

WTC I/6 in D minor – Prelude

This prelude begins in purely harmonic design. Against this backdrop, melodic ideas gradually emerge, repeatedly emancipating themselves from simple bass patterns. The prelude should therefore be analyzed under the criteria of both harmony and motivic development.

The first harmonic progression ends with the lower D that serves as a tonic pedal during the first five beats of the piece. (In the right hand, the conclusion falls on the fifth triplet-16th-note of m. 2). Since this progression unfolds above a pedal-note bass, it conveys the impression that the piece has not yet quite begun. This cadential close is thus not to be regarded as structural, but as a first segment of a larger unit. The full first section modulates to the relative key, F major. It closes in m. 6 (right hand: on the eighth triplet-16th-note). The structural caesura is enhanced by a distinct cadential-bass pattern in mm. 5-6. Regarded under harmonic aspects alone, the sections of this prelude are as follows:

- I mm. 1-6 tonic to tonic relative (D minor to F major)
- II mm. 6-8 on to subdominant (F major to G minor)
- III mm. 8-10 on to dominant (G minor to A minor)
- IV mm. 10-15 back to tonic (A minor to D minor)
- V mm. 15-26 tonic confirmed (D minor)

A close look at the melodic structure reveals that the three sections in the center are closely interrelated: section II sets up a motif in the lower voice, which is then sequenced one tone higher (L: mm. 6-8 \approx 8-10) and taken up again after a short interruption (L: mm. 12-14). This time, the expected cadence is delayed and appears only after an additional measure in the lower octave. Moreover, the “interruption” just mentioned features a short motif (see L: m. 10, A A G F) that is sequenced three times. Extending the analyses to motivic development, the previous layout can thus be condensed into three major sections:

- I mm. 1-6 (D to F, no motif yet present)
- II mm. 6-15 (F to D, two motifs and their development)
- III mm. 15-26 (D to D, motifs 1 and 2 no longer present)

The sequential structure in the three harmonically closed progressions in the central section apart, the prelude does not contain any transpositions, variations, or other analogies. Only one very short correspondence should

be mentioned as it will add to the understanding of the overall design: m. 15 recurs in m. 23, transposed to the dominant and enriched by an additional middle voice.

The continuous flow of broken-chord patterns in the right hand might indicate an ideal tempo for the piece. As in preludes determined solely by harmonic processes, these broken chords should sound fast enough to allow listeners to perceive them as harmonic entities rather than melodic zigzag lines. Neither should they appear as sparkling virtuoso figures, so as not to divert listeners from grasping the inherent harmonic design. The articulation reflects the rather lively basic character with legato for the triplet 16th-notes and non legato for the eighth-notes. Within this non legato, color shading distinguishing between neutral bass notes and more emotional motivic notes is, of course, very much encouraged.

The first section in mm. 1-6 displays all the characteristics of a piece determined solely by harmonic processes. Each eighth-note represents a complete chord, and unlike the more complex progressions in the preludes in C major, C minor, D major etc., most of these chords (up to the third eighth-note in m. 4) appear in root position. Moreover, the secondary processes that often occur in harmonically-determined pieces can both be found here: a pedal and sequences. These processes are connected with the following dynamic lines: Above the tonic pedal, a D-minor cadence unfolds with the active step to the subdominant taking place at m. 1₃. The tension-enhancing step is enhanced by an upward shift in the pitch level. A complementing descent accompanies the tension-decrease toward the resolution in m. 2: mm. 1-2₁ = $p - mp - p$. After an octave leap that brings about a sudden tension-increase, a model of four eighth-notes is introduced and sequenced one step lower. In the model, the pitches and with them the tension are again falling: mm. 2₂-3₁ = $mf^- - p^+ - mp^+ - p^-$. In the next measure, the density of sequential pattern and harmonic change doubles. Each eighth-note now establishes a new chord, and the model to be sequenced is only two eighth-notes long. (The sequences contain one slight adaptation in the bass, which allows the left hand to move to the preferred lower octave.) The model and its three sequences move upward, thus expressing a significant tension-increase: mm. 3₂-4₁ = $mp - mp^+ - mf^- - mf$. The next measure provides a yet different pattern, with harmonic changes now occurring on the quarter-note beats while the bass inserts non-harmonic passing notes on each unaccented eighth-note. The two-eighth-note long model is followed by three descending sequences. Here, the tension-release is prolonged for an additional measure with a short cadential close: mm. 4₂-6₂ = $mf^+ - p$.

