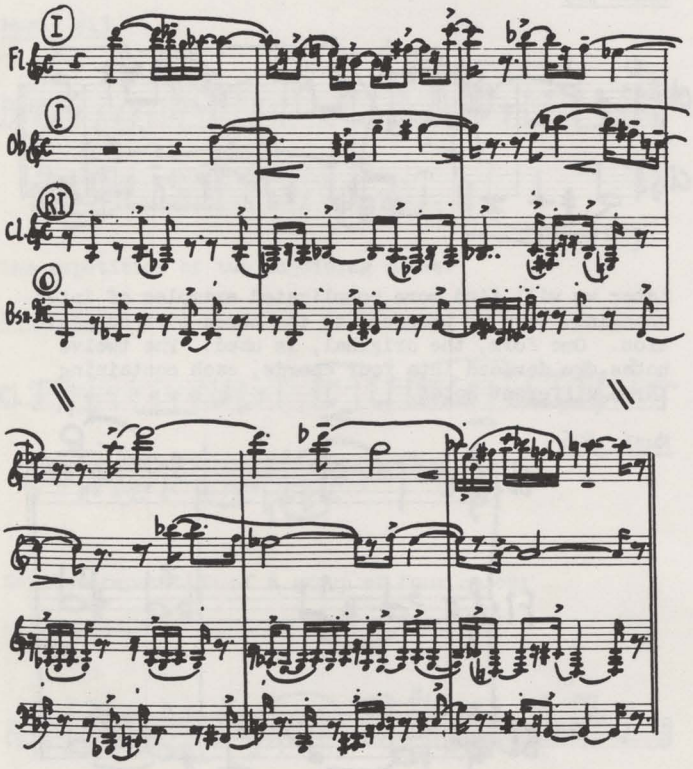
A different type of the three-parts composition. Two different forms are used. The original in the flute and in the clarinet and the bassoon the inversion form. There are no interchanges used.

Music #28



The last example of the three-parts composition employs three different forms: the inversion form in the upper oboe voice, the retrograd form of the inversion in the middle clarinet part and in the low bassoon line the original form. No interchanges.

Music #29



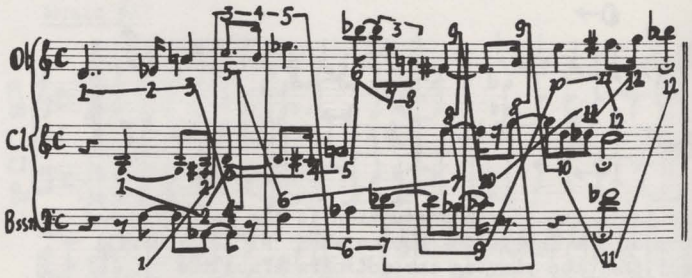
By adding a fourth voice to the latter example we demonstrate the four parts composition. The fourth voice, the flute, is based on the inversion form. This means that two inversion forms, one retrograde of the inversion and one original form are employed. You can observe that the oboe, the clarinet and the bassoon run through their respective series once, the flute twice in different shaping.

Music #30 see #29

Band 6:

The four forms of the series do not represent the complete material in a twelve-tone composition. The series with its four forms can be transposed into any of the eleven remaining halftones. This means that our series beginning with the tone D can be transposed one half-tone higher, thus beginning with the tone E-flat, etc. As there are 12 different half-tones which can be the departure points of a series and since a series has four forms, there are at all four times twelve different series which can be used in any composition. The next example uses the original form three times: in D played by the oboe, in G played by the clarinet, and in F played by the bassoon. There are frequent interchanges.

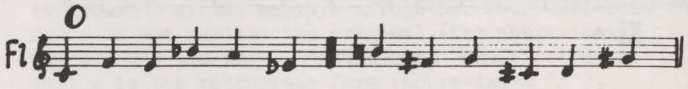
Music #31



Band 7:

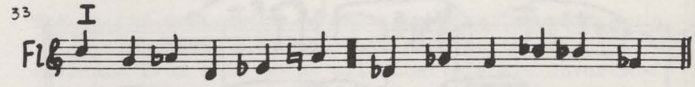
Before concluding the demonstration of the basic twelve tone technique, it still remains to be mentioned that there are two specially constructed series: First, the so-called symetric series, whose first and second half are related in a certain kind of symmetry.

Music #32



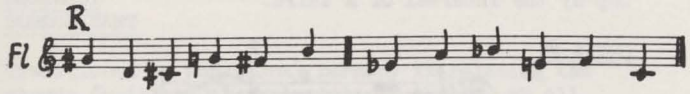
This is the original form. Its first half is identical with the second half of its inversion, and the second half of the original form is identical with the first half of its inversion. This means that the two halves of the original form are in the relationship of inversion: the first half is the (transposed) inversion of the second half and the second half is therefore the (transposed) inversion of the first half. Here the inversion form.

Music #33



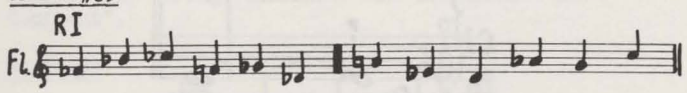
Similar relations exist between the retrograde and the retrograde form of the inversion (R-RI). The first half of the retrograde form is identical with the second half of the retrograde form of the inversion and the second half the retrograde form is identical with the first half of the retrograde form of the inversion. Let's listen to the retrograde form.

Music #34



And now the retrograde form of the inversion.

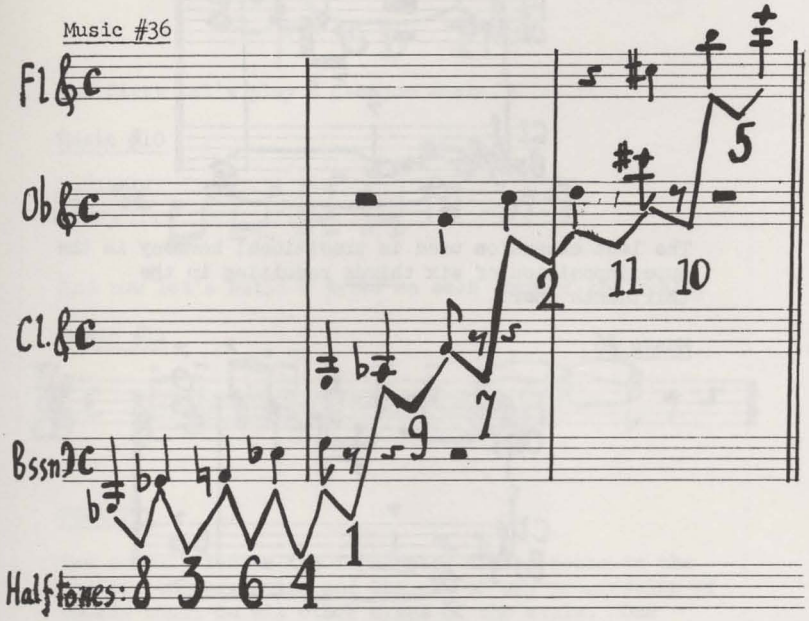
Music #35



Band 8:

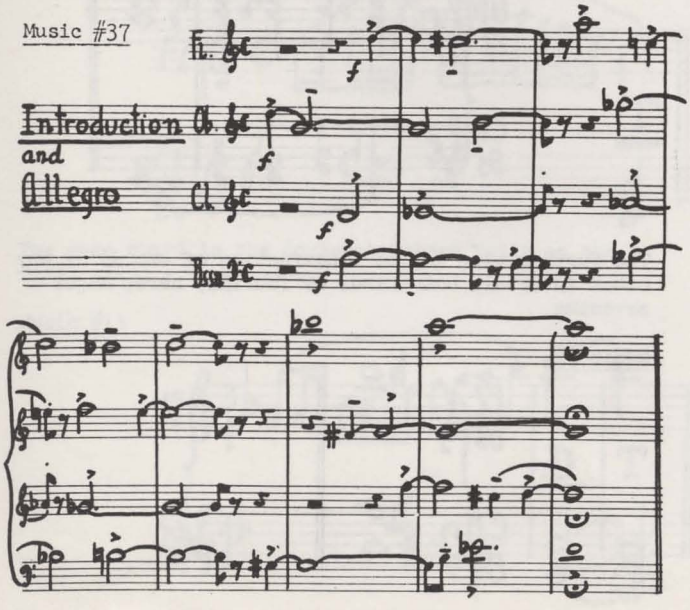
The second, specially constructed form is the "all-interval" series. It is a series constructed in such a way as to contain eleven different intervals between the individual twelve notes of the series. (Intervals beginning with one and ending with eleven halftones)

