WTC I/9 in E major – Prelude

This prelude is composed in polyphonic style. Apart from a few missing rests and the not so unusual voice-splitting in the final measures, its three voices are presented in consistent part-writing. Prominent material within this prelude is based upon one motivic idea only. The composition can thus be regarded as built along the lines of an invention. Sections are determined by their harmonic patterns as well as by their development of material. In addition, there is a striking structural analogy, revealing a ternary form with coda.

The first harmonic progression ends at m. 3_1. Its steps are: m. 1 = I – IV, m. 2 = I – V^7, m. 3 = I. The cadential close coincides with the end of the motif (G♯ at U: m. 3_1). For this reason, and also because the bass has not yet taken part in the polyphonic texture, these first measures do not constitute a self-sufficient unit. The next harmonic progression concludes in the middle of m. 8, after a modulation to the dominant. This cadence represents a strong close and serves as a structural caesura. The dominant key is first reached in m. 4. In m. 5 it gives way to its dominant (F♯ major) which, reinforced by sustained notes in the bass and several F♯-major broken chords in the treble, governs the three measures preceding the perfect cadence in B major.

Harmonic progressions indicate four structural sections: mm. 1-8_7 (E major to B major), mm. 8-13_1 (B major to F♯ minor), mm. 13-14 (stepwise return from F♯ via B to E, which serves here as dominant to A), and mm. 15-24 (A major to E major, with an interrupted cadence in m. 22_7 followed by a full cadence in m. 24). The first section recurs in the fourth (mm. 1-8_7 ≈15-22_7). There are only two small deviations from a literal transposition: melodically, the ornamented note at m. 4_1 is substituted by an eighth-note group at the beginning of m. 18, and harmonically, the perfect cadence at the end of the first section is replaced by an interrupted cadence (see the C♯-minor chord in the middle of m. 22).

The basic character in this composition is ambivalent, but the differences in articulation resulting from the two choices are small. On the one hand, the interval structure in the principal motif features an entire broken chord. If, with regard to the rhythmic pattern, one focuses on the polyphonically involved voices and their frequent three-eighth-note groups

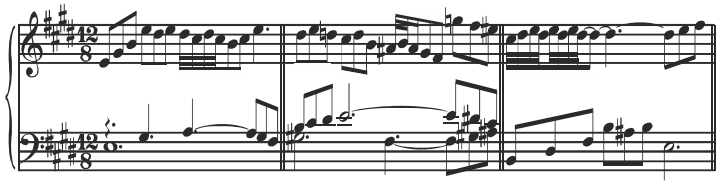
against dotted quarter-notes, one would have to interpret the rhythm as simple. This underlying simple rhythm, in conjunction with the melodic surface features, could then be read as indicating a rather lively basic character. In this case, the dotted quarter-notes and quarter-notes would be played non legato, the eighth-notes (quasi) legato. On the other hand, one might read the melodic line in the first phrase as an elaborate hidden two-part structure based, after an initial rising sixth (E-C♯), on the stepwise descent C♯-B-A-G♯ set in double thirds, and consider the syncopations in U: m. 3 and M: mm. 4 + 5 along with the 16th-notes in the cadential figures and the "bridging" m. 14 as essential constituents of the rhythmic pattern. In this case, the piece would be interpreted as representing a rather calm basic character in which all melodic notes are to be played legato. In the motif, the sequential structure implies phrasing after each E. In either character, cadential-bass notes (mm. 12 + 22-23) are non legato while do–si–do formulas (L: mm. 2-3, M: mm. 12-13, and U: mm. 23-24) as well as notes with tie-prolongation into an eighth-note (M: mm. 1-2, U: mm. 3, 4 etc.) are legato. This leaves only very few notes that will be played legato in a rather calm but non legato in a rather lively character.[1]

The prelude's tempo, too, does not necessarily differ too much in the two approaches. As always in Baroque pieces, the compound time signature indicates that the dotted quarter-notes and not the eighth-notes are to be perceived as the pulse of the piece. At the same time, the ornaments and the written-out 16th-note runs must be accommodated. A combination of these two criteria limits the choices to a moderate pulse with gently flowing eighth-notes.

