





## Hermeneutics of Bach

Research and research results by Christoph Bossert

### Feature 6

My concept of 'Werkeinheiten' using the example of *Das Wohltemperirte Clavier I*, Fuga in A minor and its 118th bar half in the course of the 22nd theme performance

Hermeneutics  
instructional video in 12  
features  
with  
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on the Klais organ (2016) in the Great Hall of the  
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## Feature 6

### **My concept of 'Werkeinheiten' using the example of *Das Wohltemperirte Clavier I*, Fuga in A minor and its 118th bar half in the course of the 22nd theme performance**

I now come to Feature 6 in the context of Bach and hermeneutics. The last keywords were *signature*, *family* and *work unit*. How do I come to this?

I call *signatures* very concise musical characteristics, which are of course always linked to a certain musical context of a piece, a context that mostly concerns words, tone and number. My example level was what scholars call *chorales by Johann Sebastian Bach from Neumeister's collection*. I suggested calling them *36 chorales* because there is a great deal of evidence to suggest that one can actually even speak of symmetry and that it is increasingly unlikely that a piece could be missing. Who was able to control such a symmetry in the first place? In my opinion, it was the genius of Johann Sebastian Bach. However, how can we be comparatively certain that these surviving chorales, which we have only known since 1985, are actually by Johann Sebastian Bach? In Feature 2, I explained the connection between the chorale prelude *Alle Menschen müssen sterben* and Praeludium in B flat major from the *Well-Tempered Clavier I*. This Praeludium in B flat major is immediately preceded by the Fuga in A minor.

The *Well-Tempered Clavier I* is of course such a *work unit* in the sense of the terminology work unit. Why do I say *work unit*? I would like to avoid the term *cycle* because it would suggest from the outset that one should begin with piece 1 and end with piece 48. This may be the case. However, individual pairs can also be separated out at any time as a *prelude and fugue* in a particular key in order to then stand for the whole as a part, so to speak. I would therefore like to avoid using the term *cycle* from the outset or making any kind of determining categorisation. It seems to me that a *work unit* is a neutral term that is suitable for describing a compositional whole. In this sense, then, the *Well-Tempered Clavier I* is a work unit, at least that is my definition.

What exactly do I want to show in Feature 6?

I would like to discuss the special nature of the Fuga in A minor and in particular the unusual nature of the 22nd theme. However, I would also like to discuss the fact that one can draw conclusions from a line of tradition that goes back almost 100 years before the *Well-Tempered Clavier*, namely to Girolamo Frescobaldi.

The line of tradition would then be: Girolamo Frescobaldi - Johann Caspar Ferdinand Fischer - Johann Sebastian Bach.



I would like to begin with this thought and then continue with the question of the 22nd theme of the Fuga in A minor.

The theme of the Fuga in A minor is:

**KB 1a-d, Fg a:**

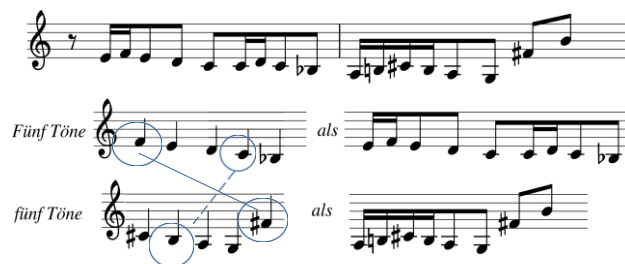


(4) The next observation is that the ten number now becomes conspicuous. It is the observation of the progression of this 22nd theme performance. I allow myself to capture sounds as I watch this performance

play:  ; now I take the liberty of recording further notes: .


These are the next five tones. The one five opposite the other five result in a ten-tone field. These ten different tones occur in just two bars.

(5) If I take my hands as an example level, these hands are mirror images and the sequence of this shape is just as mirror image: a semitone and a sequence of whole tones opposite a sequence of whole tones and the semitone at the end. Now I can see that this shape has the notes *f* and *f sharp* as its edges. If you place *e* against *g*, *d* against *a*, *c* against *b* and *b* against *c sharp*, this is exactly what happens in the process of symmetry formation in the *Well-Tempered Clavier* I. The fundamental tone sequence begins with *c* and ends with *b*. The centre is between *f* and *f sharp*. The centre lies between *f* and *f sharp*. If I take this mirror axis as a basis and say that the *Well-Tempered Clavier* has two halves: from C major to F minor and from F sharp major to B minor, these are also the mirror ratios of



the 5 + 5 notes of the 22nd subject statement.

(6) In a further discourse it should be discussed that the *Well-Tempered Clavier* I has a symmetry that is organised exactly on the axis *f/f sharp* and with the edges *c/h* in mirror image. That would be the next step towards realisation.<sup>2</sup>

(7) How do we deal with the phenomenon of these three notes  in the centre of the

Soggetto, which follow the first 14 notes? We hear: **KB 3e:** .

