

15. THE SET OF 24 PRELUDES AND FUGUES – DIDACTIC INTENTION OR CONSTRUCTIVISM?

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Abstract: *One of the most popular collection of preludes and fugue on all notes of chromatic scale, "Das Wohltemperierte Klavier", belonging to Johann Sebastian Bach, represent the starting point of a long series of cyclical works with didactic purpose, made after the same pattern of tonal sequence. The didactic goal of the set, explicitly expressed by the composer in work prologue, and structural organization were important premises for subsequent reevaluation of bachian model. This study aims to discover the relationship between teaching and constructivist side both in Wohltemperierte Klavier, but in its modern iterations, and the transformation over time of the original intent of the teacher Bach.*

Key words: *cycle, didactic, constructivism, Bach, modernism, tonality*

1. Introduction

Das Wohltemperierte Klavier Ciclul represents a collection of piano preludes and fugues, each of the two volumes containing 24 sets in all major and minor tonalities in ascending order (1722, 1744). The title of the paper refers to a new system of chording called equal temper, where each octave is divided into twelve equal intervals, method that replaced the previous one, meantone, where the tone of C major and its relative were the only ones with pure intonation, while those with sharps and flats had relative intonation. In the meantone tempered sound scale, each tone and semitone were significantly different, while the equal temper avoids the perfect intonation through an equal division of the octave, so each tone and semitone is equal. Bach recognizes the value of this new system, allowing greater freedom of modulation and use of chromatics, so that *The Well-Tempered Clavier* serves as a way to popularize within the composing circles of the time the new methods of chording, a living demonstration of flexibility and practical character of equal sharing of the keyboard. However, the cycle is an example of Bachian composing genius: despite perfect expressiveness of his music, as well as the attention to specific technical issues, it seems that Bach composed this work in the absence of the intended instrument, during a trip with Prince Leopold.

2. Educational aspects

Johann Sebastian Bach is one of the first teachers of piano, who comprised collections of repertoires for teaching. Moreover, Bach organizes many of these cycles of plays based on several exhaustive learning principles, including the design, technical, expressive and musical cultural area: *Klavierbüchlein für Wilhelm Friedemann Bach*⁷⁹ is based on the sequence of plays based on their technical complexity, *Inventionen und Sinfonien* BWV 772–801 (known as Inventions for two or three voices) are arranged in ascending order of tonalities,

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⁷⁹ The book begins with a preface that contains an explanation of clefs and a guide to playing ornaments and two of the plays represents the only surviving works that feature the fingering in Bach's own hand.

each volume covering eighth major tonalities and seven minor tonalities. *The Well-Tempered Clavier*, according to the allegations of the composer, is a collection that initially aims the pedagogical primacy, the work being designed for study and training the sons of Bach, and the secondary purpose is the idea of entertainment. The original title bears the following inscription: *for the profit and use of musical youth desirous of learning, and especially for the pastime of those already skilled in this study*⁸⁰.

Like other pedagogical works of the composer, *Well-Tempered Clavier* is a collection of works whose musical value is equally significant as the formative one. Each play proves and at the same time proposes various issues in the pianistic technique; however, Bach does not sacrifice the musicality for the pedagogy, so that the theme of fugues are both simple and interesting, the motifs are skilfully developed and the melodic lines are graceful and harmonious at constructive level. The Book II of the cycle, composed after twenty-two years after the first volume, is less focused on the pedagogical side, being clearly addressed to trained instrumentalists and not to young learners mentioned in the title of Book I. Also, Book II, in its printed score, does not have a decisive role in the equal temper: since 1744, this new system was already known and it did not require the special support of the composer.

The stylistic diversity of the plays included in the cycle proves a fundamental didactic principle: the repertoire approached by the student must contain enough variety, stylistic and formal wealth, so that he would be highly motivated in his formative effort. In terms of teaching, the two sets of preludes and fugues in *Well Tempered Clavier* raise a number of technical and expressive problems, whose solution is the foundation of a fair training of the performer of all time:

a. virtuosity – figural writing, based on formulas that evolve from simple to complex, from rarefaction to rhythmic density, associated with the choice of tempo represent a technical challenge for the instrumentalist performer. On the other hand, the chordal homophony and polyphony develop the ability of multivocal execution of the discourse, with temporal emphases of several sound interest areas placed in different registers.

