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SUGGESTED OUTLINE FOR A COURSE
OF STUDY IN MUSIC THEORY FOR HIGH SCHOOLS
BASED ON RECOGNIZED COLLEGE TEXTS

by

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B.M., Montana State University 1947

Presented in partial fulfillment
of the requirements for the degree of
Master of Music in Music Education

MONTANA STATE UNIVERSITY

1952

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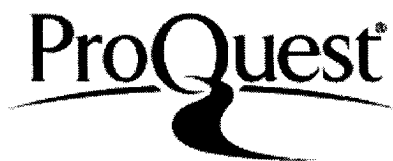


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Dean of the Graduate School

Date Aug 18 1952

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INTRODUCTION

The author's interest in music theory for high schools has grown out of his teaching experience in a small rural high school. A personal interest in the ideal of "music for everybody" has led the author to do some experimenting with teaching methods in his own classes. This experience has led to the belief that certain types of training in the structure and organization of music can add to the general effectiveness of music instruction. The author feels that some types of theoretical training can be a motivating factor in awakening and sustaining an active rather than a passive interest in music.

In comparing music training with that in other departments in high school it was observed that students seemed to do better when provided with tools which they themselves may use for exploration and experimentation. In music instruction the author believes that music theory can provide these tools.

Some students seem to have a natural appreciation and understanding of music, that is they either have a certain physical makeup, or a background of favorable environmental influences, which cause them to appear naturally sensitive to music. Other students must "learn" to listen. Music instruction must stimulate the psychological attitude

necessary to focus attention on aural perception. Student curiosity must be aroused.

This study is inspired by the author's belief that music theory can aid in arousing this curiosity. And the problem is then to develop a course of study in music theory on a high school level. Certain special problems that are unique in secondary education must be considered.

First of all, the course must be designed to fit the high school schedule of classes. Schools with an enrollment of less than five hundred would probably be unable to include a separate course in music theory in their curriculum. This means that for most high schools in northwestern United States the study of music structure and basic musicianship must be included in music courses that are already existing. This is to say that students in glee clubs, band and orchestra, would have the opportunity to study music theory only through these organizations or classes already a part of the curriculum.

Secondly, the high school age level has its own interests which must be met if learning is to be effective. The music theory course must be functional for the student, and must be based on his previous experience.

Third, this proposed theory course must be in line with the over-all objectives or philosophy of secondary education in regard to the establishment of proper attitudes.

And last it is to be noted that high school courses in general are for all students. Whereas most college theory

is designed for music majors, high school theory must be designed for students with a much wider range in their background training and interests.

Special Definition of High School Theory

In consideration of the above mentioned special problems it seems possible that high school theory should assume the form of a survey course. The primary aim of this course being to bring the student in contact with music and to explain music structure sufficiently to produce an intelligent familiarity. It includes a recognition, classification and analysis of music effects. The true purpose of "theoretic study," as expressed by Howard A. Murphy, is to "foster the growth of musicianship through the acquisition of insights and skills needed to meet individual needs."¹ Musicianship is defined by Charles Leonard as "a quality composed of a sensitiveness to music, a responsiveness to its aural imagery, an understanding of its symbols, and an ability to produce music in one or more of its media."²

Basic Assumption

This study is based on the assumption that existing college texts in music theory are unsuitable for high school use. The use of college texts would require more time than could be allowed in the high school schedule of classes. They require a degree of skill beyond that attainable by the

¹Howard A. Murphy, E. J. Stringham, Creative Harmony and Musicianship. (New York: Prentice Hall Inc., 1951), p. v.

²Charles Leonard, "A New Approach to Music Theory," M.T.N.A. Proceedings, (1949), p. 208.

average high school student.

Although there is already published a great many theory textbooks for colleges there seems to be a need for less ambitious but practical works expressly designed for high school use.

THE PROBLEM

The subject of this study is to determine trends in the teaching of college theory that may be applied to the teaching of theory on the high school level. The problem shall include the development of an outline of a course of study for high school theory. Related problems that must be included in such a project are the setting up of criteria; the determination of what theoretical knowledge and how much theoretical knowledge and skill would be useful to high school students.

The data for this study was obtained from music textbooks currently used in colleges and older texts that were used considerably in the past. A complete listing of sources appears in the bibliography.

The procedure in determining what should go into the outline of the high school course began with an analysis of college texts to determine the purpose for which the texts were written, the arrangement of content, the kind and types of student assignments, and the style and period of music explored. This analysis provided a history of trends in the method of teaching and an insight into the harmonic materials exposed by the various texts. This information was then modified to meet the interests and needs of high school students.

Trends in the Teaching of Theory

One of the questions to which this author sought the answer was that of clarifying the purpose for the study of theory. In some of the older textbooks theory study seems to be exclusively for student composers. In some of the newer texts theory is redefined and considered indispensable to musicians in all fields of the art; that is, performers, conductors, students, critics, musicologists and teachers.

Textbooks at the beginning of the century were written with the primary objective of the development of skill in four part harmony. They were written as an introduction to the highly specialized art of music composition. The student's skill was developed through following strict disciplines in drill and practice. A gradual change in this concept of purpose can be followed in a chronological survey of the introductory comments of the texts. Textbook authors have made use of the knowledge of the way in which people learn. The rigid disciplines of the past have given way to the concept of creativeness and learning by doing.

Early authors were professional theorists. More recently, professional composers who have been employed as instructors in universities have contributed their own innovations in both content and method of the theory courses.

Another significant change or development is the increased emphasis on the ability to hear music internally. Recent practical study by Dr. Samuel T. Burns has indicated that the ability or skill of hearing harmony internally is

of first importance to school conductors of music groups.³

The content of theory courses seems to have grown, through a complex metamorphoses, from a course in composition to numerous courses in the specialized skills of ear training, dictation, part writing, harmony, analysis, counterpoint and form, and more recently to an integrated course combining all of these separate skills.

Practically all the texts were based on music compositions of the eighteenth and the nineteenth centuries. In several newer texts, however, a clear tendency was shown to include twentieth century and contemporary harmonies, harmonic devices and contrapuntal techniques. In certain of the newer texts no attempt was made to widen the scope of harmonic investigation, but rather, a smaller segment of traditional eighteenth century style was thoroughly and specifically exposed to the student.

