

The introduction of a manifold of keys around F# minor occurs in the critical passage beginning measure 72 of Fugue IV, resolving to C major in measures 86-87 (see below). The discovery and situating of the F# mode, is the product of a revolution of axiomatic principles, which begins with the paradoxical implications of a discovery in Fugue I. Any ensemble of musicians attempting to play Fugue IV necessarily experiences the referenced passage as having bearing upon Ludwig van Beethoven's late string quartets.

As we present the musical demonstration of this discovery, it will be useful to keep the following excerpts from Lyndon LaRouche's main essay, "The Substance of Morality," in mind:

"With Plato, one begins with propositions being entertained as prospective theorems, and then follows the approach taken in his dialogues, as a way of searching out discoverable fallacies in those underlying presumptions. . . . The challenging of such prejudices, provides the user of Plato's method with what appears to be, for the moment, a

refined array of mutually non-contradictory definitions, axioms, and postulates; this refined array, taken as a whole, is an *hypothesis*. . . .

"The method of Plato starts with the recognition that all . . . hypotheses, including what were previously the most refined ones, must include some significant, axiomatic fallacy of some kind. . . .

"Truth, then, does not lie in any one choice of hypothesis. . . . Truth lies in the always radically revolutionary process, by means of which valid new

Comments on Bach's Fugues by His Contemporaries

He who is not acquainted with Bach's fugues cannot even form an idea of what a true fugue is and ought to be. In fugues of the ordinary kind, there is nothing but a certain very insignificant and sloppy routine [*Schlendrian*]. They take a theme, give it a companion, transpose both gradually into the keys related to the original one, and make the other parts accompany them in all these transpositions with a kind of thorough-bass chords. This is a fugue; but of what kind? . . . Bach's fugue is of quite another kind." (Johann Nicolaus Forkel, "Biography of J.S. Bach," in *The Bach Reader*, ed. by Hans T. David and Arthur Mendel [New York: W.W. Norton, 1966], p. 324.)

In composition, [Bach] started his pupils right in with what was practical, and omitted all the *dry species* of counterpoint that are given in Fux and others. His pupils had to begin their studies by learning pure four-part thorough-bass. From this he went to chorales; first he added the basses to them himself, and they had to invent the alto and tenor. Then he taught them to devise the basses themselves. He particularly insisted on the writing out of the thorough-bass in parts. In teaching fugues, he

began with two part ones and so on." (Letter from Carl Philipp Emanuel Bach to Forkel, in *The Bach Reader*, *op. cit.*, p. 279.)

The true fugue is two sorts, distinguished according to their treatment of the fugue subject:

"(A) A strict fugue, *fuga obligata*, is one in which no other material than the subject is treated throughout, i.e., in which the subject after the exposition . . . makes its appearance in one entry after another, so to speak, and in which, consequently, all the counterpoints and interludes are derived from the principal subject or from the counterpoint that first appears against the answer, by means of division, augmentation, diminution, contrary motion, etc.; all this however, being bound together through imitation and a coherent and solid harmony. When such a strict fugue is worked out at length, and all kinds of other artifices (made possible by the many kinds of imitation, double counterpoint, canon, and change of key) are introduced in it, such a piece is called by the Italian name of *Ricercare* or *Ricercata*—an art fugue, a master-fugue. Such is the nature of most of the fugues by the late Capellmeister Bach.

"(B) A free fugue, *fuga libera*, solu-

ta, sciolta, is a fugue in which the principal subject is not continuously treated; that is, in which it does not make its appearance in one entry after another, although often enough, and in which, when the principal subject is abandoned, a brief, well-chosen interlude is worked out by imitation and transposition—which has a similarity to the principal subject or to the counterpoint that first appears against the answer, and is related to the same, even though it is not always derived from it. Such is the nature of most of the fugues by Handel." (Friedrich Marpurg, 1753, quoted in *The Bach Reader*, *op. cit.*, p. 254.)

[**Note:** Marpurg was no friend of Bach's. While his distinction between free and strict fugue is somewhat useful, he, a typical musicologist, thinks in terms of form, not ideas. In fact, *A Musical Offering* is of the character he indicates, but the fugues of *The Art of the Fugue* are much more groundbreaking and complex. The useful distinction to be made, is between Bach's type of thinking, and the sort of fugues Haydn wrote, before 1782. Examine, for example, Haydn's String Quartet in F minor Op. 20, No. 5: Every entrance is on a Lydian interval, but the principle associated with the Lydian mode is not even referenced.]