

## The Impossible Note / Part II

Where Beethoven tells us what we do not want to see.

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### Introduction

In our recent article “*The Impossible Note in Beethoven’s Sonata n.14 opus 27.2*”<sup>1</sup> we examined the first edition of Ludwig van Beethoven’s piano sonata n. 14 by the Viennese publisher Johann Cappi<sup>2</sup>. We specifically pointed out the DD# in the bass — and thus a DD#-E# interval — in measure 20 of the first movement, the Adagio Sostenuto. This note has universally been labeled as an engraver’s error, and even as an error possibly made by Beethoven himself and taken over by a copyist who would have written out an engraver’s copy of the composition.

We have provided a number of substantive arguments which led us to propose that the note DD# in the low bass of bar 20 is in fact not a publisher’s error, but intended by the composer. Beethoven himself wrote it down firmly in the surviving autograph. Pointing to a number of distinct references, musical and biographical, we have indicated a parallel with the composer’s sonata n.31 opus 110. Musically however, this note has not yet proven itself. The label ‘impossible’ still clings to it.

The DD# in the bass of bar 20 was obliterated early on from all editions of opus 27.2 but the one by Johann Cappi, for reasons still unclear, or at least not unequivocal. In our view, the modification applied to the score in bar 11 of the sonata is directly related to this. What is clearly apparent is that the note in bar 20 is deemed ‘impossible’ by many, from a musical and theoretical point of view. This article aims to change that perception.

Until very recently we had no reason to believe that in 1801 there was a Viennese fortepiano with a keyboard compass extending to six octaves (from CC to c4) on which this music, as published by Cappi, could have been composed and played<sup>3</sup>. It seemed an important additional argument supporting the general view. Although no early Viennese fortepiano with a keyboard compass CC-c4 has survived, we have recently demonstrated that it is highly probable that the Geschwister Stein in

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<sup>1</sup> Arts, Birgitta and Sietse Kok: *The impossible note in Beethoven’s Piano Sonata Opus 27 no. 2*. June 2015. Please refer to [www.stein1802project.com/archives/10370](http://www.stein1802project.com/archives/10370) for the full article.

<sup>2</sup> The first edition by Johann Cappi may be consulted in the Digital Archives of the Beethoven-Haus Bonn, via the following link: [http://www.beethoven-haus-bonn.de/sixcms/detail.php?id=15288&template=dokseite\\_digitales\\_archiv\\_en&dokid=T00011830&seite=1-1](http://www.beethoven-haus-bonn.de/sixcms/detail.php?id=15288&template=dokseite_digitales_archiv_en&dokid=T00011830&seite=1-1)

<sup>3</sup> The discovery of a five and half octave Geschwister Stein original from February 1802 started our investigations. Additional research in 2013 and 2014 resulted in a January 2015 online publication: Arts, Birgitta: *Beethoven had access to a pianoforte with a keyboard compass of FF-c''' in 1802. The relationship between the Stein-Streicher family and the composer Ludwig van Beethoven in the early years in Vienna (1796-1803)*. January 2015. The full article may be downloaded via the following link: [www.stein1802project.com/archives/10031](http://www.stein1802project.com/archives/10031) .

Vienna conceived and built such an instrument as of 1800 or early 1801. Ludwig van Beethoven would have been the first to have had access to it<sup>4</sup>.

In our first article on the *Impossible Note* we stayed away from a purely theoretical analysis of the first movement of opus 27.2, preferring to show how we had come to pay attention to this 'error' in the first place. We pointed to the strong and diverse clues which had led us to reassess the nature of the DD# in the first edition of the piano sonata. We will now, in the second article dedicated to the Impossible Note, focus on a musical and theoretical explanation of measures 11 and 20 as they were printed by Cappi in his edition of March 1802<sup>5</sup>. Here again we will draw important parallels with the first movement of Beethoven's opus 110 composed in 1821, now from the perspective of musical analysis only.

