## articles

## The Speculative Content of Schoenberg's Harmonielehre John F. Spratt

As might be expected, Arnold Schoenberg's *Harmonielehre*, published in 1911, represented a considerable departure from traditional practice. Even the most tradition-influenced section on chorale harmonization contains a statement of purpose which can be paraphrased as follows: "It is not a question of harmonizing, but of the creative use of harmony. One may have to make corrections, yet not in terms of *theory*, but by virtue of one's sense of form . . . corrections are to be arrived at intuitively." Where such an attitude is expressly stated, even with respect to chorale harmonization, it is not surprising that the remainder of the book emphasizes the creation of original harmonic progressions without the guidance of a given melody or bass line.

There are limits to pedagogical originality, however. The author still finds it necessary to enumerate the diatonic chords in C major and to state that in the first exercises the root of the chord must always be in the bass and that in the key of A minor a chord containing an F# may never be followed by one containing G\u00e4. Such instructions are, of course, indispensable. Yet in the version of the book most widely used in the English-speaking world there is little other than instructions of this nature. I refer to Robert D. W. Adams's translation, Theory of Harmony (New York: Philosophical Library, 1948). Dr. Adams states that this edition is intended for the practical use of students, and that much philosophical material has been omitted, but he notes that "the essentials—explanations, directions, examples—have been included" (p. xi). Dr. Adams states further that "some American readers may be surprised, perhaps a bit disappointed, to find here a treatise on traditional harmony, handled from a conservative, even strict point of view, when they may have expected a dissertation on the twelve-tone system or a survey of 'ultra-modern' harmony" (p. xi).

The Adams translation is based on the Leitfaden<sup>2</sup> by Erwin Stein, a practical guide to the Harmonielehre, from which all speculative portions were excluded. Dr. Stein's Leitfaden presumably had the approval of Schoenberg himself. However, that such approval was at least qualified may be inferred from Schoenberg's sardonic comments, in his own preface to the Leitfaden volume (p. 3), to the effect that Stein's book would enable the reader to ignore the speculative portions of the Harmonielehre and would eventually cause three-quarters of the book to be forgotten.

It thus appears possible that the omitted portions of the book are at least as "essential" as the practical instructions. This consideration prompted Roy E. Carter to undertake the first complete English translation of the Harmonielehre, based mainly on the revised edition of 1922 ("Arnold Schoenberg's Harmonielehre: A Complete English Translation," unpublished Ph.D. dissertation, Florida State University, 1970).

The portions omitted by Stein and Adams, and which this paper refers to as the speculative content, are very substantial. A deep preoccupation with nature's bearing on culture in general and the art of music in particular is apparent throughout the book. Speaking of cultural systems, Schoenberg says on pp. 5–6:

... A real system should above all consist of principles which account for all phenomena. Ideally, just so many phenomena as actually exist, no more, no less. Such principles are the laws of nature. And only such principles, which admit of no exceptions, can claim the unqualified validity of natural law. However, laws of art are conspicuous mainly for their exceptions.

[Universally valid] artistic principles have so far eluded me (as well as others), and it is doubtful whether any such will soon be formulated. Attempts to base art *entirely* on nature will continue to be abortive. The attempt to formulate artistic law can at most have the merit of a good comparison (that of influencing perception). This is a considerable merit.... Yet one must never imagine that such miserable achievements constitute eternal laws comparable to the laws of nature. I repeat: natural law is true without exception, but theories of art consist mainly of exceptions [italics added].

From this and many similar passages, Schoenberg appears as a determinist with respect to nature, a relativist with regard to culture, a Spinozian naturalist in the sense of regarding nature as an exemplary system and regarding inference from nature as a vital force in culture. (He states only that efforts to base culture *entirely* on nature are bound to be unsuccessful.) Yet anyone so preoccupied with the overtone series as a justification for his harmonic practice regards nature, *ipso facto*, as a vital force in culture.

Since the term "relativism" has certain unfavorable connotations that are ineradicable, the writer feels constrained to employ the term "contextualism" to describe Schoenberg's attitude toward culture. This attitude has two major consequences: firstly, a marked hostility toward existing attempts to formulate cultural law and, secondly, an extreme skepticism in his own musical system with regard to any ultimate principle.