The chief difference in methods of teaching the elements of theory has been the change of emphasis from drill in written exercises to acquisition of skill in creative composition. This change has been partly brought about by suggestions of psychologists as more knowledge about the learning process has been gained. Instruction in the past was usually based on the rules in textbooks. These rules were derived from the author's knowledge of the subject. However, even when the author's knowledge was sufficiently

³ Samuel T. Burns, Harmonic Skills Used by Selected High School Choral Leaders. (New York: Teachers College, Columbia University, 1945), p. 92.

accurate, no attempt was made to correlate his written rule with living music.

Outstanding among the new trends is the deduction of principles and rules from real music. These principles, whether stated by the author or formulated by student deduction, are always correlated with, and exemplified in passages from the great works of the period. Thus we have a reversal of former theory methods--music, not merely rules, receives primary attention and greatest emphasis. When the rules are finally presented to the student, he has as a background the musical and intellectual reason for the rule. In this way, according to modern educational psychology, a more efficient use of the learning process is achieved.

The real purpose, then, for the study of theory is well described by Roger Sessions in his new book Harmonic Practice. He says,

The goal of harmonic study must be precisely that of liberating the ear. The aim is that of enabling the ear to become constantly more aware of, and more sensitive to, the relationship between tones and between aggregates of tones, and constantly more resourceful in making coherent use of these relationships."⁴

Additional Factors Influencing the Approach to Theory

In addition to the previously explained revolution in methods of theory teaching there have been many subsidiary approaches by various contemporary composers. These composers, retained on university staffs as instructors of

⁴Roger Sessions, Harmonic Practice (New York: Harcourt, Brace & Co., 1951), p. xv.

composition, have become very much interested in ways of helping students towards mastery of musical materials.

One of these composers is Arnold Schoenberg. His textbook "The Theory of Harmony" has good explanations of why certain techniques are used in the handling of music materials.

Another composer, Paul Hindemith, has influenced recent approaches to theory. He says that harmony is a simple craft based on a few rules of thumb derived from facts of history and acoustics. He stresses the importance of the theory teacher being first of all a musician. He says, "The teacher must not base his instruction simply on the rules of textbooks."⁵ He contends further that the complete separation of harmonic material from melodic invention is thoroughly wrong. One of his main ideas is that the basic principles of composition are derived from the natural characteristics of tones and are consequently valid for all periods. His complete theory as presented in his "Craft of Musical Composition" is very interesting and different. Hindemith's book "Traditional Harmony," contains many musical exercises based on modern lines.

Perhaps the most significant impact on theory and the teaching of theory in America in the last decade or two has been the method of Heinrich Schenker (1865-1935). He is described by Vincent Jones as "one of the greatest theorists

⁵Paul Hindemith, Craft of Musical Composition, translated by Arthur Messdell (New York: Associated Music Publishers Inc., 1942), p. 4.

in recent years."⁶ Schenker demonstrates that tonality is the expression of one key. So called modulatory excursions lie within the tonal orbit. Schenker's method is not so much a theoretical approach but more a method of aural analysis. It provides a practical means of expressing what we hear in music if we are guided by our aural perceptions rather than by a purely harmonic training. It develops a way of hearing that Schenker considers essential to the true understanding of music. Schenker's approach is basically an aural analysis of the structural coherence of a composition. According to Schenker the natural law of unity is represented in music by tonality.

Schenker's theories were brought to America by Dr. Hans Weisse who taught at the David Mannes School of Music in New York. This school has published some of the chart outlines or graphs of Schenker's analyses of certain well known compositions. His method has been explained further by Adele Katz, a student of Hans Weisse, in her book "Challenge to Musical Tradition."⁷ Three authors of textbooks used in this study, Mitchel, Murphy, and Sessions, give Schenker credit for many ideas.

Walter Piston is another composer-teacher who has influenced theory study in this country. His textbook "Harmony" was adopted by the United States Armed Forces

⁶Vincent Jones, Music Education in the College (Boston: Birchard, 1949), p. 74.

⁷Adele Katz, Challenge to Musical Tradition; A Concept of Tonality (New York: Alfred A. Knopf, 1945).

Institute and was circulated over the world as a War Department Education Manual number E.M. 601. Of special interest in Piston's book is the treatment of harmonic rhythm in chapter five.⁸

Another influential approach to theoretical study is the teaching of harmony and counterpoint in terms of the "style" of a period. This approach regards the material studied principally in terms of a certain style. The acquisition of harmonic or contrapuntal technique comes through a study of music written in that period. This method was developed by Allen I. McHose at the Eastman School of Music, Rochester, New York. The method is highly specialized and is generally beyond the high school level of skill.⁹

Another composer-teacher included in this discussion for his contribution in regard to twentieth century techniques of composition is George F. McKay. Other writers of theory texts express the inadequacy of present theory in describing "modern" music but McKay's work is a valuable source for students.¹⁰

Joseph Schillinger, must be included in a list of men who have influenced theoretical practice. A number of contemporary composers, notably some in Hollywood in the

⁸Walter Piston, Harmony (New York: W. W. Norton, 1944), pp. 41-54.

⁹Allen I. McHose, The Contrapuntal-Harmonic Technique of the 18th Century (New York: F. S. Crofts & Co., 1947).

¹⁰George F. McKay, The Technique of Modern Harmony (Ann Arbor: Edward Bros. Inc., 1944).

movie field, have been students of his method of composition. George Gershwin was one of his outstanding students. The complete Schillinger method published in two large volumes by the Carl Fischer Company of New York, represents twenty-five years of his study and experiments in musical research and composition. His system is not based on composers or selected schools of music. He is concerned with discovering general principles of the behavior of tonal phenomena. This system is quite comprehensive and attempts to uncover and classify all of the available resources of our tonal system.¹¹

There are, of course, many other men and women, especially those in teachers associations such as the M.E.N.C. and its affiliates, who have contributed to the improvement of teaching procedure.

