

BACH'S ART OF THE FUGUE

by **Gavin Black**

History and Form

J. S. Bach wrote *The Art of the Fugue* during the last years of his life. He probably began work on what turned out to be his longest and most complex instrumental composition in 1743, and he left the work incomplete at his death in July, 1750. The work was published in 1751 in Leipzig in a poorly engraved edition, the preparation of only part of which had been supervised by Bach himself. The publication was not a commercial success, and the project was soon abandoned by Bach's heirs. Copies of *The Art of the Fugue* circulated among musicians, however, from that time on. In 1799 a scholar referred in print to the work as "celebrated", and both Mozart and Beethoven owned copies. *The Art of the Fugue* was studied extensively by musicians throughout the nineteenth century, and nearly twenty editions or arrangements were published during those years. The first public concert performance of the whole work, however, took place in 1927 in Leipzig under the direction of Karl Straube, one of Bach's successors as Cantor of St. Thomas' School in that city.

As it has come down to us, *The Art of the Fugue* is a work of well over an hour in length, consisting of eighteen movements all based, in one way or another, on the same musical theme. This theme occurs in something like one hundred different forms throughout the piece. The first and simplest form of the theme is shown in example 1. The theme is closely based on the tonic triad of the key of D minor, or, looking at it another way, on the interval of a fifth, and on the idea of filling that interval in. The first gesture creates a perfect fifth; the next gesture fills that fifth in, in the simplest possible way. The rest of the theme both provides the remaining notes needed to fill in the perfect fifth, D-a, by step, and outlines a diminished fifth, C sharp-C. In the tonal world of Bach the perfect fifth is the source of security and repose, while the diminished fifth is a source of tension, unrest, and striving. The two are antithetical to one another. This antithesis, with the one side represented not only by the perfect fifth as such but also by all diatonicism, and the other side mainly represented by the chromaticism implicit in the diminished fifth, is a major source of direction, growth, and meaning throughout *The Art of the Fugue*. The opening theme also contains, in significant contexts, all the intervals from the semitone to the perfect fifth. This is in spite of the brevity, compactness, and apparent simplicity of the theme. The use of such a theme creates a situation in which any interval, either open or filled in by step, can be used by the composer as a motive significantly related to the main theme of the work. This possibility for motivic interrelation is an important source of unity and coherence in *The Art of the Fugue* in spite of considerable variety and diversity.

Most of the movements of *The Art of the Fugue* are fugues, or are largely constructed through fugal procedures. Four movements are strict two-voice canons. Bach did not designate any of the movements as "fugues", but rather as "contrapuncti". (He may well also not have been responsible for the title under which the work is known, since the title page was engraved after his death.) He seems to have been concerned in his use of nomenclature to suggest that the movements were not autonomous fugues such as the organ fugues or the fugues of the Well-Tempered Clavier (all of which are, of course, paired with non-fugal Preludes) but rather stages in the working out of a musical idea, or a set of musical ideas, through a variety of contrapuntal

techniques. Several of the movements, even apart from the canons, would probably not have satisfied Bach's own definition of a "fugue" as such, because of serious irregularities in the construction of their opening sections. These irregularities, however, make perfect sense as stages in the contrapuntal development of the work as a whole. They serve invariably both as responses to what has come before and as preparations for what will follow. These relationships will be described in detail below in the comments on the individual contrapuncti.