### *Opus 27.2: The departure from the tonic and the move toward bar 11*

In the first four bars of the Adagio Sostenuto we move through the key of C# minor to the dominant. The tempo is *alla breve*, the manner is explicitly indicated as *senza sordino* (i.e. with dampers constantly lifted) for the entire movement, and the notation shows a slight delay in the left hand. In bar 5 the chord in the left hand (C# - G# - c#) shifts position and clearly asks for a repetition, as indicated by the broken bar. Played in a soft legato manner it will have effect on the harmony. The left hand (C# - G# - c#) as well as the g<sup>1</sup># in the upper voice, at the end of bar 5, with the *pp* just in front of it, are clear indicators that we are still in the home key. This leads us to the dominant seventh in first inversion in bar 6, where the modulation to E is being prepared. The modulation to the new key E takes place in bar 7, which can be interpreted entirely in the key of E major: I in C# minor = VI in E major. This leads us to bar 9 in which the E major fully asserts itself. The slur from the beginning of bar 7 to the beginning of bar 9 shows this with graphic precision.

With the lowering of the third in bar 10 (G# to G) we arrive at an e minor chord. Most analysis of the Adagio will find that at this point a modulation to B is about to take place, from the V<sup>7</sup> in bar 8 to chord I (I=IV) in bar 10. We would like to suggest a different transition, a shift which sets the stage for the complexity to come, in bar 11.

### *Bar 11 in the Cappi edition: announcement and premonition of things to come*

The first edition shows, in bar 11, a D# in the bass, resulting in a D# - d# octave interval in the left hand which is almost aligned with the f<sup>1</sup> natural, or at least with the second half of the first triplet. Subsequent editions of opus 27.2 by other publishers have all amended the D# lowering it to D, with

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<sup>4</sup> Kok, Sietse: *Tracing back to a six octaves piano CC-c'''' in Vienna in 1801. An analysis from the builder's perspective*. Published online by the Stein 1802 Project, May 2015,

[www.stein1802project.com/archives/10333](http://www.stein1802project.com/archives/10333). An extended article (publication later this year) will incorporate additional aspects presented at the YPF seminar in Amsterdam on November 20, 2015.

Based on these findings and earlier research on an original fortepiano by the Geschwister Stein dated February 1802, Sietse Kok is currently building an early six octaves instrument 'D'après Frère et Soeur Stein' with keyboard compass CC – c4.

<sup>5</sup> The publication was first advertised in the *Wiener Zeitung* of March 3, 1802.

the D-d octave aligned on the first beat. Unfortunately the first page of Beethoven's autograph<sup>6</sup> is lost, and we do not have a handwritten document to back up the notation in the bass provided by the Cappi edition.

The revised and generally accepted version (with a D in bar 11) results in a reading of a GBDF chord in second inversion, the dominant (V 4/3) before C. It does not give bar 11 any prominence but tidies it to fall right into the mold of a normal and rather standard progression. Why this might have happened, is a discussion we have briefly referred to in our previous article. It pertains to the realm of bar 20 and the decision to modify it. We will return to this at a later stage. For now, we will give precedence to the first edition and acknowledge the D $\sharp$  octave in the bass. We would like to argue the case here for a distinct and unusual pivot in bar 11 leading to the key of B as of bar 12.

With an octave on D $\sharp$  in the bass, what could be the nature of bar 11? If it is not a GBDF chord in second inversion, how may we understand it? The lowered G $\sharp$ =G inherited from bar 10 and the subsequent lowering of F $\sharp$  to F lead us to believe in a veiled and punctual switch from the scale of e minor to the scale of c minor, the relative of E flat major. In the progression of the harmony in the left hand, the D $\sharp$  octave is in perfect balance with the context as D $\sharp$  - C - B is a c minor descent which leads us from the leading note of e minor to the A $\sharp$  in the second half of bar 12, the leading note in B thus indicating a change to the key of B. The start of this descent in c minor lies at the beginning of bar 11 and therefore operates like a very perceptible turn after the two bars with octaves on E (bars 9 and 10).

We can interpret the chord in bar 11 as a D $\sharp$  augmented triad D $\sharp$  G B with added ninth (F). The switch from E minor to the scale of C minor indicated by the lowering of F $\sharp$  is being used to in the transition to a modulation to B minor. The D $\sharp$  (leading note of E minor and as E $\flat$  in disguise, the third of C minor) operates as a pivot note. Our suggestion raises a few questions though, especially because the D $\sharp$  is not notated as an enharmonic change. Further down in our analysis we will suggest an explanation for this.

