

## Notes on the organ, instrument and interpretation

The three organs available to Johann Sebastian Bach in the course of his career were average for the time, with a maximum of some thirty stops on two keyboards, and pedal board - Arnstadt : 23 stops ; Mülhausen : 29 stops ; Weimar : 23 stops. Unfortunately, as noted by his son, Carl Philipp Emanuel, «Expert as he was, he never had continuous use of a truly extensive, truly fine instrument» (1). It is easy to imagine, therefore, the joy he must have experienced when playing (among others) on the Hildebrandt organ in Naumburg (53 stops, three keyboards), and especially the Arp Schnitger organ at Saint Catherine's in Hamburg (58 stops, four keyboards). Johann Friedrich Agricola reports «The late J.S. Bach, Kapellmeister, in Leipzig, who once spent two hours playing on this instrument, called it excellent in every way, praising the beauty and variety of its reed-stops» (2) (this organ disappeared during World War II). Carl Philipp Emanuel Bach also tells of his father speaking with heartfelt nostalgia of the instruments in the North he had seen in his youth. Although modest in comparison, the Trost organ at Altenburg (39 stops, two keyboards) is often adduced as exemplary, especially for its Neidhardt I temperament, which Bach greatly appreciated.

The outstanding quality of the Groningen organ is precisely this brilliant *tutti* range, its delicacy and luminosity of detail, its elegance and accuracy, all combining to produce an aura of poetry. These are the same qualities we find in Flemish painting, as well as in the transparent air shines with the landscape's natural light, shifting with the season and the time of day, leaving not untouched. Surely the northern Schnitger Martinkerker organ - with the richness and variety of its timbre, its wide range (53 stops, three keyboards), its authentic style and workmanship, and the slight unevenness of its Neidhardt I temperament - is just the kind of large, beautiful instrument Bach would have wished for. It is also perfectly suited to the chamber music works on this recording.

For example, the fast movements of a sonata or a concerto are played with the same stops (or "interpreters"), with a few exceptions for the concerto *ripienos*. Sonatas II, V, and VI are conceived as concertos, each with its own individual character (the word "concerto" applied at the time to works for three soloists as well as to those for antiphonal instrumental groups). Sonatas I, III, and IV on the other hand, are more intimate trio forms.

On the Groningen organ, the Bovenmanual (3rd keyboard) is outstanding. Its great precision is crucial to the sonic balance of the trio, sometimes even more so than for the Hoofdmanual (2nd keyboard), with the Rugpositief (1st keyboard) serving - by definition - as the foreground. The pedalboard, lastly, provides the underlying context. This spatial differentiation brings out the melodic lines of the sonatas, offering extensive possibilities to the performer. For varying tone color and "voice", the repeats of the slow movements provide occasional opportunities to switch keyboards, thus shifting the spatial perspective as well.

On the northern organ, stops can be used alone or together for exploiting a wide variety of possibilities. The Netherlands may never have had a Dom Bédos, but documents attest that it was customary to add a muted reed to some basic stops. The Groningen organ not only provides performers with a marvelous "sound", to which the artistic intuition immediately responds, it also facilitates precision detailing and elimination of the slight drag sometimes encountered with reeds, a problem familiar in other parts of the world. A single reed can sometimes sound too "thin" in an otherwise full-blown burst of sound.

Groningen also offers a number of composite possibilities (pipe stops, a mute reed and a mutation) for more distinctive harmonics, including a da caccia oboe, oboe d'amore, and baroque bassoon tone. The keyboard also has a horn-like tone in the bass up to middle-C, available without pulling out the trumpet stop.

A mute reed added to a mixed *plenum* - another possibility brings out the individual voices in the polyphonic structure in an extraordinary way, especially in the mid-keyboard range. If we examine Bach's method of orchestration, we see he uses oboes in unison with the violins, or combines the bassoon with the bass section in a string ensemble. This rich blend is a major characteristic of the baroque orchestral style.

The mutations, especially the third, serve not only a solo function, but can also be added to the mixtures, the reeds, or to both of them at once. This provides relief, vivacity, and exceptionally lovely tone color ; note that in the rococo period, the third is often added to the mixtures.

Looking further, still from the perspective of chamber music, we see that “string” effects - “*imitatio violistica*”, in Scheidt’s words - and woodwind, brass, and vocal effects added a special dimension to the organ’s essential quality as a wind instrument.