The prelude features several ornaments. The principal motif, in its first presentation (mm. 1-3_1) and its recapitulation (mm. 15-17_1), carries two mordents; these are dropped in all shorter developments of the motif. Both mordents begin on the upper neighbor note and thus contain four notes, the first of which falls on the beat. The mordent adorning the preparation of the cadence in m. 7 is not derived from Bach's manuscript but from a copy, as the brackets indicate. Because it is very appropriately placed and embellishes the piece in an unpretentious way, playing it is a good idea. (Consistency would then require integrating an equivalent mordent on the middle beat of m. 21.) In both cases, the ornament begins on the main note because it is approached stepwise. Finally, the compound ornament in m. 4 is launched from the lower neighboring note, as the little convex curve

[1]These are: U: none; M: mm. 1: G♯, 5: E, 6: A♯, 10: all, 13: F♯, 15: C♯, 19: A, 20: D♯; L: mm. 6: F♯, 7: G, 9: E♯, 10: all, 14: B, 20: B, 21: C.

preceding the symbol designates. For performers with good finger dexterity, a rendition with eight ornamental 32nd-notes sounds most convincing. A longer ornament might blur the lower-voice entry of the motif.



m. 1 m. 7 m. 4

The initial phrase, which ends in a perfect cadence at m. 3_1, introduces the motif of this "invention." This motif has several outstanding features, some of which are transitorily lost in the development and only recur in the transposed recapitulation. As mentioned above, the line consists of a rising broken chord whose octave is prolonged with a written-out inverted mordent E-D♯-E and a melodic descent through the strong-beat notes C♯-B-A-G♯. The first two of these melodic notes recall the inverted-mordent figure, enhancing this lyrical embellishment by additional mordents and returning in-between with an escape note to the octave E. This E thus serves as a background layer in a hidden two-part structure. The last two melodic notes are then linked by a free ornamental line. Horizontally, one could regard the motif as consisting of "head" and "body," the head comprising the broken chord, the original inverted-mordent figure ornamenting the octave, and the melodic step downward (which entails a harmonically active movement), leading into a body in which the climax relaxes with a gradual melodic descent and an equally gradual harmonic return to the tonic. The motif's original accompaniment shows in the lower voice a protracted do–si–do formula and in the middle voice a (differently embellished) melodic parallel to the descent in the motif's body: A-G♯-F♯-E.

The development focuses on the motif's head, which appears twice in the lower voice (m. 3 = tonic and m. 4 = dominant) before returning with two statements on F♯ (V/V and V^7/V respectively) to the upper voice.[2] The remaining 1½ measures borrow the idea of gentle curves from the end of the original motif and close in m. 8 with a B-major cadence.

[2]Note that in these measures, the motif's head carries on into another broken chord. For a meaningful performance it is vital to distinguish between the original, active broken-chord rise, found here on the first beat of each measure, and the passive one that serves as a rhythmic extension to the melodic target note.

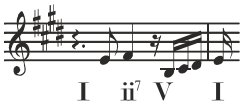
From a perspective of harmony, the first and second sections perform the pattern of "head" and "body" on a larger scale. This large-scale "head" —the first phrase—is firmly rooted in the tonic before its partial imitation undertakes an active harmonic step (from the E-major chord to the inverted F♯^{9} at m. $3_{3)}$. The gradual melodic descent of the "body," begun in m. 3 with G♯, continued in mm. 5-6 with F♯-E, E-D♮, and completed after a "lyrical ornament" in m. 8 with C♯-B, ultimately resolves into a new tonic as the F♯-major chord, implied from m. 3_3 to m. 8_2, finally gives way to B major. In the second section, the imitation of mm. 8-9 with the active harmonic step leading to an inversion of the C♯-major ninth chord represents the structural "head," followed here again by a sweeping descent (U: mm. 9-12: B-A-G♯, D-C♯-B-A) accompanied by the gradual resolution into the tonic of F♯ minor at m. 13_1.

