

SYMMETRY: ART AND EDUCATION

**BÉLA BARTÓK COMPOSES
THE THIRD MOVEMENT TO HIS PIANO SUITE**

A Fairy Tale from Music Land

told by Siglind Bruhn

Musicologist/music analyst and pianist (b. Hamburg, Germany, 1951)

Address: Department of Musicology / Institute for the Humanities,
University of Michigan, Mailing address: 1308 Broadway, Ann
Arbor, MI 48105, U.S.A.; E-mail: siglind@umich.edu

Fields of interest: Interpretive musicology, musical hermeneutics,
interdisciplinary aspects (music/arts, music/psychology, music/
spirituality etc.), performance as 'Gestaltung'.

Publications: (1986) *Die musikalische Darstellung psychologischer
Wirklichkeit in Alban Berg's "Wozzeck"*, Bern/Frankfurt. Peter
Lang; (1992) Symmetry and irreversibility in the musical
language(s) of the twentieth century, *Symmetry: Culture and
Science*, vol 3, no 2, 187-200; (1992) Symbolic Representations of
Divine Attributes in the Musical Language of Olivier Messiaen,
Exemplified in his Piano Cycle *Vingt Regards sur l'Enfant-Jésus*,
Symmetry: Culture and Science, vol. 3, #4; (1993) *J S Bach's
Well-tempered Clavier: In-depth Analysis and Interpretation* Bern/
Frankfurt. Peter Lang, (1994) Patterned Time: Boris Blacher's Play
with Variable Meters, *Symmetry: Culture and Science*, vol 5, no 3



Abstract: This "tale" represents something akin to the glimpse into the creative artist's workshop - that glimpse that we all so much long to be granted. Imagining 'how it could have happened', the narrative traces the conception and development of a piece of music from its cells (fitted, just like cells in the human body, to the functions they are to fulfill), through the meaningful grouping of the cells (showing how the same simple things may be playfully jostled over and over again), and ending with a complete movement for which its composer is justly famous.

The operations used characteristically are those of symmetry and symmetry-breaking. Graphic depictions of the components and the way in which they interplay and are strung together demonstrate the simplicity and beauty of the compositional processes.

1 SETTING THE STAGE

I wish I could take you to a composer's study, to watch him at work. He would be writing and rewriting his pieces, and I can think of many different ways how he could do this. He might sometimes start with rough sketches which are to be refined later on. On other occasions, he may feel that the whole piece is already flowing in his mind, in very much detail, so that all he has to do is put it down. (For an observer, this kind of inspiration may often look as if he were writing by some magical dictate.) In yet other cases he may have the main "ingredients" on which the composition is to be based ready in his mind, together with a clear idea about the character and spirit of the piece, but without having worked out the actual combination and development of these "ingredients" into a piece of such character.

Of course we could go and ask one or the other of the living composers to allow us to watch them at work - but who knows how they would feel with a curious stranger present? (I don't think I could come up with any good idea in such a situation!) And then, what I would actually like best is to see how one of the "older" composers stitched together something which today is regarded as a masterpiece.

A vain wish: most of these composers have obviously been dead for years. All we can do is use our imagination - and daydream the situation.

Why don't we try that? It may not even be such a bad idea. I'm sure the composer, if he ever found out, wouldn't feel bad about it; he would certainly understand that we should be interested in the creation process of a piece of art which we admire. And he would probably only smile if what we imagine isn't quite the way it happened. After all, it could have happened like this!¹

2 THE FIRST FLASH OF IDEAS

Béla Bartók didn't sleep too well last night. Some strange pulsating beat went through his dreams. Sometimes it was as if hordes of horses were running towards him very fast, coming closer and closer, and when they were nearly on top of him and appeared very threatening, the picture suddenly changed - and there they went, galloping at a rather safe distance, the sound of their hooves coming and going in waves. Then again he felt reminded of those frantically spinning Arab dances that he had seen and heard so often when he was in the Biskra oasis to collect Arab folk music, shortly before World War I broke out.

¹

The following abbreviations will be used:

M for melodic idea
CH for chord

B for bass pattern
T for toccata pattern

"I should really start writing them down, these rhythms. They could make the basic elements for the third movement of my piano suite", Bartók says to himself. "If I don't they will drive me mad!"

He has been too busy these last days to start with the composition of this new movement. Also, he is not quite convinced that what he has in mind is really such a good idea. If he decided to use those pieces of rhythm and melody that were haunting him already in his dreams, the movement would emerge as something with a very strong driving force. But was that what it should be, after the first movement with its bucolic elements, and the "marcato" character of the second? Was it not better to follow the example of so many generations of composers who demanded that after two rather lively pieces in a row the third had to be slower, to provide a contrast?