The second section is determined by its two motifs. The longer first motif (M1), introduced as an independent melodic unit in the lower-voice of mm. 6-8, is actually not completely new. Its stepwise descent recalls the bass line in m. 4, and its ending is reminiscent of the cadential-bass pattern in mm. 5-6. Some details, however, are new, and they are decisive: M1 begins on a pitch that is the seventh of its chord. This creates high melodic tension right from the start of the motif. In its second half the line returns once more to the same note, which is now redefined as the root of the deceptive chord in the subsequent cadence. The tension created here is of a harmonic nature. In the right hand, the uppermost chordal notes present several short parallels to the left-hand line. Particularly the ascent in the middle of m. 7 serves to enhance the impact of the deceptive chord. The much shorter second motif (M2), introduced in m. 10, depicts a melodic descent combined with a harmonic process of relaxation and thus counter-balances the gesture of M1. The dynamic processes in this section may be described as follows:

M1	mm. 6 ₂ -8 ₂	<i>mf</i> – <i>mp</i> – <i>mf</i> ⁺ – <i>p</i>
sequence	mm. 8 ₂ -10 ₁	<i>mf</i> ⁺ – <i>mp</i> ⁺ – <i>pf</i> ⁻ – <i>p</i> ⁺
M2 + sequences	mm. 10 ₁ -12 ₂	<i>mf</i> – <i>mp</i> ⁺ – <i>mp</i> ⁻ – <i>p</i> ⁺
M1 + extension	mm. 12 ₂ -15 ₁	<i>pf</i> ⁻ – <i>mf</i> ⁻ – <i>pf</i> – <i>mp</i> ⁻ – <i>mf</i> ⁺ – <i>p</i>

The third and concluding section combines various secondary melodic processes of a different nature. The lower part sets out from the newly-found keynote D. After a broken chord that propels it almost two octaves upward, it splits into a hidden two-part structure with D as a pedal in the lower part and a melodic descent in the upper notes, accompanied by a peak-note line in the right-hand part. The anticipated release of all tension is delayed when the peak-note line takes on a virtuoso form in mm. 18-19. But, as this virtuosity seems to bear little effect against the decreasing power of the bass line, the previous peak-note pattern is reinstated.

Soon after the bass descent has been concluded, the concealed two-part structure of the left-hand part turns into a real one: an independent middle voice evolves. As middle and lower voices proceed, two distinct tritone intervals mark points of high tension at mm. 21₃ and 22₃. In the right-hand part, the peak note line is taken over alternately by the top and bottom notes of the broken chords. The overall impression is one of descent, so that the downbeat of m. 23 is reached in a softness almost comparable to that of its corresponding measure, m. 15.

From here, both hands are once again propelled up almost two octaves, with the now firmly established middle voice adding extra drive. In an

unaccompanied cadenza-like treble line the ascent continues up to the high $B\flat$, from where diminished chords descend chromatically until the keynote D is regained—and with it the beginning of a short, chordal-style final cadence.

WTC I/6 in D minor – Fugue

Beginning after an eighth-note rest and ending at m. 3₁, this subject spans exactly two measures. Despite the sudden interruption of the sound flow that is indicated by the wedge on the $B\flat$ and creates a tension-sustaining hiatus, the subject consists of one indivisible phrase. Its pitch pattern features a predominance of steps and minor thirds. The single larger leap in the middle of the phrase, a minor sixth, represents one of the established “high-tension intervals.” The rhythmic pattern comprises four different note values: 16th-notes, eighth-notes, quarter-notes and the tied quarter-note (which, as will be seen later, does not belong entirely to the subject but is nonetheless heard as a rhythmic unit).

As one compares the rhythm in the remainder of the piece with the subject, it becomes obvious that there is only one additional note value in the thematically active parts (i.e., not counting the longer values in the cadential closes): a syncopated dotted eighth-note. As will become apparent, this is the value with which the counter-subject implicitly opens.

The subject’s harmonic background is that of a simple progression; the tonic gives way to the subdominant on the second beat of m. 2, followed on beat 3 by the dominant seventh, and resolving onto the tonic at the beginning of m. 3. The fact that the active harmonic step takes place in the middle of m. 2 and not on one of the downbeats endows



the $B\flat$ with the quality of a syncopation. This impression is enhanced by the rhythmic standstill (this is the feeling given by the quarter-note that appears suddenly, after the initial eighth-note motion had developed into 16th-notes) and the interrupting wedge. This $B\flat$ is therefore the obvious choice for a climax. Melodically reached in a high-tension leap, harmonically representing chord iv , further enhanced both by its suddenly larger rhythmic value and by the unexpected articulation mark, and metrically appearing as a quasi-syncopation, this note combines all possible features that could characterize a climax.

