

or the marvelous are Benda's melodramas *Ariadne auf Naxos* and *Medea*, Winter's *Das Labyrinth*, Zumsteeg's *Geisterinsel*, and Süssmayr's *Spiegel von Arkadien*.

<sup>2</sup> For an opinion on this see Edward Dent, "The Romantic Spirit in Music," *Proceedings of the Musical Association* (1932-33) 59:92.

<sup>3</sup> See Edward O. D. Downes, "The Operas of Johann Christian Bach as a Reflection of the Dominant Trends in Opera Seria," unpublished Ph.D. dissertation (Harvard University, 1958), p. 115.

<sup>4</sup> *Revue musicale* (1827) 1:574.

<sup>5</sup> Alfred Loewenberg, *Annals of Opera* (Cambridge, 1943), col. 710.

<sup>6</sup> 2:548, 565, 605. There was clearly a certain amount of competition between the *Opéra-Comique* (Carafa) and the *Opéra* (Auber) concerning the production of these two operas. Auber's work had been scheduled for performance early in 1827 but was continually delayed by the lack of progress of the *décorateurs*. Reports on their progress in 1827 refer to the opera as "Mazzaniello," but after it becomes known that Carafa is producing an opera with the same title, Auber's opera becomes *La Mulette*.

<sup>7</sup> *Biographie universelle des musiciens*, 2nd ed. (Paris, 1860-65), V, 106.

<sup>8</sup> Loewenberg, *op. cit.*, col. 491.

## Roger Jacques Kamien—*The Opening Sonata—Allegro Movements in a Randomly Selected Sample of Solo Keyboard Sonatas Published in the Years 1742-1774*

Ann Arbor: University Microfilms (UM order no. 64-9458, 1964. 310 pp. in 2 vols., Princeton University diss.)

*Thomas Warburton*

Roger Kamien has contributed a valuable service to musicology by showing how one might apply statistical methods to a study of sonata-allegro movements. In his dissertation he has methodically observed specific qualities in a random sample of seventy works. These have been drawn from a total population of 1090 works published between 1742 and 1774. Many previous studies of sonata-allegro movements have involved either the historical evolution of the concept of the sonata in general or the tonal dispersion of musical materials in particular. Kamien, by contrast, has attempted to bridge the gap between the specific and the general.

Having surveyed previous discussions of sonata movements, Kamien observes a lack of objectivity among writers in their descriptions of sonata form. He deplores the inexactness of such terms as "rarely found" or "not uncommon" or "frequently appear" to qualify the occurrence of musical properties. He even refrains from using the term "sonata form" past his second chapter. Through an application of statistical methods, he hopes to determine and describe the incidence of musical events in a more precise language. (In Appendix II he describes the specific technical procedures he has employed.) Further, he attempts to attain a frame of reference with

no limitation to a single composer, group of composers, or specific country. After studying the random sample, he can indicate the changes of style for the total population by means of statistical inference.

Kamien logically and articulately outlines his method. He chooses the dates 1742 and 1774 (inclusive) because they mark C. P. E. Bach's first published solo keyboard sonatas on the one hand and Mozart's first solo keyboard sonatas on the other. Furthermore, he limits his subjects of study to movements in a fast tempo which repeat each of two sections. Accompanied sonatas have been eliminated, as have sonatas by Domenico Scarlatti and works which originally appeared only in anthologies. Kamien admits the obvious limitation "that a random sample may fail to include the most significant works of a period" (p. 32). In an appendix, the author lists the works in his random sample and gives pertinent information about their publication.

As a basis for evaluating change during the period of thirty-two years, he divides the sample at the year 1759, to separate the halves. He then defines cogent compositional gestures that seem indigenous to music of the period. After observing the relative lengths of the two sections, he studies texture, imitation, exchange of voices, phrase structure, and expressive indications. For the first section he particularly emphasizes the so-called "dominant caesura," which he defines as a cessation that "gives special emphasis to a point that roughly corresponds with the beginning of the V area" (p. 56). He is especially interested in measuring the length between the opening of the second section and the return of the first material in the tonic. He qualifies each composition according to these several characteristics and bases his conclusions on the frequency of their occurrence throughout the sample. Occasionally the author relates the music in the sample to the works of Haydn and Mozart.

From his observations, Kamien shows changes in phrase structure, sectional articulation, and harmonic style from the first half of the sample to the second. Few important changes are observed in procedures during the second parts of the movements. In a summary chapter, the author shows the changes in outline form, with page references to the earlier parts of the dissertation.

It is apparent that many characteristics can easily be evaluated quantitatively in a given group of compositions. Indications of dynamic markings or the appearance of a certain kind of texture can be seen and counted precisely. Thus his summary in tabular form, for example, shows the decline of imitation and the increasing disparity of length between the two sections from the earlier works to the later.