On the other hand: the ideas which keep returning to his mind seem the logical continuation of the stream of growing intensity which runs through the first two movements. Then maybe the "contrast" would have to wait? But, if he doesn't want to change his original design of a four-movement suite, then the slow piece would be the one to end the composition. Would the audience accept that? ("They always expect you to finish in a brilliant outburst!" he thought. "But sometimes it just doesn't work out like that. - Oh, forget about audiences!")

Bartók finally sits down and starts "laying out his material".

First, the frame: It should be easy enough to grasp, but at the same time not too "tonal". In the Europe of 1916, after the first years of World War I, people need both: hope and orientation on the one hand, but also a depiction of their actual anxiety and fear. Thus he will choose a clearly audible keynote - yes, that is important after all those shrill dissonances in the second suite movement - and then a second note for the other end of the axis along which he plans both his melodic processes and bass patterns to move. D and A - that would be a good idea. Their distance marks the span of a relaxed normal-sized hand on a piano, thus anything happening between them should be easy to learn and to memorize. Also, both notes have black keys on either side; that he might want to use.

The frame is then set, with D and A as the two ends of an "axis".

The next element to put down should be those pulsating bass patterns that keep haunting his nights. He plans to build the main sections of this movement on only two such patterns: The first one a scale, starting from D upwards, but avoiding the second axis note in the last minute (so that something is left to look forward to in the second bass pattern). He'll write it in an 8/8 rhythm:



Fig. 1: The idea for the first bass pattern
D E F G A^b G F E / D E F G A^b G F E

The second bass pattern should sound like a logical next step after this first one: therefore, it will also start from D, but culminate on the note A which the other avoided. Yet wait, something else between the two border notes has to be changed, because a simple D minor scale would be just too obvious. Bartók definitely wants some chromatics in his bass patterns, even more since the chosen border notes represent the traditional perfect fifth interval. So, what he will do is this:



Figure 2:

The idea for the second bass pattern

D F G G[#] A G[#] G F / D F G G[#] A G[#] G F

He tries the two patterns on his piano; yes, that's what he had in mind! For a more dramatic effect, one could even consider an octave displacement of the keynote in both bass patterns:

Figure 3:

adding dramatic octave jumps



Now the melodic patterns. As with the bass patterns, Bartók plans to rely on mainly two ideas which should also develop between D and A. They should definitely include the semitone step, preferably even the two semitones inside the D - A interval. That makes four notes: D-E^b and G[#]-A - which is probably already quite enough to make nice crisp motives.

Let's see: For the first melodic pattern, just the step from D to the semitone and back, leaving the other two notes for the second motive. The E^b could be a longer note and carry an accent, and the D would then be split into two shorter values. Now how about the distribution in the bar? If he starts with the D, then this would sound together with the D's at the beginning of the bass patterns - that is too simple! Better start with D on the second beat of the bar, so that later, should he decide he doesn't want a rest on the first beat but rather a continuous motion, the E^b falls on the bass D and creates some tension.



Figure 4:

The idea for the first melodic pattern

. D D E^b D D / (E^b) D D E^b D D

The second melodic pattern should have some direct connection with the first so that they can be used in a chain. Thus, starting it with the same E^b-DD motion (with or without the rest at the beginning of the bar) seems a good choice. That leaves the second half of the bar. With in his mind the image of a spinning dance, with its revolving movements and its emphatic character, Bartók finds it easy to decide: the

highest note with a sharp accent on it is to fall on the middle of the bar, after which the line can just fall through the two semitone notes back to D:



Figure 5:
The idea for the second melodic pattern

. D D A G# E^b D / E^b D D A G# E^b D

Bartók plays through his “material” again and again, in different octaves, bass patterns and melodic patterns first separately, then together, and finally with both hands in parallel motion for the bass patterns and for the melodic patterns.



Figure 6: The combination of the two melodic and the two bass patterns

Yes, all this is easy enough to hear and understand, yet complex enough to remain interesting for a major section of the piece. Between the four patterns, he has used all semitones from D to A except for F#, and the vertical combinations of the two voices encompass 7 different intervals. (Want to check? His intervals are: the minor ninth (D-E^b), the octave (A-A), the minor seventh (E-D), the major sixth (F-D), the minor sixth (G-E^b), the fifth (G-D and A^b-E^b), and the diminished fifth (G#-D).

Next, the middle section. The material which is to characterize this should be in contrast to the four patterns of the main section in all possible aspects. It should be more vertical than horizontal; therefore, instead of lines it would rather contain chords. The two hands should play not so much against each other but together in a single idea; thus again chords seem a good choice, but in addition, to have more motion, he'll think of a toccata-pattern which joins both hands in complementary rhythm.

As for the tonal organization, the keynote D has been so prominent in the main-section material that it should rather be spared for a while in the contrast section. But the note which has so far been left out in the chromatic scale from D to A, the F#, holds of course first preference.

