The last work on our list, Scriabine's, exhibits in 166 measures no less than thirty chromatic mediantal progressions involving almost the same number of triads, V_7 chords and V_9 chords. Of these progressions twelve are of the first degree; three, of the second; and fifteen, of the third.

The evidence given by these five movements is quite clear. Wherever harmonic procedures play a major part in romantic music the technique of chromatic mediants plays a significant role. With the progress of Romanticism the use of this technique increased and at the same time the more distant relationships within this technique became increasingly favored. On the other hand — and this is not clearly shown by the examples here adduced but is nevertheless true — contrasting of sections of movements by means of chromatic mediants decreases. Among our five selections only the earliest ones, those by Beethoven and Schubert, used this device. It seems that the more complex the internal harmonic texture of phrases became the less did composers wish to complicate the external harmonic relationships from phrase to phrase.

In closing it may be added that a similar analysis with respect to modal mixtures, secondary dominants, and tension-created chromaticisms would produce very similar results.

* * * * * * * * * *

RE: UNITY IN MUSIC

By William H. Reynolds

An unfortunate tendency in teaching courses in harmony (and even in more purely analytical studies) is that of confining analysis to a mere harmonic dissection of a given piece of music. The value of that kind of study is limited at the most to practice in the recognition of chords and chord progressions as they appear in scores representing different styles or textures and different media.

Such routine harmonic analysis can never be much else than dull; and, once a student has gained facility in handling harmonic materials, it is well-nigh meaningless. A more mature approach, and one which embodies considerably more interest for students, is the kind of analysis which attempts to determine the means of organization by which a given musical composition is unified in an overall sense and at various levels. This kind of unity involves consideration of harmonic relationships, to be sure, but together with other unified elements such as melodic line, rhythmic balance, and structural and formal details.

It is obvious that the beginning student in harmony will scarcely be able to produce analyses of complex works which will be in any sense profoundly perceptive. It is important, however, that he be made aware from the very outset of his musical studies that one aspect of music cannot stand in a compartment by itself and render meaning while effecting little or no interaction with other structural elements of the

form. The real acquaintance with and understanding of a composer's style and particular genius can never come from a one-sided investigation of his work; rather one becomes acquainted with a composer or with a given composition by considering the means by which various musical elements react with one another, producing unities which may be in the large or in the small, in the tangible or relatively intangible, but unities which are a part of the physical appearance and personality of a musical work.

Even at the beginning level of musical study a student ought to be expected to begin as soon as possible to point out the relation of harmonic details as a structural reinforcement of form. Further, the student ought to be expected to perceive the linear destination of the melodic material of a composition and to observe what relation exists between the melodic material and the harmonic material, including such details as the treatment of areas of melodic climax. Especially important in a consideration of the melodic line and its relation to harmonic materials should be the reduction of the melodic line to its structural, unembellished form with attention given to the manner in which the harmony provides reinforcement for this skeletal line. Illustrations of this will be discussed later.[2]

Beyond this it is desirable to stimulate an awareness in the student's mind of some of the many less obvious means by which compositions may be given unity. As a student's musical intuition and perception grows, he should develop an increasing awareness of such techniques.

Each musical composition of the common-practice style will involve the utilization of primarily similar musical details. The varying means and proportions of these musical details will determine in large measure the uniqueness of a given work. The following comments are offered only as suggestions which could be applied to individual attempts at an over-all musical evaluation through analysis on the one hand, through the reverse process of musical synthesis on the other.