We will also endeavor to show how the out-of-order alignment of bar-filling whole notes is truly indicative of performance here, certainly in the context of the first movement where one is instructed to play '*senza sordino*'. The D $\sharp$  octave in bar 11 needs to be played preferably just before the advent of F, as clearly indicated in the Cappi score. The relationship of F to D $\sharp$  announces the subsequent descent toward bar 20 and prepares its DD $\sharp$ -E $\sharp$  interval in the bass.

Bar 12 shapes a modulation to B minor. It is confirmed with chords  $\sharp$ II - IV 4/6 - VII7 - V5/6. The C major chord on C and E minor chord on B permit the stepwise approach, with the sharpening of A, to the b-minor chord V on A $\sharp$ . We will return to examine this bar at a later stage.

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<sup>6</sup> The autograph may be viewed in the Digital Archive of the Beethoven-Haus Bonn, via the following link:  
[http://www.beethoven-haus-bonn.de/sixcms/detail.php?id=15288&template=dokseite\\_digitales\\_archiv\\_en&dokid=wm20&seite=1-1](http://www.beethoven-haus-bonn.de/sixcms/detail.php?id=15288&template=dokseite_digitales_archiv_en&dokid=wm20&seite=1-1)

### *The road to bar 20*

With the universally accepted amendment which was made to the bass note D $\sharp$  of bar 20, to E $\sharp$ , the E $\sharp$  octave interval in the low bass predictably results in a reading of V $_6/5$  in F $\sharp$  minor at the beginning of bar 20, and thus the general interpretation that a modulation from E minor to F $\sharp$  minor takes place, announced by the flattening of D $\sharp$  in the preceding V 7<sup>th</sup> dim chord on G $\sharp$ . We wish to argue the case here for a more unusual and distinctly excruciating event, with a different interpretation of the path leading to it.

After the onset of the modulation to B, a b minor chord on B in bar 13 takes us via a ( i – ii 5/6 – ii 3/4 – i 4/6 – V – I ) progression to a B major chord in bar 15. From bar 16 we see here a IV – I – IV – I cadential progression leading up to bar 20. For this entire passage, the B is turned into a major chord. The a $^1\sharp$  in the upper voice (the leading note for B) at the end of the bar and the repetition of the same phrase in bar 18, remind us we are staying in B. It is like a reiteration of a supplication or a prayer which leads to an anguished Bdim<sup>7</sup> chord on G $\sharp$  in the second half of bar 19 (I 2/4).

### *Bar 20: the Impossible Note is a bizarrely possible*

If we examine bar 20 and accept the reading of both the autograph and Johann Cappi's edition, it seems at first glance as if we are in the presence of a bizarrely inverted chord C $\sharp$ -E $\sharp$ -G $\sharp$ -B-D $\sharp$  with a ninth interval DD $\sharp$ -E $\sharp$  in the left hand, followed by an f $\sharp$  minor chord F $\sharp$  A C $\sharp$ . The announcement of the ninth interval on D $\sharp$  has been made in bar 11, according to our suggestion above. But even with a convincing explanation for bar 11, a C $\sharp$  dominant ninth in total inversion with a ninth interval on the bass can be pretty shocking.

But arriving in the key of B, as we suggested we do, a possibility emerges. In the second half of bar 19, the D $\sharp$  is lowered for the diminished chord, and the E is raised. The raising of the E is a rather predictable and maybe even bland event if we have an octave on E $\sharp$  in the bass in bar 20 and we are looking to make a stepwise approach to F $\sharp$  minor. But in our opinion this is absolutely not the situation. In the path of a modulation from the key of B, raising E to E $\sharp$  would mean we are descending one step lower in the circle of fifth. It takes us rock bottom.

Does it mean we should actually look at things from the point of view of d $\sharp$  the relative to F $\sharp$  major? Possibly yes, but difficult to understand, at first. The leap doesn't seem prepared. It is Ludwig van Beethoven himself who provides us with the answers, in the literal explanation he gave us in 1821.

### *To the heart of the matter: examining Sonata n. 31 opus 110*

In part I of the *Impossible Note* we pointed to Beethoven's sonata opus 110, showing some of what we believe are references to opus 27.2 and the years 1801-1803. The first item on our list was bar 115 in the first movement of the sonata n.31. There, a similar ninth interval in the bass, this time on A $\flat$ , had caught our attention. We suggested a parallel. True, here the presence of a ninth interval AA $\flat$  – B $\flat$  in the bass, in this one before last bar of the first movement, has always been an undisputed fact in all editions of the composition, coming neatly and extensively prepared and finding resolution according to the rules. However, it is somehow peculiar that the composer takes us through a very elaborate preparation in bar 114, just before the end of the movement.

