

WTC I/8 in E \flat minor – Prelude

The E \flat -minor prelude is primarily determined by melodic processes. These unfold in the context of an essentially homophonic accompaniment. The two predominant melodic ideas are introduced in the treble line of mm. 1-4 and 20-21 respectively. The former begins in the second half of m. 1 and ends on the E \flat in m. 4; the latter stretches from the high C \flat in m. 20 to the downbeat of m. 21. While subsequent developments of these melodic ideas show a large degree of variation in the treatment of pitch progressions, their rhythmic patterns remain consistent.

The first harmonic progression, a simple cadence with the subdominant in m. 2 and vii⁷ (replacing V) in m. 3, concludes in m. 4. This cadential close coincides with the end of the melodic entity and is thus of structural relevance. However, as the subsequent development is composed as a continuation with its own structure, phrasing at this point only marks a smaller breathing within a larger unit. The next harmonic development embarks on a progression of secondary dominants which each resolve into their related tonics. Listeners thus repeatedly experience resolutions without truly arriving at any new key.

mm. 5	6	7	8	9	10	11	12
	V ⁷ /vi – vi	V ⁷ /iv – iv		V ⁹ — I		V ⁹ /v — v	

The following twofold cadence in B \flat minor in mm. 13-14₂-16, secures the modulation to the minor dominant. Yet again, this new key is not established with a truly convincing resolution. In m. 14 the new tonic is reached in metrically unaccented position on the second half-note, and in m. 16 the melodic ascent after the downbeat also creates a sense of openness. The subsequent measures then modulate to the subdominant A \flat minor, which is established with a iv-V-i progression in mm. 19-20. The point of completion of this cadence marks the end of the first larger section of this prelude.

There are altogether four structural sections in the E \flat -minor prelude:

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|-----|-----------|-------------------|-------------------------------|
| I | mm. 1-4 | (E \flat minor) | tonic confirmed |
| II | mm. 4-16 | (B \flat minor) | modulation to the dominant |
| III | mm. 16-20 | (A \flat minor) | modulation to the subdominant |
| IV | mm. 20-25 | (E \flat minor) | modulation back to the tonic |
| V | mm. 25-40 | (E \flat minor) | tonic confirmed |

The fifth section shows three subdivisions—not only on the level of melodic development but also on that of harmonic progressions—insofar as there are two deceptive cadences prior to the final perfect ending: In mm. 25-29, the Neapolitan-sixth chord in m. 26 and the vii^7 in m. 27 seem to prepare a definite ending. This expectation is deceived on m. 29₁ by a chord that combines features of the traditional “deceptive-cadence” VI (which would read $C\flat, E\flat, G\flat$) with the $A\flat$ of step iv , reached by way of an appoggiatura $B\flat$. The i^6 of $E\flat$ major that follows in m. 30 is reached plagally from iv^6 and thus does not conclude this cadential progression either. Similarly in mm. 31-37, the subdominant chord at m. 31₁ is redefined on beat 2 as yet another Neapolitan-sixth chord, the vii^7 is extended through four measures (mm. 32-35), and the preparation of the ending is almost exactly the same as before (mm. 36 second half \approx 28 second half). Once again an expectation is deceived, this time because the resolving chord is topped by its minor seventh. As a V^7/iv progression, this initiates another $iv-vii^7-i$ progression that, above a four-measure tonic pedal, finally leads to the resolution into the Picardy-third tonic.

The appropriate tempo in this prelude is determined by rhythm and meter. On the one hand, the 16th-notes have to be calm enough to retain their melodic expressiveness and at the same time to allow for 32nd-notes in the trills. On the other hand, the time signature demands a tempo fast enough to convey a pulse in half-notes.¹

The articulation requires legato for all notes pertaining to the melodic process; this can be achieved with the fingers alone and thus poses no problems. The accompanying chords also sound best if smoothly linked. Yet connection between chords—particularly if they involve so many repetitions—is not possible on the piano without the help of the sustaining pedal.²

¹This is very important, particularly since the somewhat complex rhythmic structure in the piece may tempt performers into a transitional stage of counting in quarter-notes. While this may be essential during the process of preparation, it is equally vital that this stage be ultimately overcome in favor of the larger swinging pulse with only three beats to a measure.

