

MODERN MUSIC

SCHÖNBERG AND TONALITY

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THE art of Arnold Schönberg is enigmatic not only to amateurs of music but also to most professional musicians. His technical methods seem so different from generally accepted practical procedure that it is difficult in most cases to perceive clearly just what the composer really wants to express. But if the technical methods are not understood, any esthetic judgment in art is necessarily without a substantial basis. Our critical attitude towards Bach and Beethoven would lack foundation and be amateurish if we had no clear conception of the fugue and the sonata problems as met by them. A clear view of modern art, in our particular case the art of Schönberg, can be attained only after examining his technical ideas and innovations.

It is a trying task to clear up his peculiar methods of composition. To discover and define the laws governing his music is a problem which Schönberg himself has not solved. In the critical works of his most enthusiastic pupils and admirers we find boundless admiration rather than investigation and clarity of description. Since nothing satisfactory, so far as I was aware, had been published on the subject heretofore, and as I felt there was great need for an exact investigation, I resolved to make an attempt in this direction myself. In the third edition of my *Formenlehre*, published by Breitkopf and Härtel, 1927, I included a detailed analysis of Schönberg's *Three Piano Pieces*, opus 11. I propose to continue my investigations in the present essay by analyzing Schönberg's *Six Little Piano Pieces*, opus 19,

(Universal Edition, Vienna) as extensively as is possible within the space limitations of a magazine article. It would be advisable for readers to follow my explanations with a copy of Schönberg's opus 19 in hand.

To explain means to reduce the unknown to known terms, the x and y of an algebraic equation to definite quantities. Consequently to illustrate my point most distinctly I will translate Schönberg's unknown quantities to familiar terms of harmony, rhythm, part-leading or melody. Lazy and superficial observers have coined the term "atonality" for everything they do not understand. To me "atonality" seems a convenient subterfuge for chaos and nonsense. Music as an art can dispense with tonality as little as architecture can disregard the straight line, the perpendicular, the center of gravity. "Atonality" is only tonality in disguise, in a new and surprising variation which we must learn to understand and to interpret properly. The major and minor keys do not exhaust tonality. Busoni found by experiment that more than a hundred different scales are possible within a single octave. This means that from C to C' there are more than a hundred tonalities of which major and minor are only two. There are also the church modes, the pentatonic, the whole-tone scale, the gipsy scale, the oriental and exotic scales and dozens of others never before used which may serve for melody and harmony. Nor does polytonality, the sounding together of different tonalities, mean atonality. To reduce the new phenomena of modern harmony to tonality in a wider sense is of course a very difficult piece of work, the subject proper to an extensive book and in this short article I can only give the briefest indications, the outlines of such a problem.



Schönberg's innovations in melody are inseparable from his treatment of rhythm. To reduce his new melodic types to the old and familiar ones requires a demonstration of logic in the structure of the new forms which so often appear senseless and ridiculous to those who do not understand or instinctively feel the as yet unformulated laws of construction governing his

melody. This analysis is not of course an estimate dealing with artistic importance. I leave open the question of the esthetic value of Schönberg's innovations, and am content now merely to point out and explain, to the best of my ability, some of his novel technical methods. The six pieces of opus 19 will be treated not in the succession of the printed edition, but rather progressively, taking the comparatively simple ones first.

Of these Number VI is the simplest and easiest. Its nine bars are filled out by a few chords held out for a considerable time, sounding into each other very softly, with a fragmentary melody of faintest pianissimo floating above or within the long chords. This melody leaps about in characteristic Schönbergian manner, from top to bottom, from the highest octaves to the bass register. Putting it into one plane, and making its logical coherence still clearer by a few enharmonic changes, one might present the following condensed version:



Every musician will see at a glance that it is sheer nonsense to call this "atonal." It is written in pure and simple E major, chromatically modified, and, presented in this manner, is not in the least startling or novel. In rhythm there is nothing at all remarkable in the entire little piece.