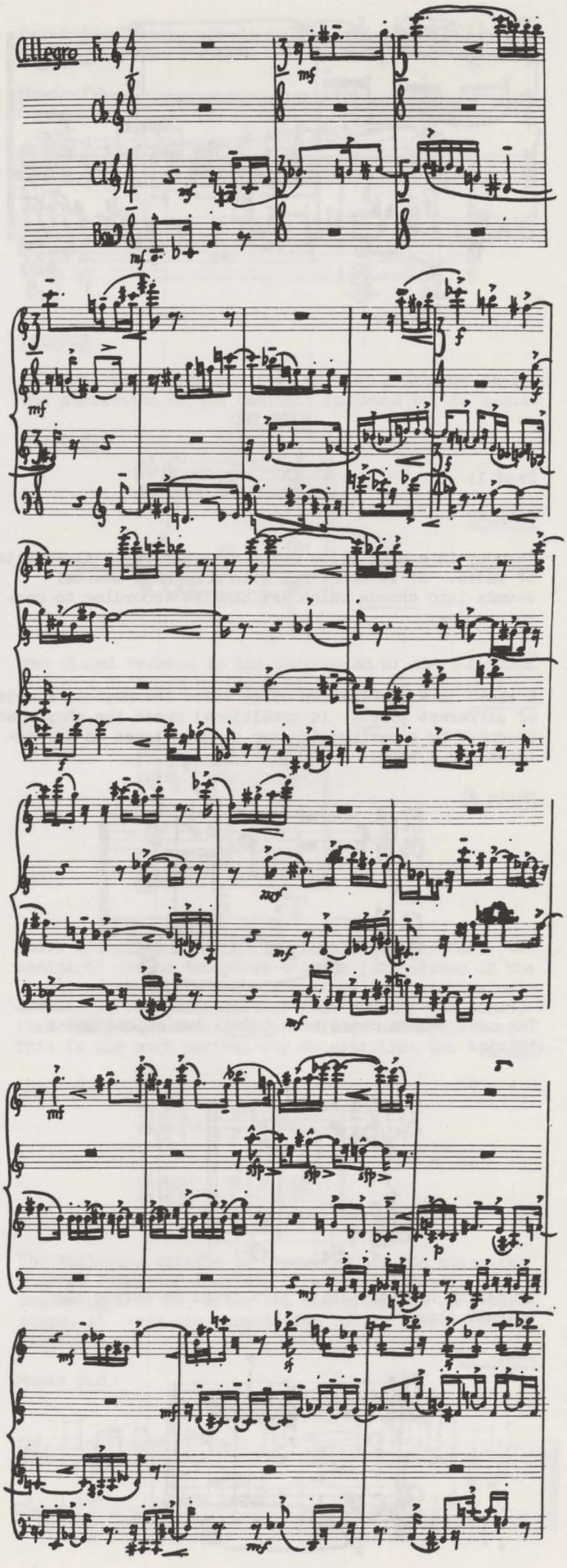
Music #36

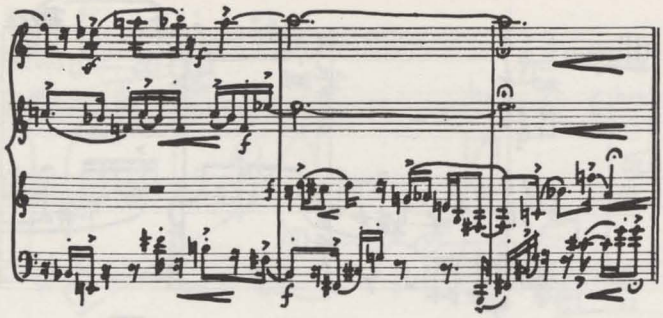


With the all-interval series we have completed the demonstration of the basic rules and laws of the twelve-tone technique. In conclusion you will hear a short "Introduction and Allegro" for woodwind quartet based on the same series which was used for demonstration on this record.

Music #37







SIDE TWO

Band 1:

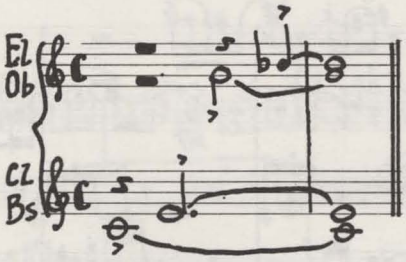
HARMONY

Harmony is a discipline organizing the vertical aspects of music. It is concerned with combining musical sounds into chords which are handled according to certain rules.

CHORD

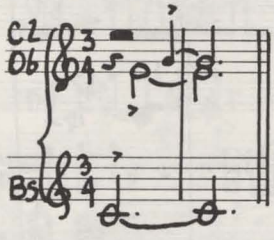
A chord is a combination of at least two musical sounds of different pitch. In traditional music the chords are produced by superimposing two or more tones in the interval of a third.

Music #1



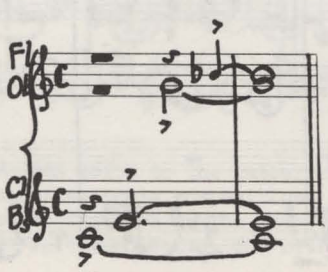
The most common chord is a triad: two superimposed thirds.

Music #2



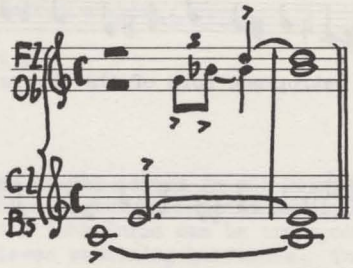
By adding one more third to a triad we obtain the seventh chord.

Music #3



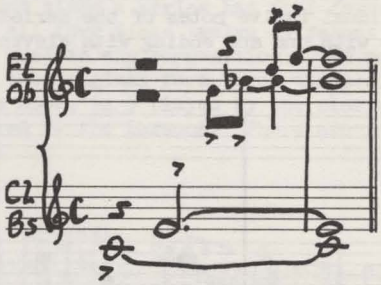
The ninth chord is a seventh chord extended at the top by the interval of a third.

Music #4



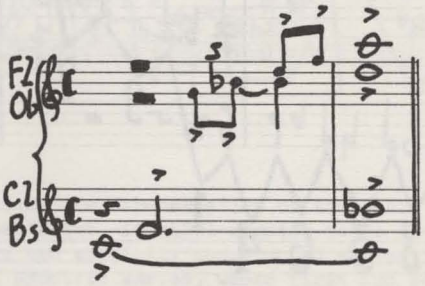
The addition of a further third to a ninth chord produces an eleventh chord.

Music #5



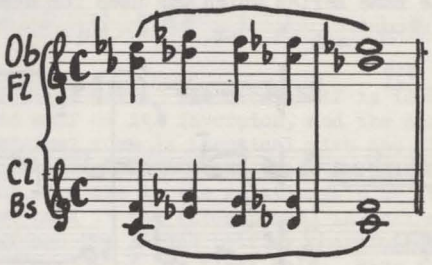
The last extension used in traditional harmony is the superimposition of six thirds resulting in the thirteenth chord.