The subsequent brief passage encompasses two statements of the motif in the lower voice that are even shorter than the previous ones. The sudden 16th-note runs, launched by the right hand and later taken up by the left, add to set these measures apart from the remainder of the piece. Structurally, these two measures serve as a retransition to the recapitulation in m. 15; harmonically they lead to the function that, in Baroque compositions, commonly opens a recapitulation: the subdominant (m. 15: A major). The fourth section repeats the design of the first but ends in an interrupted cadence instead. The coda presents three shortened versions of the motif in the split middle voice before it concludes the work with a final cadence in E major. This cadence is of particular interest as it is a hybrid between a plagal cadence (represented by the bass step A-E) and an authentic cadence (represented by D♯ and C♮, the third and the ninth of the dominant chord).

WTC I/9 in E major – Fugue

The subject of this fugue is short. It begins between beats (on the upbeat to m. 1_3) and ends already at m. 2_1, encompassing six notes and one rest. The dominant, implied on beat 4 where the unaccompanied line features a rest, resolves onto the tonic at the return to E.[3] The harmonic movement on the rest, i.e., in the step from the implied prolongation of the

[3]It is possible to assume a "female ending," i.e., an unaccented extension without any modification of the harmonic pattern. This would include the four 16th-notes up to the G♯ at m. 2_2. However, an analysis of the whole fugue shows that it makes more sense to relate these notes to the counter-subject where they form an essential part of the first subphrase.



highest pitch and its subdominant function to the dominant, underlines the indivisibility of the phrase. The harmonic base is a simple cadence in which the subdominant is replaced by a seventh chord on its relative. The subject's pitch pattern comprises seconds and one fifth interval. The rhythm includes three different note values: 16th-notes, one eighth-note, and one quarter-note. Later in the fugue, this rhythmic pattern is occasionally interspersed with tie-prolongations.

Identifying the climax is easy in this subject. The second note F♯ is the melodic peak, the rhythmic focus as a sudden halt, and harmonically enhanced by the subdominant function and the implied change of harmony on the rest. The rest after the climax sustains the tension, which is then gradually released through the ensuing four 16th-notes.

The subject appears altogether twelve times in the course of this fugue.

1.	mm. 1-2	M	5.	mm. 7-8	M	9.	mm. 20-21	U
2.	mm. 2-3	U	6.	mm. 9-10	L	10.	mm. 21-22	M
3.	mm. 3-4	L	7.	mm. 16-17	M	11.	mm. 25-26	U
4.	mm. 6-7	U	8.	mm. 19-20	L	12.	m. 28	L

Only two of the subject statements are varied. The upper-voice entry in mm. 20-21 includes an interesting octave displacement: a 16th-note-group sets out one beat early from middle B. The extra time created by this metric shift is filled with a figure leading to the climax C♯ in the higher octave. Similarly, the final entry also begins on the wrong beat. This time, however, no "correction" is made. Instead, this statement concludes in its metrically anticipated position and thus makes room, as it were, for an accented cadential-bass leap to the tonic at the end of the piece.

The fugue features only one counter-subject. Introduced in the middle voice where it is pitted against the second subject statement (from the second 16th-note in m. 2 up to m. 3_1), it is almost omnipresent. This companion is thus considerably longer than the subject. As it begins immediately after the downbeat, it bridges the three-eighth-notes rest that precedes the first subject note. The counter-subject's pitch pattern and perfectly even rhythm confirm the ornamental nature and, by extension, the basic character of this fugue. A spiraling motion around a central note (mm. 2-3: around E) and an obvious lack of harmonic or melodic features that might enhance tension discourage any explicit dynamic shaping other than a very soft rise at the beginning and a relaxation during the second