Although a treatment of the influence of the psychology of learning is beyond the scope of this study, a consideration of this aspect is given by several authors of theory texts and has apparently influenced the theory courses a great deal. A current belief affecting music instruction is that understanding comes from continued experience in a meaningful context. The minute and specific explanations and cataloguing of materials and techniques is accomplished as they occur in the actual music.

Possibly the most important of all influences on teaching methods has been the growth of certain philosophies

¹¹Joseph Schillinger, The Schillinger System of Musical Composition (New York: Carl Fischer Inc., 1946) 2 vols.

of public school education. Music as taught in public schools today is for all students. Educators are interested in what music can do for all children.

SUGGESTIONS FOR HIGH SCHOOL THEORY

Purpose

The purposes for the study of music theory in the high school are somewhat different than those in the college.

First: theory may be used as a help in the development of an attitude of interest in music of all kinds for all students. Within the author's experience high school boys, for example, can become more interested in music through learning to play a few chords on the piano than by many more formal approaches. In such ways as this music theory can open doors to understanding and appreciation of music. Beyond a basic arousing of interest in music, high school music theory should present as much of the tonal raw materials of which music is made as is possible. An awareness of the existence of these "raw materials" is prerequisite to any real interest in how they are used. It is the purpose of high school theory to increase a sensitiveness to music through an awareness of harmonic and structural patterns. Theory must be taught in such a manner as to increase the responsiveness to the aural imagery of music.

Second: theory can furnish a rational explanation of the symbols of music and the use of these symbols. Inadequacies in the system of notation are sometimes allowed to hamper the student's progress in his assimilation of tonal

materials.

Third: theory can promote the desire to produce music for self-expression. This is now being accomplished in current methods for class piano. High school students may find that elementary theory will enable them to express themselves through music in a very immediate and rewarding manner. All they need is a few tools and the freedom to use them as they wish in order to get started.

And finally: perhaps the most important purpose of theory study is to increase the ability to discriminate between good and less-good music.

Scope and Content

To meet the individual needs of various schools and classrooms the theory course will have to be extremely flexible. This element of flexibility is considered important because, in many cases, theory cannot be offered as a separate course. Especially in the case of small high schools or rural schools the theoretical element becomes an indispensable supplement to other music courses. The possibility of combining theory with the regularly established music courses makes it easily adaptable to the curriculum.

The course itself should be wide in scope. In keeping with high school practices it may assume the nature of a survey course. In larger schools it might become a core course and in this case would really amount to a good course in appreciation.

In so far as any relationship between the science

of acoustics and music theory is concerned, some knowledge of sound and psychological perception may well be included. The presentation of the acoustical basis for the triad seems to be considered useful by several authors of college texts.

The content of the theory course may include a great deal of music of all kinds, thereby providing an opportunity to become acquainted with music outside the realm of that studied in other high school classes. Along with arousing the student's interest in music through active participation, that is playing or singing, the student may be brought into contact with a great deal of music by listening.

The functional aspect, or contact with the students' life, may be achieved and maintained by using considerable material familiar to the student. A "squeamish" instructor may refer to cowboy songs as "folk music." This presupposes the "exploitation" of melody to a far reaching extent. But the course can take advantage of the natural interest in melody. Through the study of any melody there can be developed an appreciation of phrase, form, and linear design. The harmonization of melody and the mastery of simple forms of accompaniment provide the means for creative expression.

Some activity in arranging serves as an introduction to part writing. Through arranging songs as duets the student comes in contact with intervals. In arranging trios the student gains experience in the use of triads. As the course progresses to quartets the student is introduced to four-part harmonization which includes problems in voice

leading. In arranging for instruments an acquaintance with instrumental techniques seems to be automatically encouraged. This last activity becomes a practical introduction to "hearing" the complex tones of the orchestra.

In the end this sequence of activities from song writing to arranging and orchestration lead to the actual process of composition. In this stage the students are well aware of the importance of the melody and bass lines that constitute the outer lines in larger compositions. The vocabulary of chord syntax is gradually extended to include root tone ratios out of key, pedal points and passing tones, and the use of chromaticism.

After students have had an opportunity to hear considerable music that makes use of the tonal materials they have studied they may be ready for an introduction to contemporary music.

Methods in Teaching

Most successful instruction in high school contains the element of active participation on the part of the students. In music theory this means making live music. The materials are used as they are introduced. The activity takes the form of playing on an instrument, and singing in groups. The idea is to learn by experience, not by precept. The way this is carried out in the classroom will vary a great deal. Use may be made of all available resources. Students may bring their own guitars, accordians, et cetera. Much of the activity is similar to that used in class piano

methods. Students who do not play the piano are offered the opportunity of becoming acquainted with the keyboard to the extent of being able to construct chords and perform simple accompaniments.

Much use is made of methods of analysis. Analysis should be designed to include both aural and visual perception. Printed music and recordings are used for analysis of harmonic and melodic structure. The effects of analysis are focused on the production of rhythmic and tonal imagery. A demonstration of each harmonic effect studied is included in analysis.

Each student must have a manuscript notebook in which to keep a record of the activities of the class. The writing of tonal combinations and patterns aids the student in learning to "think" sounds. The songs used are to be collected in the notebook by writing out the melody and the chord symbols. All the chord progressions studied and discovered in class are to be recorded in the notebook. The techniques of varying and prolonging progressions may add to this collection. The student should also make a record of the patterns of accompaniment and various rhythmic patterns studied throughout the course. Other important written exercises include the writing of original tunes, motifs, and their extensions. The arrangements of songs may be kept in the same book.

The basic pattern for the method in general might be said to be a sequence from crudeness to clarity. Clarity comes from continued experience in a meaningful context.

Materials Needed

Whatever musical instruments are available may be used in the course. Most schools will have a piano available and more than one piano would be very useful. Other school instruments such as auto harps, xylophones, and small organs may be used. Social instruments from the homes such as guitars and accordions are useful. Another essential is a good phonograph. If the school does not own a library of recordings it may be feasible to borrow recordings from the homes of the students.

The success of the course will depend in no small way upon access to quantities of music of all kinds. The music will usually be selected for chord content. Sheet music, both school and privately owned, may be used. Some material may be found in school song books. The theory class may take advantage of the choral and instrumental libraries of the school.