Music #6



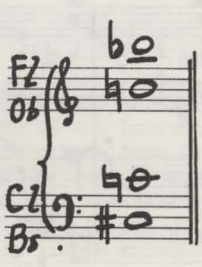
In the search for a new sound, chords are built by superimposing the intervals of fourths.

Music #7



The further step is the construction of chords by any other intervals but thirds or fourths; here, major sevenths.

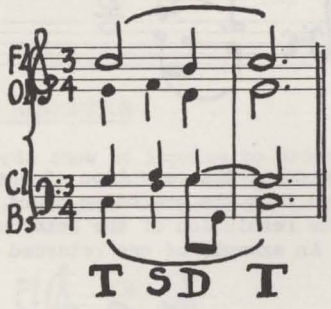
Music #8



TONIC
DOMINANT
SUBDOMINANT

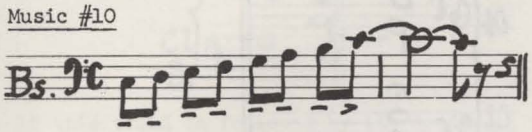
Traditional or functional harmony is relating the chords (built by the principle of thirds) on all steps of the major or minor scale to a focal point, called "tonic", exposed as such by two tension forces, the strong "dominant" and the milder "sub-dominant".

Music #9



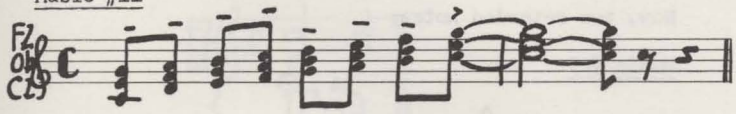
But first let's play a C-major scale.

Music #10



And now let's build a triad on each step of the scale:

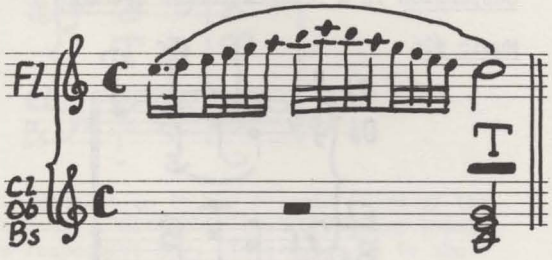
Music #11



TONALITY

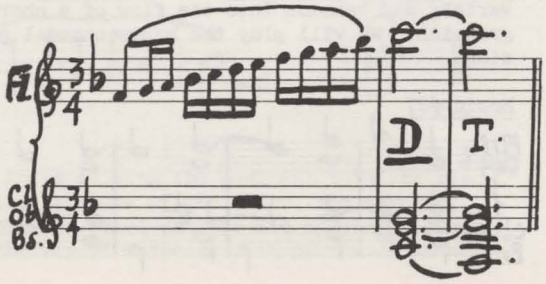
The chord based on the first step of the scale is the tonic: the beginning and the end of any progression of chords based on all other steps of the scale. One chord alone, however, does not establish the tonality. It may belong to different keys. So the triad C-E-G is the tonic (that is, the chord built on the first step) in C-major.

Music #12



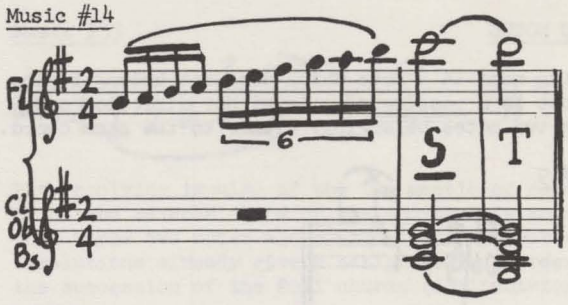
The same chord is the dominant (chord built on the fifth step) - in F-major.

Music #13



C-E-G is also the sub-dominant - (chord built on the fourth step) in G-major.

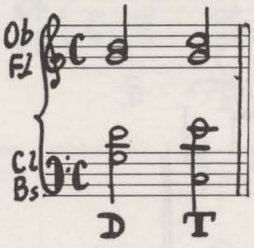
Music #14



CADENCE

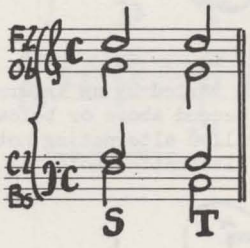
To establish the tonality we need at least two chords: The succession of the dominant followed by the tonic.

Music #15



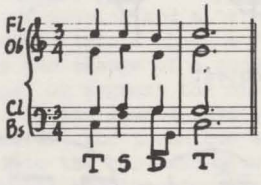
The plagal cadence is the succession of the sub-dominant followed by the tonic.

Music #16



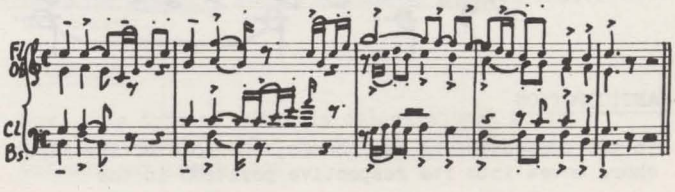
There are other types of cadences: the imperfect (tonic-dominant) or the deceptive cadence (succession of the chords on the fifth and sixth steps). The classical cadence is the succession of four chords: the tonic, then the sub-dominant, then dominant and again tonic. This is the most perfect way to establish the tonality.

Music #17



The following example demonstrates how the classical cadence fixes the tonality of a music piece in its beginning and how, after the use of chords on other steps, it leads the composition to its conclusion on its tonic.

Music #18



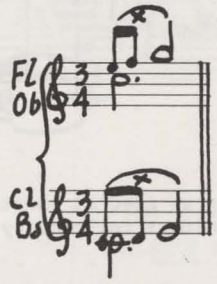
Band 2:

Now, we'll talk about the use of chord-foreign notes:

PASSING NOTES

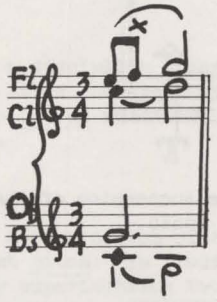
A passing note is a note which does not belong to the chord but is a passing step in either direction connecting two notes belonging: either to the same chord...

Music #19



or to a different chord.

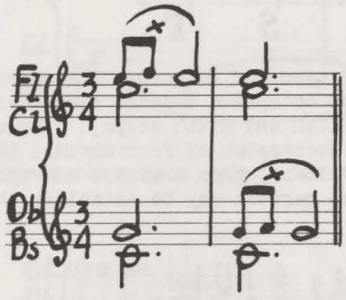
Music #20



ALTERNATING NOTES

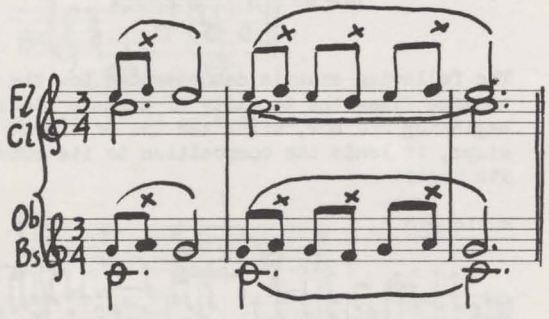
One chordal note can be varied by an interruption through its adjoining second above or below; the interrupting note is called alternating note. An example, using one alternating note:

Music #21



Now two alternating notes:

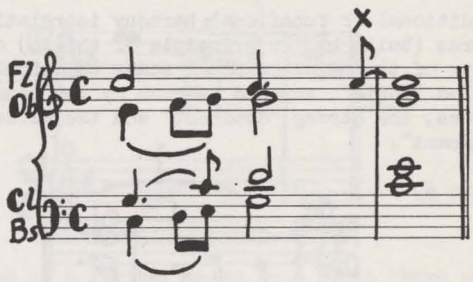
Music #22



ANTICIPATION

In the succession of two chords, one note of the first chord moves into its respective position in the second chord, advancing the other notes of the chord. The advancing note anticipates the second chord. This procedure is called anticipation.