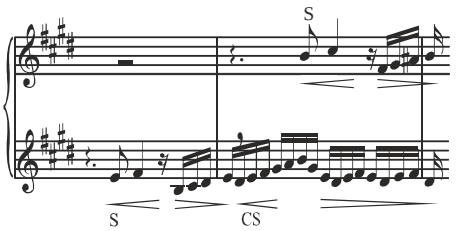
half. For the same reasons and because of the very even rhythmic pattern, subphrasing is also unlikely. Nevertheless, one can clearly distinguish two segments. They are of equal length (each spans eight 16th-notes and ends on a strong beat), which allows them to appear in various combinations. Separate or joined, they play an important role in the fugue. The first segment, CS-a, consists of a scale section from D♯ to B followed by a broken chord B-G♯-E. The second segment, CS-b, features the inverted turn D♯-E-F♯-E and its varied repetition D♯-E-F♯-D♯. These segments appear both as companions to subject entries and as episode motifs. They are therefore worth being traced in detail.

As a companion to the subject, the complete version of CS-a + CS-b appears only against the subject entries in mm. 2-3, 7-8, 20-21 and, with a slight variation, in mm. 21-22. Other subject entries are accompanied by

1. CS-b + CS-b in sequential pattern (see mm. 3-4, 25-26)
2. CS-b + CS-b in a two-part imitative setting (see mm. 9-10)
3. a free figuration followed by CS-b (see mm. 6-7)
4. CS-b dissolving into a free figuration (see mm. 28-29)
5. no counter-subject material at all (see mm. 16-17, 19-20).

Within the episodes, the segments may appear in the counter-subject order of CS-a + CS-b (mm. 4-5 L: D♯-D♯; mm. 8-9 M: A♯-A). In this order, they may form descending sequences (mm. 11-12 and 12-13 L: G♯-G♯ and E-E; mm. 13-14 and 14-15 U: B♯-B and A♯-A; mm. 17-18 and 18-19 M: B♯-B and G♯-G♯; mm. 22-23, 23-24 and 24-25 M: D♯-D♯, C♯-C♯ and B-B). They may even incorporate small variations that change the harmonic outline (mm. 26-27 and 27-28 U: D♯-G♯ and F♯-B). Or the episodes may recall only one of the counter-subject's segments, either separately (m. 3 first half U: A♯-B) or in ascending sequences of CS-a (mm. 5-6 L: C♯-C♯, mm. 15-16 U: G♯-G♯). In other words, there is not a single measure in the E-major fugue without some quotation of the counter-subject segments.

Because of its unusual nature without any explicit dynamic shaping, the counter-subject does not challenge the subject's supremacy. Yet one must distinguish different levels of intensity in its 16th-notes and shape the beginning carefully: while the four ascending 16th-notes that end the subject constitute a distinct diminuendo, the ensuing group of ascending 16th-notes represents a tension increase (though a mild one owing to the ornamental structure).



There are seven subject-free passages in this fugue.

E1 = m. 3	E4 = mm.10_3-16_3	E6 = mm. 22-25_3
E2 = mm. 4_3-6	E5 = mm. 17-19_3	E7 = mm. 26-28_1
E3 = mm. 8_3-9		

No episode is related to the subject, but all, as has been shown above, feature at least one of the counter-subject segments. This consistency of material throughout all structural portions creates a strong impression of unity. In addition, the episodes contain three motifs. While inconsequential for the design of the composition, their dynamic impact for the episodes is important. M1 appears in the upper voice of mm. 5-6 (B D♯ F♯ B); its broken chord pattern, immediately imitated in the middle voice but never recurring thereafter, describes a graceful increase in tension. M2 is of greater importance. Consisting of a syncopated appoggiatura and its resolution, it is introduced in the middle voice of mm. 13-14 (A♯-G♯) and followed by two descending sequences, each representing an emotional accent and relaxation. Its accompaniment, a non-melodic eighth-notes figure in the lower voice that is also sequenced twice, finds its climax on the middle beat of each measure, preceding the high-tension interval (see the minor seventh leaps A♯-G♯, G♯-F♯, F♯-E). M2 is taken up in E6 where its appoggiatura-resolution pattern appears in the upper voice of mm. 22-25. The accompaniment, again in the lower voice, is a non-melodic eighth-note figure in similar dynamic design, albeit in a different pitch pattern. M3 is presented in the upper voice of E5 (see m. 17, G♯ to tied note A) and sequenced once in the next measure; it never recurs thereafter (although U: m. 9 could perhaps be regarded as remotely related). It describes a tension curve with the climax on the first 16th-note.