The plant facilities needed will be the usual ones provided by the school and will include blackboard space, staff liners, and desks for the students to write in their notebooks. The students will need their manuscript books and various instruments they play or would like to learn to play.

Activities

Much of the activity has already been mentioned above. The chief activities are briefly: playing, singing, listening, and writing. In playing the student learns the

chords and chord progressions through the activity of accompanying the songs. The singing activity includes experimenting with chord voicing, singing original songs as well as a wealth of familiar song material. The listening activity is not confined to recordings. It includes the two types of analysis, aural and visual, and includes demonstrations by the teacher and members of the class. The writing activity and the use of the notebook is somewhat different than the traditional exercises for the development of skill. The type of experiences to be recorded in the notebook has been mentioned above under methods. In addition, the writing activity will include some work in dictation and some practice in transposing for instruments. A collection of the duets, trios, et cetera and the arrangements made as part of the class work are kept in the notebook. The amount of writing for each individual student will not be the same, varying with their interests and needs.

Arrangement of Content

Beginning with the study of chords, similar to the procedure in class piano methods, the beginners are given the first tools with which to proceed. This seems to be the most interesting and easiest approach for beginners of high school age. It makes possible the practical participation which is desired in the class work. The main idea is using these chords on whatever instruments are available such as guitar, accordion, auto harp, or any other. Studying chords seems the quickest way to develop the ability to hear

composite sound. They furnish valuable material for ear training. Chords also help develop a sense of key and tonality. Transposition of chords is studied in a method similar to that of class piano.

When the student has acquired a vocabulary of three or four chords and can use them in accompanying simple melodies the student's interest, energy, and activity may then be directed toward the various elements of musical structure. The playing of accompaniments is a practical study in broken chords and an introduction to the methods of prolonging chords. Rhythmic figuration and accessory chord tones soon enter the picture. The chief activity at first is harmonizing familiar melodies. From this stage the student may experiment with original melody. Elementary composition, on however small a scale, will enable the student to "think" music for himself.

The next activity is a beginning in the field of arranging. The songs are arranged for the voices and instruments in the class. Some by-products of this activity are: 1. An acquaintance with various instruments, 2. A knowledge of instrumental combinations, 3, The voicing or placement of chord tones, 4. The proper connection of chords for voice leading which serves as an introduction to part writing and basic composition. Other anticipated by-products of this activity are an increased interest in performance and faithful interpretation.

In classes containing a number and variety of

instruments and performers the work in arranging may proceed to a study of elementary orchestration.

In conclusion, the idea in the arrangement of content is to take advantage of the creative urge of young people in a way that will contribute to their gradual growth in knowledge of musical structure, musical literature, and the mediums of musical expression.

OUTLINE FOR A HIGH SCHOOL MUSIC THEORY COURSE

The course is divided into six units corresponding with the six periods of the high school year. Each unit is divided into areas of activity for each week of the period. The first week of the unit is devoted to presenting the raw materials of music. The second week is devoted to the use of those materials in harmonizing melodies. The third week takes up the structural analysis of music and the meaning of music symbols with actual printed music used as the reference text. After the student has been given some tools to work with, has used them to some extent in actual songs, and has observed their use in additional songs he is ready for an original experiment. The results of these experiments should then be tried and compared in class by playing and singing. This last activity might be called arranging and orchestration. The last week of the unit is a flexible program devoted to summary and review of the materials of the unit.

Briefly summarized, each unit introduces the following raw materials. Unit One presents the primary triads, and the phrase as an element of melody construction. Unit Two adds the secondary triads to the chord vocabulary, analyses the form of popular songs, and includes the arranging of a duet. In connection with the observation and experimentation with duets a beginning is made in the study of

intervals with emphasis on thirds and sixths. Unit Three presents the cycle of keys in connection with the interval of the fifth and the progression of dominant seventh chords. Further acquaintance with the triads is gained through arranging trios. In Unit Four, the observation of songs with contrasting periods in related keys introduces the process of modulation. The diminished seventh and augmented fifth chord are given some attention in this unit. In Unit Five, keys and scales are studied. Two objectives of this unit are the development of an elementary concept of tonality and the development of an aural awareness of elaboration within tonality. Unit Six extends the chordal vocabulary to include the supertonic seventh and some other seventh chords. Also some techniques of composition are exposed to the student with the idea of increasing his aural awareness of the elements of music.

UNIT ONE

Assuming that the class includes students who are beginners in music, the entire first unit is more or less a course in music appreciation. During the first week the instructor presents the materials of music by lecture and demonstration while the class sings and plays, or accompanies familiar songs that illustrate the material. The fact that tones have alphabetical names is a starting point.

First Week: Presenting Materials

1. A brief lecture on how tones form chords, the

spelling of chords by thirds (a, c, e, g, b, d, f), the meaning of triad and how chords are named for their root tone, is followed by the activity of singing songs using only one chord. Such songs as "Little Liza Jane," "The Farmer in the Dell," and "Row, Row, Row Your Boat" may be used. At this point an introduction to the use of the keyboard is made by having students come to the piano two at a time and playing the chord while the rest of the class sing. (Throughout the course, use is frequently made of class piano methods.)*

2. How tones form scales. (Brief history, effect of habit). Five tone scale (Popular and folk music). Major scale (white keys on piano). More songs with one chord.

3. Change of harmony--using two chords (listening for chord changes). Meaning of tonic and dominant. Basic pattern for keyboard accompaniment. Songs such as "Chopsticks," "London Bridge," "Three Blind Mice," "Long, Long Ago" and perhaps a popular song. Changing key, songs in different pitch, finding other major chords, ear training.

4. How to determine when to change harmony. Endings and the tonic chord, phrases and the dominant chord. Demonstration of musical punctuation and harmonic rhythm. (The rhythmic swing of harmony as in the "Blue Danube Waltz").

5. Songs with three chords. "Old MacDonald Had A

*The author hesitates to recommend any particular piano course, but a general idea of the methods of class piano may be obtained by reading the prefatory notes in the various courses available at most music stores.