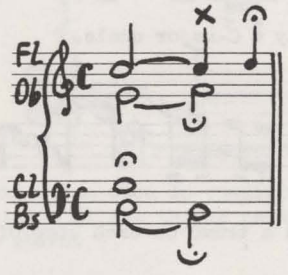
Music #23



RETARDATION

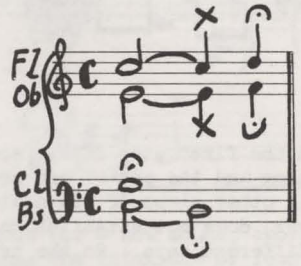
Now the delayed note: the retention of one or more notes in a chord from the preceding chord is called retardation. The resolution of the retarded note must be in ascent. An example of one retarded note:

Music #24



Now, two retarded notes:

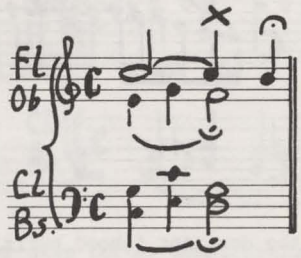
Music #25



SUSPENSION

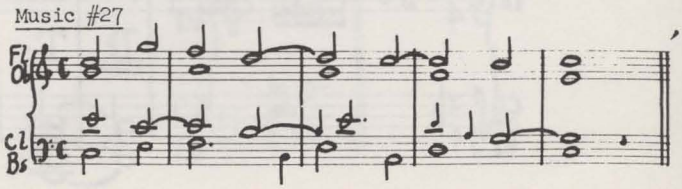
Suspension is a retardation in descent.

Music #26



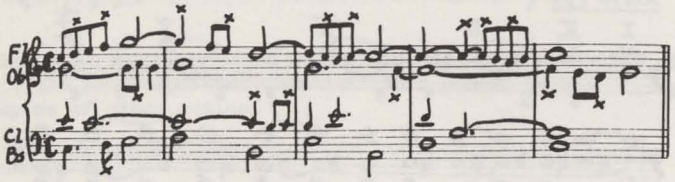
The use of passing or alternating notes and the anticipation, retardation and suspension bring more variety and tension into the flow of a chordal progression. We will play the basic chordal progression:

Music #27



Now the same progression varied by the use of chord-foreign notes:

Music #28

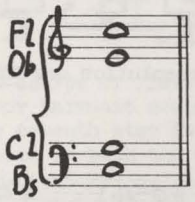


Band 3:

TENSION AND RESOLUTION

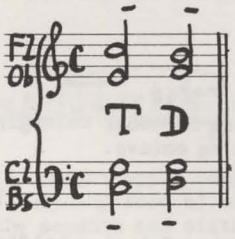
Certain chords show no impulse to progress further, as for instance a triad, standing alone, is a static sound with no tendency to progress into another chord:

Music #29



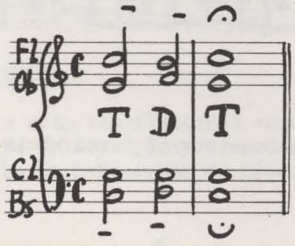
If this triad is followed by its dominant, there is a different situation.

Music #30



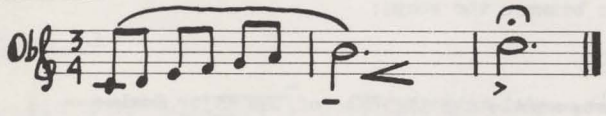
That progression of two chords shows the impulse to go further. The second chord, the dominant, tends to be resolved back into its tonic.

Music #31



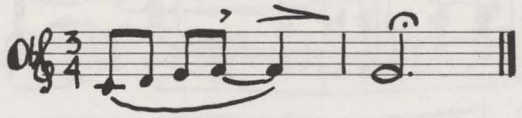
The urge for resolution in the seventh chord of the dominant is caused: either by its third, the leading note in its respective key. In c-major it is the note B, the seventh step of the scale which forces the resolution into the eighth step of the scale.

Music #32



The second force driving the dominant into its resolution is the top note of the chord, the seventh, which tends to be resolved into its adjoining lower step. In the key of C the seventh of the dominant is the tone F, the fourth step of the scale, which has the tendency to go down to its adjoining lower step, the third.

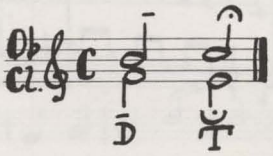
Music #33



The resolving impulse of the two mentioned notes (F & B) of the seventh chord of the dominant is so strong that these two notes alone with their respective resolutions already give a satisfactory impression of the succession of the full chords (dominant-tonic).

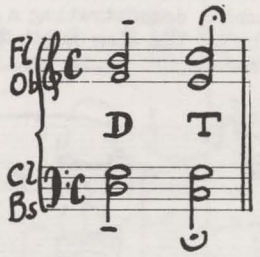
First, we'll demonstrate the two-voices-version of the dominant-tonic succession:

Music #34



Now the same succession in a version for the full four voices:

Music #35



CONSONANCE
DISSONANCE

The tonic-triad is a so-called consonant chord, which means a chord without any dissonant notes, in other words, notes which need further movement into their respective resolutions.

The dominant seventh chord is a dissonant chord because it contains two notes seeking their resolutions. Retardation, anticipation, suspension and the use of passing and alternating notes either introduce into a chord a foreign element which causes the change of a consonant chord into a dissonant one, or augment the dissonant elements of the chord if introduced into an already dissonant chord. The technique we've been describing brings into the harmonic flow of the music more dissonances and therefore more tension.

(Refer to examples #27 and 28)

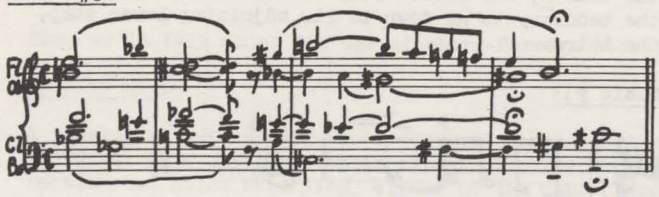
TONALITY

The resolution of a created tension is the basic principle of tonality. To neglect this principle means to dissolve the relationship between individual chords.

ATONALITY

Now, this type of music is called atonal music. Here's an example of a series of created tensions without any resolution:

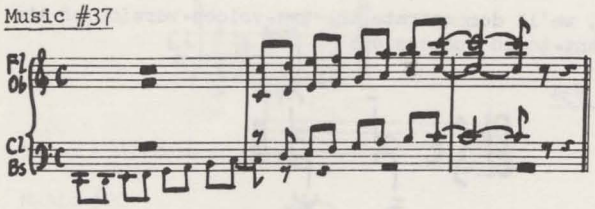
Music #36



DIATONIC

Diatonic music means music that uses throughout (dia means through), only the unchanged degrees of a scale. This means that in C-major only the following seven "diatonic" notes are used.