The four two-voice canons (numbers 12-15) are lighter in texture and mood than any of the other movements, and simpler in construction. Coming after the most complex of all the contrapuncti, and before the movements in which contrapuntal ingenuity is carried to its farthest extremes, they provide for performer and listeners a moment of repose. This makes possible a renewal of energy and of momentum towards the climax of the final movement. Many individual Bach organ fugues contain within their structure a similar "relaxed" passage, which serves a similar function of providing a breathing space before the final climactic musical gesture. (Measures 121-139 of the fugue in C minor, BWV 546b, and mm. 141-155 of the fugue in E minor, BWV 548b, are particularly good examples of this.) This suggests that *The Art of the Fugue* should be thought of not as a collection of fugues, but as one structure analogous to a single giant fugue. Further facts bear this analogy out (assuming it is not pressed into too detailed a form!) The first movements of the work introduce the main musical ideas in a straightforward way, as does the exposition of a fugue. The middle movements of *The Art of the Fugue* develop those musical ideas and others, with increasing complexity, contrapuntal and harmonic, and with increasing variety of texture. This is similar to the middle section (sometimes called "development") of many fugues, especially, longer ones. The four canons fulfill the purpose described above. In the final three movements harmonic complexity is reduced, and anything even approaching the almost impenetrable density of Contrapunctus 11 is abandoned. In Contrapunctus 17, the original theme is reintroduced in a form closer to the opening of Contrapunctus 1 than anything that has been heard since Contrapunctus 4. This is analogous to the return of the initial subject that characterizes the final section of many fugues. The extraordinary contrapuntal ingenuity of Contrapuncti 16 and 17 (see below) is analogous to the increase in contrapuntal complexity that is found at the end of many Bach fugues, usually in the form of stretto.

Neither the first edition of *The Art of the Fugue* nor any of the eighteenth-century manuscript copies say on what instrument or instruments the work was meant to be performed. Over the years many different sorts of performing forces have been used, including piano, chamber ensembles of various composition, symphony orchestra, jazz combo, harpsichord, and organ. Many scholars believe that Bach actually meant the work for organ, some that he meant it for harpsichord, even though the posthumous title-page says neither. The first edition was published in open score, that is, with a separate line for each voice. This was an old Italian and German way of presenting keyboard music used, for example, by Samuel Scheidt in his *Tabulatura Nova* (1624). It was certainly not the standard keyboard notation in 1750, but Bach had used it shortly before, in his *Canonic Variations* BWV 769. The surviving autograph manuscript of *The Art of the Fugue* is in standard two-staff keyboard notation, which was used, in eighteenth-century Germany both for organ music and for other keyboard music. The contrapuncti all fit very well under two hands and two feet, and with some difficulty under two hands alone. The pedal parts work as pedal parts: that is, they can be learned using the kinds of pedal technique known to Bach and his students, and when so learned they are comfortable (though occasionally challenging) to play. This would not be true of the bass lines of Bach chamber works or harpsichord works, by and large. The editors of the first edition chose to include a short additional piece by Bach, to compensate the purchaser for the incomplete state of the last movement. The piece they selected was an organ chorale, which they also presented in open score. It is thus likely that they assumed that the users of the work would be organists, even though they did not say so on the title page. It is also quite possible that Bach himself wanted musicians to use their own judgment as to how the piece can be realized in sound.

B-A-C-H

The third subject of the last movement of *The Art of the Fugue* is made up of notes which, in the standard German musical nomenclature, spell the name “Bach” (see example 27). In the German system, B-flat is called B, and B-natural is called H. Bach was apparently well aware throughout his life that the letters of his name made a plausible musical theme—in fact it was certainly known to his musical ancestors as well—but he used it sparingly in his music. In fact, the only extensive use he made of it was in *The Art of the Fugue*. The final appearance of the B-A-C-H theme as the subject of a powerfully climactic fugue in Contrapunctus 18 is prepared by a chain of musical developments running through the whole work. This chain is best followed retrospectively. Before Contrapunctus 18, the B-A-C-H theme appears in Contrapunctus 11. Here, the four relevant notes form part of a lively and insistent eighth-note motive (example 16). They do not stand on their own, but they are clearly present. This eighth-note motive, however, is an inversion of one of the main themes of Contrapunctus 8. That movement is thus revealed to have contained the B-A-C-H theme in a highly disguised form. The motive also occurs in once in Contrapunctus 8, casually, that is, without repetition or development, in the bass voice at m. 143, transposed up a whole step. The first appearance of the B-A-C-H theme in the work occurs at the end of Contrapunctus 4, where the four notes form part of an otherwise meandering free chromatic countersubject to the main theme. This serves to underline the essential chromaticism of the B-A-C-H theme, and to tie that theme explicitly to all the other chromaticism in *The Art of the Fugue*. The seeds of all the chromaticism in the work, and thus the seeds of the B-A-C-H motive itself, are found, as explained above, in the initial statement of the main theme itself. The four contrapuncti in which the B-A-C-H theme is found (4, 8, 11, and 18) are, by a considerable margin the four longest movements in the work, and each of the four is longer than the last.