In his commentary of opus 110, Heinrich Schenker stated: "in bar 114 the primary motif has the last word, although in a version that involves not only bar 1 but rather, in a striking way, the sums of bars 1-2 compressed within the space of a single bar"<sup>7</sup>. In other words, he is talking about a combination of chord A $\flat$  C E $\flat$  of bar 1 and the E $\flat$  G B $\flat$  D $\flat$  chord from bar 2. We will examine bar 114, for the key to bar 20 in opus 27.2 lies precisely here!

#### *Bar 114 in Sonata n. 31*

We are in the home key, A $\flat$  major. An A $\flat$  C E $\flat$  chord on A $\flat$  (*a*) and a E $\flat$  G B $\flat$  D $\flat$  chord (*b*) are combined in several steps, first via a D $\flat$  F A $\flat$  chord (*1*). It is the third (C), in the soprano voice, which moves up to D $\flat$ . After an inversion and temporary muting of voices an (E $\flat$ )-G-B $\flat$  chord is able to move in. This allows for a G B $\flat$  D $\flat$  chord in first inversion to evolve into a diminished seventh chord on B $\flat$ . The lowering of F to F $\flat$  ties in a G B $\flat$  D $\flat$  F $\flat$ . The final result appears in bar 115.

Let us note that the chord that permits the first step is D $\flat$  F A $\flat$ . We can re-spell this as C $\sharp$ -E $\sharp$ -G $\sharp$ , which is in our opinion a direct reference to bar 20 in opus 27.2. We believe that right here, in bar 114, the composer is guiding us step by step through the genesis of bar 20 in sonata n. 14 and the emergence of the ninth interval in the bass.

#### *Back to bar 20 of the Sonata n.14*

From our examination of bar 114 we may draw a few conclusions. We will apply these in a similar way, step by step, to arrive at the first chord in bar 20 of the Adagio Sostenuto.

Bar 114 of opus 110 points out that the bass note A $\flat$  of the chord in bar 115 provides the key signature. If we follow the same procedure and apply this to bar 20 of the Cappi edition, we may conclude that the D $\sharp$  in the low bass of bar 20 provides the key signature. This ties in with our earlier impression that from bar 19 the sharpening of the E indicates that we need to move around in the scale of d $\sharp$  minor. The only complicating factor here is that we believe we are moving around in the scale of d $\sharp$  minor and that the example provided in opus 110 is in a major key.

If we then follow go through the motions one by one, copying the procedure of bar 114, our starting point to understand bar 20 must be a D $\sharp$  F $\sharp$  A $\sharp$  chord (*a*). The second chord we will wish to combine it with would, following the example (*b*), be an A $\sharp$  C $\sharp$  E $\sharp$  G $\sharp$  chord. F $\sharp$ , the third of cord (*a*), will move up to G $\sharp$  in a second step (according to the d $\sharp$  minor melodic descending scale), in an inverted G $\sharp$  B $\sharp$  D $\sharp$  chord (*1*). When we go through the motions which Beethoven spells out in bar 114 of opus 110, a C $\sharp$  E $\sharp$  G $\sharp$  chord is embedded, grafted onto the bass note D $\sharp$ . Via inversion, a temporary muting of voice and the lowering of B $\sharp$  to B (as we w, we arrive can arrive at the final result: a C $\sharp$  E $\sharp$  G $\sharp$  B chord in first inversion stacked onto an inverted chord E $\sharp$  G $\sharp$  B D $\sharp$  on D $\sharp$ , but in a curious way. The B is the hinge. Because the chords share another note, the E $\sharp$ , they link into each other, as if they are crossed.

Therefore, in bar 20, we may see an unorthodox C $\sharp$  dominant none, on D $\sharp$ , the ninth. In reality, it is composed of a C $\sharp$  dominant 7<sup>th</sup> chord on B grafted onto E $\sharp$  minor 7<sup>th</sup> with a lowered fifth, in third inversion ( $\sharp$ iv of B, also the leading note of the dominant F $\sharp$ ). This chord can resolve to F $\sharp$  minor, even though the inversion still is an issue.