²The use of the pedal is a very delicate matter and may appear somewhat complicated where 16th-note motion in one of the lines requires a clean and unblurred rendition. The only solution is thus to pedal on or slightly after the last rhythmic value in a measure. As every performer will aim at evenness in tone color throughout each measure and each phrase, this means that the pedal cannot be depressed before the last 16th-note fraction of each half-note. The only stretches that might do without any pedal are the beginning of the second half (mm. 20-21) and the cadenza-like measure near the end (m. 35).

There are three kinds of ornaments: trills, arpeggios, and a grace-note. The grace-note in m. 36 poses the easiest task. In keeping with the Baroque rule of “equal appoggiatura-resolution distribution in binary note values,” the A_b, played together with the notes in the other voices, is held for one quarter-note, leaving the second quarter-note for the resolution G_b.

Although the trills are indicated by different symbols, \sim , $\sim\sim$, and *tr*, their execution is determined much more decisively by their context.³ The desirable rendition can be found by addressing the nature of the resolution. If the ornamented note resolves directly into a strong beat, the trill fills the entire value, ending with a suffix immediately before the resolution. If, however, the ornament’s resolution occurs on an unaccented fraction of a beat, or if it is preceded by written-out notes, the shakes obviously have to stop before the written-out bridge. Also, if the ornamented note belongs to the harmony of the subsequent pitch, which therefore does not provide an actual resolution, the trill, short or even relatively long, must end on the main note without a suffix. Since we know that Bach often wrote simple mordent symbols for any length of trill including suffix-ended long ones, these considerations take care of all ornaments. Regarding the onset, as always in this era, a beginning from the main note is required only if the ornament is approached in stepwise motion; in all other cases, it is launched from the upper auxiliary.

The many arpeggios all begin with the lowest note *on* the beat. They sound best if the rhythmic distance between the lowest and the highest note remains constant, even though this may seem more difficult than retaining the rhythmic distance between any two consecutive notes. As a result, the long arpeggio at m. 6₁ should be considerably faster than the short three-note arpeggios at m. 6₂ and 6₃, etc. Another question is whether all notes of a broken chord belong to the level of accompaniment, or whether the treble or the bass form part of a melodic progression. Whenever the latter is the case, performers must consider both the coloring (melodious vs. neutral) and, in the event of a treble line, the metric placement of the melodic note. The horizontal context would sound awkwardly distorted if such a note appeared “offbeat”—as it would if it were played as the end of a rolled chord. One creative way of finding out what is appropriate in any given context is to imagine the entire texture of this prelude rewritten for an

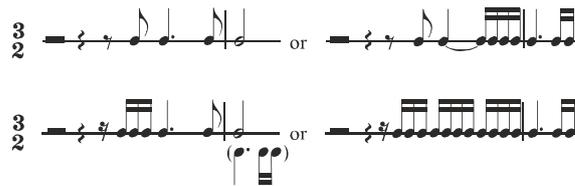
³On the one hand, if the extended mordent in m. 4 is interpreted as a note-filling trill, consistency requires that we play an ornament of similar duration in mm. 8, 10, and 12 where only the simple mordent sign appears. On the other hand, the *tr* in m. 15 decorates a dotted-note figure and must therefore be executed with a “point d’arrêt” ending.

ensemble of instruments—e.g., the oboe for melodic lines in the higher register, the bassoon for melodic lines in the lower register, and the harp for the accompanying chords. This aural image will greatly improve the color pattern of keyboard performers. Questions like the following should then be asked: Who plays

- the bass-clef B \flat at m. 5₁ as opposed to that at beat 2?
- the treble-clef E \flat at m. 6₁ as opposed to that at beat 2?
- the treble-clef C \flat -B \flat -A \flat at m. 8₁ and the notes at m. 8₂?
- the treble-clef G \flat -F-E \flat at m. 4₁ and the high G \flat at m. 4₂?
- the treble-clef F at m. 12₂ and the G \flat at m. 13₁?
- the treble-clef G \flat at m. 25₁ and the F \flat at m. 26₁?
- the treble-clef E \flat -D in m. 28? (This measure might allow for two equally meaningful solutions.)

