

The Inventions and Sinfonias

(BWV 772–801)

The *Inventions and Sinfonias* is a collection of short pieces Bach wrote for the musical education of his young pupils. These are among the finest examples of artistic gems ever written for this purpose, and probably because of this, they became very popular among Bach's pupils and others ever since they were written.

The work comprises fifteen two-part, each named 'inventio', and fifteen three-part pieces, named 'sinfonia'. These two groups of pieces are arranged in an identical fashion—in ascending order by key—so that there is little doubt that Bach's intention was to bring them together as a single work. This is also confirmed by the way they are carefully written in his autograph fair copy penned in 1723. On every facing page of an open volume each piece demonstrates the contrapuntal technique, while, at the same time, explores a wide range of musical expressions using various styles and developing the motives in a logical fashion.



Inventio 1

Like the *Well-Tempered Clavier*, the *Inventions and Sinfonias* did not appear in print during his lifetime. Nevertheless, it was widely disseminated in manuscript copies even before its first publication in 1801 and ever since the work has been widely used for the teaching of young musicians. At the present time, however, some concerns are expressed frequently regarding its proper use, as to what extent Bach's intentions are being understood correctly. It is sad to discover that the work is often regarded as a dry, technical exercise for the independence of two hands. In order to enjoy the real benefit from this highly renowned teacher, one ought to make every effort to try to understand his music wholeheartedly by searching for Bach's sense of judgement. Only by succeeding with this enquiry, can one learn from this work a universal principle of music, which, in turn, gives us a sense of true appreciation of music as

well as encouragement for further study.

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Title and Its Historical Background

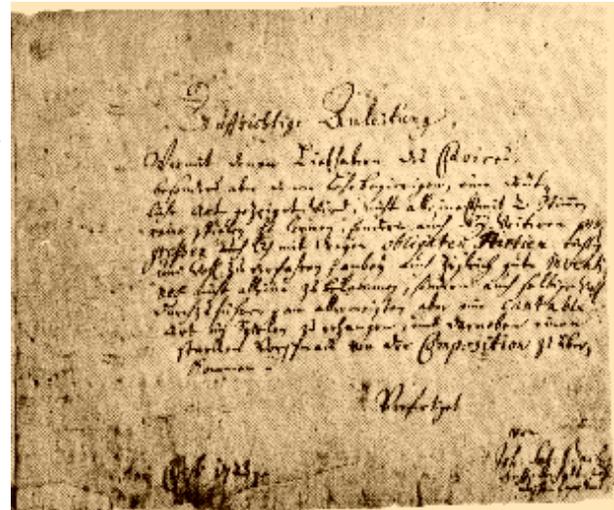
The autograph fair copy in the Staatsbibliothek zu Berlin begins with the following description of the work:

Straightforward Instruction,
in which amateurs of the keyboard, and especially the
eager ones, are shown a clear way not only (1) of
learning to play cleanly in two voices, but also, after
further progress, (2) of dealing correctly and
satisfactorily with three *obligato* parts; at the same
time not only getting good *inventiones*, but developing
the same satisfactorily, and above all arriving at a
cantabile manner in playing, all the while acquiring a
strong foretaste of composition.

Provided

by
Joh. Seb. Bach:
Capellmeister to
his Serene Highness the
Prince of Anhalt-Cöthen.

Anno Christi 1723.



In it Bach uses the word '*inventiones*', where, it goes without saying, there is an element of play on words, as it is used as the title for the following 15 pieces. In today's musical world this word means this work by Bach, as it became so famous. The word originally belonged to the term in rhetoric, and here Bach used to describe the idea that could be used as a compositional theme. Thus the 'straightforward instruction' presents a specimen answer to the proposition as to how one can discover a good musical idea for a piece, and how to develop that into a full-scale composition. When providing such pieces for his pupils, Bach expected those who studied performance to leap from the stage of technical finger exercise to a more musical approach, and those who studied composition to acquire an effective method of finding ideas and developing them.