<sup>7</sup> Schenker, Heinrich: *Piano Sonata in A $\flat$  Major, Op. 110, Beethoven's Last Piano Sonatas, Volume 2*. Translated, edited and annotated by John Rothgeb, Oxford University Press, 2015. Page 64.

From an E $\sharp$ /F minor chord, the subsequent move to an F $\sharp$  minor chord in the second half of bar 19 is now opened up. However, in order to fully understand what happens, we must point out to two essential aspects which are extremely relevant for the execution.

Harmonically, the D $\sharp$  is re-enforced by the E $\sharp$  in the interval DD $\sharp$ -E $\sharp$  in the left hand, as their upper tones stack up. The upper tones of F correspond to the higher upper tones of D $\sharp$  in that interval, and thus DD $\sharp$  is re-enforced.

At the same time, we should not forget that we are instructed to play '*senza sordino*'. The two elements compounded (the *senza sordino* playing and the effect in the harmonics) enable the D $\sharp$  to function as the root of the F $\sharp$  minor chord F $\sharp$  A C $\sharp$ , harmonically shaping the chord D $\sharp$  F $\sharp$  A C $\sharp$ , thus in effect a D $\sharp$  minor 7<sup>th</sup> with lowered fifth. In bar 114 of opus 110, the slur which links the root of the first chord on A $\flat$  to the subsequent A $\flat$  in the bass is an indication, pointing precisely to this feature, but in a different more standardized context. And we must read it in reverse order!

In D $\sharp$  minor we would have a chord I<sup>7</sup> and thus, in F $\sharp$  minor, we could theoretically be in the presence of a chord on the leading note (vii<sup>7</sup>). But it could even function as an F $\sharp$  minor sixth chord F $\sharp$  A C $\sharp$  D $\sharp$  in third inversion. This is how the D $\sharp$  could be on its way to get a sense of resolution too. Before jumping to conclusions, let us look ahead, past bar 20.

#### *Moving on from bar 20, in F $\sharp$ minor?*

Assuming we are in F $\sharp$  minor, let us examine bar 21. A Neapolitan  $\flat$ II<sup>6</sup> on BB is followed by a VII<sup>7</sup> diminished on BB $\sharp$ . Interesting to observe here that the first chord, G B D is indeed the lowered chord G $\sharp$  B $\sharp$  D $\sharp$ , which is precisely the chord (1) that was used to articulate and embed the two chords (a and b) which we believe are at the theoretical source of bar 20. It is important to note that in light of our previous observations, the lowered D $\sharp$  = D could contribute to the sense of resolution of D $\sharp$  from bar 20. And, G B D re-spelled corresponds, not surprisingly, to the A $\flat$  major triad.

The VII<sup>7</sup> diminished on BB $\sharp$  now starts to make more sense. It gives the clues to bar 20 from within the composition itself and points to the peculiar role the D $\sharp$  holds in bar 20 (and as a matter of fact throughout the movement). Opus 27.2 is indeed full of indications about itself. And this is not the end of the story, to the contrary. Things are just starting to unfold.

#### *The ambiguity of bar 21*

In fact, what we see in bar 21 are two chords which can also be read in D $\sharp$ . The VII<sup>7</sup> diminished on BB $\sharp$  may also be seen as a minor chord on B $\sharp$  (I 2/4) in D $\sharp$  minor. Then the first chord of this bar would be a chord III<sup>6</sup> of the theoretical scale of D $\sharp$  Major. So in effect, as of bar 20, the cadential progression in D $\sharp$  minor is VII – I –  $\sharp$ III – I (we have omitted the figured bass for the inversion here). The harmonic duality of bar 21 displaces the modulation to F $\sharp$  minor from the second part of bar 20 to the second part of bar 21! So where in the second half of bar 20 the solution of F $\sharp$  minor is being forged, but still as a slight question, an option or the shaping of a solution, the real conclusion arrives in bar 21. It is in bar 21 that the modulation to F $\sharp$  minor is starting to happen.