A second question worth considering is whether the accompanying chords following exactly the same pattern as the others but appearing without an arpeggio symbol should be treated in the same way. This applies to the left-hand chords in mm. 29-30, the two-hand chord in m. 31₁ (with the exception of the C \flat continuing the “oboe” line), the right-hand chords in mm. 32-34, possibly the chords in m. 36₂₊₃ (with the exception of the melodic treble notes to be played on the beat, together with the root of the arpeggio), and possibly the left-hand double notes in mm. 38-39.

As was already mentioned, the prelude contains two relevant motifs, both of which undergo considerable changes in the course of the piece. Furthermore, both motifs are determined much more by their rhythmic and metric shapes than by their pitch patterns or the number of notes they encompass. M1 rests on a figure that could be described as a “question + answer” phrase with two similar halves, each consisting of an upbeat of varying length, a dotted-note group with or without an ornament, and a downbeat with or without a “female” tail.



M1 is introduced as an extended four-measure phrase consisting of three subphrases. (The upward stem of the B \flat at m. 1₁ is confusing, yet later statements leave no doubt about the motif's upbeat beginning.) Dynamically, the first and second subphrases describe small crescendos toward their successive climaxes and preferably no heavy accent in the third subphrase. The motif's character is graceful and mild. This can be

heard particularly well after the completion of the first perfect cadence: the first subphrase sounds in the lower melodic voice, leading harmonically to a dominant-seventh chord, while its “answer,” given in the upper voice, supplies the respective resolution. In mm. 12-14 the motif is freely developed in the upper voice, followed by a variant in what appears as a middle voice (mm. 14-16). A last statement, presented in the lower voice in m. 16, is extended and merges into the cadential-bass pattern that ends this section. Yet another variant emerges in mm. 22-25. Finally, toward the end of the prelude, M1 recurs stripped of its “question + answer” design in the form of a chain and in different harmonic guise.

M2 is introduced in mm. 20-21, in the very center of the 40-measure prelude. Spanning only one measure, it shares its rhythmic and metric features with M1. After only one beat, the lower voice sets in, creating a stretto. The whole imitative pattern is then sequenced. The tension curve is quite different from that in M1, mainly because the entire figure expresses a single harmony. The climax falls on the beginning, the character is stately. M2 is developed once, in mm. 26-28, where it appears in a single-voiced version without imitation. Owing to the harmonic change at the end of the first of these statements and the inverted pitch pattern in the second, the dynamic curve is also inverted, with a crescendo to the final note of the motif.

The interpretation of this prelude is determined by its broadly swaying basic character and its texture: a melodic dialogue before the backdrop of softly arpeggiated chords. Large-scale dramatic buildups are not the aim in this meditative composition.

WTC I/8 in D_# minor – Fugue

With a little less than three measures, the phrase length of this subject is not metrically oriented. The keynote D_# that falls on the middle beat of m. 3 does not only act as a harmonic resolution of the dominant-seventh chord represented by the G_# and E_# on the first two accented beats of m. 3, it also marks the melodic return to the pitch from which the phrase set out. While intuition tells us that the subject is made up of two subphrases, it seems that there could be two equally valid solutions for phrasing. One option is to view the complete curve from the initial D_# to the D_# in the middle of m. 2 as an entity and thus as the “main thought,” with the scalar descent from G_# onward as an “afterthought.” Another option is to regard the leap D_#-G_# in m. 2 as a varied sequence of the opening D_#-A_# which

makes sense rhythmically and metrically as each D \sharp is a quarter-note on a strong beat leaping up to a syncopation of 3/8 length. Most performers have fairly strong feelings as to which version they prefer. However, as it turns out in the further course of the fugue, the choice is not really ours for there are two statements that reveal what phrasing Bach himself had in mind. The middle-voice entry in mm. 19-22 and the upper-voice entry in mm. 20-22 both feature a rest within the phrase. This rest occurs after the end of the curve; it cuts through the assumed sequential leap and thus provides undeniable evidence for the phrasing into “main thought” and “afterthought,” i.e., the first option described above.