According to the rules of fugue composition, a third would be expected at the end. Instead of this third, a fourth is heard here. This is a breach of the rules and such a breach of the rules is not provided for in fugue theory. So how is it that Bach notates a fourth here? Is it an oversight? No, Bach could have harmonically inserted a third at any time. So now we are faced with a *challenge*: why the fourth?

How can we deal with this challenge? I am now methodically concerned with the next sequence of steps<sup>3</sup>:

<sup>2</sup> See the explanation of the symmetry of WK I and WK II on the Seuffert organ in Maria Limbach.

<sup>3</sup> Cf. *Hermeneutics on Bach*, Feature 5 with comments on chorale 33 of the *36 chorales*. In it, I call the use of the third voice the "*first great challenge*".

We have an *inverse* in front of us and despite its supposedly very chaotic structure of ten different tones in a very small space, it shows 5 + 5 mirrored tones in an *inverse*. So what could be the next step?

(8) I think that in the next step we come to the following question: How would the theme become audible in *rectus form* if we simply mirrored this form, since there is, after all, an *inverse*. So what would the *rectus* look like if we were to mirror this singular 10th *inverse*?

(9) From a methodological point of view: What is the underlying mirror axis when we mirror? We have just mentioned the mirror axis f/f# - c/h. All tones would then behave in this way:

 So the progression  would change (due to the mirror mode

e-> G, f-> fis) are reflected in the form 


(10) However, since this figure emanates from the *inverse*, it would now be an *inverse of the inverse*.

(11) If we look for this figure in the score - which would be the next step - we do not find it. As evident as a new figure has now emerged, it was not composed by Bach. So is it all speculation? This question is also part of the methodology and the sequence of steps.

(12) Now comes the chapter on the evidence or non-evidence, the plausibility of this mirroring, even though Bach does not compose it at all. Should we therefore immediately shelve this idea - however much we have considered it at the moment - or does this step from the *inverse* to *the inverse of the inverse* now point to the "step beyond"?

(13) The "step beyond" would be the following: we move from the visible, the *visibilium*, to the non-visible, the *invisibilium*, in which we only imagine and mentally comprehend the *inverse of the inverse*, which is nothing other than a new form of the *rectus*. And: we must endure the fact that Bach did not compose it.

Everyone can answer for themselves to what extent this train of thought has evidence or no evidence for them. In any case, the transition from the visible to the invisible is precisely an expression of a religious message, namely the transition from the visible of death - and now I take this

Form  for dying - into the eternal life that is invisible to us humans.



Bach's cantata *Gottes Zeit ist die aller beste Zeit* ("God's time is the best time of all") contains a corresponding musical passage " ... must die": **KB 4, BWV 106 Actus tragicus**:



BWV 106, 2b Lento

57 f - gis - e gis f - gis - e f - gis - e f - gis - e

Soggetto Fg a, WK I, Inversus


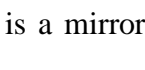
T. dass wir sterben müssen, dass wir sterben müssen, ach, Herr.

Cont. ...e

So in Fuga in A minor, at the point of "Sterben müssen" , this figure  would stand before the inner eye. What is this figure? That is another next step.

(14) It is a figure of a leading tone, fundamental and fifth.

(15) The next methodological step is to ask what statements we can make about this. It is a step into the cadence formulation with leading tone, fundamental, fifth, fundamental.

So this figure  is a mirror image of  and now represents something musically very evident, namely the relationship of leading tone to root and fifth. How said: We have now arrived at the level of the spirit, i.e. at something that happens in our idea of a cadential formula of leading tone, fundamental and fifth.

But what evidence is this ultimately supposed to provide, except that if we carry out a fictitious mirroring of the *inverse* and thus arrive at the *inverse of the inverse*, we obtain a cadence formula?

(16) A further methodological step is now required, namely the step of localising this strange fourth leap, in the place of which - as can be seen from the preceding 21. theme performance - a third should be heard.

**KB 5, Fg a:**

57 21. Themenauftritt 58 22. Themenauftritt 59

The location of this deviant fourth, i.e. the location of the rule break (!), takes place in bar 59 on the second half of the bar. This means that it takes place in the 118th half bar in conjunction with the fact that we are currently in the 22nd subject statement. The location of this rule break therefore applies to the 118th half of the piece in the course of the 22nd subject statement. So much for another finding.


There is still no definitive evidence of this happening. However, we can summarise by stating that the rules have been broken, which is not to be expected.

5 + 5 notes; we can say something about the location and we can imagine in our minds that the whole thing would be a fuga with a completely different theme:




Then the 22nd theme appearance would be an absolutely correct reversal of this.