Notes on the Individual Movements

Contrapunctus 1 is a four-voice fugue on the original, and simplest, form of *The Art of the Fugue* theme (ex.1). There is no regular countersubject. The mood is forthright and powerful, but with underlying calm.

Contrapunctus 2 is a four-voice fugue on the same theme, except that the last notes are changed from eighth-notes to dotted eighths and sixteenths (ex.2). This dotted rhythm pervades the piece. The sounds jump rather than flow from one beat to the next. The effect is, at least intermittently, unsettling. The dotted rhythms convey a suggestion of French musical style, though the piece is not fully worked out in that style.

Contrapunctus 3 is a four-voice fugue on the inversion of the original theme (ex. 3). The piece moves slowly and gently, and the mood is quiet. The subject is accompanied (after the first entrance, of course) by a chromatic countersubject loosely derived from the subject itself (ex. 4). This countersubject also provides a short motive (ex.5) on which two episodes are based. This motive will return later on the work. In m.23 the subject enters in a new form: with passing tones (ex. 6). Although it is abandoned in the next movement this will become the most important form of the theme later on.

Contrapunctus 4 is also a four-voice fugue based on the inversion of the main theme (see ex. 3). The theme is accompanied by a short chromatic motive, more explicitly dissonant than that of Contrapunctus 3 (ex.7). The movement is also characterized, however, by long episodes of almost exaggerated consonance. These are based mainly on a simple two-note descending third

(which can be heard as a reference to the thirds in the original, non-inverted, theme, although that theme is not explicitly present in this movement) and a four-note stepwise fourth, both ascending and descending, which is derived from the last four notes of the main theme, in both its inverted and non-inverted forms. There are several lushly beautiful internal cadences, almost hypnotic in their effect. The last measures conceal a single reference to the B-A-C-H motive.

Contrapunctus 5 opens with a statement of the inverted theme with passing tones, introduced in Contrapunctus 3. This is joined, before the end of the theme, by the non-inverted theme with passing tones in the bass (ex.8). This over-lapping of themes, called “stretto” by theorists of fugue-writing, is by no means characteristic of the opening of a fugue. Nor is it characteristic for the second subject entry to be an inversion rather than a transposition of the first. This is a gesture of union of the two essential forms of the main theme. They are the opposite of each other, but they can be joined together. In measure 53, an even closer union is suggested with a four-voice stretto at the interval of one quarter-note. The inverted and non-inverted themes, however, are treated to this process separately (mm.53-57 and 65-69)! The mood of Contrapunctus 5 is alternately urgent and dreamy, or perhaps both at once. In the last measures of the movement the two versions of the theme are heard simultaneously, somewhat concealed by an unexpected six voice texture.

Contrapunctus 6 is marked “*in Stile Francese*”. Thus it realizes the suggestion made by Contrapunctus 2. It is not easy to define what the “French style” is. For the purposes of this piece, however, it is enough to recognize that it involves the use of dotted rhythms, very fast short runs, and moderately fast longer runs. It also aims to create a feeling of power and grandeur in the context of rather static (non-flowing) rhythm. Native French pieces in this style would never have been fugues, so Bach was doing something new. This piece, like the last, opens with a stretto, at the interval of only one measure. The impatient quality of the second voice, created by its insistence on coming in early, is here intensified by the fact that it comes in “too fast”, that is, in diminution. The very rapid four-note runs, heard from m.7 on, are a standard characteristic of the French style, but they can also be seen as a double diminution of the last four notes of the main theme.

Contrapunctus 7 is a fugue on the main theme, with passing tones, both inverted and not, and on the diminution of these themes. To this is added the theme in augmentation (ex.9) which is heard first in the bass, and once in each voice. Almost every note in this contrapunctus is derived directly from the theme, by augmentation, diminution, or double diminution. The effect is one of extreme concentration and intensity, but also of rather jovial power and good humor.

