

WTC I/7 in E_b major – Prelude

The prelude in E_b major is long and complex. Its three segments are visibly distinct in the use of material and the degree of virtuosity. The first segment (mm. 1-10) is built along the lines of a “prelude determined by motivic development,” ending with a virtuoso passage and a cadential close. The second segment (mm. 10-25) displays a polyphonic texture in which voices enter one after the other with a short motif. At first, this motif is imitated in stretto; later the imitative pattern loses some of its density. No indications for any of the well-known structural models (such as fugue or invention) materialize: there is no cadential close in a second key followed by a new beginning corresponding in any way to that in m. 10. As a passage in free imitative style based on a single motif, this segment may thus be referred to as a “fugato.” The third segment (mm. 25-70), by far its longest, is also polyphonic, beginning with two contrapuntal voices in complementary keys. As there are several definite cadences and new presentations of the material after these cadences, this segment within the E_b-major prelude qualifies as a “fugue.” To sum up, Bach’s prelude in E_b major is conceived as a through-composed three-movement composition consisting of “prelude,” “fugato,” and “fugue.”

The first cadence concludes at m. 4₃. However, as the bass has not yet begun to participate in the harmonic progression but remains locked in a tonic pedal, this cadential close should not be regarded as structural. A second reason is that the flow of the lines continues uninterrupted, without even the slightest sign of phrasing. The next harmonic progression ends—again over a pedal note—at m. 10₁ in B_b major, the dominant of E_b. It marks the end of the “prelude in the prelude.”

Within the “fugato,” similar circumstances prevail as in the “prelude.” The only structurally relevant cadence, however, appears again at the end of this segment, i.e., at m. 25₁ (once again in B_b major). Two earlier cadential closes are worth mentioning because of the unusual way in which the listeners’ expectations for a resolution are deceived in the first and turned around in the second. Both cadences set out to close in the home key of E_b major but are prevented from doing so. The first seems to draw to a close in m. 15. Yet before the typical closing formula has reached the resolution, three of the four voices proceed quite differently from what is

anticipated.¹ The second cadence is initiated in m. 18. The return to the tonic seems almost achieved on m. 19₁, with only a soprano appoggiatura lagging behind with its resolution upward to E_b. Yet when the uppermost voice moves, it does not rise but fall. Soon thereafter, the other voices also give up hope for a conclusion. After this second attempt at a resolution onto E_b major, the section returns to the dominant tonality from which it had set out.

Neither the “prelude” nor the “fugato” thus contain any structurally relevant internal cadences. The “fugue,” however, is variously subdivided. Its six sections bring the total of structural blocks in the E_b-major prelude to eight, each of them individual and without any analogy. In the table below, the tonality in brackets denotes with which cadential target each section closes.

1.	mm.	1-10	=	“prelude”	(B _b major)
2.	mm.	10-25	=	“fugato”	(B _b major)
3.	mm.	25-35	=	“fugue,” section I	(G minor)
4.	mm.	35-41	=	“fugue,” section II	(C minor)
5.	mm.	41-49	=	“fugue,” section III	(B _b major)
6.	mm.	49-58	=	“fugue,” section IV	(A _b major)
7.	mm.	58-68	=	“fugue,” section V	(E _b major)
8.	mm.	68-70	=	“fugue,” coda	(E _b major)

The ideal tempo for this prelude is one that accommodates the character of each of the three “movements” without any need for an adjustment of pace. To be specific, the tempo should allow the 32nd-notes of mm. 8-9 to sound fluent enough to give the impression of an ornamental rather than a melodic line. At the same time, the quarter-notes of mm. 10-24 should sound calm enough to express the basic character of this “fugato.”

The appropriate articulation for the entire piece is legato. While the lively character in the prelude would require any eighth-notes and longer values to be played non legato, there are no notes to which this applies: virtually all longer values come with tie-prolongations, and the only separate long notes (tenor mm. 7-10) form a do-si-do group that is legato in any case. In the calm character of both the “fugato” and the “fugue,” only cadential-bass notes and consecutive leaps are detached. This applies to mm. 29-30: B_b-B_b-E_b, mm. 34-35: C-D-G, mm. 39-40: G-C-F, mm. 40-41: E_b A_b F G, and mm. 58-59: E_b A_b F B_b.

¹Try playing m. 15 as the penultimate measure of an E_b-major cadence. The soprano would resolve onto E_b, the alto descend to G, the tenor to E_b, and the bass leap down to E_b. As m. 16₁ shows, this is not what happens: all voices except for the alto take unexpected turns.