The preparation and the resolution of this climax are slightly irregular. The process of tension-growth leading up to the climax is called into question by the three-note slur in m. 2, and after the climax there are only two notes entrusted with resolving the rather powerful tension. Yet instead of ending on one of the two melodically relaxed notes of the tonic chord, F or D, the subject comes to a melodically incomplete-sounding halt on A, the fifth—the one scale degree that regularly fails to convey a satisfactory feeling of resolution. The slur in the subject becomes more comprehensible if we remember that articulation symbols in Baroque polyphonic music derive from markings for string and wind players. Violinists approaching an unmarked line would play each note with a separate bow movement. They would thus be able to increase the tension through each note. But, seeing the slur in the subject, they would combine the group of notes comprised under it in one single bow movement. The dynamic effect is that the initial note under the slur is active while the notes following it sound passive and do not continue the tension. The slur thus creates a two-leveled structure: the dynamic gesture leads through each of the notes in the first measure to the first note under the slur and from there implicitly on to the climactic B \flat , after which it breaks off and then resolves through the trill into the subject's ending note.



There are seventeen complete and seven incomplete but structurally relevant statements (the latter are here marked with an asterisk):

1. mm. 1-3	O	9. mm. 17-19	U	17. mm. 28-30	M
2. mm. 3-5	M	10. mm. 18-20	M	18. mm. 29-31	U
3. mm. 6-8	U	11. mm. 21-23	U	19. mm. 33-34	M*
4. mm. 8-10	O	12. mm. 22-24	O	20. mm. 34-36	U
5. mm. 12-13	M*	13. mm. 23-25	U	21. mm. 35-36	O*
6. mm. 13-15	O	14. mm. 25-26	M*	22. mm. 35-36	M*
7. mm. 14-16	M	15. mm. 26-27	U*	23. mm. 39-41	U
8. mm. 14-15	U*	16. mm. 27-29	O	24. mm. 40-42	M



Two kinds of changes can be observed in the complete statements of the subject: Its ending may be varied (melodically to a rising fifth in mm. 22-23, or rhythmically with eighth-notes instead of the two quarter-notes

in mm. 35-36), or it may appear inverted (see entries nos. 5, 7, 12, 13, 14, 15, 16, 18, and 22). Moreover, there are two conspicuous strettos, both involving complete entries appearing in the original shape (mm. 17-20 and 39-42). These are surpassed by a stretto sounding in a chain of three entries two of which are inverted (mm. 21-25). Finally, there are several strettos made up of a mixture of complete (“2/2”) and incomplete (“1/2”) statements, using both the original shape (“O”) and the inversion (“I”):

mm. 12-16: 1/2 I (M) + 2/2 O (U) + 1/2 O (L) + 2/2 I (M)

mm. 25-31: 1/2 I (M) + 1/2 I (L) + 2/2 I (U) + 2/2 O (M) + 2/2 I (L)

mm. 33-36: 1/2 O (M) + 2/2 O (L_{var}) + 1/2 O (U) + 1/2 I (M)

Parallel statements do not occur. There are, however, two instances where the (inverted) second entry of a stretto coincides with an incomplete entry in the original shape: see mm. 14-15 M + L and mm. 35-36 U + M.

Bach invents only one counter-subject for this fugue. CS grows out of the final note of the preceding subject statement. The fact that the subject seems to end in a tied note thus brings up the question of the note value with which the counter-subject begins. To what proportion the A on the downbeat of m. 3 is divided between the subject and its counter-subject can be understood when comparing later counter-subject statements: the few times when CS does not follow immediately after a subject statement, it opens with a first note of dotted eighth-note duration (see, e.g., U: m. 6). The counter-subject thus begins, like the subject, on the second eighth-note of a measure and ends after two measures on the downbeat. It consists of two subphrases. These are interrelated through their rhythmic structure. Both set out with a syncopated dotted eighth-note (U: mm. 3 ≈ 4) and progress in regular 16th-note motion until the subsequent downbeat. Both are structurally analogous: in the first subphrase, four descending 16th-notes are sequenced; in the second subphrase, the same happens to a “turn” figure. The two subphrases are most clearly distinguished in mm. 6-8 where the first is allocated to the upper voice while the second follows in the middle voice. Considering these features, each subphrase will find its climax on the initial syncopation, after which the falling 16th-notes effect a relaxation. These dynamic developments are very gentle. With regard to the relationship between the two subphrases, the second subphrase expresses a higher tension level than the first both because of the shift upward and, more importantly,

because of the greater emphasis the “real” syncopation creates in comparison to the merely “implied” syncopation at the beginning of CS.