Farm" first with one chord, then with two chords, and finally with three chords. The C, F, and G chords on piano, auto harp, and guitar with students performing and singing such songs as "Jingle Bells," "Aloha Oi," "Annie Laurie," "Auld Lang Syne," "America," "Battle Hymn of the Republic," "Dixie," "Yankee Doodle," "We Won't Go Home Till Morning," and selected Stephen Foster songs. (Note: It is not intended to use all these songs. Popular songs may be used.)

Second Week: Harmonizing Melody

1. Introduction of the dominant seventh chord and the basic dominant tonic progression. How chord progression causes movement. Demonstration, for aural recognition, of dissonance and resolution. Related activities in playing and singing.

2. Selecting chords for a melody. Class select new song and decide what chords to use. Watch phrases, endings. Note relationship of melody and chord tone.

3. Melodic tones foreign to the chord. Passing tones. Other non-harmonic tones. Some common melodic ornaments and figures.

4. Patterns for using chords in accompaniments. Sustained chords, humming. Broken chords, arpeggios. Chords may be in any position, inverted. Chords may be repeated to fill in pauses in the melody. The rhythmic element in accompaniment.

5. Class use of all available resources for instruments to play. How to use a music notebook. (Each student

equipped with a standard size, spiral bound music notebook with small staves.) A vocabulary of chords and chord progressions will be kept throughout the course.

Third week: Structural Analysis

1. The system of notation. Brief history. Pitch notation. Graphical notation of pitch scales and melodies for concept of highness and lowness, interval distance, and the relation to the staff. (Note: The observation of music structure should use approximately one-third of the class time. Remainder of time given to activities mentioned above.)

2. The notation of chords. Placing the location of chord tones on the staff. All C chord tones, F, and G7 chord tones. The appearance of harmonic and melodic intervals. Means of extending a chord melodically as in bugle calls. Observing how melodies are built around chord tones. Chord tones as the landmarks and goals of the melodic line.

3. Observing rhythm and accent. How chords usually change over the bar line. Noticing how the melody pauses on a chord tone at cadences. Chord tones in simple melodies are usually accented or on the beat with the passing notes between. Sometimes, as in syncopation, a non-chord tone may come on the beat. Find accented passing tones and notice how they resolve to chord tones.

4. The notation of rhythm. How beats and accents determine movement and cause motion. The duration of tone and the types of notes. (Brief history and graphic illustrations of duration.) Divided beats. Two common types of

rhythm, fox trot and waltz. Point out relation of longer rhythmic patterns to phrases.

5. Practice in reading rhythm. Use of drum methods and elementary song books. Finding rhythmic patterns in songs. (A continuous process, a vocabulary of rhythms to be kept in notebook).

Fourth week: Original Experimentation

1. How to write a song. Pointers on script writing. Setting words to music. Affinity of music and language. Poetic accent and meter. Select poems, determine rhythms, and mark off phrases.

2. Selecting chords for the harmonic background. Use tonic at end and dominant at cadence. Study flow of words and select chord progressions.

3. Melodic line. Use of triad as basic factor. Characteristics of design such as smoothness, skips, jerkiness, change of direction, climax, use of repeated notes.

4. Form. Phrases and periods. Completing periods. More than one period. Contrasting periods. Extending phrases. (Note: Four measure phrase not compulsory, examples in cowboy and folk music.)

5. Additions of introductions and endings to songs. Use of the dominant chord in devising introductions. Dominant sevenths to prepare for first chord. Use of an extra dominant and tonic in the ending.

Fifth week: Arranging

1. Using the new song. Class singing the song and class chordal accompaniment using instruments. (Note: It is important here that the original experiments of the students be heard and compared by the class. The playing and singing of a creative experiment is part of the psychological process and important to motivation.)

2. Performance of the song on a transposing instrument serves to introduce the technique of transposition. The activities in this area may be very limited at first depending on the background training of the students in the class. If there is no need for this activity, that is no instrumentalist in the class, it may be postponed or even omitted altogether. The important thing is the performing and the class hearing the original tunes of the class members.

3. Singing and playing chords. Basic progressions in several different voicings. Mixed ensembles. Open and close position of harmony. Effects of chord inversion.

4. Learning to play chords on different instruments. Related experiences such as tuning a guitar.

Sixth Week: Review and supplementary work

1. Listening to some recorded music. Musical examples selected from Haydn and Mozart. Listening for changes in harmony. Recognizing primary triads. Listening for phrases and periods. Listening for basic rhythm patterns.

2. Vocabulary of chord progressions. Recording progressions in a notebook. Basic progression in other keys.

Introduction to key relationship through noticing that the same chords are used in different ways (functions) in different keys.

3. Program of original songs. Fun with original words.

UNIT TWO

Unit two takes up the construction of chords by thirds, the secondary triads, writing duets, and form in popular songs.

First Week: Presenting Materials

1. Physics of sound and hearing. Generating sound waves. Musical sound. Vibrating bodies and harmonics. Tone quality, composite harmonics. Difference in instrumental tone color caused by harmonics.

2. Harmonic series--overtones (blackboard illustration to be copied in notebook.) Basis for triad. Basis for important interval of the fifth. Dominant tonic progression.

3. Our "selected" tonal system. (Brief history, result of accidental discovery and use of materials at hand.) Importance of habit and conditioning in psychological perception. The octave divided into 12 equal steps of pitch. Music of the Western World and the major-minor system of scales. The pitch construction of major-minor scales.

4. Chord construction. The system of thirds. I, IV, V triads contain the tones of the major scale. Use of Roman numerals. Triads on each degree of the major scale.

Triads II, III, and VI are minor.

5. Construction of the 7th, 9th, 11th, and 13th chords. Chords on the minor scale. Four types of triads; major, minor, augmented, and diminished. (Note: Students may play consecutive sevenths on the white keys of the piano to experiment with color and keyboard finger position.)

Second Week: Using secondary triads in harmonizing melody

1. Variety through substitute chords. Principle of common tone, harmonic bond, coherence. Progressions I-III, I-VI (bass moves by thirds).