The subject’s pitch pattern contains two fifth intervals, at both ends of the “main thought”; all else is stepwise motion. (As we know now that we have understood the phrase structure, the step from D \sharp to G \sharp does not count as an interval since the two notes do not belong to the same subphrase.) Rhythmic features include eighth-notes, quarter-notes, and syncopated dotted (or tied) quarter-notes. The harmonic background is that of a simple cadence with an extended first chord. The complete curve of the “main through” is rooted in the tonic, but interspersed with dominant chords that quickly resolve back into D \sharp minor.



The syncopation at the beginning of the “afterthought” represents the subdominant, followed by a gradual return to the home chord.

The shaping of tension within the subject leaves no room for doubt in the second subphrase where a simple decrease after the syncopation is certainly the only logical answer. In the first subphrase, however, it allows for two slightly different interpretations, depending on the chosen tempo and on individual preference for rhythmic versus melodic processes. Performers who feel that the rhythmic feature should take precedence over the melodic one will place the main climax on the second note, the dotted A \sharp , while performers who favor the pitch curve may wish to play a tension-rise past this A \sharp to B, the (high-tension) minor-sixth degree, thus giving this subject a very special emotional quality.

The D \sharp -minor fugue contains 35 subject statements: in this fugue, the subject seems all-important. There are no rivaling counter-subjects or even any transitorily prominent motifs. Instead, subject entries encompass an unusually large portion of the composition, and the subject appears in so many different shapes, distributed with such obvious determination and purpose, that nothing else seems to matter.

1. mm. 1-3 M	13. mm. 39-41 L _{inv}	25. mm. 61-64 M
2. mm. 3-6 U	14. mm. 44-47 L _{inv}	26. mm. 62-67 L _{augm}
3. mm. 8-10 L	15. mm. 45-47 U _{inv}	27. mm. 64-67 U _{inv}
4. mm. 12-14 L	16. mm. 47-50 M _{inv}	28. mm. 67-69 L
5. mm. 19-22 M	17. mm. 47-50 U _{inv, rh}	29. mm. 67-72 M _{augm}
6. mm. 20-22 U	18. mm. 52-53 L	30. mm. 69-72 U
7. mm. 24-26 U	19. mm. 52-53 M	31. mm. 72-75 M
8. mm. 24-26 M _{rh}	20. mm. 52-53 U	32. mm. 77-79 L
9. mm. 26-29 U	21. mm. 54-55 L _{inv}	33. mm. 77-80 M _{rh}
10. mm. 27-30 M	22. mm. 54-55 M _{inv}	34. mm. 77-83 U _{augm}
11. mm. 30-32 U _{inv}	23. mm. 54-55 U _{inv}	35. mm. 80-83 M
12. mm. 36-38 M _{inv}	24. mm. 57-60 U	



Apart from the usual adjustments in the tonal answer, the most frequent guise of the subject is the inversion (inv) in which all intervals appear upside down. Augmentations (augm), i.e., statements in which each note value is doubled, and rhythmic variations (rh) each occur three times. In these variations, the dotted-quarter-note value of the subject's second note also "affects" the fourth and sixth notes, thus stretching the first subphrase in such a way that the second subphrase has to be shortened.⁴ Furthermore, two-part and three-part strettos occur frequently.