Bartók starts building chords: on F# for a root and with A to retain some relation to the main-section material, that brings him to F# minor. What could the next chord be? Related in some way, yes, but not too much. Maybe cross-related! Using the A for

relation but setting a C against the C[#] of the F[#] minor chord - that gives just the right amount of dissonance. He likes this F[#] minor / A minor progression so much that he decides to add a third chord in the same degree of cross-relationship: Taking the C heard in the previous A minor chord as a root, but exchanging the E of the last chord against an E^b, leads him to C minor.

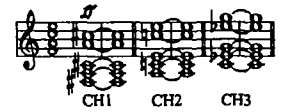


Figure 7: The idea for the three chords

The last element he plans to design before starting to think about possible arrangements of this material is a toccata pattern. The question of motion is easily answered: as he is thinking of a very virtuoso effect, the fastest result and at the same time the most powerful will be achieved by a bar long or even two bar long root; with on top of it a regular pattern of alternately hitting hands. But which notes does he want to choose? To keep things as simple as possible it would seem best to use the pitches from the three chords - preferably not one by one but as many of them as possible in one pattern. E.g. like this:



Figure 8: The toccata-pattern based on the three chords

For more variety, this pattern could then be transposed - for instance from its original CH3-root C to the CH1-root F[#]. This is what the toccata-pattern would sound like, transposed and - in the process - with some minor changes.



Figure 9: The toccata-pattern, transposed

That is enough for one session. He plays through all his material again, which he can already most easily do from memory since all elements are simple in themselves:

the two bass patterns,
the two melodic patterns,
the three chords,
and the toccata pattern.

3 DRAWING AN OUTLINE

Now that “the stage is set”, the next task is to sketch the general outline of the composition. Bartók has already made up his mind for most of the details:

There will be an introduction, so that the listeners can come to know the material bit by bit, preferably even the bass pattern separately from the melodic pattern. Section I will then expose the bass and melodic patterns as they sound against each other, in different octaves of the piano. As a kind of cushion between this and the following, he could then perhaps insert a little episode based on any single component of this main material - that remains to be seen. Afterwards, there should be a repeat of section I - well, not an actual repeat, not the same all over again, but similar enough to be easily recognized.

From there he will go to the middle section, with the three chords and the toccata motion. Towards the end of the movement the main material would again be taken up, in yet another way. Then, if he really writes that first episode, the piece would probably ask for a second episode to balance the first one. (This second episode would have to be different from the first one in material but somehow related; he doesn't yet know how he'll do that.) Finally ... if the very end could possibly bring the main-section patterns and the middle-section material together? That would round the composition off.

On the composer's sketch paper, this outline looks like this:

Introduction (B/M)
 Section I : B1, B2, M1, M2
 Episode 1
 Section I (developed)
 Section II : chords + T1
 Section I (newly developed)
 Episode 2
 Final section with B + M + CH + T

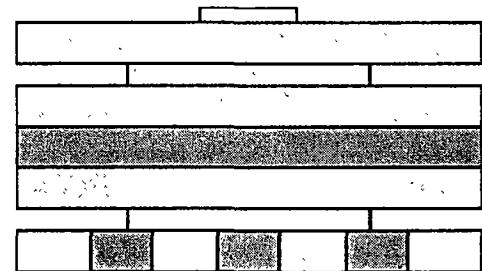


Figure 10: The main outline

This draft should guide him through the composition. Sometimes, these abbreviated outlines can even point out flaws before the notes are written. Or can they? Let's see - why does Bartók feel something is not quite right?

Oh yes: If the “introduction” introduces only some elements of the main material, then it is actually an introduction to section I - and section II, the middle section, would consequently need an introduction of its own! That would certainly be for the benefit of both the smoothness of the composition and its clarity. Bartók fears that hardly any listeners would be able to appreciate those cross-related chords unless they hear them

separately first and with very much emphasis on each single chord. That is, then, what the “introduction 2” should achieve.

And while he is looking so critically at his outline, the composer discovers that, for the balance of form, there should also be a respective introduction before the restatement of section I. On the other hand, the material which is to come is not new, so something like a short transition will do there.

4 DEVELOPING THE MAIN-SECTION MATERIAL

Bartók finds it easy enough to start with the actual composition. Especially the part he plans to make section I is as good as finished in his head, sounding there so clearly that he feels he cannot write quickly enough. He starts with both hands in rather low octaves and sets two bars of B1 against M1, followed by two bars of B2 against M2. Then the same with the right hand one octave higher, altogether a little louder than the first line. Finally, the tension buildup: splitting off just the last bar and chasing it all over the keyboard - up, up and down, down again, accompanied by a powerful crescendo.