Contrapunctus 8 opens with a short fugue exposition on a brand new theme, not derived in any way from what has come before (ex.10, but see under Contrapunctus 18, below). After several short episodes and a cadence in the tonic, a second exposition begins, based on the same theme and another brand new theme (ex.11), simultaneously. (This is marked in this evening’s performance by the first change of sound within an individual contrapunctus.) These two themes work themselves out with increasing intensity and exuberance, until they are joined (in a somewhat hidden manner, that is, in an inner voice) by a new version of the main theme (ex.12). The intensity and exuberance – the latter quality created mainly by the almost exaggerated repetitions of the second theme (ex.11) – continue to the end.

Contrapunctus 9 is a fugue on a new subject (ex.13) which is loosely derived from the main theme. Whereas Contrapunctus 8 opened with a descending whole-step (see ex.10) this movement opens with an upward leap of an octave. This is a contrast, and the fact of this contrast is itself a contrast to Contrapuncti 1-7, all of which opened with the interval D-A or A-D. Contrapunctus 9 is a lively, flowing piece in which exuberance, though present, is restrained. The main theme enters in augmentation in the soprano voice in m.35 and is heard several times thereafter.

Contrapunctus 10 opens with a fugue exposition on a subject (ex. 14) whose rhythmic and melodic peculiarities create more of a sense of expectation than of fulfillment. The expectation is

met with the entry of the main theme in the soprano voice in m.23. What follows is a fugue on this subject, in which example 14 serves as a countersubject. So many new motives are introduced, developed briefly, and then abandoned, that the movement becomes a celebration of fecundity (or perhaps of profligacy!) The countersubject (ex.15) which appears in mm.22-26, and does not appear again in this movement, will supply the subject of the second section of Contrapunctus 18 (see below),

Contrapunctus 11 is the centerpiece of *The Art of the Fugue*. It is probably the most complex contrapuntal creation of J. S. Bach, as well as one of the most deeply and powerfully expressive. It is a contrapuntal fantasy making significant use of at least ten different themes, and including five fully worked out fugue expositions. It is related to what has come before and what will come after in more ways than it is possible to describe. All of the thematic material is taken from earlier contrapuncti, mostly from Contrapunctus 8, but also at least from 3 and 10. The richness of thematic material is reminiscent of 10, while the compactness with which it is used is reminiscent of 7. The sectional construction is reminiscent of 5 and 8. The compellingly powerful cadences suggest number 4. The most powerful of these cadences is followed by the introduction of the B-A-C-H theme, which looks forward to Contrapunctus 18 and also back to number 8 (see above under B-A-C-H). At m.158, the main theme and its inversion are again, as in Contrapunctus 5, united in absolute simultaneity, this time without the concealment that marked this event in the earlier movement. The form of Contrapunctus 11 is as follows. It opens with a fugue exposition on the main theme, with passing tones and altered rhythmically as in Contrapunctus 8. The opening rhythm is the same as that of Contrapunctus 10. Following a cadence in m.27 there is a loosely constructed fugal exposition on the two new themes: the inversion of the first theme of Contrapunctus 8, and a chromatic theme filling out the interval of a fifth. These themes are joined by a motive taken from Contrapunctus 3. This section ends with a cadence in mm.70-71. The next section is a short fugal exposition on the inversion of the opening theme, in which the motive borrowed from Contrapunctus 3 is also used. In m. 89 there begins a long, rather freely constructed fugue based primarily on the new eighth-note theme which incorporates the B-A-C-H motive. All of the thematic material which has been introduced so far in this movement participates in this section, which lasts until m.158. At this point *The Art of the Fugue* theme and its inversion enter simultaneously in the soprano and alto, and then in the tenor and bass. The remaining thirty bars are concerned with a limitlessly joyous uniting of themes in all possible combinations. The main theme appears for the last time (in this movement) in the soprano in m.180. The last note of this theme is also the last note of Contrapunctus 11 (see ex. 16 for all the thematic material of Contrapunctus 11).