Traditionally, this concept of 'invention' denoted an important stage in composition; it originated from a famous Roman orator, Marcus T. Cicero's rhetoric, which was still widely studied in the 18th-century Germany. In his *De Inventione*, Cicero listed five stages in creating an oration, namely invention (*inventio*), arrangement (*dispositio*), style (*elocutio*), memory (*memoria*) and delivery (*pronuntiatio*). He explains, 'one must first hit upon what to say; then manage and marshal his discoveries, not merely in orderly fashion, but with a discriminating eye for the exact weight, as it were, of each argument; next go on to array them in the adornments of style; after that keep them guarded in his memory; and in the end deliver them with effect and charm.'

The concept of orator's invention and delivery was applied more or less directly to the composition and performance in music. We can find examples of this approach to music as early as the music theory of 17th-century Germany. Christoph Bernhard (1627–92), for example, observed that 'there otherwise belong to composition three things: *inventio*, *elaboratio*, and *executio*, which display a rather close relationship with oratory or rhetoric.' Such definitions of the process of musical composition continued to be a hot target for debate; among the contemporaries of Bach, one can find such names as Johann David Heinichen (1683–1729), Johann Mattheson (1681–1764) and Johann Adolph Scheibe (1708–76), whose discussion resulted in the redefinition of the processes. So, in addition to the discovery of 'good invention', the concepts of arrangement and stylistic development are now recognised processes. On this newly founded tradition it is now possible to interpret Bach's 'straightforward instruction' where he promotes the acquisition of good invention and its felicitous development in practice. Indeed, Bach's elegant display of his simple and lively motifs that are developed logically and in various ways within the restricted time space can be nothing but the finest example of rhetorical disposition in music.

In this title-page, we find Bach's detailed directions on using the 'straightforward instruction'. When viewing them from the circumstances of Bach's life, one can envision his intentions more vividly. The word 'straightforward' (*auffrichtig*), for instance, has connotations of both 'candid' and 'sincere', each representing Bach's clear purpose for and strong faith in his pupils who are about to learn these pieces with serious intent. In Bach's wording one may also feel his solemn attitude, who follows the tradition of Lutheran orthodoxy. Nonetheless, such an elaborate use of language in the title-page was customary in those days for the published treatises, and so it seems reasonable to assume that it is Bach's public statement.

Bach then moves on to mention the performance technique of two-part writing, and when it was accomplished satisfactorily, he says, one is allowed to proceed to the three-part exercises. This 'two-part first' approach is, in fact, rooted in the educational tradition from Luther's days, as it can be seen in the works of Georg Rhau (1488–1548), who once served as the Thomascantor in Leipzig. In the preface of his polyphony music *Vesperarum precum officia* (1540), Rhau states 'it had always been his desire particularly to assist schoolboys by providing them with materials through which they might praise God and learn the truths of the Scriptures, and through which they might also love and study the honourable discipline of music.' One may notice hereby the same reference given to the style, compositional techniques and the purpose of education, all of which are also present in Bach's *Inventions and Sinfonias*.

The concluding remark on 'cantabile' manner of performance may sometimes be confused with the legato phrasing technique of the 19th-century composers, and so one should be a little cautious in interpreting within the early 18th-century performance practice. As singers are required to pronounce clearly with a view to conveying the meaning of words, it should mean that keyboard players must also

provide clear articulation according to the character and affection of individual motifs. This is the essence of contrapuntal music whereby the independence of each voice results in the harmony; this is indeed one of fundamental concepts of composition.

The expressions used in the title-page of *Inventions and Sinfonias* is thus deeply rooted in history, through which we must learn and appreciate accordingly Bach's time and his reactions.

Origin and Process of Revision

In discussing the origin of *Inventions and Sinfonia*, there is an earlier collection by Bach, which we cannot ignore: it is the *Clavierbüchlein* for Wilhelm Friedemann Bach. The date given at the back of the front cover 'on 22 January Anno 1720' undoubtedly indicates when Bach started teaching his eldest son formally; Friedemann was exactly 9 years and 2 month old.

The instruction by his father seen here is organised systematically and thoughtfully, which is most impressive of its kind. Bach began the lesson with Friedemann by teaching him how to read music, followed by the realisation of ornaments and the application of fingering. On the first piece entitled 'applicatio', Bach wrote above it 'J.N.J' (In Nomine Jesu = in the name of Jesus). Although this dedication was a common practice of his day, it also indicates Bach's serious and even passionate attitude to his son's education. This collection contains 62 little pieces. The first half consists of pieces focused on finger exercises where we also find simple chorale preludes, suites, and the 11 preludes that were later expanded and integrated into the *Well-Tempered Clavier* (1722).