Twelve bars - this is done. Next, the “repeat which should not actually be a repeat”. Bartók has been thinking about this a lot and has come up with a very ingenious idea: Against the same B1 / B2 bass line he now sets two melodic patterns on top of each other, one starting as before from D, the other starting from the second axis note, A. They both begin with M1, but as the upper voice proceeds, after two bars, to M2, the lower voice continues to sound the first melodic pattern so that three different patterns appear at the same time! This should result in considerably more excitement than the original section I.

Another minor but important change is that the composer launches the “section I repeat” from the middle-range octaves of the keyboard and then moves upwards, in the second line, to a level which is already quite high. In this way, the beginning of the third line will bring the actual outburst - highest and loudest in the development - after which the next bars will just gradually fall back.

Instead of descending in octave leaps which might be too brusque for what is meant to bring gradual relaxation, Bartók has decided to let the two voices jump from axis note to axis note and then build their respective patterns from there. The interval A-D at the beginning of the melodic patterns now alternates with the interval D-A. To give this line its final touch he also alternates the bass patterns. The entire development is then full of surprises although nothing essential has been changed! Here is what this final portion of the second main-material section will look like:



Figure 11: The transformation in the first recurrence of the main section

Instead of turning his attention now to the introduction and a possible episode between the two paragraphs with the main material, Bartók has decided to follow the logical connections and finish the restatement of section I first. How, then, can he do this in order to obtain a restatement which appears both as a convincing new beginning and as a sum of the two previous sections with this material?

To meet the first request he starts very softly and in the lowest possible octave, eliminating from the bass pattern the octave displacement of its first note. And he starts, of course, with just one voice in the right hand. The second line also remains fairly calm, although the right hand has moved up an octave and the bass pattern has reintegrated the octave leap.

Figure 12:
The transformation in the
second recurrence of the
main section

But as soon as Bartók comes to the third line of this paragraph, he starts combining the different facets of both the model and its first development: He takes up the idea of the doubling in the treble part, combines it with jumps from axis note to axis note - upwards this time - and in the fourth line crowns all this with a very steep, half-bar long descent in octaves.

With its powerful tension growth from the lowest whisper to this abrupt precipice, the restatement is both a sum total of the two previous main material paragraphs and the climax of them all.

5 INTRODUCTION AND FIRST EPISODE

From the moment of his first rather vague idea of what this piece should become, Bartók had always planned an introduction. Now that he has actually finished writing the main section this introduction seems even more necessary: You cannot expect a listener to fully appreciate the material of your piece if you pour it over him in very much of an indistinguishable way, with two patterns at a time right from the start! Thus, preceding the first statement of the main material there should be several bars which introduce at least some of its elements one by one.

For instance: The bass could start alone, exposing its first pattern. A little later this bass pattern could reappear together with the treble voice, which would now present the first melodic pattern (M1). By the time the audience has heard both elements thus introduced, they will be able to recognize these ideas throughout the remainder of the composition.

But Bartók is still not content. Starting the piece with just four bars of introduction, two for the bass pattern and two for the melodic pattern, seems rather abrupt. He feels that these elements would stand a better chance to really sink into their listeners' consciousness if they sounded a bit separated from one another, maybe linked with some minor, easy-to-absorb material.

Yes, that's it: what he is looking for is an *insertion*! And who knows, if he finds a suitable figure he might even use it also for that episode for which he has not yet developed any specific concept.

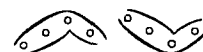
What, then, should such an insertion figure look like? If it were to be inserted into the first bass pattern, let's say exactly into its middle, then it would have to link the two halves:

D E F G (link) A^b G F E

Furthermore, it should of course not attract too much attention, so as not to distract the listener from the main material. What can be neutral enough for the purpose and at the same time link the two halves of the bass pattern in a simple and logical way?

After considering a few other figures Bartók settles for one that has been well established through centuries of music making: the “turn” - a four-note figure that is launched from below or above a center note, moves through this center to the other side and ends on the center note itself. The good thing about this figure is that you can actually use it both ways around, beginning on either the upper or the lower neighbor note to the center. In other words, with one stroke you have two figures, without confusing the audience with too many new ideas.

Figure 13: The “turn” figure, right side up and upside down



Fitting these turn figures into his pattern is more than simple for the composer. Since the motion within the first half of the pattern is directed upward, the first turn to follow would be the one which starts from below and moves mainly upward too; and consequently its brother, the inverted turn which begins from above, can then be used to lead very smoothly into the downward motion of the second half of the bass pattern. Bartók writes down the pitches he is going to use for the insertion.

Now if you find it somewhat surprising that he should know so easily which notes to use (with so many flats!), I can tell you why: There are compositional rules which have existed more or less since the first days when people used turns for their pieces. These rules say that a good turn should consist of one semitone and one whole-tone step. There are thus really only two options - either first the semitone and then the whole-tone step, or the other way around. In the particular surrounding of Bartók's bass pattern, where the first turn would be reached in the semitone G-A^b it would not have seemed all that good to start with another half step. That's why the solution was so easy to find.