At this point, power, grandeur, complexity, repetition, development, and intensity have gone as far as they can. The next four movements are relatively short, quiet, and simple, though not any the less expressive. They are strict canons in two voices. **Contrapunctus 12** is a **canon at the octave** based on an ornamented version of the main theme in triplet sixteenth-notes (ex.17). It is a good-humored, even humorous, piece. **Contrapunctus 13** is somewhat darker in mood. It is a **canon at the twelfth**, based on a close variant of the main theme (ex.18). Its rhythmic interest comes from an alternation between triplets and duple rhythms. **Contrapunctus 14** is a **canon at the tenth**, based on a completely straightforward version of the inverted main theme. This is accompanied by a quiet, rather wistful triplet figure (ex.19). **Contrapunctus 15** is a **canon by augmentation in contrary motion**. That is, the second voice enters with an inversion of the first voice, at half speed. The second voice falls progressively farther behind, and by the end it has presented less than half the musical material of the first voice. As if to be fair, Bach has arranged the work in two sections, with the upper and lower parts changing roles halfway. This canon is based on a chromatically altered version of the main theme (ex.20). The effect is rather weird, both disquieting, and humorous.

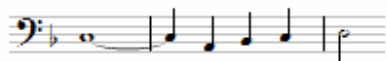
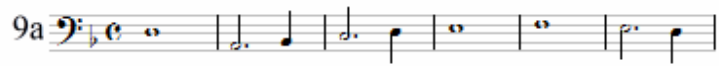
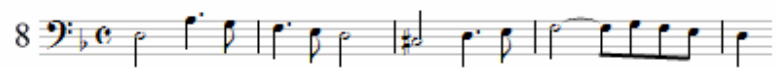
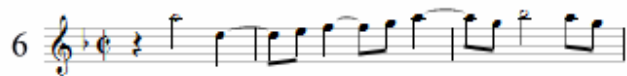
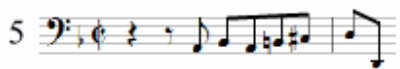
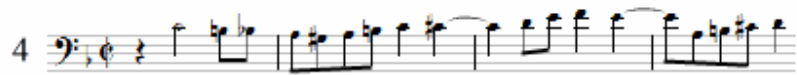
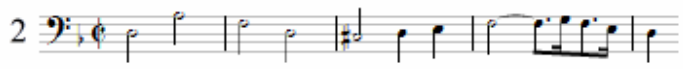
Contrapunctus 15 reintroduces principle of inversion which was so important through number 11. Contrapuncti 16 and 17 carry this principle farther than before. Each is in two sections, and, in

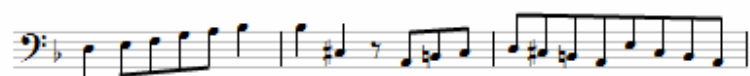
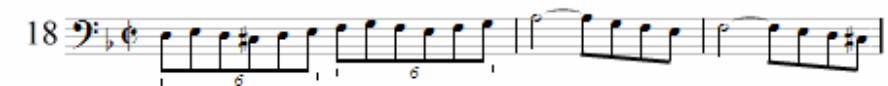
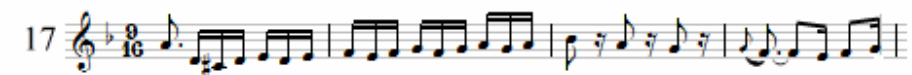
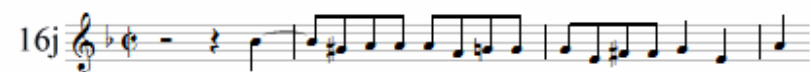
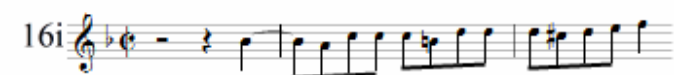
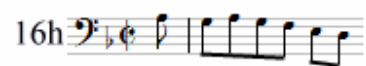
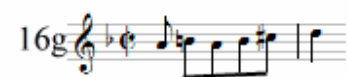
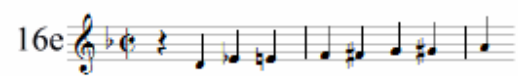
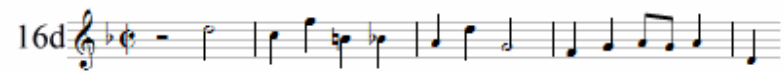
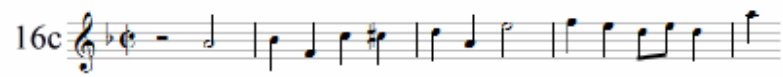
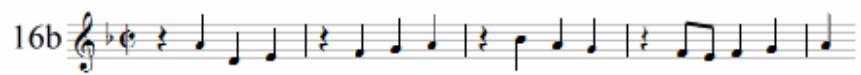
each case, the second section is a note-by-note inversion of the first. These are contrapuntal *tours-de-force* of the highest order, all the more so since in both cases the inversions sound just as natural, spontaneous, and free as the original forms. **Contrapunctus 16** is in three voices, and based on a triplet version of the main theme, reminiscent in different ways both of Contrapunctus 9 and of Contrapunctus 12 (ex. 21). The style is that of a moderately lively trio-sonata movement. **Contrapunctus 17** is a four-voice fugue based on a version of the main theme which is identical to the original version (ex. 1) except that it is in triple time (ex. 22). The texture is very thick. With many voice crossings, the contrapuntal nature of the work is somewhat obscured. The mood is dreamy and brooding. In m. 21 a new version of the subject enters (ex. 23), which is derived from a short countersubject figure (ex. 24) which was, in turn, derived from the last four notes of the subject itself. Each half of the work ends with a flourish in sixteenth notes.