The early version of fifteen *Inventions* (entitled here as 'praeambulae') starts at the 32nd, which is about the half way through the collection. Then follows the suites by Georg Philipp Telemann (1681–1767) and the partita by Georg Heinrich Stölzel (1690–1749) before the early version of fifteen *Sinfonias* (entitled here as 'fantasias') that closes the collection. The manuscript, which is currently held in the Yale University Library in Connecticut, USA, is in such a fragile condition that the spine of the volume is damaged; probably for this reason the last two leaves are now missing where must have been accommodated the second half of the *Fantasia* No.14 and the entire *Fantasia* No.15.

By examining the collection carefully as a whole, one may deduce the progress that Friedemann had made in his performance techniques. In the second half of the collection particularly, one may associate the early versions of *Inventions and Sinfonias* with Bach's intention to introduce 'real counterpoint' to Friedemann who, by then, has already accomplished basic performance techniques. Others may also infer that Bach wanted to write a collection of systematic *études* gaining hints from the *Well-Tempered Clavier*, which was also being prepared simultaneously. In fact, it cannot be a mere coincidence that the 31st piece of the collection, which preceded this early version of *Inventions and Sinfonias*, is the only fugue (BWV 953) in this book. This fugue was written with Bach's more mature handwriting, from which one could deduce that it was later added in one of the unused pages. What is intriguing about this is that the counterpoint is the main feature of the second half of this book. If we look at this notebook from this angle, we would find a symmetrical structure, the concept of which we often find in Bach's works.

Actually this concept of symmetry is present in the fifteen *Praeambulae* if we look closely: the out-most pieces (i.e. Nos.1 and 15) are written in duple metre, and the next pair (i.e. Nos. 2 and 14) are

in triple, and so on, although the same layer structure is not present in the fifteen *Fantasias*.

A different system can also be found when looking at them from a different angle. If the fifteen *Praeamlulae* are examined from the points of compositional techniques and styles, it is obvious that they are organised in threes; the first group (C, d, e) uses the scale-based subject, followed by the arpeggiated tonic triad (F, G, a) and long-breathed subject with a counter-subject (b, B-flat, A). It seems very likely that this attests to Bach's process of developing the collection, though it is also possible that it reflects faithfully Bach's intended order of teaching the subject matter.

A closer examination of this notebook gives further insight into how it was written and compiled over many years. Except for a few pieces copied by Friedemann, all the pages were filled by Bach. The majority of these comprise his draft scores and non-fair copies in which various traces of corrections, reflecting Bach's active mind with the music at the time of writing, can be identified. There are many traces of later revisions, too. In such pieces as *Praeamlulae* in C minor and G minor, we can confirm how Bach modified the shape of the subjects themselves, from which it can be deduced that Bach could be critical of his own compositions.

These revisions were entered in an early compositional stage, as it can be ascertained from the context. Yet Bach also revised the piece when he was writing the fair copy of the *Inventions*. For instance, the *Inventions* Nos.7 (e) and 13 (a) are both 21 bars long in their respective early version, consisting of three phrases of equal length. In the final version, the third phrase received different treatment, as a result of which they were extended into 23 and 25 bars respectively. In other pieces, too, many small revisions were made, the process being completely different from a procedure we can term 'copy making'.

Among these is the *Invention* No.1 (C), which Bach revised at a much later date. Originally this subject was based on semiquavers, but Bach later introduced a passing note between the descending leap of a third on the second beat, resulting in the introduction of a triplet motif. Consequently, the character of the piece became more lively and charming. There is no general agreement among scholars whether it was one of such demonstrations by Bach as to how a motive can be developed further or it was Bach's final version of the piece whereby the inherent character of the piece is manifested more clearly and genuinely by this modification introduced in a later revision.

Construction

Each of the two parts of *Inventions and Sinfonias* starts with C major, and the pieces are arranged on an ascending chromatic scale until it reaches B minor. There is no duplication of the same keys. When the major and minor keys use the same tonic note, the major key is placed before the minor counterpart, exactly what we also see in the *Well-Tempered Clavier*. It is evident therefore that the construction of the *Inventions and Sinfonias* is very similar to the *Well-Tempered Clavier*. Their differences are equally evident: it covers 15 keys only, instead of all the 24 keys, and the concept of pair, which is found in 'Prelude and Fugue' in the *Well-Tempered Clavier* is found here in a different dimension—two-part and three-part counterpoint.