The hostility toward existing cultural systems accounts for the savage invective in which the book abounds and which constitutes the main reason for excluding certain portions from classroom use. The formulators of musical law are known variously as music historians, theorists, musicologists, and aestheticians, all of whose professions are the objects of Schoenberg's unremitting derision. He makes it a point of honor, while discussing the history of music, to explain that he has never read a history of music (p. 80). Hugo Riemann is acknowledged to be a man of profound intellect. However, Schoenberg himself had surmised what Riemann laboriously "proved"

concerning the development of organum: namely, that organum developed into real polyphony only because of the introduction of contrary motion. Thus, without the aid of scholarship (Wissenschaft) he arrives at the same conclusions. He is not a Wissenschaftler, he says, but self-taught and relying solely on the power of thought.

Heinrich Schenker is depicted as a man of rare talent and learning. But, in his contention that the golden age of music is past, he is similar to a man capable of judging only ripe apples, not green ones. His emphasis on the magic number five is demonstrably false, since G is the third tone of the (C-major) triad, the seventh tone of the chromatic scale (calling C# the first), etc. Nature, says Schoenberg, is too inscrutable for us to be able to divine her secrets so easily. Again, he has not read Schenker's book but has simply glanced at a few of its pages.

His sharpest invective is reserved for aestheticians. He makes it plain at the outset that his *Harmonielehre* is not concerned with aesthetics, but rather with a skill comparable to good cabinetmaking. His discussion of "non-harmonic" tones—some of which allegedly, in existing aesthetic systems, are declared to be either beautiful or ugly—includes a reference to notable "non-harmonic" passages in the works of J. S. Bach. With great cunning Bach has concealed such passages in a motet; according to Schoenberg, the theorists cannot read Bach's old clefs and the aestheticians cannot hear the passing tones (p. 392).

Consequently, the least endearing aspect of Schoenberg's creative personality is revealed in this book: a petulant disdain for music scholarship in all its forms. A more constructive corollary of this attitude is the extreme skepticism with regard to eternal law in his own writing. In this he resembles his contemporary William James, who once declared of psychology, a science in which he occupies a founder's position, "What a science! Not one law, not one principle." Schoenberg's contextualism thus leads him to observe that it matters little whether one's initial hypothesis is "correct" or not, for in the long run both the true and the false hypotheses will be proven inadequate (p. 16). The use of consonance and dissonance as antithetical terms is unjustifiable, the difference being one of degree (p. 18). The laws of a work of art (p. 32) are incidental rather than necessary features, and they are possibly laws of perception more than of art. The melodic progression F-E is most convincing if given the aspect of necessity by appropriate harmonization; however, there are no absolutely reliable means of ensuring this aspect of necessity (p. 100). Any and all rules in the Harmonielehre may be set aside by a more urgent necessity, and this is perhaps the only rule that is admissible. (Even here, appealing to the ultimate criterion of necessity, Schoenberg has already recognized it to be a relative term.) Laws concerning rhythm valid in earlier music hardly hold true for Bach and are actually reversed in Beethoven, Schumann, and Brahms. He doubts that a unifying principle may be formulated. Needless to say, he denies any ultimate status to tonality as an alleged natural law of musical composition.

But the degree of arbitrariness he ascribes to the tonal system is indeed surprising. He does not necessarily contend that triads are arbitrary, but he does attribute the system of building chords in thirds above the triad to nothing more profound than the make-up of manuscript paper, whereby the lines and the spaces are respectively a third apart. From this paltry, ridiculous circumstance (says Schoenberg) arises the conviction that C-E-G-Bb is a "chord" whereas C-E-G-D is not. He does not believe in the "golden section" as a principle of musical art; he regards the tempered system merely as a truce in the struggle for musical expression; above all, he denies the aesthetic premise (p. 394) that certain chords or sounds are intrinsically beautiful or ugly. The artist is not concerned with beauty, which tends to be a personal preference, nor even with truth, the knowledge of which would be unbearable. The artist creates out of inner necessity (Bedürfnis) and is concerned only with integrity (Wahrhaftigkeit), of which, indeed, beauty, order, and intelligibility are likely to be by-products (p. 395).

Schoenberg's reverence for natural law is not shared by all philosophers of science. Such men as Bertrand Russell and A. S. Eddington have felt that the laws of nature, as inviolable truisms, really relate nothing to us of nature. The force of this attitude may be very clearly seen with reference to the law most basic to musical art, the law of the vibrating body, whereby frequency varies inversely with length. A piano string two feet long will produce the octave of one four feet long. However, piano strings do not exist in nature. A host of exclusions also exists: density, tension, and other properties must remain constant. The law is true eternally and without exception, but only if one takes very elaborate precautions to make it true. It is therefore as much a law of culture as of nature. Not to deny the reality of nature, the writer still believes in ontological deposits of iron ore existing independently of culture and from which piano strings (and also Pythagorean anvils) are made.