2. Writing and playing progressions. I-II-V-I; I-III-IV-I-V-I; I-VI-II-V-I; I-V-III-VI-II-V-I; et cetera.

3. Different accompaniments for different moods. Rhythmic accompaniment, basic 4/4 and 3/4. Variation by broken chords, inversions. Alberti bass, boogie woogie bass.

4. Tones added to chords in popular music. The added sixth (frozen accessory tone). Increases density of triads (usually I, IV,) to match the dominant seventh. (IV/6 equals II 7th; I/6 equals VI 7th inverted)

5. Selection of bass notes in an accompaniment; harmonic importance (inversions) and melodic importance (good bass line). Outside voices give shape and balance to music. Music of Brahms, strong melodic outer voices may be a guiding line or motivating force for harmonies.

Third Week: Analysis of structure

1. Listening for bass part and accompaniment figures. Analysing accompaniments in printed music.
2. Form in popular songs. The four measure phrase, and the eight measure period. Four periods equal thirty-two measures. The AABA form.
3. Continued study of popular songs for form and period contrast.
4. Varied structure in folk songs. Phrase length, harmonic progression, harmonic rhythm, use of contrasting phrases.
5. Principle of harmonic balance. Use of primary and secondary triads. (A common cycle: primary color first, secondary color for contrast, return to primary color. Feeling of movement away from the tonic center and back again. Example: Brahm's Lullaby.)

Fourth Week: Writing melody

1. The harmonic origin of melody. Harmonizing a melody is practically a re-discovery of an element already in existence. Likewise in the composing process a composer thinks of melody in terms of its harmony.
2. Experiment. First develop a series of chords, using enough primary color at the beginning to give stability, then some secondary color to avoid monotony, with a return to primary color for balance and the ending. Next invent a melody to add to the harmony. Try to make it rhythmically interesting. (Note: Some members of the class

will need more time to learn chords and acquire a feeling for harmonic progression. In writing songs they may rely on words and the primary chords for inspiration.)

3. Some of the original songs selected by the class may be recorded in the notebook as a single melodic line with chord symbols.

4. The instructor, and students proficient in playing chords, should accompany the original songs for the class to sing.

Fifth Week: Arranging

1. Practice in accompaniment. From chord symbols to accompaniment patterns. Reading music from chord symbols. (Refer to figured bass of Bach's time).

2. Adding a second part to the melody. Tones that sound well together. Intervals of 3rds and 6ths. Some intervals to avoid at first.

3. How to write duets for "like" instruments. Use of chord tones for harmony parts. Use of 3rds and 6ths (for straight second part).

4. Independence of the duet part. Different rhythms, sustaining chord tones. Melodic independence and imitation. Passing notes in the duet part. Tones essential to harmonic color (importance of the third degree in chords). Dissonant intervals and their resolution.

5. Duets for unlike instruments. The solo and accompaniment style.

Sixth Week: Review and supplementary work

1. Playing duets. Make use of all possible combinations of instruments.
2. Piano duets. Even if only Chopsticks is used, it may be played in different keys.
3. Listening. Records of duets by concert artists.
4. Songs in two parts for class singing.

UNIT THREE

Dominant sevenths and secondary dominant chords.
Chord relation and the cycle of keys. Arranging trios.

First Week: Basic facts of chord relation

1. A chord is an expansion of a root tone. The chord of nature. (Practice writing and playing the natural overtone series from several different fundamentals.)
Certain intervals are mathematically more natural than others. The octave, then the fifth closest related. Chords may be related through what is called root tone ratio (more about this later).

2. The progression of V to I is the most satisfying and natural. But the I chord is also the V chord in another key, so by changing its function, a continuous progression is possible through all twelve keys.

3. The circle of fifths (or fourths, the inversion of a fifth, and sometimes easier to recognize melodically). How the circle is used. The resolution of dominant seventh chords. The process of "tonicization" and dominant harmony.

The resolution of dominant seventh, ninth, eleventh, and thirteenth chords. Many examples in popular music.

Second Week: Harmonizing melody

1. Adding to the vocabulary of chords and progressions. Using dominant seventh chords. Expansion of basic progressions with dominant harmony.

2. Anticipating changes of harmony. Using the circle of fifths. Harmonizing passing tones. Harmonizing tones outside the scale (chromatically altered tones).

3. Harmonizing the scale; with primary chords, with primary and secondary chords, with dominant sevenths, and finally with more than one chord for each scale tone.

4. Review of process in harmonizing melody. Determining key and modal color, determining the general frequency of chords, trying the available chords for the main melodic tones, dividing the melody into phrases and selecting the cadences, and using knowledge of chord progression formulae.

5. Selected popular songs. Variety of harmonization possible.

Third Week: Analysis

1. Songs (use choral library for SSA, SAB, and TTB music.) Analyze for chord progressions, relative amount of natural progression. Select slow moving, chordal type melody for class singing in three parts.

2. Analyze for cadence, complete (perfect authentic), half cadence, plagal, and a deceptive or evaded cadence.

3. Analyze for ideas in accompaniment pattern and use of harmonic rhythm.

4. Record new rhythmic patterns in notebook. Sing one song with pronounced rhythm and a different song in which the rhythmic element is subordinate.

5. Analyze for form. Antecedent and consequent phrases. Also non-harmonic or accessory tones.

Fourth Week: Creative experiment

1. Write and play dominant seventh chords progressing around the circle of keys.

2. Write a melody using a dominant seventh on each scale step and progressing around the circle. (Example: C, B7, E7, A7, D7, G7, C. The contrasting phrase might follow C7, F7, B^b7, E^b7, A^b7, and G7. Popular songs similar to "Please" and "All of Me" furnish examples of this use of the circle of keys.)

3. A group experiment in polyphony. First select a harmonic progression of two phrases in length in 4/4 time. Next each class member write a melody following this harmony and without using passing tones on accented beats. Play each melody separately then combine the melodies in duets, trios, quartets, and finally with everyone playing his own melody at the same time.

Fifth Week: Arranging trios.

1. With a given melody first decide on the simplest harmonic background using mostly triads. Passing chords may

be introduced later. Write down the melody and add the second and third parts from the chords selected. Harmony parts may be above or below the melody. Each part should make a good sounding melody.