The episodes comprise two unequivocal closing formulas that are structurally significant as they provide essential information for the understanding of the nature of the seven episodes. This is crucial in the case of the first closing formula, which occurs in mm. 4_3-5_3, where the upper voice features the typical do–si–do figure. E2 thus consists of two halves of very different structural importance: the first measure provides a cadential close in the dominant key of B major, while the continuation introduces M1 and modulates back to the tonic, re-establishing E major in m. 6_4. The second closing formula is found in m. 12, with the perfect cadence in C♯ minor, the tonic relative, completed at m. 13_1. Once again the upper voice presents one of the typical figures, and once again this closing formula appears in the middle of a subject-free passage. E4 is thus built similarly to E2; it also consists of two segments, the first of which provides the cadential close while the second introduces a new motif: M2. Two other closing formulas

appear in subject statements. The first, characterized with the typical cadential steps in the lower voice, accompanies the middle-voice entry in mm. 16-17; the second, with a similar lower-voice pattern and a do-si-do figure in the upper voice, supports the final entry in mm. 28-29. Concerning structural analogies, E6 is a variation of E4b (mm. $13\text{-}16_3 \approx 22\text{-}25_3$).

The role the seven episodes play in the development of this fugue reveals a strikingly regular pattern: E1 provides a bridge between the second and third entries; it sustains the tension that has already been built up without sounding too important lest it diminish the premonition of the next subject statement. E2 engenders a release of tension in its first half; after the cadence, M1 introduces a contrasting color with its own relaxing tendency. E3, like E1 though longer, serves as a bridge between two entries. E4, like E2, injects a tension release into the (also considerably extended) first segment; after the cadence, the appearance of M2 provides an even more distinct color contrast.[4] E5 like E1 and E3 serves as a bridge. Like its predecessors E1 and E3, it also appears in two-part texture, with the lower voice resting. Yet because of its unique motif, this bridge sounds more individual than the two others. E6 repeats the color contrast and the overall relaxation of its model, the second half of E4. E7 once again sustains the tension between the two final subject statements.

The basic character of the E-major fugue is rather lively. This is determined above all by the rhythmic structure that, from the middle of the first subject statement onward, presents an unbroken continuity of 16th-notes, and by the ornamental nature of the 16th-notes. Several broken-chord figures (M1, M3, M2 accompaniment, lower voice E7 etc.) confirm this choice of character. The appropriate tempo of this fugue is very fluent, almost virtuoso, with a swiftness that avoids any heaviness. The articulation encourages many nuances: an energetically bouncing non legato in the subject's upbeat, a lighter non legato in the broken-chord patterns of M1 and M3 as well as in all other upper- and middle-voice eighth-notes, a neutral, medium-length non legato in the M2 accompaniment and all other cadential-bass patterns, a crisp quasi legato in the 16th-notes figures, an ordinary legato in the melodic closing formulas of the treble (mm. 4-5, 12-13, and 28-29), and an intense legato in the appoggiatura-resolution pairs of M2.

[4]M2 is more prominent than M1 both in length and in further impact. It is set more clearly apart from the ornamental character of this fugue owing to the melodic legato found in its appoggiatura-resolution figure, and its descending sequences effect an overall relaxation.