Above all, the most important is to find an explanation for Bach's selection of the 15 keys for this collection. In order to do this, we need to return to the early version found in the *Clavierbüchlein* for

Wilhelm Friedemann Bach.

As discussed above, this collection was the fruit of Bach's conscientious and systematic approach to the teaching of his eldest son. It seems reasonable to suppose that the concept of keys, which Bach explored systematically in the *Well-Tempered Clavier*, plays a significant role here as well. This theory is supported partially by the fact that Bach's 15 keys are identical with the first fifteen keys that are described by Mattheson in his *Das Neu-Eröffnete Orchestre* (1713) in which he discussed sixteen keys only. It seems clear, therefore, that Bach left out the keys which were rarely used in his day.

Bach's key-scheme therein was to select firstly the keys whose tonic triad falls naturally on the C major scale and arranged them in an ascending order (C, d, e, F, G, a and b). The remaining eight keys were arranged in the descending order (B-flat, A, g, f, E, E-flat, D, c), but as we can see, these do not follow a particular system, but, he allotted the remainders to a similar scheme as closely as possible. Nevertheless, it is significant that this scheme displays the key-scheme in symmetric shape, which must be Bach's intention. In this scheme, Bach introduces to his pupils the concept of different keys step by step, starting with six pieces using fewer than one sharp or flat, and two in Nos. 7 and 8, three in No. 9, four in Nos. 11 and 12, and so on. Because this key-sequence is identical in both *Praeambulae* and *Fantasias*, it seems safe to assume that Bach decided to employ this scheme before writing them down in this book. From this it may be inferred further that by putting together two separate collections Bach considered both structural beauty and educational merit. It is worth adding that a similar system is also seen in the eleven preludes placed earlier in this notebook (which can be grouped into C-c-d-D-e-E-F and C-sharp-c-sharp-e-flat-f), that later developed into the *Well-Tempered Clavier*; here one can see consistency of approach in Bach's works.

This key-system is completely redesigned in the 1723 version of *Inventions and Sinfonias* in his fair copy, appearing in the order: C, c, D, d, E-flat, E, e, F, f, G, g, A, a, B-flat and b. There is no division in the system. This newly established system is partially modelled on the *Well-Tempered Clavier* (completed in 1722), as we can see that in rearranging the key sequence, Bach maintained the order of major and minor keys, and arranged the key on the chromatic scale starting with C major. The last piece, B minor, is also identical between them. Thus in both educational works written in the same period we can confirm Bach's large-scale structural redesign in a very similar way. Behind this is present the change of heart on Bach's part at certain times when the pieces, which had originally been composed for his eldest son's education, are also used for many of his more advanced students whom Bach described in the title-page as the 'amateurs of the keyboard, and especially the eager ones'. In other words, a private collection was transformed into a universal didactic work. Under this new circumstances of its usage, the choice of pieces now depends largely on pupils' technical abilities and specific needs, and thus it is no longer necessary to adhere to the principle that the collection is arranged by the technical difficulty associated with the keys in which pieces are written. Viewing from a different angle, this novel, systematic arrangement has a clear advantage in the ease of finding a specific piece.

It would not be totally surprising that beneath what appears as a methodically assembled architecture there could be shared theological concepts as a fundamental framework of the work. There is a yet-to-be-proven theory, however bold and speculative, that the number symbolism can be considered present in both works. In the *Well-Tempered Clavier*, on the one hand, the number '24', as in the number of pieces therein, can be interpreted as 24 seats and elders around the throne (Revelation 4:4). The number '30' in the *Inventions and Sinfonias*, on the other hand, can be interpreted as the number of years Jesus spent with his parents to learn the basics of mankind. By referring to these two holy numbers that

express these specific theological meaning, Bach may have implied that the two-fold pedagogical process had a dual purpose—namely the fundamental work and further advanced work for those who completed the fundamental work in order to find pleasure in study and for the glory of God. This theological allusion in a didactic situation conforms to the attitude of musicians who lived in the Lutheran tradition of music education.