Bach's *Well-Tempered Clavier*. As M2 is the one and only driving force of the fugato, it seems important to identify all its statements:

- | | | | |
|--------------|------|---------------|------------------|
| 1. m. 10 | T | 6. mm. 13-14 | S** |
| 2. mm. 10-11 | B | 7. mm. 14-15 | T** |
| 3. mm. 11-12 | A* | 8. mm. 16-17 | B*** |
| 4. mm. 12-13 | S*** | 9. mm. 17-18 | S* |
| 5. mm. 12-13 | B** | 10. mm. 19-21 | S** ³ |

While the four-note version is still very close to the original, later modifications of M2 appear more and more transformed.⁴

The final segment of the fugato features only two rudimentary statements of M2 (see S and B: mm. 19-21). More influential here are the descending lines in all voices: soprano mm. 20-25 = E_b down to D, alto mm. 20-25 = D down to B_b, tenor mm. 22-24 = B_b down to E_b, and bass mm. 20-23 = G down to A_b. Each of these descending lines comes in diminuendo, so that the last five measures of this section describe a long relaxation. Not only is the ending of the fugato section thus well prepared, but, more importantly, the impending beginning of the third major segment, the "fugue," is strongly suggested.

This fugue turns out to be based on two leading ideas. As each of them is later used quite independently, it seems appropriate to speak of two subjects rather than of subject and counter-subject. In a proper double fugue, these would be presented separately at considerable distance, each determining a major portion of the fugue before being juxtaposed. Yet in this "fugue within a prelude," the two melodic ideas enter simultaneously. S1 is introduced in the alto. It spans two measures, setting in on the second 16th-note in m. 25 and ending on the downbeat of m. 27. This subject is closely related to M1 from which it borrows the first seven notes. S2 first appears in the bass: it stretches from m. 25₁ to m. 27₁. This subject is closely related to M2. The beginning recalls the first three notes of M2; these are followed, after the third note has doubled as the beginning of a sequence, by the entire four-note version of M2.

³A missing accidental in the *Urtext*, found also in several other editions, should be carefully considered: in m. 20, the tenor features B_b-A_b-B_b despite the A_n in both soprano (m. 19) and alto (m. 20). As the soprano statement of M2 suggests B_b major for these measures, adding a natural to the leading note seems essential.

⁴The variations indicated by the asterisks above are: * The third note may be prolonged to twice its value, delaying the fourth note to a weak beat where it follows usually as yet another syncopation. ** The motif may sound with its first note lengthened to a syncopation. This may then be followed either by only the third note or by the two remaining notes. *** The fourth note may bend back instead of leading downward.

S1

M1

varied sequence

S2

M2

M2

The dynamic design of the two subjects is, at least at the beginning, determined by the motifs from which they are derived: S1 begins with a tension-increase toward what was the final note of M1; the second, longer subphrase begins anew and carries an even stronger crescendo through the motif's varied sequence. The climax falls preferably on the quarter-note E_b, and is followed by the resolution through the subsequent do-si-do figure. The dynamic shape of S2 reflects its evolution from the fugato motif: a climax on the syncopation E_b followed, after slight relaxation serving as a new start, by a stronger second climax on m. 2₁. The descent to the key-note of the target chord brings the relaxation.