Once the performer has hit his stride in terms of tempo - even if only abstractly at times - he must then deal with acoustic considerations. The tiniest detail must be audible, and every organ requires individual treatment in terms of tempo, technique, and touch.

The C major Concerto BWV 594 is an extremely interesting case. When we look at Vivaldi’s score (RV 208), we see that Bach, constrained by the keyboard limitations of his time, was forced to transcribe into the key of C a work originally written in D, so as not to “run off the end of the keyboard”. In the process, he placed the solo sections of the three movements - including the cadence - an octave lower than in the original. In order to achieve the proper pitch (tessitura) for the soloist - something that Bach always respected in his transcriptions - the Rückpositif register is based on a 4’, rather than a 8’, stop (3). This may actually sound better to the ear, however, since the work gains in flow and clarity.

Although Bach was careful to indicate the 4’ register at the beginning of the D minor Concerto BWV 596, also transcribed from Vivaldi (RV 565), and, for the reason described above, the soloist-keyboard tessitura as well, he did not do so for the “Grosso Mogul”. Did he “forget”, or did he simply not bother to write in something all contemporary performers were assumed to know? The question remains unanswered to this day.

Contrary to custom and tradition, the fifth section of the Canonic Variations - a stunning apotheosis of the “Gravura” version - begins in the same powerful mood as the peroration (with the chorale entrance perfectly clear, unassisted by supplementary stops). There are two reasons for this : first, the perfect symmetry between scoring and conception (form and idea) characteristic of Bach at his peak ; and, second, the no less perfect symmetry between the form, the inherent quality of the instrument, and the style.

## Notes on the Canonic Variations

The Canonic Variations belong to that tiny core of western music that is truly miraculous, combining intellectual discipline and peerless skill for a result that is pure poetry of the highest order. With text and lyrics by Luther, the chorale “Von Himmel hoch, da komm’ ich her” had been set many times before Bach put his hand to them. Scheidemann has left an admirable suite of four variations, and Bach himself had worked on them previously. But none of these settings came near to matching the perfection evident in this masterpiece, the consummation of a centuries - old musical tradition. Kirnberger and Schulz have put their own stunned admiration on record : «The highest form of variation is surely that in which each repeat contains the imitations and canons in double counterpoint. J.Seb. Bach has given us a keyboard melody with thirty variations treated in exactly this way ; and he has done the same for the hymn “Von Himmel hoch, da komm’ ich her”, which is universally regarded as the apogée of the art. What we most admire in this work is that for each variation, the amazing harmonic transformations are almost always linked to a lovely, flowing melody» (4).

An admirer nearer to our own time is Stravinsky, who in 1956 transcribed the work for chorus and orchestra, using the same title, but not the same key structure as Bach had done. The five variations, all originally in the key of C Major, were “decanted” by Stravinsky to C, G, D flat, G and C, respectively, and preceded by a four-part version of the chorale. In order, no doubt, to assuage any feelings of guilt he might have had, Stravinsky appended to the score, under his own signature, the acknowledgment : “Mit der Genehmigung des Meisters” (with the kind permission of the Master...).

Another contemporary admirer is Pierre Boulez, and his “Moment de Jean-Sébastien Bach” (1951), later incorporated into “Relevés d’apprenti” (1966), and with “La conjonction Stravinsky/Webern” (“Points de repère”, 1981). A few measures from the third “Gravura” variation are a unique quotation from Bach in his essay on Paul Klee, “Le pays fertile” (1989).

The chorale appears throughout the five variations, a tonal "object" serving sovelly as the "pretext" for the contrapuntal permutations and combinations. It is stripped of its liturgical connotation, becoming a philosophical, musical "dissertation" progressing logically towards its culmination. There is no superfluous element anywhere ; every note has "its" ordained place, as Bach himself had "his" (14th) in the Mizler Society.

The piece represents the summit of the contrapuntal art, absolutely devoid of the kind of pedantry against which, éach in his own time, both Vincenzo Galilei ("Dialogo della musica antica e della moderna", 1581) and Descartes ("Compendium Musicae", 1618) railed. By a strange coincidence, an original manuscript copy of the Descartes work is held by the University of Groningen Library (Ms.108).