Since this fugue does not feature any counter-subject, the intriguing juxtapositions are those three-part strettos in which one of the voices appears in augmentation. The example shows mm. 77-83:

⁴Moreover, the first note is abridged in mm. 12 and 61, lengthened by anticipation in m. 26, and ornamented in m. 39. The final note is omitted in m. 50, delayed in mm. 14 and 26, and reached after an escape note in mm. 29 and 79 or after a chromatic passing note in mm. 63-64. Finally, in the very dense three-part strettos of mm. 52-53 and 54-55, only the subject's "main thought" can be tracked, but even this fragment contains irregularities at its end.

There are ten subject-free passages. As can be seen from a cursory glance at the music, these occur more often in sections where the subject appears in separate statements, but episodes are scarce—and short—within the context of the strettos.

E1	mm. 6-7	E6	mm. 50-51
E2	mm. 10 ₃ -11 ₁	E7	mm. 56-57 ₃
E3	mm. 14 -19 ₃	E8	mm. 60-61 ₃
E4	mm. 33 -35	E9	mm. 75-77 ₁
E5	mm. 41 ₃ -44 ₃	E10	mm. 83-87

No episode material is related to the subject. The only subject-related component between entries occurs in mm. 22-23 where the upper and middle voices extend their respective subject statements by sequencing the “afterthought.” These sequences, however, are inseparably linked to the preceding entries. As they do not give the impression of a contrast between statements, these measures are counted as a subject extension rather than as an episode. There are no independent episode motifs, but a few note groups that reappear occasionally.⁵ Comparing the measures featuring these recurring note groups with the list of episodes drawn up above, one finds that the only episodes to develop any melodically lasting figures are E3, E5, and E10. These are not only the longest episodes in the fugue, but, as will emerge later, indicators of important structural caesuras. Beyond this correspondence on a higher level, there is no further remarkable relationship between the episodes.

⁵They should be mentioned not because of their thematic importance but because a performer would wish to pay attention to shaping them consistently.

- In mm. 14-16, the middle voice line C#-F#-E#-D#-C# is imitated an octave higher (see U: mm. 16-17 from C#).
- The same line may also be recognized, with a variation in the first interval and a cut before the last, in mm. 18-19 (see M: C#-B#-A#-G#).
- Also in mm. 17-18, the upper-voice line C*-D#-E#-F#-E#-D#-C# is followed by a varied sequence (see U: mm. 18-19 from D#).
- The same curve recurs in inversion twice in mm. 33-34 (see U: from E#; M: from G# - varied), and six more times, in several slightly different variations, in mm. 41-44 (see U: m. 41 from G#, m. 42 from F#, m. 43 from C#; M: m. 42 from C#, m. 43 from F#, m. 44 from F#).
- In mm. 82-85, overlapping with the end of the preceding subject entry, the same curve recurs three times in inversion (see M: m. 82 from A#, m. 83 from A#, m. 84 from F#).
- Also in mm. 82-85, the syncopated final note of the subject entry, together with the subsequent falling broken chord, sets the model for a little curve that recurs twice (see U: m. 83 from A#, m. 84 from F#).
- Finally, all three voices are involved in stating a four-note scale segment as an upbeat figure in mm. 85-87.

Almost all episodes serve as periods of relaxation between the measures of tension built up by the subject statements. The only exception is E6, where the tension seems to rise, both because of the unrelentingly driving eighth-notes in all voices and because of the harmonic intensification toward the A[#]-major chord in m. 52.

Both the variety of note values (half-notes, quarter-notes, eighth-notes, 16th-notes, and various syncopations) and the predominantly stepwise motion in the fugue indicate a rather calm basic character. The range of an appropriate tempo is suggested by two inherent characteristics of the work: The calm character requires a tempo slow enough to allow for each eighth-note to be felt with full melodic impact, while the augmented subject statements require a tempo fluent enough to allow for the “main thought” to be sung in one breath. The tempo proportion between prelude and fugue may be simple: a half-note in the prelude equals half a measure in the fugue. (Approximate metronome settings: prelude beat = 33 [quarter-note = 66], fugue beat = 66.) The articulation that best expresses this character is an overall legato, only interrupted by phrasing. These interruptions, which occur frequently, should be gentle but distinct.