S1

S2

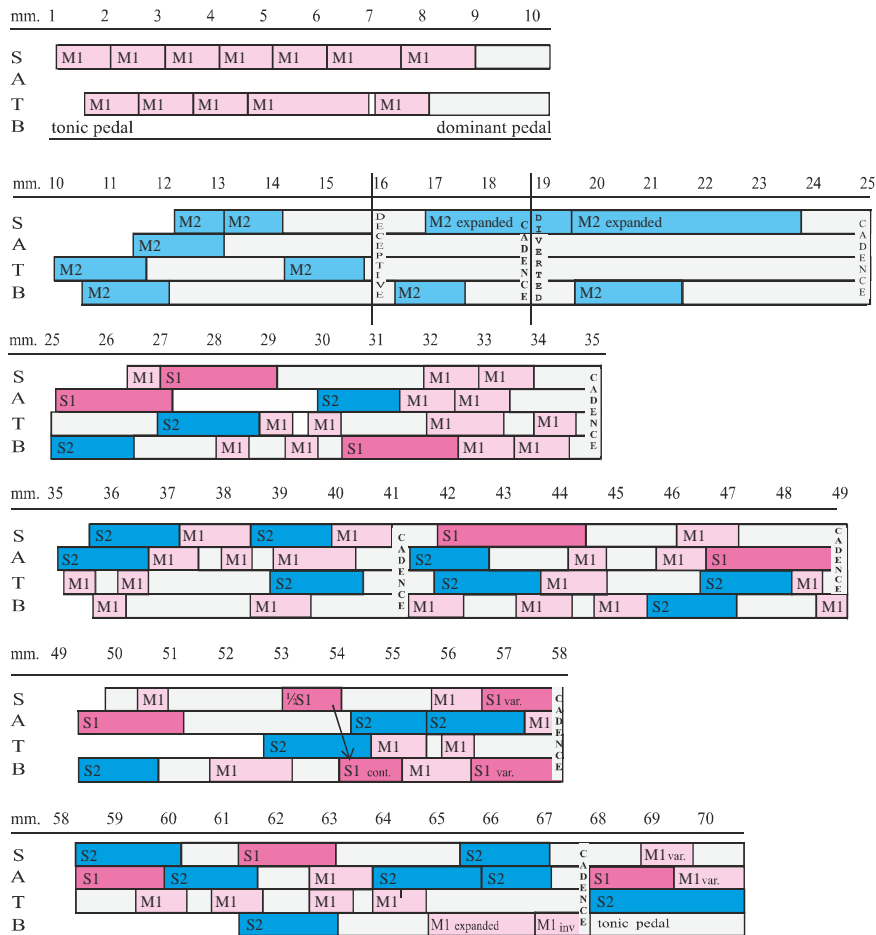
S1 appears twelve times in the course of the “fugue” and S2 twenty-two times. The following chart lists the statements of both subjects:

mm. 25-27	S1	A +	S2	B	
mm. 27-29	S1	S +	S2	T	
mm. 30-32	S1	B +	S2	A	
mm. 35-37			S2	A +	S2 S
mm. 38-40			S2	S +	S2 T
mm. 41-44			S2	A +	S2 T + S1 S
mm. 46-49			S2	B +	S2 T + S1 A
mm. 49-51	S1	A +	S2	B	
mm. 53-56	S1	S/B +	S2	T +	S2 A
mm. 56-58	S1	B +	S2	A +	S1 S
mm. 58-60	S1	A +	S2	S	
mm. 60-63	S1	S v	S2	A +	S2 B
mm. 64-67			S2	A +	S2 S + S2 A
mm. 68-70	S1	A +	S2	T	

Both subjects appear with several irregularities and variations: S1 may come without its final note (as in mm. 27-29) or even without the last two notes (as in mm. 60 and 63). It may be deprived of its entire first subphrase

(as in mm. 30-32), shortened in the middle so that the first subphrase leads directly into the note repetition of the ending (as in B: mm. 56-57), or it may, while shortened in the middle as described above, find its concluding note repetition replaced by a single tied note (as in S: mm. 56-57). S2 may come without its final note (as in mm. 27-29), it may have lost both its final notes (as in mm. 30-32, 35-37, 38-40, etc.), or its beginning may sound ornamented (as in m. 60).

S2 builds several strettos (see particularly mm. 35-49 and 64-67), the last of which sounds briefly like a parallel—although it is not. In addition, there are a few interesting voice crossings: in m. 28 the tenor does not descend directly after the two rising fourths of the S2 beginning. Instead it



continues, using scattered M1 quotations, to climb as high as A_b (m. 29). The alto with its statement of S2 thus begins underneath the tenor and only regains its rightful position in m. 31. In mm. 41-43 the S2 entries in alto and tenor rise high while the S1 entry in the soprano crosses below both of them before it corrects its position with an octave adjustment. Finally, in mm. 53-54 the S1 statement seems “confused”: it begins in the soprano with a varied first subphrase, descends correctly to E_b (m. 54₁), after which it switches to the bass! This, however, does not pick up the right pitch: instead of the expected A_b-A_b-A_b-G-A_b we hear F-F-F-E_b-A_b.

As in any other fugue there are a number of subject-free passages:

E1	m.	29	E4	mm.	40-41	E7	m.	63
E2	mm.	32-34	E5	mm.	44-45	E8	m.	67
E3	mm.	37-38	E6	mm.	51-52			

The material employed in these episodes derives mostly from M1; the remainder is neutral. Features to be pointed out include typical cadential patterns (see B: at the end of E2 and E8, and S: at the end of E3 and E4), as well as particular pitch patterns that engineer a tension-rise in all voices, thus preparing for the subsequent entries (as in E5 and E6). In contrast to these six episodes with definite closures, E1 and E7 use fragments of the first subject, thus serving merely as links.