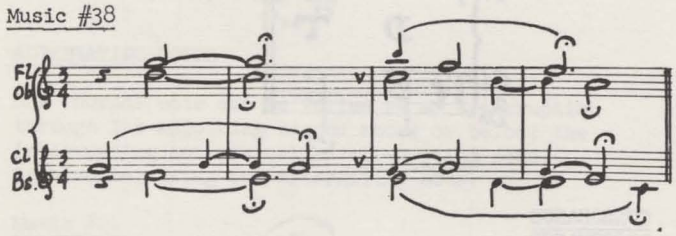
Music #37



CHROMATIC

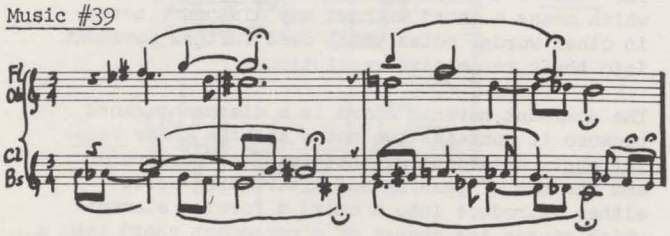
Chromatic music is music which contains besides the diatonic notes of the key some, or all notes which do not belong to the respective diatonic scale. You will hear two examples demonstrating a diatonic and a chromatic version of the same music sample. First the diatonic version:

Music #38



Now the chromatic version:

Music #39

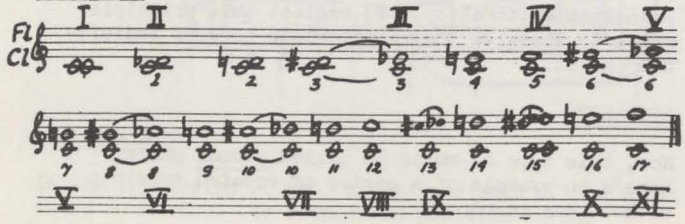


Band 4:

INTERVALS

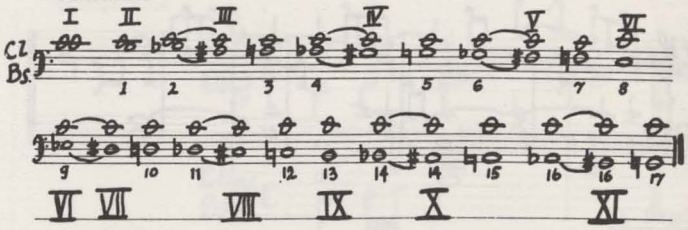
The space between two notes is an interval. The space is measured by half-tones. Starting with the unison of two notes, the flute and the clarinet proceed by halftone steps up to the interval of an eleventh.

Music #40



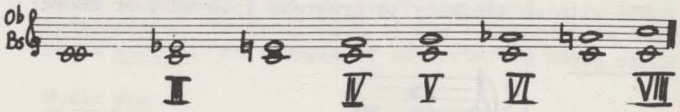
The next example, played by the clarinet and the bassoon, demonstrates the inversion of the intervals from the preceding example.

Music #41



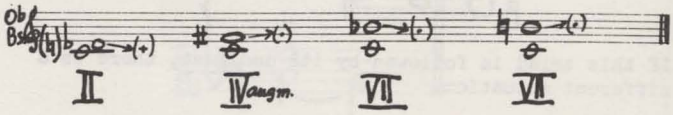
Intervals which do not need a resolution are consonant intervals.

Music #42



Intervals which do need a resolution are dissonant intervals.

Music #43



Band 5:

SCALES

A scale is the succession of tones belonging to a key; the range of a scale is an octave.

CHROMATIC

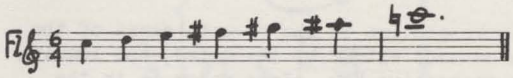
A chromatic scale consists of twelve halftones (minor seconds.)

Music #44

WHOLE-TONE

A whole-tone scale consists of seven whole tones (major seconds).

Music #45

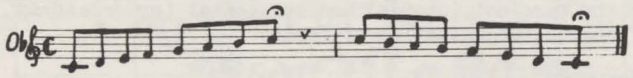


The chromatic and the whole-tone scale divide the octave into twelve, or six even parts. The following scales have an irregular distribution of intervals between the steps:

MAJOR

First, we'll take the case of the Major Scale: The most important characteristic of a major scale is the major third between its first and the third step. Both, the ascending and the descending form of the major scale are using the same unchanged steps.

Music #46

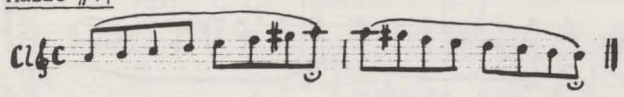


The minor third between the first and the third step is the most important characteristic common to all types of minor scales.

MINOR HARMONIC

Now the Minor harmonic scale: The tonic of either one of the minor scales is situated one minor third lower than the major scale with the same key signature. Thus the minor scale of the same key signature as C-major (no sharps, no flats) lies one minor third below the note C. It is A-minor.

Music #47

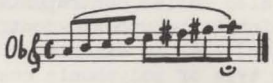


There are no sharps or flats in C-major; the reading of the A-minor harmonic scale shows one chromatic change: the seventh step is sharpened and it remains sharpened in both the ascending and the decending form.

MINOR MELODIC

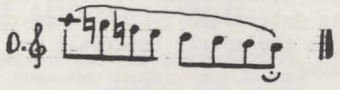
The minor melodic scale has two chromatic changes: the sixth and seventh are sharpened.

Music #48



The chromatic changes apply only to the ascending form. The descending form of the minor melodic scale uses the seventh and sixth step lowered back to the notes according to the key signature.

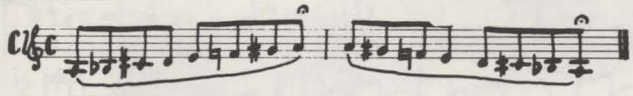
Music #49



GYPSY OR ORIENTAL

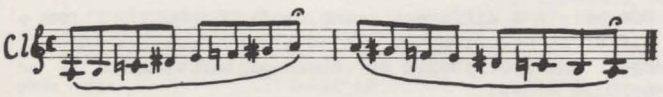
A major scale with the flattened second and sixth step is the so-called "gypsy or oriental" scale, so named after Eastern-European or Oriental music.

Music #50



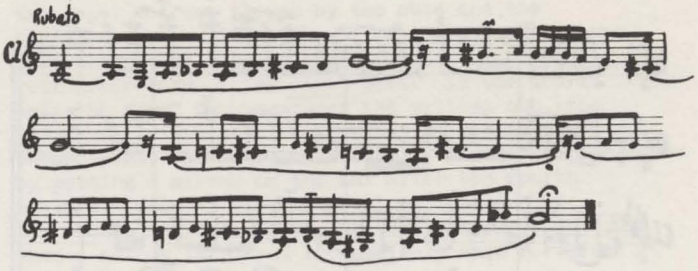
That was a major gypsy scale. A minor gypsy scale is a harmonic minor scale with its fourth step sharpened.

Music #51



Both scales are used interchangeably within a music piece.

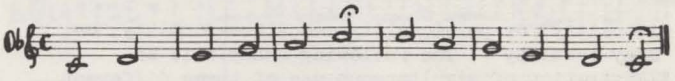
Music #52



CHINESE OR PENTATONIC

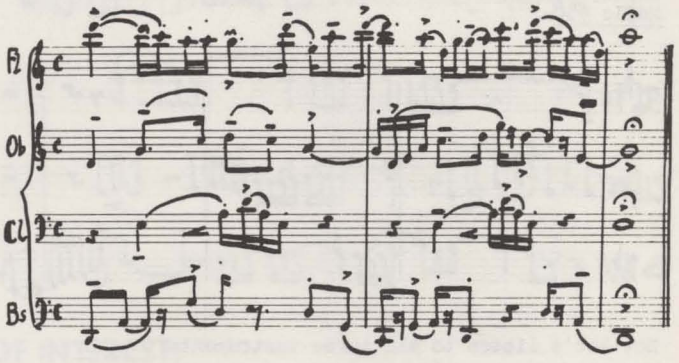
The Chinese or pentatonic scale is a five-tone scale (penta means five). We derive the pentatonic scale from a major scale by leaving out the fourth and seventh step.

Music #53



Here, is a typical pentatonic sound.

Music #54

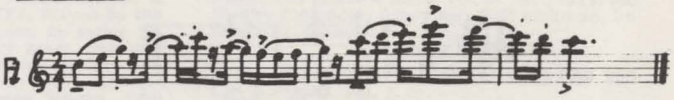


Band 6:

TRANSPOSITION

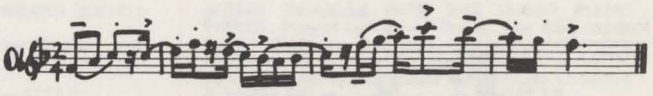
Transposition means moving a musical piece into another key. The following passage played by the flute is written in the key of C-major.