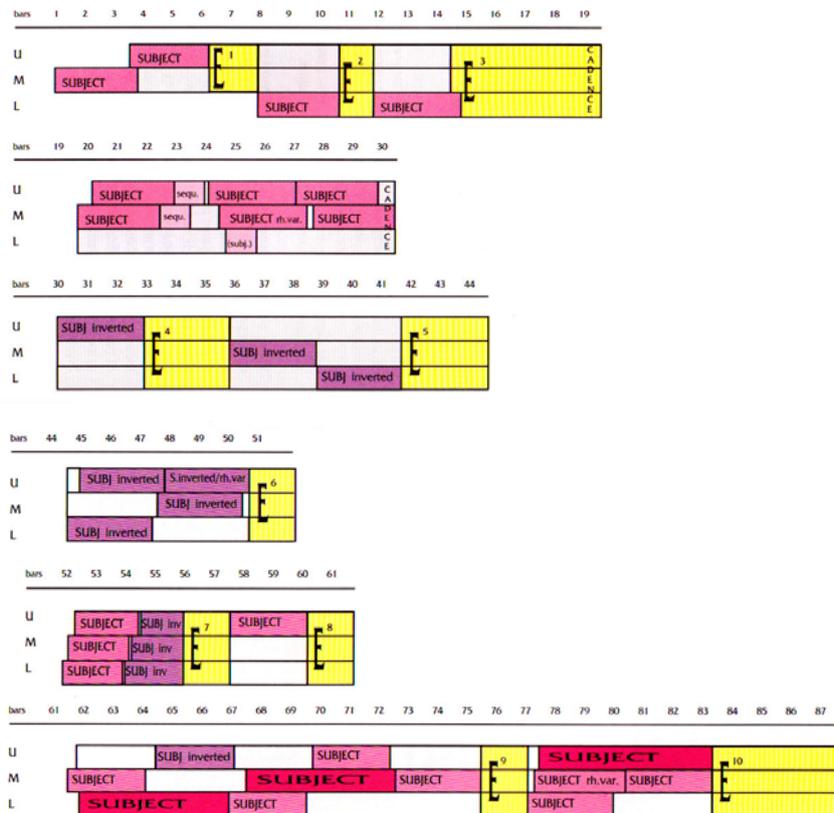
The only ornament, a complex trill in the lower voice of m. 74, seems somewhat arbitrary. Proving neither structurally important (like the trills in cadential closes) nor thematically consistent (like trills embellishing a note in the subject or a counter-subject), it appears redundant if not outright confusing. If played, it should consist of five notes: B[#]-C[#]-B[#]-A[#]-B[#].

The design of this fugue is obvious in the grouping of the material:

- I The first section contains four subject statements: M U L / L. The regular lower-voice entry (mm. 8-10) remains in the pitch range of a tenor while the fourth (redundant) entry sounds like a bass—thus giving unsuspecting listeners the illusion of a four-part fugue.
- II M. 19 introduces the first of three strettos, all of them using the subject’s original shape: M^U U^M U^M. In the first stretto, the imitation is at the octave at two quarter-notes’ distance, with both voices equally faithful to the original. (The middle voice is in the lead merely because it enters first.) In the second stretto, the subsequent voice enters after only a quarter-note but sounds in rhythmic variation and with a shortened afterthought. In the third stretto, the upper voice enters first but shows modifications at beginning and end, while the middle voice gives a faithful rendition of the subject and also relates more immediately to the target key of F[#] major. This is why the middle voice should be regarded as the leading voice in this stretto.