Bar 20 and 21 require further acoustic and harmonic analysis, as the essence of the '*senza sordino*' effect lies precisely here. What we can point out at this stage is that the harmony in the bass line should be seen from the perspective of d $\sharp$  minor and D $\sharp$ . In the bass we are coming from the melodic

descending scale of d# to D#. The passage lies in bar 20, where the effect described by Tartini<sup>8</sup> delivers a Tartini note G, or a note with a pitch floating between G and G#. So the transformation to the scale of D# lies in bar 20, but the acoustic effect of a D# Major chord III<sub>6</sub> in bar 21 bring us to the low point, just beyond bar 20<sup>9</sup>. The harmony in the bass line is thus to be seen from the onset of bar 19 to the onset of bar 21 as follows: B – G# - G – D#, wherein G describes the Tartini note of bar 20 and D# the acoustic effect of the major chord GBD in this precise context.

The B# / C in the bass of the second part of bar 21 pulls us out of this situation. In bar 22 two horizontal ranks of C# lead us to chord I in F# minor in bar 23 with a solemn FF# - C# - F# in the bass. The acoustic effects of the latter are not to be understated either. In the present article, we will not pursue our analysis any further into the Adagio. However, we would like to briefly step back to the situation in bar 11.

#### *Returning to the related bars 11 and 12*

Having talked about the major chord GBD in a D# context in bar 21, we would like to return to bar 12, where we believe we are in the presence of a similar situation. What we could not explain in our earlier description of bar 11 and 12 are two things: the D# of bar 11, which is being used as a pivot is not reinterpreted as E<sub>b</sub>. Also the next step, in bar 12, is a C major chord and not c-minor.

Having described the appearance of a D# Major chord III in bar 21, we suspect that we are in a related situation in bar 11. D# is not reinterpreted because it is the theoretical scale of D# Major which is actually being used here. The D# augmented triad D# G B with added ninth (F) can be read as I (with augmented fifth) of D# major. It is then less surprising to find that in the next step we have a major chord C-E-G. The ambiguity of bar 12 now comes to light. C-E-G may also be seen as chord VI with lowered third of D# major where by the F natural from bar 11 may resolve upwards to G. So the modulation to the key of B minor is prepared here (VI = ♯II).

#### *Last but not least: Beethoven tells us what we do not want to see*

The sonata n. 31 opus 110 contains many more references to the genesis of Beethoven's sonata n.14. A couple of them should be mentioned here, to tie up our second article on the Impossible Note. In bar 67 of the first movement, Beethoven re-spells D<sub>b</sub> minor in C# minor in order to move to

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<sup>8</sup> Giuseppe Tartini, Italian violinist and composer (1692-1770). Tartini wrote an important works about harmony, published in Padova: *Trattato di musica secondo la vera scienza dell'armonia*. (1754) and an essay *De Principi dell'armonia musicale contenuta nel Diatonico Genere* (1767). Herein he describes the principle of the of the 'terzo suono', the third sound or pitch. The scope of the present article does not permit a further description of Tartini's theory and how Beethoven has applied it in opus 27.2.

Jean-Jacques Rousseau described Tartini's system in his *Dictionnaire de Musique* (Paris, 1768), but stopped short of explaining the extremely complex possibilities in modulation. He states that he will not go into these intricacies or subtleties of the Art ("les finesses de l'Art") as they would be misused by those who do not understand. His concluding remark is what we must remember: "...le vrai Système de la Nature mène aux plus cachés détours de l'Art." (p. 496)

<sup>9</sup> Kiyomi Kimura, who analyzes unpublished graphs by Greta Kraus and Angelika Elias, describes the difficulty and conflict that one encounters in assessing where the emphasis lies in the progression from bars 19 to 21. There is no doubt that this stems from the fact that they are not acknowledging the D# from the original edition by Cappi, reading an octave on E# in the bass of bar 20.

Kimura, Kiyomi: *Schenker and the Moonlight Sonata: Unpublished Graphs and Commentary*. Musicological Explorations, School of Music, University of Victoria, Canada. Vol 13, 2012.

E major. With this enharmonic change he is giving us a straightforward reference to his Sonata in C# minor. Then in bar 69, he changes the key signature to E major, for a total of 9 bars. He is now playing with numbers: E Major affirmed itself in bar 9 of the Adagio Sostenuto of opus 27.2, a movement which consists of a total of 69 bars.