Music #55



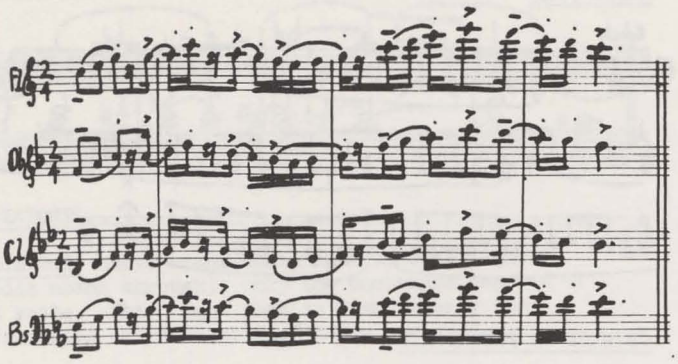
Now, the oboe will play the same passage one fifth lower, that is, in F-major.

Music #56



In the next example four instruments play exactly the same music in four different keys: The flute in C-major, the oboe in F-major, the clarinet in B-flat-major and the bassoon in E-flat-major.

Music #57

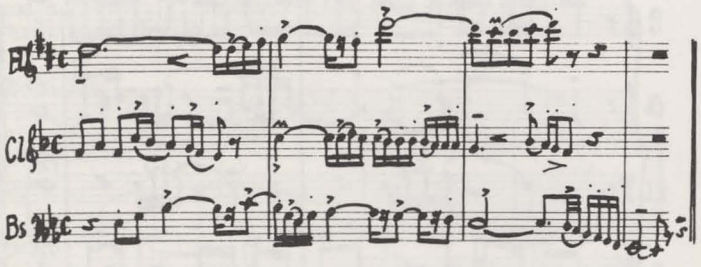


Band 7:

POLYTONALITY

Bitonality, or polytonality means "two-tonality", or "many-tonality". The following example is an illustration of simultaneous use of three different keys. We are going to play successively the three melodic lines. The flute in D-major, the clarinet in F-major and the bassoon in E-flat-major.

Music #58



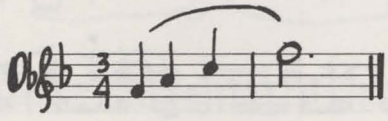
Now let's listen to all three instruments together:

(See Music #58)

HORIZONTAL

Horizontal, when used in connection with music, means proceding in time. The following four notes create a fragment of a melody: a horizontal line.

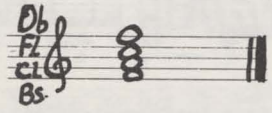
Music #59



VERTICAL

The same four notes played simultaneously produce a vertical structure; thus, vertical, when connected with music, means simultaneity of musical sounds.

Music #60

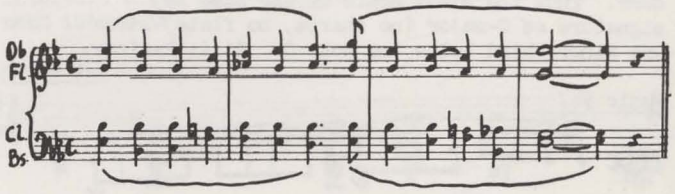


A chord is a purely vertical structure, a progression of two or more chords contains both the horizontal and the vertical aspect. Using the terms horizontal and vertical we could define harmony as the vertical (chords) and horizontal (progression of chords) organization of music.

HOMOPHONY

Music consisting of a melody every note of which is sustained by a chord is a vertical or homophonic type of music. (homos means one, unified; phonee means sound). Here's a typical homophonic passage. Every note of the melody is sustained by a chord.

Music #61



POLYPHONY

The opposite of homophony is polyphony (poly means many). Polyphonic music is music whose vertical structure is created not by chords sustaining the melody, but by the simultaneous progression of two or more melodic lines.

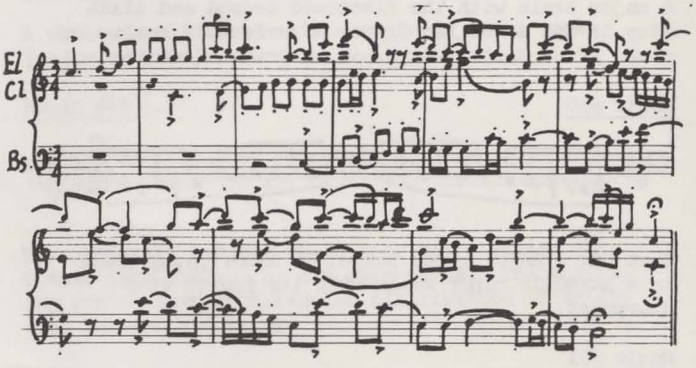
CONTRAPOINT

Polyphonic music is also called contrapuntal music. (polyphony-Counterpoint or polyphonic-contrapuntal have identical meaning). As an example we demonstrate the strictest type of polyphonic music, a symbiosis of three identical melodies led in canon.

CANON

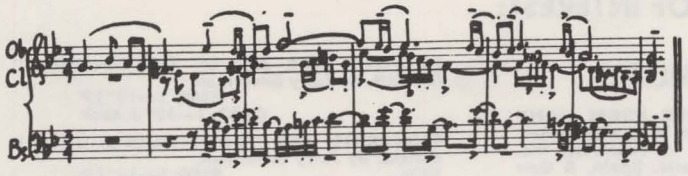
A canon is a composition in which the second and all following voices are a strict repetition of the first voice. The voices enter successively in metric intervals determined by the composer. In the following example the metric intervals are four quarter-notes long.

Music #62



Now here's a different example of polyphony. Three different melodies are played simultaneously, thus creating a polyphonic structure of three free melodic lines.

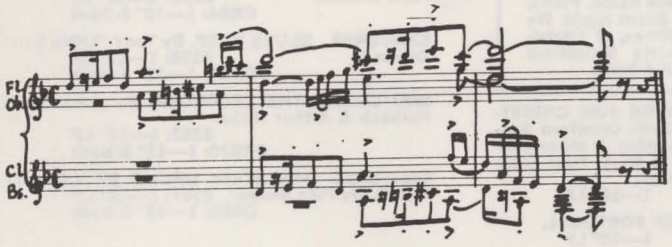
Music #63



IMITATION

A canon which does not exactly imitage the first voice in its other voices is called imitation.

Music #64

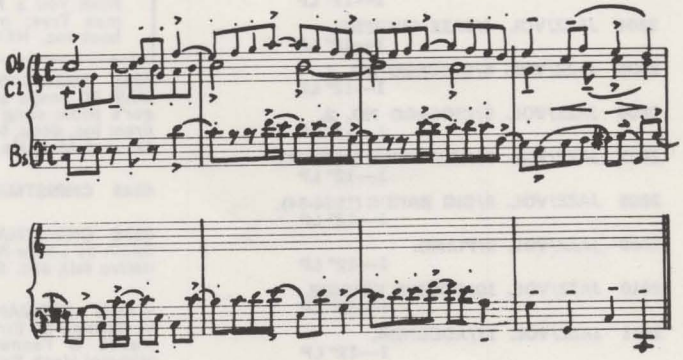


Band 8:

RETROGRADE
MIRROR FORM

A melody played backwards is called the retrograde form of the originally forward progressing melody. The following example uses three voices. The lowest, played by the bassoon is a normally forward-moving melodic line from its beginning till its end. The two upper voices, played by the oboe and the clarinet, are built in the mirror form. This means that the second half of the melodic line is the retrograde form of the first part. In the score only the first four measures are written out, the first half of the whole phrase. You obtain the second part, the retrograde form of the first part, by putting a mirror on the bar after the fourth measure. This is also the best explanation of the reason for the use of the term, mirror form, when a melody is played successively once forwards and then repeated backwards.