Only the harmony calls for a few explanatory remarks. Four chords constantly repeated make up almost the entire piece. Two are dominant sevenths, with one tone omitted. The first, A-F \sharp -B, is the dominant chord of E major: E-D-G \sharp in the fifth bar is the dominant of A major. The other two chords show Schönberg's characteristic and novel groupings of fourths: G-C-F and C-F-B \flat . Peculiar effects result from the sounding together of these chords. In my earlier study of Schönberg's opus 11, I formulated the law governing such chord-connections, a law unknown to the older theory of harmony, as follows: Any two or three chords, no matter how dissonant, which can be resolved into the same chord, may be played together. In this particular case the chords numbers 1 and 3, numbers 2 and 3, and even 1,

2, 3 and 4 (in bars 5 and 6), are correctly combined, according to this law, because each one of the three chords may be naturally resolved into the tonic triad E major. Schönberg omits the resolution, but in spite of his dextrous manoeuvre, in spite of the entire absence of the tonic triad of E major, he cannot destroy the tonality of the piece, which remains E major to anyone who really understands what happens.

How all these different chords may be resolved into the same triad of E major is shown in the following synopsis which illustrates the combination of four different chords in bars 5 and 6, the added resolutions being placed in parenthesis.



Number II is a descendant of Chopin's famous "rain-drops" prelude. The two tones G and B, in the manner of an ostinato part, like falling drops make their way softly but persistently through all the nine measures of the little piece, the regular succession being interrupted but once, in the sixth measure. Against this ostinato phrase there is set a brief melody of expressive sighs which shows a clearly defined tonality occasionally clashing against the ever-repeated G-B. This tonality, belonging to the complex of E minor or B major, is veiled by the addition of a lower parallel third, and by frequent enharmonic changes of accidentals, so that the eye, glancing superficially over the page, is easily deceived as to the real tonality. The following melodic extract of the piece shows clearly that the melody is based on the scale E, F, or F#, G or G#, A, B, C, or C#, D or D#, i.e. E minor, with occasional chromatic alterations such as frequently occur in Chopin's, Schumann's or Wagner's music. A more precise statement might refer to this as the major-minor scale of E.



In the melodic sketch above, Schönberg's actual notation is frequently replaced by the enharmonic equivalent, as, for example, G \sharp and D \sharp for A \flat and E \flat , in order to demonstrate that there can be no question here of atonality. The construction of the little melody is quite simple: the motive (a) recurring several times, the larger motive A being used three times in variations, bars 7-9 being an inversion of bars 6 and 7.

Strange chords of Schönbergian color occur only three times, in bars 5, 6 and 9. These tone groupings are easily understood if one realizes that many of the ultra-modern chords are merely what were once known as passing or changing chords with the distinction that they now leap over the resolutions formerly considered indispensable. Thus the chords in bar 6 and the closing chord in bar 9 might easily be reduced to an effect strictly legitimate in the sense of the older theory, by merely adding the resolution omitted by Schönberg. In both cases the B major triad, dominant chord of the E minor scale, would thus be reached, corroborating once more the "tonal" character of the piece.



Number IV, a little *scherzando* sketch of thirteen bars, is chiefly interesting not for harmonic effect but for melodic construction. In fact for three-quarters of the little piece it is wholly without harmony, in one-part writing. The manner in which Schönberg shapes his melody here is novel. Two motives, (a) and (b), consisting of seven and three notes respectively, are the elements of the structure. Motive (a) is used in four, motive (b) in five rhythmical variations. The ordinary principle of melodic construction consists in preserving the rhythm of the motive and varying the melodic substance, the intervals. Schönberg tries the reverse of this commonly accepted principle: he preserves the melodic substance approximately, but varies the rhythm at every new appearance of the motive. That this inverted method of melodic construction will be widely accepted seems to me questionable, but it is interesting

as an experiment that opens new possibilities. The version of the piece given below clearly reveals these melodic correspondences and rhythmical variations.