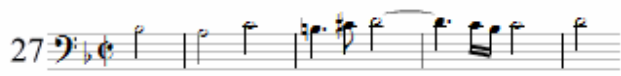
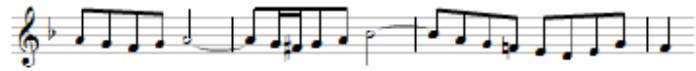
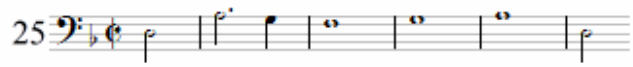
Contrapunctus 18, the last movement of *The Art of the Fugue* is a monumental work, surpassing even Contrapunctus 11 in scale, and equaling it in expressive power. It was left incomplete. Bach died either before he wrote the ending down, or before he was even able to conceive of an appropriate ending to a work of this stature. In its present form, the movement has 239 measures. Any formally adequate continuation and ending would bring the length of the work to over four hundred measures, making it by far the longest fugue from the Baroque era. This, however, was not to be.

The movement opens with a fugue in four voices on an apparently new theme (ex. 25). The first four notes of this theme, however, are identical to the first four notes of the main theme (with passing tones). After the fourth note the theme doubles back on itself, in an allusion to the mirroring process whereby the previous two movements were created. Thus this theme is a version of the first half of *The Art of the Fugue* theme. This new theme can also be derived directly from the second half of the first subject of Contrapunctus 8 (see ex. 10). Furthermore, the very first two notes of Contrapunctus 18 are an exact echo of the last two notes of Contrapunctus 17; and the whole of example 25 is essentially the same as the flourish which ended the first half of that movement. The fugue built on this subject—one of extraordinary grandeur—last 115 measures. It overlaps with a new fugue on a new subject (ex. 26). This subject is derived, closely from a theme which was introduced briefly in Contrapunctus 10 (see above and ex. 15). It also includes, on strong beats, all of the notes of the main theme which are missing from the first theme of Contrapunctus 18: it completes that theme. This fugue is more lively in character than the first fugue. The first theme does enter, however, five times as a kind of *cantus firmus*. The last two such entries are in *stretto* with each other. This fugue ends in m. 193. A third fugue now begins, on the B-A-C-H theme in the simplest, most straightforward possible form (ex. 27). This section brings a return to the majestic quality of the first section, but it is much shorter. In m. 233 it gives way to a return of the second subject in (partial) *stretto* with itself. This is joined one measure later by the first theme in the bass, and, one measure later still, by the B-A-C-H theme in the tenor. The three themes are united; the main Art of the Fugue theme is present only by implication or by transfiguration. At this moment the work ends. There is no cadence, no resting place. It ends as abruptly as could be. We are challenged to accept that the meaning, quality, and completeness of a work of art, as of a human life, do not come from the timing or nature of its end, but from what it is and what it does.

Examples below:







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