Many indicators help in presenting an easy overview of the design of this fugue: The four-part ensemble is built up gradually, from the initial two voices (alto + bass) in m. 25, which are joined by the soprano in m. 26 and the bass in m. 30, to a first four-part cadence in mm. 34-35. A tonic pedal in mm. 68-70 separates the coda from the fugue’s “trunk.” The grouping of subject statements includes simple S1/S2 juxtapositions in mm. 25-35, S2 strettos in mm. 35-41, S2 strettos with additional S1 statements in mm. 41-49, S1/S2 juxtapositions with irregular S1 entries in mm. 49-58, and merging entries / juxtaposition / S2 stretto in mm. 58-68.

WTC I/7 in E_b major – Fugue

The subject of this fugue spans 1½ measures. It begins on the initial downbeat and ends at m. 2₃ on B_b. As indicated by the natural sign preceding the A at the end of m. 1, the subject features a modulation to the key with only two flats: B_b major, the dominant of E_b major. A_b is not only the leading-note to the new key but also part of a broken chord F-A-C-E_b in mm. 1-2, the V⁷ chord of B_b major. The subject note B_b in the middle of m. 2 represents the resolution onto the new tonic.

There are two subphrases within this subject. This can be deduced not only from the rest in its middle but much more from the varied partial sequence with which the second subphrase begins: the two prominent eighth-notes in the subject's second half sound like an elevated sequence of the two eighth-notes before the rest, while the preceding groups of 16th-notes is shortened but "made up for" by the final strong-beat note.

The pitch pattern in the subject features mainly broken chords:

- m. 1₁₋₂ = E \flat -major chord (with auxiliary note)
- m. 1₂₋₃ = A \flat -major chord (with auxiliary note)
- mm. 1₄₋₂₂ = F⁷ chord (with passing note⁵)

A brief look at the remainder of the fugue shows that these and other broken-chord patterns are prevalent throughout the piece. The rhythm in the subject consists mainly of 16th-notes and eighth-notes, with the exception of the quarter-note carrying the trill. The same predominance of these note values can be detected in the entire piece.

The subject's harmonic background is determined by the modulation within its confines. The active step (tonic to subdominant) occurs melodically immediately after the second beat, but is metrically confirmed only on beat 3. This subdominant harmony is sustained even when the second eighth-note of beat 3 returns to B \flat (a note that, in its unaccompanied

The musical notation shows a single staff in G minor (one flat). The melody consists of eighth and sixteenth notes, ending with a trill on B \flat . Below the staff, the harmonic analysis is as follows:

E \flat :I	IV	I	V ⁷ /V	V
			B \flat :V ⁷	I

melodic version, is necessarily heard as a return to the tonic). The pivot chord (V⁷/V) beginning melodically with the A \natural can be felt metrically either in the rest at m. 1₄ or at m. 2₁.

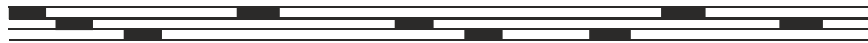
The E \flat at m. 2₁ seems the obvious choice for a climax: it falls on a downbeat, it represents the metrical place of the pivot chord that triggers the modulation, and it is reached in the high-tension interval leap of a minor seventh. Moreover, as mentioned above, it is conceived in varied sequence to the process in the first subphrase that finds its climax on the C at m. 1₃, the note that represents the subdominant harmony and sounds rhythmically as the first halt after the opening 16th-notes.

The tension in the subject thus moves in two curves. The first begins with a moderate crescendo and is complemented with a one-note relaxation (C-B \flat). A second crescendo then surpasses the first and is complemented with a longer diminuendo for a more perfect resolution of the tension.

The subject appears altogether nine times in this fugue:

⁵The use of the second eighth-note in m. 2 as a passing note is confirmed in Bach's harmonization of later subject statements; see, e.g., mm. 4, 7, and 18.