Bar 69 (opus 110) opens with the V 5/6 chord of E, on d1#. The ascent and fall of D# becomes very visual element in the score: in bar 71 we see the D# climbing, rising progressively to be overtaken by E in 72, and a fall in bar 73 where D# remains in the left hand bass chord. For this and for many other reasons mentioned in this article, we would like to differ with H. Schenker when he believes Beethoven had not intended the use of the E-major key from the outset. His impression seems absolutely true when he says that Beethoven is 'dissimulating' and used the E-major key imbuing it "with the character of an organically magnified necessity"<sup>10</sup>. The interpretation he gives, that Beethoven is only using it (albeit magnificently) to get out of the key of D, is not.

Finally, opus 110 reveals the truth about bar 11 of opus 27.2. In bar 114, the chord which makes all things possible is E, G, B, D, F A, or, for short E, 11, the E-flat dominant 11<sup>th</sup>. And in his own brilliant magisterial way, Beethoven tells us and has told us all along there was an E, in bar 11 of the Adagio Sostenuto! So indeed, Johann Cappi did exactly what he was told to do: in the first edition there is certainly not a mistake in bar 11, and indeed an octave on D# and not on D.

Opus 110 was published in Vienna by the firm Johann Cappi, almost at the same time as the original edition by the Berlin publisher Schlesinger. Heinrich Schenker, in the foreword to his analysis of opus 110, stated that he was under the strong impression that Beethoven had, for opus 110, collaborated on its proof-correction for the Viennese publishers "given the remarkable relationship of the Viennese editions to the manuscript."<sup>11</sup> We believe that twenty years earlier, in 1801-1802, Johann Cappi himself worked similarly with Ludwig van Beethoven and went through great pains to craft this difficult score according to the composer's explicit wishes.

The octave on D in bar 11 of all other editions of opus 27.2 must surely be an amendment made to the score when bar 20 had to be modified. The missing page of the autograph is no longer there to prove it, but the composer himself has left us, in his music, a legacy about an excruciatingly painful event of his life.

*In conclusion, for now.*

The author of the review in the *Allgemeine Musikalische Zeitung* from June 1802 was without doubt well aware of some of the more intricate details of Ludwig van Beethoven's opus 27.2, in the first version by Johann Cappi, when he wrote: "Diese Phantasie ist von Anfang bis zu Ende Ein gediegenes Ganze, mit Einemmal aus dem ganzen, tiefen und innig aufgeregten Gemüth entsprungen, und nun gleichsam aus Einem Marmoblock gehauen. [...] überall hat auch der Verf., so weit Etwas mit konventionellen Zeichen ausgesagt werden kann, den Vortrag, und auch die Handhabung des Eigenen un Vorzüglichen des Pianoforte hinzugesetzt."<sup>12</sup>

<sup>10</sup> Schenker, Heinrich: *Piano Sonata in A, Major, Op. 110*. Page 52.

<sup>11</sup> Ibid. page 4.

<sup>12</sup> *Allgemeine Musikalische Zeitung*, no. 40, June 30, 1802, p. 652. Original text. See translation below.

Words hardly suffice to describe the musical – theoretical, acoustical and notational -- tour de force which comes to light. It will need a far more detailed study of all its implications, which is beyond the scope of the present article. The impact on performance can be tremendous as well as incredibly difficult, but is yet to be uncovered.

As of today, we know that we are and have been all along in the presence of not one but two versions of the *Sonata Quasi una Fantasia*. The Moonlight Sonata and Beethoven's original Sonata n.14 opus 27.2 are really distinct compositions having led distinct lives. No wonder Ludwig van Beethoven has been quoted to have said, about the former, the *Moonlight Sonata* version which was played by the public and about which people raved: "I have composed better things in my life".

Let us repeat the words of Jean Jacques Rousseau, which echo above all<sup>13</sup>: "...le vrai *Systeme* de la Nature mène aux plus cachés détours de l'Art."

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Our translation: "*From beginning to end this Fantasy forms a sound whole which, having once come forth from the wholeset being and deepest, most restless frame of mind, was thus carved as if from a solid block of marble. [...] and the composer has, as far as something like this can even be expressed through conventional notation, added details all over as to execution and how to bring forth the characteristic and most exquisite aspects of the fortepiano.*"

<sup>13</sup> See note 8 of the present article. Jean-Jacques Rousseau: *Dictionnaire de Musique*, p. 496. Our translation: "...the true *System* of Nature leads to the most hidden paths (detours) of the Art." Italics in the original text.

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