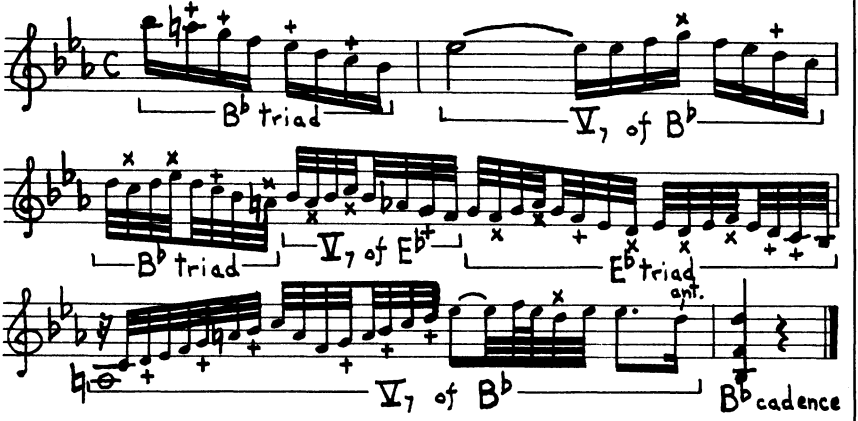
A given melody should reveal certain implications. A composition is not well unified if the harmonic implications of its melody are left unfulfilled. The means of implication include the following: emphasis on a single tone by its placement on an accented beat, by its obvious repetition, or by its placement as a goal of stepwise or chromatic linear movement; outlining a specific chord by leaps from strong to weak areas of a measure or from one unaccented part of a measure to another; outlining a chord by leaps which have been filled in with passing or other non-harmonic tones; emphasis on specific tones by placing them at turning points of the melodic line (Example 1).

A striking unity in melodic writing can be achieved by the exploitation of a specific interval to which the melody is limited through a considerable portion of its movement or which, although filled in by stepwise movement, is pointed up nonetheless by a turning of the line (Example 2).

2. See examples 3, 4 and 5.

Example 1.

Harmonic implications through emphasis on single tones.

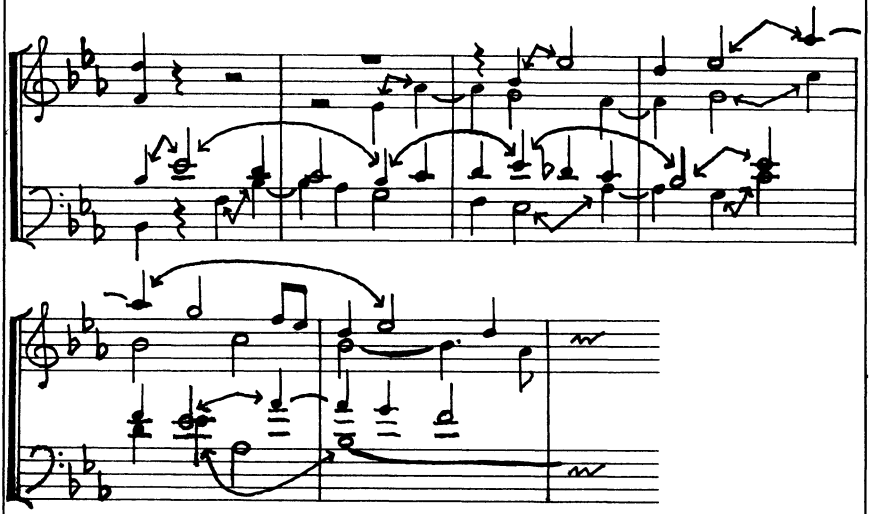


Passing tones +
Auxiliary tones ×

J. S. Bach, Prelude VII, WTC I.

Example 2.

Melodic emphasis on the interval of the fourth by leap and by scale progression.

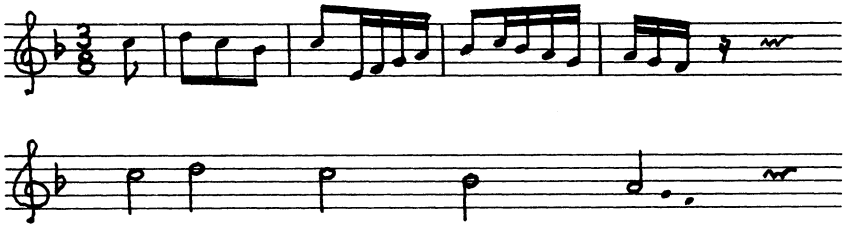


J. S. Bach, Prelude VII, WTC I.

All melody is susceptible to reduction to basic movement. This has to do with the concept of a foreground area in which the entire melody is involved from which it is possible to remove surface ornamentation and non-essential movement, reducing the melody to a more skeletal background in which the actual structural linear movement is laid bare (Example 3).