1. mm. 1-2	U	4. mm. 10-12	U	7. mm. 25-27	L
2. mm. 3-4	M	5. mm. 17-19	M	8. mm. 28-30	U
3. mm. 6-7	L	6. mm. 20-22	L	9. mm. 33-35	M



The subject always sounds in its complete length. Its last note appears most often as a 16th-note but may be extended to an eighth-note (as in mm. 27 and 30) or even to a quarter-note (as in m. 35). Moreover, several statements begin with a syncopated anticipation of the first note (see mm. 10-11, 25-26, 28-29, and 33-34). In addition to these small changes in the appearance of the subject, interval adjustments—between the first two notes and across the rest—occur in all tonal answers (see m. 3 etc.). No *stretto* or *parallel* are used.

Bach has invented only one counter-subject for this fugue. CS is introduced in mm. 3-4 against the second subject statement, where it begins slightly later than the subject with the eighth-note A \flat and ends, together with the subject, on the G at m. 4₃. This counter-subject appears as a faithful companion to the subject in all but the initial and final entries, featuring only one slight variation of its beginning in m. 20. It fulfills its task of counter-balancing the subject in several ways: Against the broken-chord patterns dominating the first two-thirds of the subject, CS sets stepwise motion, and against the stepwise motion at the end of the subject it sets a broken dominant-seventh chord (see m. 4₂). While the subject is made up of two subphrases, the counter-subject is conceived as one indivisible line. And while the subject has two climaxes—a softer one on the third beat and a stronger one on the fifth beat after its beginning—the counter-subject features a single unbroken tension-curve. Its climax falls either on the first eighth-note, followed in this case by a single long *diminuendo*, or (more likely) on the syncopation that coincides with the rest in the subject.

In this fugue, the number of episodes equals that of the subject statements:

E1 = mm. 2-3	E4 = mm. 12-17	E7 = mm. 27-28
E2 = mm. 4-5	E5 = mm. 19-20	E8 = mm. 30-33
E3 = mm. 7-10	E6 = mm. 22-25	E9 = mm. 35-37

E6 is the only episode to show a relationship to the subject: its first two measures quote a variation of the first subphrase in their upper voice. All other episodes are entirely independent from the primary material. They present a number of characteristic motifs that are used with great consistency: E1 introduces the half-measure motif M1 featuring two broken chords, each with a subsequent step downward to the next beat (mm. 2-3: F-D-B \flat -A \flat , F-D-A \flat -G). This motif plays a leading role in all episodes of this fugue, occasionally in an extended version with a final unaccented jump upward as in E3 and E4. E2 combines a prolonged M1 in the middle voice with M2, a figure in the upper voice that also consists of broken chords, this time in ascending direction. Significant features are the long syncopations. M2 also recurs, sometimes unchanged, at other times represented only by the accented upward leap in eighth-note rhythm. E3, the first episode in three-part texture, introduces M3 (M: mm. 7-8: F-D-B \flat -E \flat), a third motif that is subtly related to the other two: like M1 it begins with a descending broken chord, and like M2 it ends with an accented upward leap. Yet as its rhythm is built exclusively from eighth-notes, it is at the same time quite distinct. These three motifs appear in a variety of combinations (see particularly in E3, E4, E5, and E8). The second half of E6 then introduces a new pattern that recurs shortly afterward in E7. In it, sequences of ascending eighth-notes in the bass and a 16th-note dialogue with varied segments of M1 in the two higher voices create a pattern that we shall call M4.

Several relationships exist among the episodes of this fugue: the shape of E5 and E2 is similar although the hands are inverted (mm. 4-5 \approx 19-20), E3, E4a, and E8 are analogous except for the inversion of voices (mm. 7-10 \approx 12-15 \approx 30-33), and the second half of E6 is taken up, as was mentioned above, in E7. The only episode segments to remain without any correspondence are the cadential close of E4b with its preparation in mm. 15-17₃), the first half of E6 (E6a = mm. 22-24₁), and the final episode E9.

As all episodes apart from E6a are conceived as independent in material and character from the subject and counter-subject, they should sound like self-contained units, in a color and intensity distinctly different from those characterizing the subject and its counter-subject. The dynamic gestures within this contrasting and much lighter color are as follows: In E1 the descending sequences create a natural decline of tension. Similarly, the final episode E9 sounds in manifold falling lines. E2 with its analog in E5 and E3 with its analogs in E4 and E8 all show relaxing tendency in descending sequences. The first half of E6 also features a pitch direction that points downward; here again the dynamic tendency is decreasing. The

second half of E6 and, correspondingly, E7 are the only episode segments to engender dynamic build-ups. These are created both by the ascending eighth-note lines in the bass and by the ascending sequences.