Music #65



ADDITIONAL FOLKWAYS/SCHOLASTIC RECORDS OF INTEREST:

MUSIC APPRECIATION

3602 THE ORCHESTRA. ITS INSTRUMENTS. Demo. rec. by Alexander Semler; narr. & contemp. mus. ex. inc. symphony orch. & its component parts; individ. instru. in var combinations leading to devel. of full symphonic sound. Text inc. transcrip. 1—12" LP

✦3700 2,000 YEARS OF MUSIC. History of music from earliest times through 18th cent.: Gregorian Chant, madrigal, chamber music, rococo; more. Compiled by Dr. Curt Sachs. Inc. complete notes. 2—12" LPs

4510

✦3603 INVITATION TO MUSIC. Intro. to music appreciation & understanding; inc. mus. ex. of rhythm, harmony, form; more. For the beginner. By composer Elie Siegmeister. Inc. complete notes. 1—12" LP

4510 THE WORLD'S VOCAL ARTS. Voc. styles around the world. Compiled by Henry Cowell. Docu. notes. 2—12" LPs

✦4525 MAN'S EARLY MUSICAL INSTRUMENTS. Mus. demos. of native instru. from around the world. 2—12" LPs

MUSIC CLASSICS

✦8954 GREGORIAN CHANTS. Sung by the Edmunite Novices; dir. by Marie Pierik, noted authority, writer, & teacher of the chant. Inc. *Salve Regina, Ave Verum, & Adoro Te;* 22 more. Inc. hist. text. 1—12" LP

3865 GREGORIAN CHANT. Archivist Dom Ludovic Baron, O.S.B., explains & gives ex. Side 2 inc. authentic versions of chants. 1—12" LP

3652/33652 MUSIC OF THE RENAISSANCE & BAROQUE FOR BRASS QUINTET. Played by the American Brass Quintet. Second in series reviving the flourishing trad. of brass chamber mus. in the 16th & 17th cent. Selec. by Giovanni Gabrieli, Johann Pezel, Heinrich Isaac, Samuel Scheidt, Heinrich Finck, Tielman Susato, John Dowland; more. 3652: 1—12" LP (Mono)
NEW. 33652: 1—12" LP (Stereo)

3651 MUSIC FOR BRASS QUINTET/THE AMERICAN BRASS QUINTET. Selec. by Josquin des Pres, Giovanni Gabrieli, Michael East, Charles Wittenberg, J. S. Bach, Ulysses Kay, Anthony Holborne. Notes by Arnold Fromme. 1—12" LP

3326 THE STORY OF THE KEYBOARD INSTRUMENTS Vol. 1.
3327 Vol. 2. Played by Franzpeter Goebels. Vol. 1: Clavichord, hammer-clavier. Vol. 2: Harpsichord. Illus. descrip. text.
Each vol. is 1—12" LP

✦3351 THE VIOLIN Vol. 1. Selec. from famous 17th & 18th cent. composers. Technical notes inc. analysis & history.

✦3352 Vol. 2. Selec. from Mozart, Schubert, Beethoven & others.

✦3353 Vol. 3. Selec. from Brahms, Wieniawski, Tchaikovsky, Sarasate, Faure, Kreisler, Dvorak.

✦3354 Vol. 4. Selec. from Debussy, Schoenberg, Bloch, Bartok.

✦3355 Vol. 5. Selec. from Sessions, Webern, Haba; Bress' *Fantasy* (elec.). Notes inc. role of elec. mus. in relationship to the violin. H. Bress, violin. C. Reiner, piano.
Each vol. is 1—12" LP

3344 CHARLES IVES SONGS: Vol. 1.
3345 Vol. 2.
Ted Puffer, tenor; James Tenney & Philip Corner, piano. Vol. 1: 1894-1915; inc. General William Booth Enters Into Heaven, Like a Sick Eagle, The Indians; more. Vol. 2: 1915-1929; inc. On the Antipodes, Afterglow, Walt Whitman, Immortality, Farewell to Land.
Each vol. is 1—12" LP

3346 CHARLES IVES: THE SONATAS FOR VIOLIN & PIANO. Vol. 1.
3347 Vol. 2.
Paul Zukofsky, violin, & Gilbert Kalish, piano. Vol. 1: Sonata No. 1 (1903-1908) & Sonata No. 2 (1903-1910). Vol. 2: Sonata No. 3 (1902-1914) & Sonata No. 4 Children's Day at the Camp Meeting (1905-1914). Notes by Samuel Charters.
Each vol. is 1—12" LP

✦3348 CHARLES IVES: THE SHORT PIANO PIECES. Played by James Sykes. *The Anti-Abolitionist Riots, In the Inn, The Varied Air with Protests, Three Page Sonata, 22, & Some Southpaw Pitching.* Docu. notes by Samuel Charters & James Sykes. 1—12" LP

3369 CHARLES IVES: 2nd STRING QUARTET/ ALAN HOVHANESS: "LOUSADZAK" CONCERTO NO. 1. Impt. works by two pop. modern composers. Ives' mus. debate perf. by the Walden String Quartet. Hovhaness conducts his exotically Eastern concerto for piano & string orchestra. Booklet inc. notes & biogs. by Samuel Charters. NEW.
1—12" LP

ADDITIONAL FOLKWAYS/SCHOLASTIC RECORDS OF INTEREST:

JAZZ

✦ **7312 THE STORY OF JAZZ.** Docu. ex. & intro.; blues, be-bop, ragtime, Memphis, boogie-woogie, big bands; more. Written & narr. by Langston Hughes, based on his book *Story of Jazz.* **1—10" LP**

JAZZ:
A definitive, authentic, 11-vol. history of jazz on records: traces origins of jazz. Based on early, out-of-print remastered records. Great names & performers. Illus. docu. notes inc.

2801 JAZZ/VOL. 1/THE SOUTH.
1—12" LP

2802 JAZZ/VOL. 2/THE BLUES.
1—12" LP

2803 JAZZ/VOL. 3/NEW ORLEANS.
1—12" LP

2804 JAZZ/VOL. 4/JAZZ SINGERS.
1—12" LP

2805 JAZZ/VOL. 5/CHICAGO NO. 1.
1—12" LP

2806 JAZZ/VOL. 6/CHICAGO NO. 2.
1—12" LP

2807 JAZZ/VOL. 7/NEW YORK (1922-34).
1—12" LP

2808 JAZZ/VOL. 8/BIG BANDS (1924-34).
1—12" LP

2809 JAZZ/VOL. 9/PIANO.
1—12" LP

2810 JAZZ/VOL. 10/BOOGIE WOOGIE.
1—12" LP

2811 JAZZ/VOL. 11/ADDENDA.
1—12" LP

2871

2871 LIONEL HAMPTON: JAZZ MAN FOR ALL SEASONS. 1st avail. cross-sec. of the man who brought the "vibes" to jazz. Docu. perfs. illus. his unique swing, bop, modern, Latin, & romantic styles—many released here for the 1st time. Inc. biog. & extensive background notes by jazz historian Charles Edward Smith. NEW.
1—12" LP

2865 ROOTS: THE ROCK AND ROLL SOUND OF LOUISIANA & MISSISSIPPI.
1—12" LP

MODERN MUSIC

6160 SOUNDS OF NEW MUSIC. Compiled & ed. by Moses Asch to demo. use of classical instru. in devel. of avant-garde new mus. Electrical, mechanical, & natural instru.
1—12" LP

✦ **3434 EIGHT ELECTRONIC PIECES.** By Tod Dockstader; orig. composition representing combination of oscillator & natural sources, inc. diagram of elec. nota. scored on tape.
1—12" LP

3704 INDETERMINACY. Avant-garde composer John Cage recites 90 stories, from books of Kwang-Tse & Sri Rama-krishna to Aldous Huxley & Joseph Campbell; stories told him & occurrences remembered. David Tudor plays exc. from his part of Concerto for Piano & Orch.
2—12" LPs