2. Three part vocal writing. The consonance or dissonance of any chord naturally depends on its intervals. As with thirds and sixths, there are two kinds of seconds and sevenths, that is major and minor. (Compare seconds and sevenths on the staff.)

3. Parallel motion between voices. Freedom and interest in voice line. Contrary and oblique motion. Use of thirds and sixths; fifths and octaves; and fourths except outside voices.

4. Use of round or canon. Use "Three Blind Mice" and notice how voices fit together.

5. Complete the arrangement of one song for three instruments or three voices.

Sixth Week: Review and supplementary work

1. Transposition. Transfer music to new key by recognition of patterns and related chord progressions, not by single pitches. Use scale line, skips; think horizontally.

2. How to listen for tonal color. Harmonic balance and chord color. The color of scales, the two modes, major and minor. Compare to a painter's awareness of physical color.

3. On how to practice. Listening while practicing. Improving technical control of the instrument. Use of broken

chords and arpeggios.

UNIT FOUR

Unit four includes a study of modulation and the use of diminished and augmented chords.

First Week: Expansion of tonality--sources of variety

1. Modulation--related tonal centers. Purpose of short modulations. Implied modulation to the dominant. Relation of cadence and modulation. Temporary modulation for contrast. Short modulation and "tonicization."

2. Long modulations. Key change. Larger forms. The use of the dominant 7th to enter a new key. The use of pivot chords and ambiguous function. Establishing a new tonic center. Returning to the original tonic center. Usual practice, related keys. Popular music, contrast.

3. Chromatic harmony and the use of chromatic chords. The melodic basis for chromatic harmony. Chromatic passing tones. Chord progressions as the product of melodic movement.

4. The diminished 7th chord and the augmented 5th chord. Structure and the chromatic scale. Equal intervals. Inversions. Only three possible diminished 7th chords, only four possible augmented 5th chords. Neutrality of chords, void of root implication.

Second Week: Using chromatic chords in harmonizing melody

1. Harmonizing chromatic passing tones.

2. The dominant 7th and diminished 7th, a temporary contraction of the dominant for harmonic variety.

3. Extreme flexibility due to number of resolutions possible. Used for short modulations and to smooth out irregular chord progressions.

4. As a leading tone 7th (compared with V9). Using the augmented 5th chord. Dominant, V $\bar{5}$ and resolution, a substitute for V7 (V7 may have augmented 5th).

5. The raised 5th in melody. Harmonizing melodies with short modulations.

Third Week: Analysis of modulations, chromatic chords and accessory tones.

1. Long modulations. Must be a real transition-- besides harmonic transition, modulation also carried by rhythm and melodic line.

2. Modulation effective only if the musical context provides it with a point of departure and a genuine musical goal in a setting that might be called an actual musical landscape.

3. Analyzing techniques. Finding pivot chords, the relation of the new key to the original key, how the new tonic center is established for the listener.

4. Find examples of augmented 5th and diminished 7th chords. Many examples in popular music. Different spellings of these chords.

5. Accessory harmony. Passing notes, neighbor notes, suspensions, anticipations, appoggiatura; in two or more voices.

Pedal point and accessory chords. Elaboration of basic harmony.

Fourth Week: Experimenting with chromatic chords

1. Find, play, and write progressions using dim.7th and aug. 5th chords.
2. Select a progression from class work above and write a period of melody.
3. Using a melody of No. 2, above or a given melody, determine two ways of harmonizing the melody that will develop different bass lines.
4. Counter melodies. Changing chord tones cause melodies in bass and inner parts. Possibilities for counter melodies in progressions. Counter melodies may be embellished.
5. Popular music. Dixie land style. Use of counter melodies and embellishments.

Fifth Week: Arranging for groups of instruments

1. Ensembles, small orchestras, dance band. Use of like instruments (families) in orchestra.
2. Dance orchestra. Rhythm section. Saxophone section. Brass section. Inter-play and independence of sections.
3. Form of popular stock arrangements. Use of modulation and key contrast.
4. The concert orchestra. String section, brass section, woodwind, percussion, special color group.
5. Complete a short arrangement for a small ensemble

composed of class members.

Sixth Week: Review and supplementary work

1. History of the development of the orchestra.
Some of world's greatest arrangers--composers: Hadyn, Mozart, Beethoven, Wagner, Berlioz, Rimsky-Korsakov, et cetera.
2. Listening activities designed to increase awareness of musical effect and form. Listening for use of modulation. Mozart, Beethoven sonatas.
3. Review of vocabulary of chords. Construction of chords by 3rds. Chromatic alteration--major, minor, augmented, diminished.

UNIT FIVE

Unit five includes the study of keys and scales and the development of a concept of tonality.

First Week: Tonality and modality

1. Scales; two medieval patterns have survived as the basis of our music. Other organized relationships exist. Medieval modes, Spanish gypsy mode, the Negro's blues scale, whole tone scale. Modes can be acquired or derived from any natural scale through the use of accidentals.
2. Major and minor mode and definition of key. Key places locality of tonic. Mode establishes the character of the intervals. Example: C major and C minor are identical keys, no movement takes place from one to the other, only a change of color or character. Chromatic tones are within

key but their relationships are subordinate. Key--an organization of tones that induce the listener to sense or feel a drive or attraction toward a given tone.

3. Tonality--the whole tonal system of twelve keys and relation between the tones and relation between the harmonies. Tonality provides a natural law of unity and coherence. Modern atonal music depends on other means for coherence.

Second Week: Music with modal flavor

1. Folk music.
2. Use of modal harmony. Avoidance of tri-tone intervals.
3. The opposite role of triads in the minor mode for harmonic balance.
4. Gypsy music, blues, whole tone scale.
5. The form and chord progression of the blues.

Third Week: Analysis of methods of prolongation and elaboration of harmony

1. Extending a chord. Broken chords given rhythmic shape.
2. Harmonization of each chord tone.
3. Harmonic effects. May be embodied in a scale or a motif derived from a scale. Accessory tones included as part of the harmonic effect.
4. Deceptive cadence (delayed resolution of the dominant). Triple passing tones and voice leading.