Note, for example, that bars 3 and 4, 7 and 8, 10 are rhythmical variations of bars 1 and 2. Bar 10 even corresponds to bars 1, 2 and 4 together, combining in one measure both motives (a) and (b) in diminution. Motive (a) is characterized by the ascending third at the beginning, followed by a step downward and a wide leap downward, etc., whereas motive (b) is formed of three successive notes without a leap. The whole piece may therefore be called a miniature set of variations on a double theme.



I have taken the liberty here of transposing Schönberg's melody back to the ordinary manner of melodic structure, thus reducing, as a curious little experiment, its unknown quantities, x and y , to familiar terms, somewhat in the manner of an algebraic equation. In the reduction to ordinary melodic construction Schönberg's *scherzando* would run something like this:



In the Fifth Piece, the construction of the fifteen bars is $(3+3+2)+(1)+(2+3+1)=15$ bars, i.e. a two part construction of eight and six bars respectively, with the connecting link of a single bar after the eighth. The whole piece develops out of the first motive, comprising bars 1-3, the second part of which—

bars 2, 3—is also used as a building stone. The melodic sketch below shows how the entire piece is composed exclusively of these two motives, called here motives A and B.



In this sketch, Schönberg's "atonal" manner of notation has been rewritten with enharmonic changes of equivalent sounds, in order to make it obvious that the melody belongs to the tonality of the scale of B, with no more chromatic alteration than is found on any page of Chopin or of Wagner. The entire melody may be played on the organ-point of the dominant seventh (B-A) sustained, which is another proof of the B tonality, as is also the resolution added at the end of the B major triad. Space forbids my giving more details of Schönberg's actual harmonization, which has the tendency not to underline the B tonality of the melody, but rather to hide it, to mask it intentionally. But one illustration may be offered. The very first bars which, superficially viewed, seem remote from B



major, may nevertheless be interpreted in the B tonality, as is seen from the following possible harmonization on the dominant ninth chord: B, D \sharp , F \sharp , A, C.

The Third Piece employs polytonality, i.e. a different tonality for each hand. The left-hand part is easily intelligible, being written in the so-called mixolydian mode, in E \flat , with D \flat instead of D \natural . The tonality of the right-hand part is less apparent,

but, after some enharmonic changes and by allowing for a few occasional little extravagances, it may finally be reduced to the B-tonality, major-minor intermixed. The question of the final effect of these two different simultaneous tonalities is interesting, but too complicated for brief treatment. It is my experience that in some cases polytonality gives the impression of two separate tonalities going along side by side, whereas in other cases two different tonalities heard simultaneously produce, as result, a third tonality different from either.

Hardly less interesting is the construction of the right-hand melody. Schönberg employs a rhythmical variation of a motive here similar to the one pointed out in the discussion of Number IV. This piece is a one-bar theme, followed by eight variations of a single bar's length each. The novel feature is that these many miniature variations should at the same time have the character of one coherent melody.

Number I is perhaps the most complicated piece of the whole set. It also shows a most subtle variation-technique, similar to that of Numbers III and IV. As a clue to comprehension of its construction, we may single out the ascending third—B-D# in bar 1. Following the melodic line one will find this ascending third in almost every bar, sometimes, as in bars 4 and 5, in three or four parts in dialogue. In such places the so-called "linear counterpoint" of Schönberg becomes noticeable, an adaptation of the old tonal counterpoint to the altered demands of the new "supertonal" harmony. Note also that the top-voice in bars 6-8 is answered by the bass (in the right hand) of bars 9-12. The free, barless rhythms of the old Netherlands music of the fifteenth and sixteenth centuries are revived; the bar-lines, however, are a nuisance in such places, and the player ought to neglect them since he is tempted otherwise to render false accents. The correspondence of the last four bars with bar 1 will be easily seen. Less distinct is the correspondence of bar 2 with bars 6 and 7, top-voice. Note also that thematic coherence is scrupulously observed in the "accompanying" parts, even in the light, quick passages of 1/32 notes, at the very beginning, in bars 2, 8 and 10. To show these and other points, a comprehensive musical sketch would be required, in which the tonality of B major-minor in the principal melody might also be revealed.