Genre, Form and Style

It is largely due to Bach's contribution with this work that the genre of 'invention' is presently recognised as it stands; yet it is not Bach who originally invented it. As already discussed, he called the early form of *Inventions* as 'Praeambulae', and so it was not Bach's original intention. Fred Flindell's studies tell us that Bach modelled these pieces on the works of his contemporaries, such as Johann Pachelbel (1653–1706), Antonio Vivaldi (1678–1741) and Johann Caspar Ferdinand Fischer (c1665–1746). This was also related by Carl Philipp Emanuel Bach in the obituary of his father.

In his own explanation in the title-page of the work, we can certainly sense Bach's strong conviction. But still, this does not explain why it was necessary for Bach to rename the pieces in 1723 from 'Praeambulum' to 'Inventio' and 'Fantasia' to 'Sinfonia' respectively.

One of the likely reasons is that around this time Bach encountered the *Inventioni* for violin and continuo (1712) by Francesco Antonio Bonporti (1672–1749). This can be traced from a copy made in 1723, which now survives, by one of his scribes known as Anon.5. Interestingly, on this score Bach supplemented figures, suggesting that Bach not only paid serious attention to the work but perhaps also performed the piece.

In the title-page of his autograph fair copy Bach stops short of explaining the concept behind the movement title itself, as he touches upon the word 'inventio' only very briefly in a paragraph referring to 'an idea and its development'. In terms of genre, 'invention' is neither prelude nor two-part fughetta; nor it is the same as the genre to which '4 duets' (BWV 802–5) from *Clavierübung III* belong. It would appear as if Bach regarded this work to be of its own, unique genre. Above all, its most distinguishing feature that determines the character of this work is the simplicity and liveliness of the principal motifs. In addition, the contrapuntal technique employed here itself contributes to the inherent ideas in the motifs, as many pieces use the imitation at octave rather than fifth. This becomes a direct factor for giving clarity in the way the motifs are presented and developed during the course of musical discourse. As a result of this clarity in contrapuntal texture, harmonic structure is also stabilised, which in turn strengthens the logic behind modulations.

In contrast to the two-part *Inventions*, the three-part *Sinfonias* are not merely one part extra. They can be considered seriously for various reasons as belonging to another distinct genre. In this form, for example, we can find frequently therein the imitations at fifth, clear-cut episodes, and the organisation of sections resembling the sonata form. In this sense, it shares many characteristics with his own fugues. But they differ fundamentally in the treatment of the bass part and the associated contrapuntal texture, for in the *Sinfonias* we can observe widely that when compared with the fugues, the bass is not bound to the same rules of counterpoint. On this free-style bass line, we can frequently find that only two upper-parts are strictly contrapuntal, thus resembling the texture of Trio Sonata. A similar pattern can be observed in the scale of the pieces; the *Sinfonias* are not just generally longer than the

Inventions; many of them uses long-breathing motifs. Nevertheless, the *Sinfonias* differ fundamentally from Trio Sonatas in the way the bass line always accompanies the first entry in the upper-part at the commencement. There is little doubt, therefore, that the *Sinfonias* belong to a unique genre. The fusion between polyphony and homophony bestows upon it a clear direction and persuasive logic in music, as if it anticipates the appearance of Classical Sonata form. Erwin Ratz's claim that Beethoven's sonata form took its model from Bach's *Sinfonias* is the case in point.

The basic structural principles in the *Inventions and Sinfonias* do not differ very much from his other large-scale works; they are simply manifested in miniature. That is to say, each phrase here can be compared with one section in the pieces of other genre, and the next phrase becomes the developmental section, which is followed by the final phrase to conclude the piece. Not all the pieces follow this ternary design, however: the *Invention* No.2 (c) is a fairly strict canon, and No.9 (f) is a binary movement, to name but two.