Although the systematic procedure leads to definite, substantial conclusions, two problems arise when making generalizations from the study of a random sample. First, not all musical qualities lend themselves completely to treatment by the statistical method. The dominant caesura, for example, depends for its effect on material that surrounds it. Kamien notes that

Mozart writes a dominant caesura in all his sonata-allegro movements except the Sonata in C Major, K. 279 (p. 58 and fn. 27). Such a statement belies the nature of the gesture, for *there* is one of Mozart's most dramatic moments. After a brief half cadence (m. 16) and a quarter-rest, Mozart introduces the brilliant dominant of the submediant and from there leads to the dominant level through a cycle of progressions by fifths. At this point a dominant caesura provides the foil for the dramatic play of harmonies that follows. Since Kamien makes a quantitative evaluation of such a qualitative gesture as the dominant caesura, he may be overlooking the essence of the musical style.

A second problem stems from the limitation of the sample itself. The author does admit that significant compositions may be excluded; however, a further limitation is apparent in that significant musical gestures may be lacking in works of the sample. A gesture present in a given work of the total studied simply may not appear in any other work of the sample. For instance, Kamien speculates (p. 61) on the possibility that a change of tempo marks the second theme in the exposition. He then makes the following remark (fn. 36): "William Newman's observation [in *The Sonata in the Classic Era* (Chapel Hill, North Carolina, 1963)] that 'there are not a few freer-type movements in which a complete change of tempo demarcates what would still have to be called the "second theme"' (pp. 153-54) does not seem to hold true for our population." If Kamien had not had the benefit of previous observations from the Newman study, his sample would not even have shown the possibility of changes of tempo.

Whatever problems he encounters, Kamien has so carefully defined his method and its limits that he can show conclusively that a change of style does take place between 1742 and 1774. The conclusions would seem no less substantial if he had even eliminated those aspects which do not appear to be appropriate for treatment by statistical analysis. The limitation of the statistical method is that it momentarily denies the style of a single composer or the musical character of a single work in deference to a large repertory. Furthermore, using a random sample allows the researcher only relatively accurate conclusions about the total population.

In historical perspective, the sonata-allegro as such remains a dynamic form, a frame for compositional realization. Its very nature defies even an observation of change, since it never seems to become a fixed form. William Newman makes the following observation on page 4 of the above-mentioned book: "Since history is always in transition, any division into periods, however necessary for the sake of easy reference and simplified perspective, is bound to have something of the arbitrary about it." The sonata would offer as many different connotations in the thirty-two years after 1774 as it would in the period under consideration.

Kamien's work may be particularly useful as a working model for similar studies to follow. If the conclusion of the present study were confined to the random sample and not implied for the total population as well, the

problem of unknown quantities outside the sample would be eliminated. Perhaps the study could involve only those elements which have finite qualities. It will be interesting to read from the author and others about further refinements in his method.

### Philip Friedheim—*Tonality and Structure in the Early Works of Schoenberg*

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557 pp. in 2 vols., New York University diss.)

### Gregory Proctor

As the striking developments in music during the late 19th and early 20th centuries recede further in time, more and more musicians are returning to a close examination of the early works of Schoenberg, usually in an attempt to examine the historical processes involved and, perhaps, to separate those elements in modern music which can be seen as the result of a direct historical development from those that are distinctly special to the period. Philip Friedheim's dissertation deals with this problem.

The dissertation is laid out in three parts. Part One is entitled "The Relationship between Tonality and Structure"; Part Two, "The Early Works of Arnold Schoenberg," which examines compositions from 1893 to 1908, the time of the first atonal works. Part Three is a conclusion that briefly surveys Schoenberg's later development. Part One appears in condensed form with many of the examples eliminated in *The Music Review* (1966) 27: 44-53, and is, to my mind, one of the most interesting sections of the dissertation. It concerns itself with motivic transformation and melodically motivic sonorities in the works of Brahms, Wagner, and Strauss.

Friedheim's thesis is that *certain* methods of organizing musical material that can be found in tonal compositions begin to predominate in music written under the influence of declining tonality. Such devices are: motivic variation and transformation, and the combining of variously transformed motives into highly contrapuntal complexes; characteristic sonorities that give color to a work but do not represent a tonic in any classical sense; and harmonic devices, such as multiple interpretation of chords, including the variety of possible roots by supposition, enharmonic equivalents, and abbreviation of "functional" progressions by the omission of a typical chord, usually the dominant. All of the above go hand in hand with ambiguity and may be seen in relation to the classical tonal style as either contributors to, or results of, the weakening of the tonal system. The course