Example 3.

Melodic reduction to skeletal background.

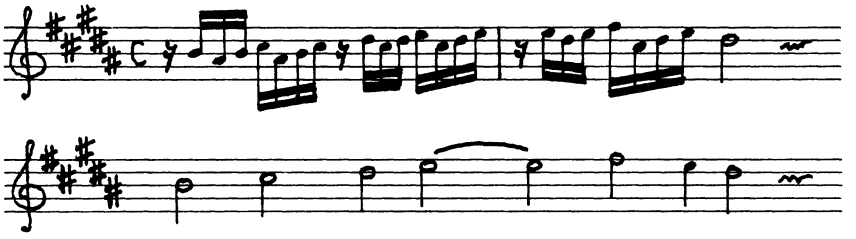


J. S. Bach, Fugue XI, WTC I.

Satisfactory melodic movement in almost all cases reduces to a basic stepwise line. A given melody may be mono-linear; it can be reduced to one basic stepwise movement (Example 4).

Example 4.

Mono-linear melodic reduction.

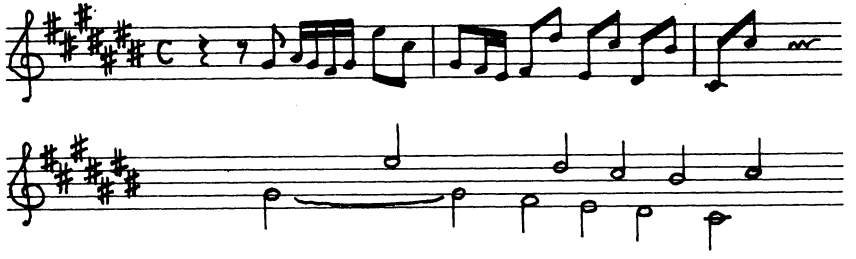


J. S. Bach, Prelude XXIII, WTC I.

Many melodies may be bi-linear or even poly-linear; a polyphonic movement is couched within the framework of a single melody (Example 5).

Example 5.

Bi-linear melodic reduction.



J. S. Bach, Fugue III, WTC I.

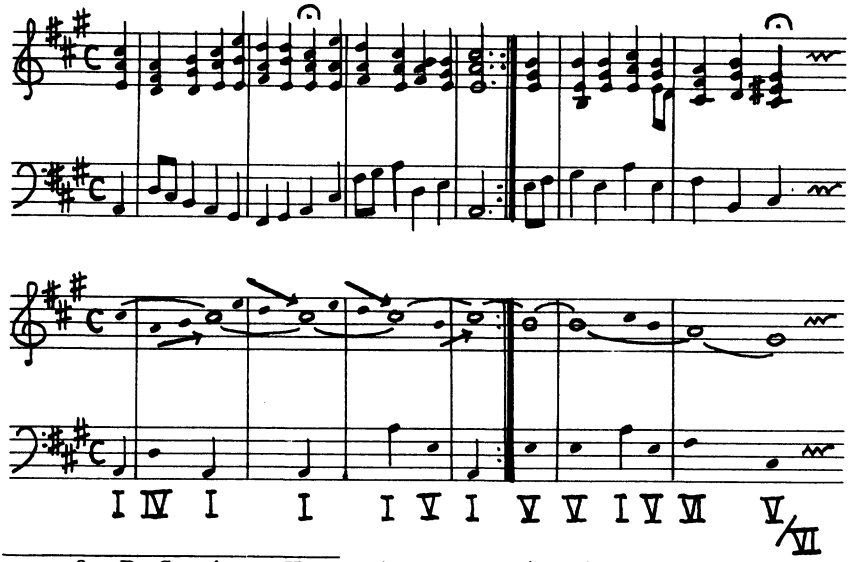
Returning to the foreground of melodic writing, it is true also that the consistent use of a particular kind of ornamentation within a piece will create unity. Similarly, one of the surest means of achieving unity is the use of imitation or canon; likewise, the use of melodic, harmonic, or rhythmic sequences is a very direct means of unity.