The purpose of the above example is twofold: first, to show that Schoenberg's sharp distinction between cultural and natural law is to some extent unnecessary, and, second, to suggest that culture is no less amenable to the formulation of law than is nature, provided that one acknowledges truistic reasoning as a legitimate instrument. Thus, Schoenberg's anticipation of Riemann's conclusion, that polyphony did not develop until after the introduction of contrary motion, is a truistic statement. What he calls polyphony (Mehrstimmigkeit) is largely synonymous with counterpoint; the notions of contrast, contrariety, and other derivatives of the word contra are indispensable features of counterpoint, as we know it. One may go further and state that the rhythmic and melodic complementarity found in a Bach fugue or a Beethoven sonata is the distinguishing feature of Western music, the musical logos of the Western world, since it is a feature sufficiently abstract to survive even the abandonment of the tempered system, i.e., in electronic music. What Riemann and Schoenberg note is the first indication of such a conclusion.

Likewise, Schoenberg's observation (p. 289) that sounds appearing as suspensions or passing tones in Bach and Beethoven later appear as selfsufficient chords in Wagner is a specific instance of the more abstract view that culture evolves from the implicit to the explicit. In this manner 19thcentury harmony may be regarded not as something essentially new but as an explicit form of something already implicit in the 18th century, just as 19th-century technology develops the implications of Newtonian science. The musical revolution of the 15th century consists to a great extent in developing the triadic harmonic system, which is more clearly implicit in Machaut than in the 13th century. Finally, this eminently truistic proposition, which depicts culture as evolving like a Socratic dialogue, also describes Schoenberg's own development as a composer. It is demonstrable that his Opus 11 for piano employs atonal practices implicit in the second quartet and that, as Schoenberg himself often said, his first serial works are to a great extent conscious formulations of organizational devices previously present in a manner of which he himself only gradually became aware.

Despite his low regard for cultural law, Schoenberg does view history as an orderly, even a natural process. He feels that the medieval church modes, which he numbers at seven, were reduced to two, major and minor, in more modern times, and that these two were reduced to one, the chromatic mode, in very recent times. He represents this process as one of simplification, with the suggestion that all notable advances are simplifications. This is undoubtedly true in a sense; yet the simplification is relative to the situation, and not progressive. Thus, while the system of Copernicus must have seemed simpler than that of medieval astronomers, one can hardly say that Albert Einstein's system is simpler than that of Copernicus. Nevertheless, cycles of complexity and simplicity, contextually and tautologically defined, can convey insight into the course of history. It is likely that the expansion of the modal system to twelve by Glareanus in the 16th century constituted an unviable complexity, and that the de facto reduction of twelve modes to two (which is observable in Willaert, for example) was ultimately made explicit as the major-minor harmonic system. This system is neither more nor less simple than the original modal system, but it is simpler and more workable than a modal system acutely out of accord with musical practice. One is reminded of Einstein's dictum that the truth is the simplest explanation. In due course the major-minor system also became discrepant with actual practice. Schoenberg relates (p. 309) that he had witnessed vigorous dispute over the root of the first chord in Tristan. Such disagreement is symptomatic of discussions involving systems in decline. Like many of his contemporaries, Schoenberg observes of the late 19th century that harmonies had become so ambiguous that any note and any chord could be related. Therefore, the final reduction of two modes to one is, if not necessarily simpler than previous systems in their prime, certainly simpler than the existing attempts to account for new phenomena with an old system, and simpler in the sense of recognizing and organizing a de facto situation.

Both culture and nature may thus be regarded as processes of constant and irreversible change, wherein no law is eternal except as it removes itself from the world of transient phenomena. Readers of Plato's dialogues will not find this a markedly original view. As Whitehead noted, any thorough analysis of Western civilization is likely to become a commentary on Plato. An analysis of Western music tends to travel in the same direction. May we not say that Schoenberg's preoccupation with musical law is another commentary upon Plato?

## NOTES

- <sup>1</sup> A. Schoenberg, *Harmonielehre* (Vienna, 1922), p. 342. All translations and paraphrases in this article are by the author.
- <sup>2</sup> The complete title is Praktischer Leitfaden zu Schönberg's Harmonielehre: Ein Hilfsbuch für Lehrer und Schüler (Vienna, 1923).