3436/33436 ELECTRONIC MUSIC. Nine pieces by var. composers which illus. the great flexibility of electronic instru. Inc. use of variable speed recorder, hamograph, multitrack tape recorder; studies in rhythm, sonority; concrete sounds of pinball machine, single drop of water; more. Rec. in the Electronic Music Studio at the Univ. of Toronto. **3436 (Mono): 1—12" LP**
NEW. **33436 (Stereo): 1—12" LP**

CHRISTMAS MUSIC

✦ **7750 CHRISTMAS SONGS FROM MANY LANDS.** Sung in Eng. by Alan Mills with guitar. 25 carol & game songs of 15 countries; inc. Austria, U. S., Poland, England, Spain, & Germany. Descrip. text. **1—12" LP**

✦ **7502 CHRISTMAS CAROLS.** Sung by Andrew Rowan Summers, dulcimer acc. Trad. Amer. carols inc. *Silent Night, Away in a Manger, & O Come All Ye Faithful.* For all ages.
1—12" LP

RECORD-BOOK

0702 A WREATH OF CAROLS. New prepackaged unit. Six carols selec. from the Scholastic book of the same name. Piano, horns, bass accomp. Inc. *Silent Night, We Wish You a Merry Christmas, O Christmas Tree;* more. Complete Scholastic book inc. NEW. **1—7" LP & book**

7053 AMERICAN FOLK SONGS FOR CHRISTMAS. 20 songs selec. from Ruth Crawford Seeger's book; sung by her daughter & other children; inc. docu. text. *Joseph & Mary, Poor Little Jesus, & Mary Had a Baby;* more.
1—10" LP

6845 CHRISTMAS SONGS OF PORTUGAL.
1—10" LP

6836 CHRISTMAS SONGS OF SPAIN. Rec. in Spain by Laura Boulton. Secular & relig. carols; native folk acc. Span. text & Eng. trans.
1—10" LP

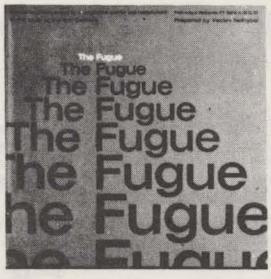
✦ **6947 GERMAN CHRISTMAS SONGS.** Sung in German by Ernst Wolff with piano. Inc. *Stille Nacht, O Tannenbaum,* Martin Luther's *Von Himmel Hoch Da Kommich, & Heilige Nacht.*
1—10" LP

MUSIC THEORY

✦ **3605 FORMS IN INSTRUMENTAL MUSIC.** Narr. by W. Geib; chamber orch. demo. & explanation of instru. mus. forms. Theme & variations, rondo, sonata; more. **1—12" LP**

✦ **3604 TRADITIONAL HARMONY.** Demo. rec. narr. by William Geib; mus. ex. by chamber orch.; basic principles of functional harmony; 100 ex. inc. cadence, chromatics, chords, organ point, & modulation. **1—12" LP**

3612 TWELVE-TONE COMPOSITION.
1—12" LP



3609

3610 TONAL COUNTERPOINT.
2—12" LPs

3606 MODAL COUNTERPOINT.
1—12" LP

✦ **3607/8 MUSIC ARRANGEMENT.**
2—12" LPs

3609 THE FUGUE. **2—12" LPs**

MUSIC INSTRUCTION

AVAILABLE IN TWO PACKAGES: Record and booklet alone, or in the CRB Series which includes record and booklet plus an instructional manual (Oak Pub.) at a special combination price.

8353/CRB7 BEGINNING THE FOLK GUITAR. By Jerry Silverman. **8353: 1—12" LP**
CRB7: 1—12" & book

8354/CRB1 THE FOLKSINGER'S GUITAR GUIDE Vol. 1. By Pete Seeger. Oak music book by Jerry Silverman. **8354: 1—12" LP**
CRB1: 1—12" & book

8356/CRB5 THE FOLKSINGER'S GUITAR GUIDE Vol. 2. By Jerry Silverman.
8356: 1—12" LP
CRB5; 1—12" & book

8355/CRB3 THE ART OF THE FOLK-BLUES GUITAR. By Jerry Silverman.
8355: 1—12" LP
CRB3: 1—12" & book

8360/CRB11 THE FLAT-PICKER'S GUITAR GUIDE. By Jerry Silverman.
NEW. **8360: 1—12" LP**
CRB11: 1—12" & book

8371/CRB8 THE 12-STRING GUITAR AS PLAYED BY LEADBELLY. By Pete Seeger. Oak music book by Julius Lester & P. Seeger.
8371: 2—12" LPs
CRB8: 2—12" & book

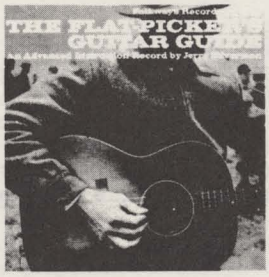
8303/CRB2 HOW TO PLAY THE 5-STRING BANJO. By Pete Seeger. **8303: 1—12" LP**
CRB2: 1—12" & book

8352/CRB4 THE APPALACHIAN DULCIMER. By Jean Ritchie. **8352: 1—12" LP**
CRB4: 1—12" & book

8358/CRB9 BLUES HARP. By Tony "Little Sun" Glover I. **8358: 1—12" LP**
CRB9: 1—12" & book

8357/CRB10 THE RECORDER. By Johanna E. Kulbach & Arthur Nitka.
8357: 1—12" LP
CRB10: 1—12" & book

8367/CRB6 THE STEEL DRUMS OF KIM LOY WONG. By Pete Seeger. **8367: 1—12" LP**
CRB6: 1—12" & book



8360

8320 BONGO DRUM INSTRUCTION. By William Loughborough. **1—12" LP**

8359 LEARN TO FIDDLE COUNTRY STYLE. By Tracy Schwarz. **1—12" LP**

MARCHES & DANCES (With Instruction)

✦ **2001 SQUARE DANCES.** With Piute Pete. Best ex. for intro. to square dance from playparties to fast Western-style dances. Inc. *Buffalo Gal, Duck for the Oyster, & Shoo Fly.* Illus. text inc. instruc. **1—10" LP**

8825 SQUARE DANCES WITH CALLS. Rec. by Edith Fowke; called by N. Roy Clifton; fiddle, accordion, piano, & percuss. acc.; inc. notes & dance instruc. Inc. *Bobby Shaftoe, Dip and Dive, & Birdie in the Cage;* more.
1—12" LP

✦ **8826 JIGS & REELS.** Rec. & intro. by Edith Fowke. Eastern square dancing mus. for groups who have their own callers but lack musicians; trad. dances; fiddle, percuss., accordion, & piano. Inc. instruc. **1—12" LP**

✦ **7673 MUSIC FOR DANCE RHYTHMS.** 41 piano pieces played by Mieczyslaw Kolinski; controlled rhythm. Waltz, mazurka, & minuet; more. Inc. complete dance instruc.
1—12" LP

✦ **8827 OLD-TIME COUPLE DANCES.** Played with fiddle, accordion, & piano. Inc. ex. of waltz, polka, schottische, minuet, varsouvianna, & two-step; descrip. instruc. **1—12" LP**

8810 THE BLACK WATCH. The Royal Canadian Infantry Corps & the U.S. Second Army Pipe Band. Pipe & drum tunes; inc. *Road to the Isle, Maj. Usher & Sandy Duff;* more.
1—12" LP

DANCES OF THE WORLD'S PEOPLES. *A series designed for teachers & pupils who need authentic folk dance music as played & danced by traditional performers in countries of origin. Inc. dance notes & instruc.*

✦ **6501 Vol. 1.** From the Balkans & Near East.
1—12" LP

✦ **6502 Vol. 2.** From Europe.
1—12" LP