

# MODERN MUSIC

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## THE TONAL ERA DRAWS TO A CLOSE

BY PAUL PISK

FOR more than half a century the principle of tonality has been progressively relaxing. A primary musical law had ordained that all the melodies and harmonies of a composition should be related to a chord built up on a fundamental tone, the tonic of a particular key. Then, sponsored by the romantics, particularly Von Weber, there appeared those juxtapositions of chords belonging to several keys which failed to establish unquestioned dependence on a single one. This led to a more frequent change of key within a composition, the separate parts of which, closely bound to each other, still continued completely to express the old law.

Tonality remained entrenched, moreover, because melodies were built partly from the natural seven-step scales and partly from chord lines of a customary type. They were stamped by a purely tonal structure. Harmonization rested, without exception, on melodies built up in intervals of thirds, (triads and chords of the seventh), which through the sum of their own overtones naturally again reproduced the seven-tone scales. Increasing chromaticism, dating from the middle of the last century, could not affect this tonality. Indeed, chromatic alterations served chiefly to introduce leading tones which only the more firmly established a particular tonic. To be sure, the tonic changed more and more frequently within a given piece. An unintended result, however, was effected by this growing use of leading tones whose inherent power is so strongly melodic. Imperceptibly the supremacy of harmony was undermined and the lines, as such, were pushed into the fore-

ground. Thus there occurred in several pieces certain group sounds which could be recognised not as chords but rather as the simultaneous sounding of tones belonging to two or more independent lines. The process of building up chords in thirds was threatened. Tonal forms otherwise constructed, which could not at that time be incorporated into a system, had appeared.



This disintegration did not stop here but also attacked melody. Successions of scale sections or chord intervals appeared less frequently. The twelve tones of the system were changed in a more varied and free manner. This gave rise to the problem of finding chords to accompany the new melodies harmonically or of discovering accompanying lines which should be harmonically suitable. At first there were violent efforts to broaden the principle of homophonic harmonic music. Taking the old chords built up in thirds, the attempt was made to disregard their functional relation to the key, (as in the cadence, which assigns the chord to a particular succession), and to treat them rather as independent, primary units in an optional relation. Max Reger's harmony is more intelligible from such a viewpoint, although as a matter of fact, he adhered closely to the cadence and in long stretches even made use of particular keys.

The next step was to combine these old chords with new ones not dependent on the natural seven step scale but built up by arbitrary conjunctions of certain intervals. Augmented triads were employed, Debussy's chords of the seventh and eventually chords using a greater number of tones. All these devices, which were outworn with amazing rapidity, could not completely displace the old system. In the melodic turn of a closing phrase, in the cadencing of a voice or of a whole piece, the attempt was still made to establish the relations of the old keys and to explain away the significance of the new melodies and chord successions that were so difficult to understand. One special group of composers left untouched the succession of tonal intervals in the individual

voices and combined various such lines simultaneously, giving us polytonality.

The possibility of tracing tonal relations in the melody is exhausted the moment that optional intervals are introduced into the twelve-tone system which do not recognize the domination of one tone. When these are not built up on the old chord or scale lines the reference to a tonic, a cadence, a unity previously necessary for comprehension disappears. The question then arises as to the point of view from which such melodies have been built in order to make them intelligible, and of how to distinguish a truly organic work, written in this style, from an ingeniously patched-up makeshift.

It cannot be denied that we have reached a significant crisis in the development of music. Perhaps the last ten years, which have led us away from tonality, mark only the beginning of a process which will culminate in a new system. Efforts are already multiplying to expand the present one, as, for example, by the introduction of thirds of tones and quarter-tones. To me, however, all these experiments seem merely so many efforts to support the old tonality. One can, if one chooses, build up the established harmonic forms, the triads and chords of the seventh, on the newly achieved divisions of tone and in that way increase the intensity without altering the fundamental structure. Realizing what a variety of chords might be erected on the countless new tones, even the composers, not to speak of the general public, can scarcely visualize the time when the free combinations of our twelve-tone system will be considered unimportant and used only negligibly. Tonal systems of the future may reveal altogether different vibration ratios between notes, which may bear the same relation to those we now know that the enharmonic system of ancient Greece does to our twelve tone scale.



For the present, we must be content to analyze the attempts to achieve a melodic structural principle for the twelve-tone system.

The Viennese, Johann Matthias Hauer, accepts a particular sequence of the twelve tones which he calls the "Tropus," that repeats itself continually in rhythmic variations during the course of a piece. Hauer at first advocated homophonic music and it is only within the last few years that he has returned to a polyphony in which parts of the Tropus (three or four tones) are used as accompanying harmonies. It is characteristic that these accompanying chords frequently assume the form of triads and that even within the Tropus there appear sequences with a leading-tone or cadencing activity. The impression of atonality is consequently weakened and, through the concluding triads particularly dear to Hauer, an all too clear reference to tonality is re-established.

Much more complex is Arnold Schoenberg's new principle. He, too, is convinced that no tone of the twelve-tone system should dominate and that the new structural element should be sought in sequences of the twelve tones. These sequences should contain either all the tones or only part and to them all the rest must be related as a complementary or secondary motif. The arrangement of intervals remains fixed throughout a piece, but can be changed in the form of an inversion (from top to bottom); of a "crab" (backwards); and finally in the inversion of the "crab." The rhythm is perfectly free, its expression permitting endless variations in each voice.

All the remaining voices (bass and middle) obey the same principle of imperative relation in the succession of intervals, within a given piece. Of these voices, several, from two to twelve, can meet in a simultaneous sound which is, however, significant not as an absolute entity, but only in relation to the melody of that piece. The harmony changes in each composition as the succession of the twelve tones is altered. In Schoenberg's latest works this principle is carried out with great diversity. His varied output is proof that this rigid form permits free play to fantasy and imagination and also allows the structure to be worked out in many different ways. The larger conjunctions of the unaltering motifs are always different; the forms of the individual parts and their accompaniments are manifold. The underlying principle of construction may also be broadened by the appearance in one movement of several fundamental forms of the twelve-tone succes-

sion, used simultaneously or interchangeably. They can always be employed on the same tone level or be removed to other tonal steps. Naturally there is no single ruling tone in these new forms. The present receptivity of our ears for several such forms is still rather limited. As a rule merely blurred tonal and sound sequences are perceived, and it is only after application that one learns to comprehend what one hears.

Schoenberg and Hauer are the only creative artists we know who have given speculative consideration to their system of composition. It is possible that Latin and Slavic composers have also succeeded in finding practical substitutes for tonality in other ways, which still await theoretical exposition. Strawinsky's achievements seem to advance toward certain melodic and harmonic formulas which are not yet clearly conceived; and perhaps in his later works Scriabine has broken a path toward new structural melodic principles.

It is too early to decide whether this development will lead to altogether new concepts of musical form or whether evolution tends, as seems likely at present, toward a quick overthrow of tonality, or whether after the usual pendulum-like reaction, another half-century will be occupied with transition forms from the old to the new principle of structure. But no one with a sense of historical development can fail to see that the epoch of the natural seven-step scale in music, the tonal epoch, is undoubtedly approaching its end.