- III Section III begins in m. 30 with three statements of the inverted subject: $U_{inv} M_{inv} L_{inv}$. As has been shown above, the closing episode of this section bears resemblance to the episode that closes the first section (mm. 41-44 \approx 17-19), thus confirming the structural analogy of these two sections.
- IV M. 44 introduces two strettos comprised exclusively of subject inversions: $L^U M^U$. In the first of these strettos (just as in the first of the earlier strettos), the imitation is at the octave at two quarter-notes' distance, with both voices equally faithful to the original. (The lower voice is leading since it enters first.) In the second stretto (just as in the second of the earlier strettos) the subsequent voice joins in after only a quarter-note but features rhythmic variation and a shortened afterthought.
- V A new grouping is launched with three-part strettos and a return to the subject's original shape after a long stretch of inversions. The two strettos sum up and further expand the earlier developments. They sum them up in that they bring, in rapid succession, the original subject and its inversion. The expansion is caused by the increase in the number of entries in the strettos from two to three. Both strettos show the lower voice in the lead, followed by the middle voice and complemented by the upper voice. The imitations are at the octave and separated by one quarter-note each. All statements appear in a shortened version. After this quite dramatic buildup, a single entry in the original shape (mm. 57-60) presents no new pattern but serves to release tension.
- VI The final section is distinguished by an entirely new feature: strettos with an augmented subject entry. From m. 61 onward there are three such strettos: $^M L^{U_{inv}}$, $^L M^U$, and $^{L,M} U^M$. In the first two, the augmented entry imitates a normal-sized one at a distance of two quarter-notes; another statement in original values follows once the first is completed, i.e., halfway through the augmented statement. All voices remain close to the original shape. The second group is slightly extended in that the voice carrying the augmented entry adds a "repeated statement"—a separate entry reminiscent of the similar one after the second stretto in the fifth section. As before, this entry serves to release tension before the impending greater climax. The last stretto is the densest of all. The augmented leader is preceded by two normal-sized entries, the second of them rhythmically varied, and followed half-way through by a fourth entry.

There are few explicit cadential closes in this fugue. The work features a twofold harmonic development, with a return to the tonic and a new progression occurring roughly in the middle of the fugue. The first four separate statements are in *D* minor, followed by a modulation to the dominant (*A* minor; cadence in m. 19). The first stretto then modulates to *F* major, which is reached in closing formulas at m. 30. After this, the three separate inverted statements return to the home key of *D* minor. The second stretto group sets out from the tonic and leads to the dominant on m. 52, thus repeating the harmonic process observed in the first section. Subsequently, the fifth section begins and ends in *A*, with a short detour to *F* in the second three-part stretto. Similarly, the augmented-entry strettos begin and end in *A* while the middle group touches several other transitory keys. It is left to the final episode to modulate back to the home key. Owing to this harmonic device, the impressive fugue ends without a coda.



Within the first section, there is a very gradual tension-rise supported by the growing ensemble. At the same time, this growth in tension is counteracted on various levels: by the strong tension-release in the subject itself, by the lack of contrapuntal tension, and by the neutral character of the episodes. In the second, third, and fourth sections, the dynamic increase between one entry or stretto and the next is negligible; emphasis thus rests entirely on the contrast between subject-carrying passages and episodes. The fifth and sixth sections allow us to distinguish three dynamic levels: a level of extremely high tension in the strettos, a level of drastically reduced, medium tension in the sudden separate statements (mm. 57 and 72), and a level with a strong tendency toward relaxation in the subject-free passages.

The overall dynamic development in this fugue shows the outlines of continuous tension-growth, with two analogous departures and two small internal relaxations. The steep drop or rise in tension between adjacent sections is so pronounced that in comparison each section seems built on a solid plateau. The only remarkable increase within a section occurs in the sixth section. Here the final augmentation-led stretto is evidently conceived as a climax outranking anything that preceded it.

The following simplified diagram shows the structural processes in relation to the dynamic levels:

I		II		III		IV		V		VI
	E		E		E		E		E	
separate		two-part		separate		two-part		three-part		three-part
entries		strettos		entries		strettos		strettos		strettos
(original)		(original)		(inverted)		(inverted)		(orig/inv)		(w/augm.)
<i>p-mp</i>	<i>dim</i>	<i>mf</i>	<i>dim</i>	<i>p-mp</i>	<i>dim</i>	<i>mf</i>	<i>dim</i>	<i>poco f</i>	<i>dim</i>	<i>f-ff</i>