Determining the number of episodes in this fugue depends on how one evaluates the incomplete subject statements. If one assumes that, as in many other fugues, considerably shortened subject statements function as episode material, then the number of episodes would amount to eight. However, since the incomplete statements in this prelude often engage in primary-level strettos with complete entries, the label “episode” seems ill-fitted for measures characterized by these shortened entries. The following table lists all the episodes in this fugue, but places measures with incomplete subject statements in brackets:

E1	mm. 5-6 ₁	[E5	mm. 25-27 ₁]
E2	mm. 10-12 ₁ [-13 ₁]	E6	mm. 31-33 ₁ [-34 ₁]
E3	mm. 16-17 ₁	E7	mm. 36-39 ₁
E4	mm. 20-21 ₁	E8	mm. 42-44

Almost all episode material in this fugue seems closely related to the subject. This is particularly true for the first three episodes and their analogs later in the piece: In E1, the upper voice imitates the subject’s second half (see m. 5) while the middle voice recalls the beginning of CS—including the way in which CS emerged out of the subject’s ending note (M: m. 5 \approx U: m. 3). In E2, both the upper and lower voices extend the preceding entry in sequences (mm. 9-10₁ are sequenced in mm. 10-11₁ and 11-12₁). Only the middle voice gains some independence by creating a motivic figure of one-bar length. In mm. 12-13₁, the first incomplete entry in the middle voice is combined with the subject’s second half in the lower voice (as it appeared in E1) and a long note in the upper voice. E3 is a varied sequence of the measure preceding it (mm. 16-17₁ \approx 15-16₁). By contrast, E4 is a typical cadential close: the upper voice provides an elaborately ornamented do–si–do formula, the middle voice contributes the syncopated trill with resolution on the next downbeat that often appears in closing formulas, and the lower voice plays a cadential-bass pattern. In E5, two incomplete subject entries in the middle and lower voices combine with a figure derived from the end of the counter-subject—extended and in inversion. The three final episodes are related to three episodes in the first half of the piece: For E6 see E2, although the voices are inverted and considerably varied (mm. 31-33₁ or 34₁ \approx 10-12₁ or 13₁). For E7 see E3, the latter being an extended version of the former, with three bars similarly continuing as a sequence of the preceding bar. For E8 see E4, as the first measure of E8 is an exact transposition of E4 (mm. 42-43₁ \approx 20-21₁). This

is followed by a 1½-measure coda in which the three voices of the fugue are split to six. The four inner voices of this new texture present a fourfold parallel of the subject's first half—the right-hand double thirds moving in inversion, those of the left-hand in the original direction.

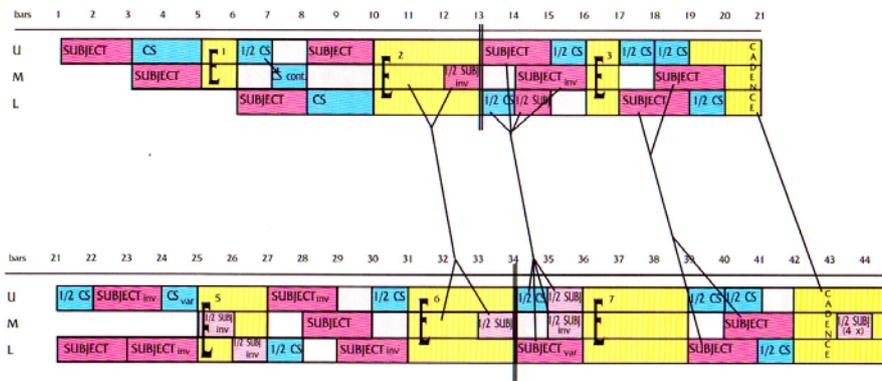
Not a single episode displays independent motifs, and none reaches the level of a self-contained unit. One can, however, distinguish four different ways in which these episodes behave within the dynamic design: The two cadential closes (E4 and the first half of E8) create the most noticeable relaxation. In the case of E8, this relaxation is soon counteracted by a particularly powerful tension increase, but this falls already into the coda. The episodes that appear as an extension of the previous development create a gradual relaxation but never quite lose the color of the primary material (see E1, E2, and E6). The episodes that extend the preceding measure with sequences involving all voices (E3 and E7) serve to prolong the tension of the subject entry; in both cases this impression is further enhanced by incomplete statements balancing the resolving tendency in the subject's second half (see L: mm. 15-16₁ and particularly U: mm. 35-36₁). Finally, the episode appearing in brackets in the table above because of its stretto of incomplete subject statements (E5) has the strongest drive of all. It sets out from a point of complete relaxation and creates, in both its incomplete stretto and the inverted (i.e., ascending) counter-subject figure, a powerful increase preparing the subsequent complete-entry stretto.