A very important role in the unification of a musical composition is played by the harmony and the harmonic texture. The employment of a relatively continuous balance between consonance and dissonance, related to what Sessions calls "dissonantal tension,"[3] must be accepted as a most important principle. There must be an avoidance of any harmonic material which sounds out of context. Context is, in this instance, the established norm of harmonic color for any given piece. Thus the harmonic context of a Chopin Prelude is quite different from that of a Bach Prelude. Obviously, if any deviation from the norm is to be involved within a single section or a short piece, it must be done subtly and skillfully or else the desired unity of the composition is not maintained. In short, the principle involved is simply that of avoiding any isolated instance of unique texture or sound.

Even among common, diatonic harmonies some are stronger and some are weaker. Likewise, the strength of a root position triad is considerably more apparent than any of its inversions. For proper unity it is logical for the structural areas of the melody to be given stronger harmonic support, perhaps by root position triads. The following Bach chorale would demonstrate this kind of unity (Example 6).

Example 6.

Reinforcement of melodic skeleton by root-position harmonic support.



3. R. Sessions, Harmonic Practice (1951), pp. 397-398.

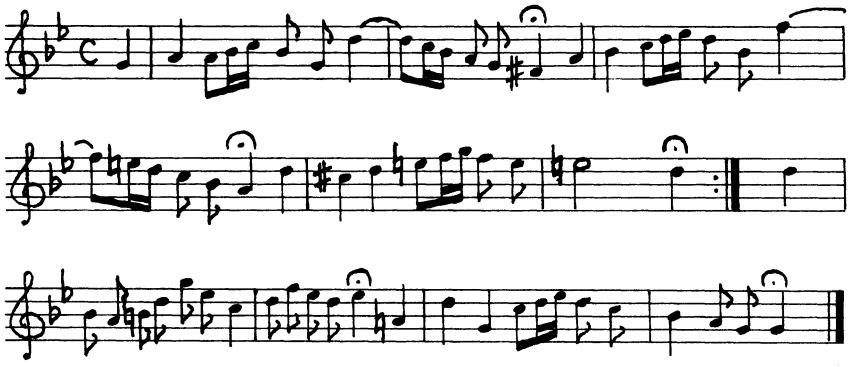
The pattern of harmonic change is usually a fairly regular one. One, two or more chord changes per measure generally occur with regularity, though any specific measure may easily differ from the norm.

The question of rhythm is an elusive one, one which deserves less definition in a study of harmony than in a more creative composition study. However, the same sort of principle as was discussed for harmonic texture applies here. Basic rhythmic movement, the sum of the rhythmic movements of each individual part, is an essential means of gaining unity in music. It is important to consider it in that light here.

Whatever the basic rhythmic movement of a piece of music, whether it be half-, quarter-, or eighth-notes, or something more complex, any abrupt or isolated deviation from the norm should be avoided. This has to do with unique rhythmic features such as syncopes, or sudden rapid figures, which differ appreciably from the established norm of rhythmic movement. When such unique movement occurs it is liable to sound out of place or isolated from the general context unless such unique movement is made to occur with sufficient frequency that it justifies its own existence as a unifying factor of elaboration (Example 7).

Example 7.

Melodic unification through sixteenth-note elaboration.

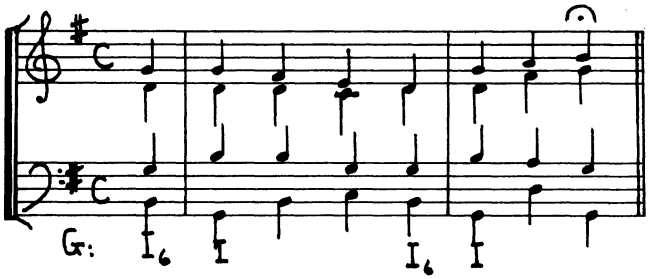


Of course, the meter of a composition sets up a recurrent pattern of successive accented and unaccented beats, representing the establishment of the strong and weak areas of the measure. In teaching harmony one seeks to establish the unity between meter and harmony that is desirable by causing strong harmonic progressions to be associated with the stronger portions of the measure, using whatever weak progressions one may wish to employ in connection with the weaker portions of the measure. The association of these elements can be most simply stated as follows: The first beat of any measure is the strongest part of any measure; to coincide with this metrical strength it is desirable to employ a strong progression across the bar line so that the strongest change of chord will be unified with the strongest area of the musical measure (Example 8).