5. Basic progressions prolonged by enlarging the harmonic span.

Fourth Week: Suggested experiments

1. Motif development. The extension of an idea. Meeting the needs of harmonic balance and rhythm. Use of sequence, various pitch levels. Use of inversion, expansion, contraction, figuration.

2. Write a school song from a motif.

3. Write scales and key signatures in remote keys. Enharmonic notation.

4. Write and analyze the 7th chords in the key of C major and C minor. Types or species of 7th chords.

Fifth Week: Arranging

1. The working out of an arrangement for band, choir, glee club, or other school group. Note: the preliminary outlines and technical problems illustrated on the blackboard, class working out score in notebook. The material might be a school song arranged for chorus and band accompaniment, et cetera.

Sixth Week: Review and supplementary work

1. Aural analysis of modal color. Selected examples of Korsakov, Moussorgsky, and Gershwin. Modal color of the blues.

2. Listening for major and minor interchangeability (variety, balance, color). (Example, Beethoven Sonata.)

3. Use of sequence. (Chopin, Greig, et cetera.)

4. Examples of tonal expansion, prolongation and elaboration.

UNIT SIX

Extension of the chordal vocabulary to include 11⁷ and other 7th chords; dominant 9, 11, and 13th chords. Also a survey of some techniques of composition to be aurally aware of.

First Week: 7th chords and altered chords

1. Secondary 7th chords; II⁷, III⁷, and VI⁷. Other 7ths; the I, IV (major 7th), VII (dominant 9th)
2. Altered structures--augmented 6th chords.
(French 6th=V7^{b5})
3. Chromatic harmony. Melodic closeness of tones. Contrast in a static line. Some chromatic progressions.

Second Week: How to improvise

1. Use of chords. Knowledge of chords and progression formulae necessary.
2. Use of scales and scale relationships such as leading tone, et cetera.
3. Use of phrasing and form. Melodic invention.
4. Use of embellishment. Figuration.
5. Developing ability to hear harmonic goals in advance.

Third Week: Analysis of some composition techniques

1. Root tone ratio and root progression.

2. Pedal point. Pedal within key. Primitive pedal. Common tone pedal. Common tone change. Accessory chords above pedal.

3. Horizontal design. Organum, simple contrary motion, elaboration of the contrary motion principal, and parallelism. Sequence, repetition of harmonic pattern. Polyphonic outer voices.

4. Methods of contrast. Thematic, dynamic, movement, rhythmic detail, instrumentation, texture.

Fourth Week: Basic four-part harmonization and its relation to the art of composition

1. Structural outline.
2. Outer voices.
3. Voice leading. Horizontal and contrapuntal thinking and hearing. Linear design of voices. Geometric design, use of contrary motion.
4. Use of dissonance. Tension and relaxation. Variation in density.

Fifth Week: Suggested experimentation

1. The relation of four-part harmony and full scores.
2. Reduction of scores. (Copy one theme of a band march from parts to full score, then reduce to simplified piano score.)
3. Conducting. Practice conducting and free interpretation of familiar songs. Score reading.

Sixth Week: Some twentieth century materials

1. History of the growth of chordal complexity.
2. Use of added tones.
3. Chords constructed of 4ths and 5ths.
4. Unresolved chords.
5. The linear use of pure interval color.

CONCLUSION

Observations

A chief factor complicating the task of selecting an approach to high school theory is the variety in philosophies of leading theorists. Besides the basically different types as exemplified in the traditional Reiman (based on Rameau), the Schenker approach, the Hindemith proposals and the mathematical Schillinger system, there are various methods used by outstanding teachers.

It appears to be the nature of musical theory to become involved in controversy. Some of the confusion may lie in the use of the term "theory" to describe the technical training of the composer, and it might be better to name the high school course "Materials of Music," or "Elements of Music."

The usual role of theory is to classify and systematize musical materials. However, when it attempts to formulate unchanging artistic principles, it may find itself at variance with the practice of composers. Any such struggle between science and art seems unnecessary if it is recognized that the art of music proceeds through the insight and creative discoveries of composers.

It is these discoveries that have added to the permanent growth of the musical language. The development of

technical resources is a continuous process. Historically, through various art periods, there is evidence of change in musical thought, change in chord syntax, change in scale or tonal systems. Of course, this fact of evolutionary growth does not imply that music training should begin with a study of primitive music. On the other hand, the complexity of much contemporary music makes it difficult as a point of departure. Music theory can, however, present the basic materials that may act as a "bridge" to form an intelligent appraisal of "style."

Recommendations

Perhaps the greatest single deficiency in the Outline for High School Music Theory, as proposed in this study, lies in it's nature as an "outline." That is, it presents certain areas in the form of topical suggestions that are not self explanatory. It presupposes that the music teacher has a fluent knowledge of theory. Much depends on the creative insight of the teacher.

Another deficiency lies in the small amount of actual music cited for use in the course. A competent listing would be a huge one. There are, however, certain conditions influencing the selection of music materials which partly explain this omission.

Local availability of printed and recorded music, the age group interest and ability of students, and the particular problem to be analyzed or illustrated will all affect the choice of materials.

In keeping with the philosophy of using familiar materials, considerable popular music may be selected by the students. The teacher may select well known standard or "hit" songs which illustrate specific theoretical material and provide a point of departure for the introduction of less familiar musical works. Since the popularity of many songs changes so rapidly, a listing of this music would soon be out of date.

As for music in the larger forms, there are some excellent guides and references. Particularly useful in connection with this course would be Douglas Moore's Listening to Music, and Edwin John Stringham's Listening to Music Creatively, which are listed in the bibliography.

One other phase of this study, of much concern to the author and not effectively solved, is the development of specific techniques for teaching theory in band, orchestra, and vocal classes. However, it is hoped that some of the suggestions made will be useful to other teachers in the high school field. An ideal solution would be a series of supplementary workbooks designed to fit the activities of various music groups such as: elementary band, or intermediate orchestra, or advanced chorus, et cetera.

Therefore the author feels he has only begun a task which has proved very interesting and rewarding, and hopes that he may be joined in this particular branch of musical investigation by other students of the art of teaching music.

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