The close relationship between Leibniz's philosophical speculations and Bach's mathematical ones has been remarked upon by Jean-Jacques Duparcq (5). The roots of Bach's work are sunk deep into the past, and there is one area in particular in which the composer represents an extension of the science that preceded him - the science of numbers. In the Middle Ages, music formed part of the *Quadrivium*, which also included astronomy, arithmetic, and geometry. Bach's fascination with the mathematics - along with rhetoric, of which he had numerous personally annotated volumes in his private library - was a lifelong one. His interest in numerical symbolism obviously stretched far back into his own past.

It would be highly misleading, however, to overemphasize the intellectualism of this great composer, who in his own time was known for the violence of his passions. In the words of his son, Carl Philipp Emanuel, «my late father, like myself and like all true musicians, was no friend of sterile mathematicism for its own sake» (6). Bach was fascinated with numbers all his life, and perhaps increasingly so as he grew older ; but to this, as to his other passions, he gave himself body and soul. Boulez rightly points out that «Bach is the man who wrote the Passions : we must never forget that» and «It takes more than formal beauty to arouse the emotions» ("Moment de Jean-Sébastien Bach").

Bach actually arouses ecstasy with his vertiginous polyphony. François Florand refers to «the inner build-up of energy, of emotional force, until composer and listener alike are filled to overflowing, intoxicated (...) This is far from crude or aggressive and yet, there comes a moment when it seems as though the composer's own head must have spun as dizzily as ours. *Es schwindelt...* And this is the climax of the work (...). But Bach's intoxication is clear-headed, his ecstasy conscious, his abandonment deliberate and always controlled by a creative imagination and rational intelligence that never flag» (7).

Johann Sebastian Bach never seems more human than when he slips himself into his music. Like Dürer, who painted himself (among others) into the bottom righthand corner of his "Adoration of the Holy Trinity" with his famous monogram (the "D" inside an "A"), Bach signed this work, as he did many others, with the letters B.A.C.H : B-flat, A, C, B-natural, in the fourth and fifth Canonic Variations.

Kees van Houten and Marinus Kaspergen's stimulating study on "Bach and Numbers" (8), following an initial contribution by musicologist Friedrich Smend, "J.S. Bach by name" (9) provides the most recent information on the subject of Bach and numerology. It also has the advantage of sweeping away some previous assumptions and advancing the daring but solidly supported hypothesis that the composer was a believer in Rosicrucianism. The two authors thoroughly analyze a number of works from this perspective, including the Trio Sonatas and the Canonic Variations. They conclude that Bach "knew" the date (day, month, year) his own death would occur in the Rosicrucian era. They claim that the Cantata "Gott ist mein König" (BWV 71), written when he was only 22/23 years old, already contained this esoteric apprehension of his own lifeline.

Nothing will ever provide us with all there is to know about this great composer, or even all we would like to know. But this information could provide us with another approach to his life : "Bach the Grand Initiate", Orpheus of the Universe.

- (1) Carl Philipp Emanuel Bach & Johann Friedrich Agricola, Nekrolog auf Joh. Seb. Bach, "Musikalische Bibliothek", Leipzig 1754.
- (2) Johann Friedrich Agricola, "Musica Mechanica Organoedi", Berlin 1768.
- (3) Luigi Ferdinando Tagliavini, Bach's Organ Transcription of Vivaldi's 'Grosso Mogul' Concerto, "Bach as Organist", Indiana University Press, Bloomington 1986.
- (4) Johann Philipp Kirnberger & Johann Abraham Peter Schulz, "Allgemeine Theorie der Schönen Künste", Leipzig 1771.
- (5) Jean-Jacques Duparcq, Contribution à l'étude des proportions numériques dans l'oeuvre de Jean-Sébastien Bach, "La Revue Musicale", Paris 1977.
- (6) Letter to Forkel, Hamburg 13.1.1775.
- (7) François Florand, Jean-Sébastien Bach, "L'oeuvre d'orgue", Ed. du Cerf, Paris 1947.
- (8) Kees van Houten & Marinus Kaspergen, "Bach en het getal", De Walburg Pers, Zutphen 1985.
- (9) Friedrich Smend, "J.S. Bach in seinen Namen gerufen", Bärenreiter, Kassel 1950.