With the use of this insertion, the introduction has gained a very good shape:



Figure 14:

The introduction to the main section

Now that people are familiar with this turn figure, it would seem very appropriate to use it again in the episode - maybe this time in combination with bass pattern 2? - and in parallel motion of both hands, to make it more urgent! The more Bartók thinks about it, the more he likes the idea. And he smiles secretly as he becomes aware of how many possibilities this insertion idea opens. Wait until you see for yourself.

There is one tiny little detail though which the composer wants to change in his original pattern, just for this episode. Since he plans to use nothing but his second bass pattern and the insertion figures, there seems no chance that he can make use of the semitone which is next to the keynote, the E^b, of which so far the melodic patterns had taken care. Yet he regards this note as an important building block of this movement and therefore decides to change his bass pattern in such a way that it will contain the E^b:



Figure 15: Changing the bass pattern

B2: D F G G[#] A G[#] G F
becomes D F G G A G[#] F E^b

His sensational idea for the episode is that he will use first only the pattern of the varied B2-figure with its insertion, then the same - with another insertion inside the first insertion, and maybe even a third start with an "insertion inside the insertion of the insertion". This is a very astute plan because people will feel they still know what they are hearing, yet they can certainly no longer make head or tail out of it.



Figure 16: The first episode

Bartók starts putting these episode ideas down on his note paper. As he comes to the third curve, however, he starts enjoying his own puzzle so much that he decides to introduce one more variation of the turn figure: he reads it from back to front, in the so-called "crabwise" motion. (Actually, we all know today that crabs move sideward and not backward, as people seem to have believed when they coined this term.) This crab-wise variation of the turn would then start with the center note and move either first up and then down, or the other way around.

Bartók uses the version in which the last note points upward, and, after having repeated this new figure two more times, a process which has given his overall crescendo a powerful last push, he propels the last note up a skip in the third repeat:

G^b F G^b A^b, G^b F G^b A^b, G^b F G^b A^b, G^b F G^b B^{bb}

This note is to be the dynamic climax and also the bending point of the curve, thus he reinforces it with an extra accent. From there on, the original episode figure moves down again. (Because of the sudden skip, though, Bartók does not quite end as he has always done in the previous insertions. But that does not bother him. All he has to do is adjust the end a little bit.)

6 INTRODUCTION TO THE RESTATEMENT AND SECOND EPISODE

Whatever the middle section is going to be - at its end, where it leads into the restatement of the main material, there will be no need for an actual new introduction or even the repeat of the original one since all musical elements should be thoroughly familiar by now. Therefore this task is quickly completed: Several repeats of the first bass pattern, in the left hand alone, should be enough to alert the listener that what is to come will be related to the main section he heard at the beginning of the movement.

The second episode, however, is not such an easy enterprise. Just as in so many of his other compositions, Bartók refuses simply to copy something he has written for reuse at a later stage. The second episode, which he has planned to insert after the restatement of the main material and before what will be like an all-over element combination, should be worthy of this placement.

Bartók reviews what he sees as his self-given requirements - the contract, so to speak, that he has signed with himself to ensure an interesting work of music. The episode should be based on just one of the patterns invented for this piece. It should also sound preferably in single voice or parallel motion in order to be easily distinguished from the main-material sections. Well, the single-voiced texture has been used twice already for the introductions; that leaves the parallel motion which relates directly to the first episode.

Which pattern, then, can he choose that is neither completely new nor already too often used? The bass patterns have certainly been exploited enough, by now. But wait: what about the melodic patterns? Especially the second one with its descent through the four main notes - the two axis notes D and A plus their respective semitone neighbors E^b and G[#] - that seems very suitable.

The next question is how he can transform this pattern in order to develop it into a longer episode. He does not want to multiply it by way of octave leaps or by jumping from one axis note to the next, since he has already done just that within the main-section phrases. Also, the simple up and down of the main elements and the three growing curves of the first episode should be complemented by a third, different design.

Suddenly an idea crops up: What if he transposes the four note descent, so that it links the two axis notes the other way round (A G[#] E^b D would become D E^b B^b A)? He could then join the two figures so that they make one longer group. And - the final clue - what if he ran through them in a large "wavy" figure?!

He would take the first note of the descent, A, as the center from which he would move first down, then up again and further up, and finally come back down again. The last A should ideally fall on the strong beat of some new bar. Can that be done? Well, sure! All he has to do is climb high enough so that the return matches exactly the length of the bar in which he finds himself.

Figure 17:
Creating a large "turn"



This idea of the wavy outline pleases him very much, not least because it takes up the idea of the turn figure, just on a much larger scale (although, alas, nobody will realize this).