(17) I see the key - and this would be the decisive next step - the key to gaining hermeneutic insight into these events in the localisation as the 118th half in connection with the 22nd thematic occurrence. If we now assume that the overall events of this fuga are about something important, something essential, then we can assume that the numbers 118 and 22 contribute to this significance. In Bach's imagination, the Bible has significance. This inference - this assumption - is again a methodical step.

(18) So the question is whether a biblical basis could be found for this event, if the figure of  in the sense of the *actus tragicus* already says "*having to die*".


If the numbers 118 and 22 were possibly a reference for a biblical localisation, could

We ask what 118 chapters there are and what the 22nd verse says. However, there is no book that has 118 chapters. And there is also no 22nd book that has 118 verses. We could be referred to the Psalms, but Psalm 22 does not have 118 verses. That leaves only Psalm 118 and verse

22: *The stone which the builders rejected*  *has become (inverse of inverse) the cornerstone:*



(19) The next step is the allegorical moment of the music. The cadence formula is, allegorically speaking, the *cornerstone* of every musical tonal statement. No phrase or musical context is concluded without a cadential close. So the biblical metaphor of the *cornerstone* would now be a synonym for the musical regularity of the cadence formulation and the

*Clausula*, which closes something - in contrast to the reflection of it  as in the best and truest sense of the word: as something that has been transformed.

**(20) Conclusio:**

This would now be the sequence of steps to be piled up in order to speak about the two notes *f sharp'*-*h'* of the rule violation, although *f sharp'-a'* is actually to be expected. The result is a mountain of steps, of mental achievements about the construction of the imaginary world of the *inverse of the inverse*, the transition from the *visibilium* to the *invisibilium* and the location as the 118th half note in the course of the 22nd subject appearance as a bridge to Psalm 118, verse 22. This mountain of thoughts is obviously triggered by Bach with two notes, whereby the first note *f sharp'* is expected, but not the second note *b'* - as a fourth interval is used and not a third interval. Ultimately, therefore, this mental construct is triggered by a single note *b'*, which does not sound in its expected position. A single note sets this structure of ideas into circulation, into oscillation.

**(21)** A final thought: the observation of 5 + 5 notes that are mirror images of each other should complete the picture. Since I play all music on the keyboard instrument with my hands, the hand now becomes the reference for semitone, whole tone, whole tone, whole tone - and the other hand as a mirror image. But what does the *inverse of the inverse* contribute to this image? It contributes the idea of the human anatomy, which has a more extensive mirror image - not only that of the hands to each other, but that of the hands to the feet, which again have 5 + 5, i.e. ten toes. What is the image then?

*The stone that the builders rejected has become the cornerstone.* This is the biblical, Old Testament reference for the basic statement of the New Testament about Christ, the Crucified One, and as a passage into the *Invisibilium*, the Risen One. All this imagery is evoked because the 22nd theme performance deviates in a fundamental way and because a single note is definitely a breach of the rules. A single tone is enough, in the multitude, in the sea of tones of the *Well-Tempered Clavier* I, to develop this image that I have now tried to evoke in a methodical sequence of steps. To be as clear as possible: Based on the tones, we see the Crucified and Risen Lord before our inner eye.

$$\begin{array}{r} 5 + 5 \\ + \\ 5 + 5 \end{array}$$

Although much has already been done in this feature 6, I have not yet reached the end point of where this 118th half as the second half of bar 59 actually leads: It leads to an organ point immediately afterwards.

**KB 7:**



(22) Two upper voices, which we find in the Neumeister chorale no. 26 to the text *and imperishable*

to be able to assign them *here*,




then lead in Fuga in A minor in bar 62 to something directly related to cadence. A cadence can be completed as a *clausel* or a cadence can be 'escaped'. Bar 62 says the following:

**KB 8a:**



(23) This bar 62 of the Fuga in A minor is the total bar 1720 of the entire work, i.e. the work unit, and:

(24) 1720 is a metaphor. In other words, it is a definitive, deeply painful event in the life of Johann Sebastian Bach in the middle of 1720. Bach's wife Maria Barbara died in the middle of 1720, while he himself was in Bohemia, namely in Carlsbad, at the time. He had returned unsuspectingly and only learnt the news of his wife's death and that she was already buried when he entered his house.

(25) In a further methodological step, the next step is to bend the cadence .

Although the 22nd subject statement had previously evoked the experience of the cadence formula, the cadence bends in the complete bar 1720. In spirit, the cadence formula is perfect and in reality, death throws a spanner in the works. A life unexpectedly snaps and this event can be found in the middle of bar 62:

**KB 8b:**



(26) What do the lower voices say now? The narrowing of the first half of the theme breaks off in low thirds in the lower register. Helga Thoene, in connection with the *Ciaccona* in D minor for Violin Solo refers to this metaphor:<sup>4</sup>



Helga Thoene sees the connection here to Bach's first cantata BWV 4 *Christ lag in Todesbanden* and *death to words, death [no one can force on all the children of men]:*

**KB 9, BWV 4:**



So there is a whole series of metaphors that interlock here and that make me certain that the metaphor of "*dying must*" - starting from the 118th half-note - finds its continuation in bar 62. There, too, there is a link back to the momentum of the middle of the Soggetto and to the break in the rule in the 118th half-note and then leads to the overall bar 1720 by means of the underlining of the signature *Und unverweslich herfür geh'n* through the organ point.