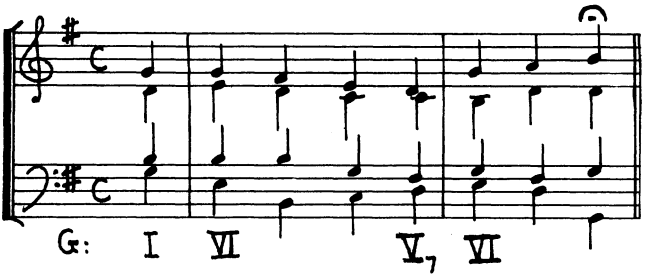
Example 8.

Establishment of unity between meter and harmony.

Poor: Weak harmony across bar lines.



Good: Harmonic strength and metrical strength coordinated.



Finally, the various aspects of unity within melody, harmony, texture, rhythm and meter, as discussed above, must function in unity with the over-all structure or form of composition. Form is not to be considered the application of an external plan or building scheme but rather the logical outgrowth of the music itself. This is simply to say that the various elements of a composition must serve to reinforce the over-all form of the composition. A very important aspect of the reinforcement of form is the heirarchy of cadences[4] which, in a sense, punctuate the flow of the music.

The elements which constantly seek unification in a piece of music cannot be set down in any complete list, for each piece is a law unto itself. Each melody sets up its own particular implications which seek realization and exploitation (or unification), and so also does each harmonic context and each rhythmic context.

4. The lesser cadences associated with phrase endings and the stronger cadences associated with conclusions of musical sections with the final cadence the most important of all would seem to form a kind of heirarchy of cadences.

Besides making possible more meaningful musical analysis, the study of unifying factors should produce an awareness which will help the perceptive potential composer to approach at least a rudimentary grasp of implications present in his own creative work. It is true that the problems of unity are of such subtlety as to defy verbalization, and it is all too possible that they may never be completely understood. This seems all the more reason to introduce basic concepts which will bring about a consideration of this important subject at the earliest possible moment in the study of music theory.

* * * * * * * * * *

RE: A GENERAL THEORY OF MUSIC

By Leigh Gerdine

Perhaps we are now far enough along to posit a "general" theory of music, a theory broad enough to fit into its statement such disparate styles as those of Machaut and Schönberg and to make of the prevailing harmonic idiom of the sixteenth century or the eighteenth century or any century a "special" case. Theorists and acousticians have returned again and again to the natural harmonic series to bulwark their hypotheses. Though the system of equal temperament has confused this issue somewhat, it is to the natural harmonic series that I would also appeal.

1) First, to make a general statement: the history of musical theory may be regarded as an exploration of harmonic possibilities of combinations of ever closer intervals occurring higher in the natural harmonic series. To the simple octave, in which men's and women's or men's and boys' voices must naturally have sung, have been progressively added the fifth and fourth, the major third and the minor third, the major and minor sixths; the mathematical relation of vibration ratios acceptable to the ear has become thereby increasingly complex.

2) Second: the great upheaval in music which began about 1900 may be considered in the light of 1) above as an entirely inevitable step in the admission of the seconds and sevenths, both major and minor, as "consonant" intervals. The implications of this statement are enormous. For one thing, it adopts a point of view in which the music of Hindemith, Stravinsky, Bartók, Schönberg, and, indeed, every other experimental composer of the twentieth century finds a place. Further, it reduces the controversy which has divided atonalists from the defenders of tonality to somewhat the same status as the Brahms-Wagner controversy of the nineteenth century.

In such a broad view as given in 1) above, the composition of music becomes a more or less systematic exploration of structural relationships possible with the sound symbol of any given period. More important, of course, than the mere complexity of the sound symbol as such is the logic with which it is used.