b. articulation – approaching the staccato, non-legato and legato techniques according to the movement of the play, phrasing, intervallic composition of the melodic line or the indications of the score.

c. counterpoint – both preludes and especially fugues develop the voices highlighting technique, independence of fingers and hands, as well as the simultaneously pursuing of melodic expressiveness and harmonic complexity.

d. expressiveness - aspect with multiple branches and determinative elements: character of the play and its relation with the election of tempo, agogic fluctuations, phrasing in the polyphonic writing and the one of monody

⁸⁰ *Das Wohltemperirte Clavier oder Præludia, und Fugen durch alle Tone und Semitonia, so wohl tertiam majorem oder Ut Re Mi anlangend, als auch tertiam minorem oder Re Mi Fa betreffend. Zum Nutzen und Gebrauch der Lehrbegierigen Musicalischen Jugend, als auch derer in diesem studio schon habil seyenden besonderem Zeitvertreib aufgesetzt und verfertiget von Johann Sebastian Bach. p. t: Hochfürstlich Anhalt-Cöthenischen Capel-Meistern und Directore derer Camer Musiquen. Anno 1722.* Source www.wikipedia.de.

accompanied type, dynamics (influenced by the capabilities of baroque instrument for which the work was designed or adapted to the timbral possibilities of the modern piano).

e. musical intuition – element less quantifiable of influenced by external factors is based on the deep understanding of the aspects of historical, stylistic, aesthetic and psychological class.

3. Structural aspects

The *clavier* explores both the potential of tempered chording innovation, which, for the first time in history, put an equal sign between the tonalities in the tonal system, and also the possibilities that the musical organisation develops due to the establishment of the new tonal system.

Each fugue is preceded by an improvising prelude, where a particular melodic motif is developed and ornamented, often overlapped to a fixed harmonic pattern. One of the elements of stylistic and formal diversity in *Well Tempered Clavier* cycle is the correspondence between preludes and various forms and genres of dance music.

No. 17	Menuet
No. 24	Gavotte
No. 10	Aria
No. 8	Sarabande
No. 13	Gigue
No. 24	Trio-sonata
No. 11	Two voices invention
No. 7	Toccata

Fig. 1 J.S.Bach - *Well Tempered Klavier* book I

The cycle *Well Tempered Clavier* covers a typological diversity in the fugued writing, so the same type of fugue integrally repeated is not find as structure in the two volumes. Fugues is less developed than many other polyphonic works of the composer: they circumscribe the whole assembly of techniques specific to the fugue form, without the most complex of them – stretto, augmentation and reduction – to be imposed, as they seem to be in other more complex compositions. However, Bach uses significant rhythmic figures, derived in dance music, by a great effect through their intrusion in the polyphonic writing.

As the churches in Bach's time were built in the symmetric form, the concept of symmetry, which originates in the cross of Christ, dominated the structure of the piece, penetrating deep into the constituting elements of music and the musical form itself. If we divide the *Well Tempered Clavier I* into two halves, we then notice that the concluding movement from each section is built around an identical compositional concept: in section 1 (no. 12), all the twelve

semitones are covered by the subject and the answer, while in section 2 (no. 24), they are contained in the single subject entry. This can be thought of as the symbolic representation of the concept — 'all the keys'. If we extend our search into the details by dividing the sections further, we find sub-divisions in threes, marked by the large fugues in minor keys, namely nos. 4, 8, 20 and 24 (no. 16 is not that substantial, however).

From a different angle, we can also find a concept of symmetry in the number of voices used in the fugues: in each section there is one 5-part fugue written in stile antico; In the first section, there are seven 3-part fugues (plus three 4-part and one 2-part), while there are seven 4-part (plus four 3-part) in the second half. ('Seven' and 'twelve' [3 x 4 or 4 x 3], often quoted as 'holy numbers', seem to be stressed here by Bach.)

4. Pedagogical interpretations in XXth century

The exploration of various methods in piano pedagogy became particularly important in the second half of XXth century, a phenomenon reflected in updating some important scores with pedagogical purpose. In the case of *The Well Tempered Clavier*, there are many different editions of the two books of preludes and fugues: Dover, Alfred, Henle, Guild and Schirmer. The Henle edition (1968) is considered the most complete in terms of keeping the original intentions of the composer (Urtext), being based on the study and research of the original manuscripts.