After Bartók has designed this old-new figure, the rest again seems easy. Of course he can't just go on circling - that would not take him anywhere. But - he can repeat the entire wavy motion one octave higher, and a third time another octave higher. Here, true to the examples he has set himself, some change would have to occur. ("That is also a very old composition rule" he smiles to himself. "With the third component of a repeat or sequence, the motive or figure has to start developing".) Well, in this third component he will let his figure step on the spot for just a little while, to raise peoples' curiosity. The he'll enlarge the last semitone to a skip - and perhaps even give it an extra accent, to refer back to the climax in the first episode. (In order not to make it too similar he could perhaps prepare this skip gradually: A B^b, A B, A C.)

After that there would be a major thrust down the keyboard in octaves - still, of course, through the notes of the second episode figure, the "large-scale turn." But wait: what if he used a trick? What if he began the parallel motion with the hands two octaves apart so that the climax fell into the really high ranges, and then, as he moved downwards, cheated at the end and just continued the descent with the right hand while the left hand simply repeated its figure? Nobody would notice, and it lengthened the descent, thus making it much more dramatic in effect.)

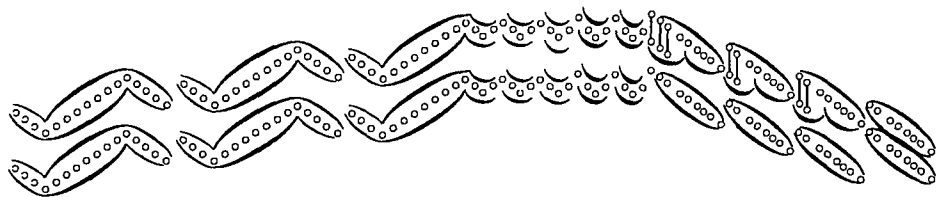


Figure 18: The second episode

7 THE MIDDLE SECTION

As Bartók has invented his material for the middle section of his movement such that a harmonic element - the three chords - and a rhythmic element - the toccata pattern could coincide most of the time, he is well aware that he needs, here again, a few introduction bars. (How else could any listener or even performer be expected to understand that the enharmonic mixture of notes in the toccata pattern actually derives from the original idea of three perfectly harmonic minor chords?)

This introduction would have to serve two purposes: first, it will present those three chords one by one, and with enough time between them to guarantee that each is savored both on its own, and in its harmonic relation (or rather: cross-relation) to the other. Secondly, it should build a link between the end of the second main-material section and the upcoming middle section; thus some poignant details from the main material should still be part of this transition, to be dropped only after the new material is well established.

What, then, would appear as the most prominent figure at the end of that second main-material section? The last step in its development was a three-part texture, with M2 and M1 in the right hand jumping down from D to A and from A to D respectively, with the bass alternating B1 and B2 from bar to bar. In other words: all four patterns sounded together. Most prominent? Well, the typical four-note descent of the second melodic pattern would probably attract most attention as it sounded in the uppermost voice, carried those fierce accents and made the plunge down through the octaves most noticeable.

That figure can now be retained for the first two bars of the transition, at a level which is the logical next step in the downward leaps. To make sure everybody recognizes it as only a preparation for something more important which is yet to come, Bartók decides to use again that same parallel motion texture which he has so far chosen to characterize the episodes.

Then, the first chord: in fortissimo and of a note value large enough to ensure that this sudden interruption of the eighth-note pattern flow produces a real startle. And that means how long exactly? To complement the two bars of transition pattern the chord could well be held for another two bars. That is a note value 16 times that of the pulse used so far! Such a drastic rhythmic break cannot fail to alert even those who are not so good at perceiving harmonic details.

To draw the most from this effect the composer decides to use a similar sequence when introducing the other two chords: two bars of preparation with main-part material in eighth-note pulse and then the sudden stop with the two-bar chord. To distinguish these "bridge" bars even more from both what was before he is now searching for a figure

which, although part of the main-material patterns, can be transformed by simple means to sound like some allusion to the new material.

He finds what he has been looking for in the first melodic pattern; it is the one he has so far less used, among the four components of the main-section material, in introduction or episode contexts. If he transforms it by way of that trick which he invented for the bass patterns - the octave displacement which turns the simple step into a ninth interval leap - then it could actually be played as a two-hand octave pattern. Like this it would both sound much more powerful and, in this form of a well established toccata figure, hint at the second element which will characterize the middle section!

Thus, two bars of "M1 octave toccata pattern" precede the two-bar long A minor chord, to be followed by an equivalent sequence with the C minor chord. The pitches for the "M1 octave toccata pattern" also have to be carefully chosen because, in order to contribute to the effect of a major change in the piece, they should no longer bear any relation to the harmonic frame of the first section. Bartók makes this very obvious by choosing, for the M1 semitone, those note pairs which lie just beside the G[#]-A step which was so prominent in the main section. Thus, chord II will be approached by B^b-C^b (the two semitones above G[#]-A), and chord III will be preceded by F[#]-G (the two semitones below G[#]-A).