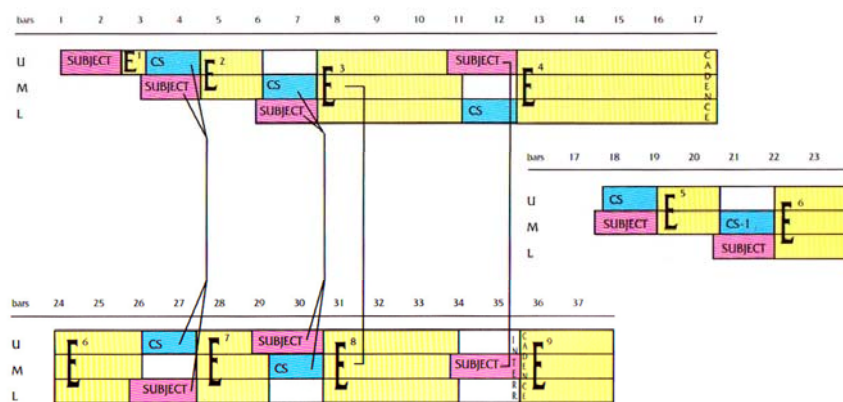
Both the steady rhythmic pattern with its predominance of 16th- and eighth-note values and the pitch pattern with its high content of broken chords characterize this fugue as rather lively. The tempo should be fast; a conductor beating an energetic four-four meter may give a good orientation for the minimum tempo, with the tricky trills in mm. 21, 27, and 35 marking the upper limit. The articulation corresponding with the character of this fugue requires a bouncing non legato for the eighth-notes and a quasi legato bordering on *leggiero* for the 16th-notes. The only longer note values that must be played legato appear in a do-si-do formula (U: m. 35 E_b-D-E_b). Furthermore, legato is harmonically indicated in the two-part version of M1 in U: mm. 27-28 (D_b-C and E_b-D) and in the chromatic descent in the split-off upper part of the middle voice in the final measure (D_b-C-C_b-B_b). The relative tempo of the E_b major prelude to the subsequent fugue should best be kept simple: a quarter-note in the prelude becomes a quarter-note in the fugue. (Approximate metronome settings: 84 for all beats.)

The only ornament in this fugue is the trill in the subject. As it is approached stepwise, it begins on the main note with a 16th-note, proceeds in two pairs of 32nd-notes, and ends in a suffix. This trill must be retained in every subject statement, even where it is not at all or only ambiguously indicated in the score, as in m. U: 12, L: m. 27, and M: m. 35.⁶

The design of the fugue reveals itself from several features, all of which are underlined by the harmonic development. The build-up of the three-part ensemble is followed by a fourth statement that is to be considered as a redundant entry belonging to the first section since it remains in the home key. The subsequent episode modulates to the relative key and confirms it with a cadential close. The fifth statement sounds in reduced ensemble and is linked to the sixth by way of the shared minor mode. The next closure, bringing about a modulation back to the home key, appears in E6a. The second half of E6 with its rising tendency not only prepares the next statement but also recurs in variation immediately afterward, when it

⁶Note that the trills in mm. 7, 12, 21, and 27 require a double note to be played in the middle of the trill motion. This becomes much easier in m. 30 if the twofold middle-voice E_b is taken by the right hand—which is more comfortable than one might think. In m. 35, the trill's main portion can be played with the right hand while the suffix sounds smoother if taken by the left.

acts as a bridge to the subsequent subject entry. The remaining group of subject entry + episode + subject entry is built in obvious symmetry to the similar group in the fugue's first section, encompassing the third entry + the third episode + the redundant entry. This symmetry hints at a structural analogy between the second to fourth entries of section I and the same number of entries in section III. The final entry with its chromaticism and deceptive cadence is harmonically the most daring.



Within the first and second sections, the tension-increase engendered by the gradually growing ensemble appears constantly interrupted by the regularly interspersed episodes of contrasting color. Thus each subsequent entry sounds only slightly louder than the previous one. In the third section, the preparation of entry no.7 creates more tension at the very beginning (thus making up for the “missing” first statement in the recapitulation?). This process is repeated before the next statement, so that the tension-increase within this section is more pronounced than that in the exposition. As the initial subject entry of the fugue expresses considerable strength owing due to the subject's lively and bouncing character, the dynamic equivalent to this tension-increase might be approximately *mf-poco f*. Within the second section, the change of mode results in a considerably less exuberant mood and, consequently, in a much softer touch. The third section thus not only balances the first one but even exceeds it slightly.