A wide variety of contrapuntal techniques is employed here as well. In the *Inventions*, the main ideas used are strict canons (c, F), fugal style (G, b), quasi-sonata form in binary structure (E), double counterpoint (E-flat, E, f, A), and the manipulation of the opening motif (inversion, repetition, voice-exchange: C, D, d, e, g, a, B-flat). Even though Bach's display of contrapuntal techniques is quite impressive, it is not that Bach's main focus was to pursue the technical possibilities. Rather, the priority was given to develop each motif both freely and logically. In clear contrast to the *Inventions*, the greater majority of *Sinfonias* follow the fugal style. Among a few exceptions which include such pieces as Nos.5 (E-flat) and 11 (g) that do not follow strict contrapuntal style. The latter is especially unique in the collection in the sense that it takes the form of a duet on an independent bass line, and that the melody parts are heavily embellished, producing highly expressive effects. Similarly, No.15 (b) is also written in two-part whereby extremely florid passage-work in demisemiquavers, together with brilliant hand-crossing techniques, closes the collection with 'style'.

Among the most dramatic and at the same time contrapuntally strictest is No.9 (f); the subject is the famous 'B-A-C-H motif', which is rhetorically characterised with rests (NB: the motif initially appears in a transposed form—A-flat–G–B-flat–A), and in addition, two contrasting counter-subjects are employed to produce extraordinary musical effects with clashing dissonance, emanating a sense of the deepest of sorrows. This intense musical affection and highly elaborate construction of music have attracted a number of intense and speculative arguments. Among these, the analytical discussion by Ulrich Siegele and Eric Chafe are most fascinating readings.

Bach's Teaching in Pupils' Eyes

The above-described account of Bach's teaching of his eldest son is to certain extent applicable to other pupils as well. Through various accounts they left, we can learn how he taught his pupils from a completely different perspective, namely in the eyes of others who were very much inspired by this famous teacher.

Johann Philipp Kirnberger (1721–83), one of Bach's most gifted pupils who was later known as the most eminent theorist in the second half of the 18th century, praised unreservedly Bach's method of teaching as follows: 'he proceeds steadily, step by step, from the easiest to the most difficult, and as a result even the step to the fugue was only the difficulty of passing from one step to the text.'

Johann Nikolaus Forkel (1749–1818), Bach's first biographer who obtained the information directly from two eldest sons, Friedemann and Emanuel, gives us the following account about Bach's method of teaching: 'the first thing he did was to teach his pupils his peculiar manner of touching the instrument. For this purpose, he made them practice, for months together, nothing but isolated exercises for all the fingers of both hands, with constant regard to this clear and clean touch. For some months, none could get excused from these exercises; and, according to his firm opinion, they ought to be continued, for from six to twelve months. But if he found that anyone, after some months of practice, began to lose patience, he was so obliging as to write little connected pieces, in which those exercises were combined together. Of this kind are the six little preludes (BWV 933–938) and still more the *Inventions*.'

Heinrich Nicolaus Gerber (1702–75) tells us a similar story. According to him, Bach gave him the *Inventions* first, then moved onto some suites and then to the *Well-Tempered Clavier*. Remember that Gerber was a university student at the time, and it is likely that his performance standard was already at certain level. Actually his copy made in 1725 survives, now in Gemeente Museum in the Hague. In it we can confirm the traces of Bach's teaching in the form of added ornaments, some of which being identified as in his own handwriting, such as those in the *Sinfonia* No.5 (E-flat). Naturally one would speculate that they were added extemporarily during the lessons to demonstrate how to execute them effectively on the keyboard.

For his pupils, the most attractive part of Bach's character was not his teaching materials or his distinguished performance techniques; rather it was his sincere attitude to pupils and his thoughtful personality. Bach used to say, 'Everything must be possible', and he would never hear of anything 'not feasible'. This statement was presumably given to encourage a pupil who was in low spirits for not being able to make sufficiently rapid progress. It is also said that one day, Bach offered to come up to Kirnberger's room for his lesson when he had a high fever. Kirnberger later gave his master to understand that he could never adequately repay him for his kindness and his pains, Bach said, 'Do not, my dear Kirnberger, speak of gratitude. I am glad that you wish to study the art of tones from its roots up, and it depends only on you to learn for yourself so much of it as has become known to me. I require nothing of you but the assurance that you will transplant that little in turn in the minds of other good students who are not satisfied with the ordinary *lirum-larum*, etc.'

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This essay is inspired by the performance of the work on the harpsichord by Masaaki Suzuki, 1998, and is used as the basis for the liner note of his CD released from BIS .