Figure 19: Transition and introduction to the middle section

As Bartók now plays around to find the best arrangement for his "chord-mix toccata pattern" which he wants to use for the beginning of the middle section, he suddenly realizes something of which he has not even once thought so far: The tempo in which he dreams to hear his main-section material is not the right one for a toccata movement. That should be much wilder - fast enough that people no longer followed its notes in a horizontal line but heard them more like a rhythmic cluster. So before he even starts writing any notes he puts down "Poco piu mosso" (a little more lively) together with "martellato" (hammered) to describe the new character.

Off he goes. Starting from the chord-mix toccata pattern which he had already fixed when collecting his basic material for the piece, he writes three identical bars followed by a fourth bar in which both hands gradually move towards the transposition of the pattern. (Remember, he designed the chord-mix first with the C minor chord for a root, but then found that it worked equally well when build over the F[#] minor chord.)

With this transposed pattern he feels he cannot repeat the idea of three identical bars, thus he allows for a development from bar to bar by raising (though somewhat reluctantly, with a new start after two bars) the note which falls on the middle beats in a stepwise progression (D[#]-E-E[#]).

Playing through what he has written he finds this last idea appealing enough to want to make more use of it. For what is going to be the third and last four-bar phrase built on nothing but the toccata pattern, he returns to the first position of the chord mix ("so people can relax a bit, feeling that at least there is something they have heard before"). From here he uses the idea of the gradually raised middle beat note, this time in a more straightforward development. Yet, this leads him rather soon to B which limits his expansion: The next note, C, would be "too harmonic" in the C minor context of the chord base, and the second next would simply be quite difficult to play, with a normal sized hand, in the kind of pattern he wants, i.e. with the two lowest notes to be sustained in long note values.

The ascent then ends on B. This middle note can then be repeated for the remainder of the four bar phrase, so as to round off this portion of the middle section by returning to a more steady motion. After all, that may be the moment to remind us of the origins of this confusing chord mix!

To start with, these last two bars in which the toccata pattern features the repeated B can sustain their two root notes all along - this recalls the introduction where each of the three chords sounded for two full bars.

Then, let's go back to the three separate chords and focus on their relation to each other, in their purest form without anything around or in-between them. Using the four beats of each bar you can actually arrange them in a turn figure:

...., CH1 - CH2 - CH3 - CH2.

(Well, in the present speed that would be lots of notes to jump to, so he had better scratch some of them so as not to scare off the less virtuoso performers. Maybe he can just use the two upper notes of each chord? People will still recognize what that stands for.)

This new arrangement of the material should now be duly exploited to give the listeners time for appreciation; thus an alternation of one bar "toccata pattern with repeated B" and one bar "3-chord-progression" seems a good idea. To relate to the initial phrases of the middle section, the bar with the cross-related chords could be transposed to a different key and then back to the one on which it first appears.

In fact, this is already quite a lot for people to take in:

- * The introduction to the middle section with its three chords and the melodic pattern transformed into a toccata figure,
- * the “chord mix” toccata pattern first on a chord III root, then transposed to chord I and back to chord III, with each time a different development in its four-bar phrase,
- * and the “cross-related chord progression” bar, transposed forth and back, alternating with a toccata pattern bar.

But Bartók feels that this section should not come to an end without some very easy-to-grasp buildup to a climax. Thus he quickly invents a kind of intensification that will not need any new notes or rhythms. He just shortens the alternation distance, so that instead of the previous bar by bar change he now uses half-bar changes: two beats of toccata pattern plus the second half of the “cross-related chords” bar. Emphasized with an extra “sforzato” and repeated two more times this material squeeze will give a powerful effect.

For a continuation of this process, a continuation which should, at the same time, serve as a retransition to the third statement of the main section, he finally drops the toccata pattern altogether - so all that is left is the second half from the cross-related chords bar. Making use of the fact that the sforzato accents he had introduced just before now fall twice in each bar, Bartók chases this figure around for just another little while and then leads it into a descent which ends - where?

In a figure which, on paper, looks rather like the previous one but which actually leads back towards the main section: its chords are harmonically related and, what is more important, it stresses those two notes which formed the harmonic frame for the main-section material: D and A. (See fig. 20, next page.)

8 THE CODA

The piece now shows a fairly finished body:

- * an **introduction I** leading to the **first main-material section**,
- * an **episode I** serving as a connection to the **second main-material section**,
- * then the **transition+introduction** leading to the **middle section**,
- * and finally the **retransition** and short new preparation, followed by the **third main-material section**.

The closing **episode II** with its thundering downpour through the entire keyboard range should now be rounded off with some kind of “tail”. Bartók is thinking of some very dramatic development which, while recalling the elements you have heard in the course of this composition, builds up to a major climax.