Béla Bartók, one of the most important composers of the musical modernism, enforced respect for 40 years by his double profession of concert pianist and teacher, holding a particular vision on the act of learning. Bartók has trained many musicians and pianists who later enjoyed international recognition, being an outstanding piano teacher, but introverted, holding extraordinary pedagogic principles and ideas, but they have never been published systematically. His works for piano, including *Mikrokosmos*, as well as the reprinting of a significant repertoire for piano, the most important being the one of *The Well Tempered Clavier* of Bach, are remarkable by the wealth of teaching principles that they contain, referred in general by detailed annotations.

His experience in the composing and teaching field determined Bartók to give up on the original tonal organization based on the chromatic sequences in favour of a sequence of prelude/fugue type pairs based on technical and interpretative difficulties, the original numbering being placed in parentheses. Thus, the edition of Bartók begins with *the Prelude and Fugue in G major*, considered the most easy and it ends with the couplet the most complex, the *Prelude and Fugue in sib major*.

In the case of *Well Tempered Clavier* (Huang, 1994, p. 50), the edition of Bartók includes annotations organized into four categories:

a. Phrasing. Bartók uses some specific graphic elements indicating the phrasing – straight and curved lines, placement of each voice of fugue on a distinct staves, metrical modification -, references that, in the context of a polyphonic

multivocal writing, focuses on the musical structure, on the circulation of motifs in the segments of form.



Fig. 2 WTC II:25, Fugue in D major

b. Orchestration. The cycle of preludes and fugues *Well Tempered Clavier* was designed for the execution to organ and only occasionally to clavier, so that the timbrality and interpretation must be made in the sense of a sound as close as the one intended by the composer. Bartók indicated in his score the execution of chords expanded and arpeggiated into a manner similar to that used at the clavier, suggesting at the same time to avoid an excessive sentimentalism, distorting the expression of the original instrument. On the other hand, the references to the sounds of organ are made by using the pedal in some chordal fragments (process considered by Bartók as extreme option) or the suggestions for doubling the bass line in octaves.



Fig. 3 - WTC II:17 A-flat major Prelude

c. Accents, dynamics, agogic and expression indications.

The main types of accents used by Bartók⁸¹ can be classified into four categories (Huang, 1994, p. 51): initial sounds of the phrase, the most acute sound with the most ample rhythmic value within the phrase the longest sound in the syncopé formula and the complete chord in cadence. Bach's clavier pieces do not often bear tempo marks. This is partly due to the domestic and

⁸¹ The numerous clarifications of metronomic and tempo class from the edition of Bartók provided a detailed and clear picture of the teacher's vision regarding the speed of execution of plays and hence on their character, considered the primary determinative factor in approaching the tempo. However, the score provides important suggestions of interpretation, mentioned both in footnotes and in the Preface and Appendix.

educational nature of these compositions. When learning pieces from the *Well Tempered Clavier*, his pupils were expected to study not only how to play the correct notes, but also how to interpret individual pieces correctly. All this is actually contained in the form of musical notation. The source of information resides in the use of a variety of time-signatures, the way the main motifs are shaped, and the way the texture is formulated. The tempo signs written in the *Well Tempered Clavier* Book I are all exceptional cases, which are intended to clarify the composer's intention. Here Bach used five kinds, namely *Adagio*, *Largo*, *Andante*, *Allegro* and *Presto*: they appear in preludes no. 2 (*Presto*, *Adagio*, *Allegro*), no. 10 (*Presto*), no. 24 (*Andante*) and its accompanying fugue (*Largo*). It is important to note that they do not indicate the absolute tempo, as we would understand it today. In Bach's time the tempo indication meant its emotional character, which in turn suggested the speed to which it belonged.

d. Fingering. Discovering a suitable fingering, that is consciously and thoroughly chosen is one of the fundamental processes of obtaining an adequate interpretation of the *The Well Tempered Clavier*, adapted to the individual level of execution, as well as the psychological fund specific to every interpreter. The introduction in the Bartók's edition of a very detailed fingering work for each play, as well as the close connection with the phrasing results demonstrate the teaching intention of the new score revised, it articulates important structural references at musical level and makes connections between the sounds of the same phrase, being useful especially in the execution of fugues for four or five voices.

5. Conclusions

One of the main purposes of the teaching works of Bach is to demonstrate the universality of musical laws. The music of *Well Tempered Clavier* can be played by musicians of all levels, providing important references at all formative levels of the interpreters: technical, expressive, stylistic.

References

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