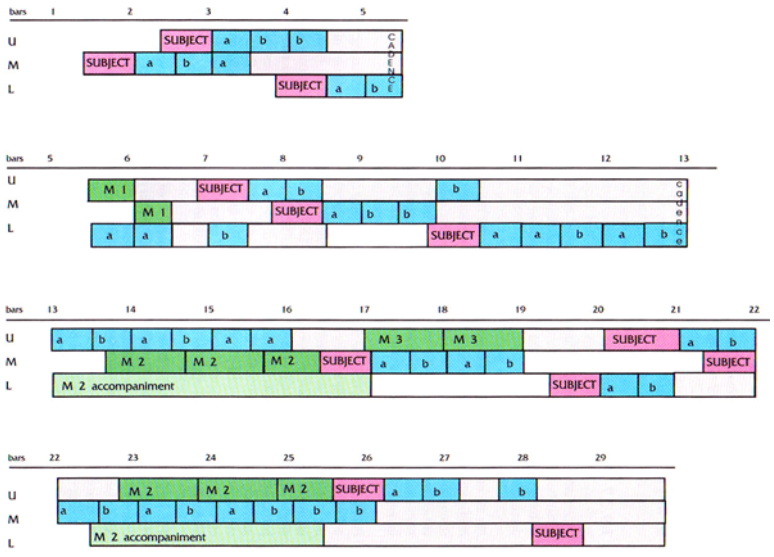
The tempo proportion of prelude and fugue also allows for two choices, depending on just how fluent or how gently flowing the prelude is taken. If the prelude is played with a pulse of metronome 80 or above, the proportion can be simple: a beat (dotted quarter-note) in the prelude becomes a beat (quarter-note) in the fugue. If the prelude is played with a considerably slower pulse, a translation of eighth-notes into eighth-notes works best. (Approximate metronome settings: [a] 96 for the dotted quarter-notes in the prelude and the quarter-notes in the fugue; [b] 72 for the dotted quarter-notes in the prelude; 108 for the quarter-notes in the fugue.)

The paramount force determining the design is this fugue lies in the two explicit cadential formulas as well as in the structural analogies. Some of these correspondences were already mentioned above, some should be added here. Summing up, these are the factors determining the layout of the fugue: E2 and E4 both consist of two segments, the first ending with a cadential close emphasized by a closing formula, the second creating a color contrast by introducing a motif that is unrelated to the primary thematic material. Interpreting these two analogous cadences as the ends of the first and second sections respectively, and looking backward from these ends, one can observe that both are preceded by the same pattern of two subject statements (on tonic and dominant), followed by an episode that serves as a bridge, and complemented by another statement in the third voice (mm. 1-4_3 ≈ 6_4-11_3). The second section differs from the first owing to the extensions of roughly one measure's length each at both sides, i.e., additional episode measures both before the above-mentioned pattern.

Another analogy occurs between the second segment of E4 and E6. Both present almost exactly the same material, albeit in different keys and with the upper and middle voices inverted. If the second segment of E4 is regarded as the beginning of the third section in this fugue, which follows from what was said above, it would be logical to accept E6 as the beginning of the fourth section. Looking back again from the respective section endings one can detect the following analogy: The three subject statements preceding the end of the third section recall those of the first section. Like them they are presented on the tonic, the dominant, and the tonic (mm. 1-4_3 ≈ 19_3-22). The episode that, in both the first and the second sections, serves as a bridge inside this pattern, now connects the entire pattern with the additional subject statement at the beginning of the third section. While we found that the second section was extended in comparison to the first, we can now confirm that the third section continues this process of extension at least at the beginning: the episode-segment opening the section is longer (mm. 13-16_3 ≈ 5_3-6), the linking episode inside the

section is also longer (mm. 17-19$_3$ ≈ 8$_3$-9 ≈ m. 3), and there is an additional subject statement.

While the third section reveals itself as related to the first by the key of its three subject statements, the fourth section similarly recalls the second one. The two statements in the fourth section take up not only the keys of the first and last statement in the second section, they even appear in the same voices (mm. 25-26 ≈ 6-7: statement in U on the tonic, and mm. 28-29 ≈ 9-10: statement in L on the dominant).



Owing to the ubiquitous presence of counter-subject segments and the absence of intensifying modifications of the subject, large-scale dynamic developments are not called for in this fugue. The overall impression should emphasize the ornamental nature of the piece and the subject's cheerfulness.