To make this final development really expressive he starts with the tempo: since this should become continuously faster throughout this coda, he writes *sempre piu mosso* (which roughly amounts to “always getting faster”) above the still empty staves which follow the second episode. However, thinking this over he comes to the conclusion that the second episode itself is actually somehow outside the main body of the piece and should therefore be part of that final run towards the end. So he goes back and marks this episode with the term “strepitoso”, an Italian adjective rarely used in musical context, which means “wild and noisy”.

The musical score consists of six staves of music, each with a label to its left:

- T1, built on CH3**: The first staff, marked with a forte *f* and *martellato* (hammered) articulation.
- T2, built on CH1**: The second staff.
- T1 varied on CH3**: The third staff.
- CH 4-1-2-1, from T1, CH 1-2-3-2, from T1**: The fourth staff, showing a variation of the first two patterns.
- CH 4-1-2-1, from T1**: The fifth staff, showing another variation.
- free development back to D**: The sixth staff, indicating a free development leading back to the key of D.

Figure 20: The toccata in the middle section

Now to the composition of this last section. There should be as much interlinking and joining as possible of main-section material and middle section material. In remembrance of the one bar alternations between toccata pattern and 3-chord-progression in the middle section, the composer now combines one bar of M2 - that is the last element you would have heard in the preceding episode II - with one bar of the 3-chord-progression. As for the pitch, he is determined to leave the melodic pattern where it originally belonged, falling from axis note A to D, and decides to displace it only in octave jumps. The 3-chord-progression, however, has always been involved in

transpositions, thus it may again jump back and forth between its original keys (F[#] / A / C minor) and another position - which, since he is approaching the end of the piece, he decides should be on the "keynote" of the movement, i.e. on D.

He starts writing these ideas down; but before he has even completed the first two-bar combination he finds out that, with the end of episode II plunging right to the far end of the keyboard, this new development sounds simply too low. Well, he cannot just leave out one octave on his way up, that would be an awkward interruption, but what he can easily do is add an extra bar of octave displacements with the melodic pattern - and there we are back to the higher pitches of the piano.

After having completed the first four bars Bartók is about to start with their repeat when he feels that for a new introduction of the three chords there has not been enough rhythmic change - after all people will have come to associate these chords with very long note values, for that is how the chords were first introduced. So he refrains from writing a simple repetition of the "M2 + chord progression" alternation. Instead he designs similar bars which are to precede these and which will feature at least the first one of the chords in a prolonged note value. (To be held for three beats this time, to choose a new rhythm and not just repeat one that has already been used.)

In this way, he admittedly only has room for two of his three chords in each bar. But then he can make this up by quoting, after the alternation with the complete 3-chord-progression, the idea invented for the middle section: the material squeeze with just half a bar of M2 and the second half with chords III and II. He will confine this to the transposition to D so that people can sense that the piece is close to its end. On his note paper, this portion with all its later insertions looks quite chaotic. So Bartók sums up on an extra slip of paper what he has composed so far for this "tail" of his composition. In his abbreviations it looks like this:

M2 with octave leaps	(2 bars)
CH1 (long) + CH2	(1 bar)
M2 as above	(1 bar)
2 chords as above, transposed to D	(1 bar)
M2 as above	(1 bar)
CH1 - CH2 - CH3 - CH2	(1 bar)
M2 as above	(1 bar)
3 chords as above, transposed to D	(1 bar)
M2	(1/2 bar)
CH3 - CH2, transposed to D	(1/2 bar)
M2	(1/2 bar)
CH3 - CH2, transposed to D	(1/2 bar)

This seems to make quite good sense, and to finish it should be easy enough. If he started again, for a final run, from the very low range of the piano (for that he will have to set the very last bar one octave down) and rushed upwards in a powerful crescendo with those M2 figures, then he could crown the movement by some super combination which has just occurred to him: the first melodic pattern in pitches taken from the cross-related chords!

If he confines himself to using just the two upper notes of the chords - as he has done in all his 3-chord-progressions - he can actually play the cross-related thirds in three octaves at the same time, using both his hands and sharing the middle interval between the two thumbs. That will give a tremendous effect of strength which, after several repetitions, will break off suddenly - to be continued in the lowest range of the keyboard by the same melodic pattern in its toccata figure.

This again will suddenly break off, so as to let both hands jump up again and present a final mighty pattern combination: a 3-octave M2 above M1, played simultaneously on both axis notes. With “fff” for loudness, accents on each note and a sudden slowing down of the highly accelerated tempo this is an outbreak worthy of the whole energetic piece. Bartók adds a “fermata lunga,” a long halt, on the final note (imagine: a fermata on the weakest beat of the bar!) so that the tension carries on past this last figure. In this way the fourth, slow movement of the suite becomes truly indispensable (he might even stress this indispensability by linking it with an “attacca” to the third), and his arrangement of the movements attains its inner logic.

Listen now to the entire movement. Can you recognize the patterns?