(27) The next step would be to clarify what is present in the total number 1684. The year 1684 is the year of Maria Barbara Bach's birth. Strangely enough, the complete bar 1720 is bar 62 of the Fuga in A minor, while the complete bar 1684 is bar 26 of the Fuga in A minor. In both cases we find low thirds.

**KB 10:**



One time, the low thirds lead to bar 26; the other time, low thirds lead away from bar 62, as we have just heard.<sup>5</sup>

4 Helga Thoene, *Johann Sebastian Bach - CIACONA - Dance or Tombeau? An analytical study*, Oschersleben 2009.

5 In the *Soggetto* of the Fuga in A minor, the low third *g sharp-e* represents the two lowest notes. They are linked to the signature *Sterben müssen*  and they are linked to the central event of the 118th half note of the piece.

(28) What is the big picture of the Fuga in A minor? I think the following emerges:

Before bar 26 there are  $5 \times 5$  bars; and again I take my two hands and say  $5 \times 5$  as a metaphor for  $5 + 5$  fingers on both hands. Then bar 26 sounds as the total bar 1684;

After a further 35 bars - Maria Barbara reached the age of 35 - bar 62 follows as the total bar 1720.

This is followed by a further 25 bars ( $5 \times 5$  as a metaphor for  $5 + 5$  toes) until the end.

Thus again, now in relation to the entirety of the Fuga in A minor, the Crucified One stands before us or the Risen One in analogy to the words:

*If I am to depart, do not depart from me. If I am to suffer  
death, then come forward. When I am most afraid for my  
heart,  
so tear me from my fears, by virtue of your fear and torment.*

(29) The Fuga in A minor ends with the following formulation:


**KB 11:**  **KB 12, BWV 161:** 

This formula corresponds to the notes for the word "wake up" from the cantata *Komm, du süße Todesstunde* by Johann Sebastian Bach in his Weimar period, composed to the tod of the young Prince Johann Ernst of Saxe-Weimar, who died in 1715 at the age of just 19.<sup>6</sup>

(30) This conclusion of the A minor Fuga is immediately followed by the Praeludium in B flat major, which begins in

"Hermeneutics on Bach", Feature 2 was annotated:

**NB 13, Pr B**

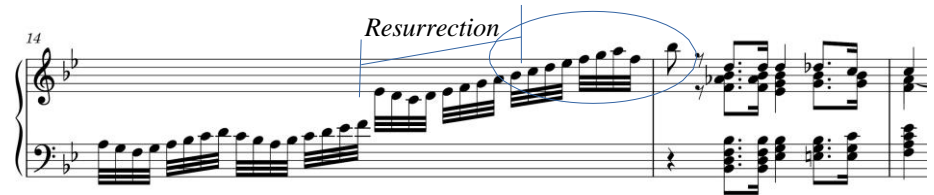


At the beginning, we hear the formula of cadence formation that determines the beginning of this piece.<sup>7</sup> This piece flashes back to the chorale prelude *Alle Menschen müssen sterben* from Bach's first work, the *36 Chorales*. In bar 14 of the Praeludium in B flat major, we hear the figure 'Auferwecken' as the signature *Auferwecken*, combined with the quotation of the transition to the epilogue in no. 32 *Alle Menschen müssen sterben* of the *36 Chorales*.

<sup>6</sup> The numbers 1-7-1-5 for 1715, for example, can be represented musically by the sequence of root, seventh, root and fifth. In Bach's cantata, the signature *Auferwecken* leads exactly into this formulation, which then corresponds to the signature *Eckstein* in Fuga in A minor.

<sup>7</sup> Cf. b-a-b-f with 1-7-1-5 and with signature *Eckstein*.

NB 13, Pr B:



NB 14, no. 32:



(31) Now the picture is complete: Fuga in A minor and Praeludium in B flat major have as counterparts Fuga in C sharp minor and Praeludium in D major. In this way, we can continue to weave the *Ariadne's thread*, because from now on we have the ticket to the symmetrical cosmos of the *Well-Tempered Clavier Part I* n.<sup>8</sup>

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8 See the instructional video on the symmetry of WK I on the Seuffert organ in Maria Limbach.

### **Cited sheet music editions**

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14. Johann Sebastian Bach, *Three Sonatas and Partitas for Solo Violin*, Bärenreiter Urtext edition, TP

59.



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