Both the pitch pattern and the rhythm advocate a rather calm basic character. Yet there is one detail that seems to support a character in which the single notes carry less weight: it is the fact that, upon close inspection, all 16th-note groups are turn-figures or scale segments ornamenting longer notes (m. 3 = A-G ornamented). Taking into consideration both the main constituents of the character and the ornamental structure of the 16th-notes, the ideal tempo is one that creates a sense of calm within a rather fluent quarter-note pulse. The corresponding articulation requires legato for all melodic notes, with slightly less weight in the 16th-notes. Non legato is reserved for cadential-bass notes (mm. 20 and 42) and obvious broken-chord patterns (as in L: mm. 31-32). The wedged note in the subject should sound actively interrupted after about half its note value. (For performers who like to work on shades: such an active interruption stands in contrast to the passive ending of unmarked notes before a rest or phrase cut.)

The proportion of the prelude's tempo to that of the fugue is simple: a quarter-note in the prelude corresponds with a quarter-note in the fugue. (Approximate metronome settings: 60 for all beats.)

For the ornament in the subject there are two possible solutions; they depend on how one interprets the wedge on the climax. For performers who feel that the wedge creates a sudden, rather dramatic halt in the melodic flow and that the subsequent G comes in after something like a phrasing, the trill should begin according to the rules for ornaments at phrase beginnings, i.e., on the main note. For performers who feel that the wedge creates articulation rather than phrasing and that the tension is suspended throughout this interruption and picked up at an almost undiminished level in the G, the trill should begin according to the rules for ornaments within a phrase, i.e., on the upper auxiliary note. In each case the trill shakes in 32nd-notes and ends in the whole-tone suffix F-G.

There are several indicators that help to determine the design of this fugue: A subject entry in reduced ensemble can be found at the beginning of the four-measure passage with multiple strettos (mm. 21₂-25₁). This reduction of voices occurs after the episode identified as a definite cadence with strongly conclusive powers. The fugue is thus laid out in extended structural correspondence. Working backward from the analogous cadences one finds: mm. 20-21₁ ≈ 42-43₁, mm. 17-19₁ ≈ 39-41₁, mm. 12-(16₁) ≈ 33-(38₁), mm. 9-11₁ ≈ 30-32₁. Moreover, the subject statement following the first distinctly cadencing episode, launching the four-bar phrase with dual stretto (mm. 21₂-25₁), is set in reduced ensemble. If we accept that the first four single entries in the fugue's initial half (mm. 1-10) correspond to the first two strettos in the latter half, the rest of the analogy falls into place. The two passages form the first and third sections, concluding in mm. 13₁ and 34₁ respectively. The two passages just ascertained as analogous, mm. 9-21 and 30-43, constitute the second and fourth sections.



Harmonically, the three initial statements sound in D minor, the fourth hovers between keys, and the subsequent episode modulates to the dominant. The second section is anchored in A major/minor. In the fugue's second half the first stretto modulates back to the tonic, followed by statements that once again fluctuate between D minor and major. Interestingly, the harmonic endings of the first and third sections overlap with the incomplete first entries of the strettos with which the second and fourth sections begin. Such an overlapping creates a particularly tight-knit linkage between two consecutive sections, so that the main impression of the design is one of two parts, each with two coupled sections.

Within the first section, the tension rises gradually owing to the growing number of voices. The descending sequences in the episode that ends this section serve to dissipate this tension, so that the second section sets out from a rather soft level. Its many strettos, however, create a powerful buildup until immediately before the concluding cadence. Both sections feature an episode in their middle that, as has been shown above, is so closely related to the primary material that the loss of tension is negligible. The third section begins in reduced ensemble on a soft level into which it falls back in the return modulation (m. 25) after only very little increase in-between. Yet from here on, all forces join in a stretto that reaches an intensity considerably above that heard in the corresponding measures of the first part. The fourth section begins again slightly softer than the third section had ended—but more intensely than its equivalent in m. 13. After the initial stretto, the tension-sustaining episode with its ascending sequences is extended (compare E7 with E3) and thus leads to a final statement pair that, once again, outranks the corresponding one in the first half of the piece.

It can thus rightly be said that each of the two halves of the fugue is composed as one long buildup of tension, interrupted only slightly at the section ending in its middle. The second half combines several additional intensifying features and thus appears, in terms of tension, as a heightened variation of the first.