

## **WTC I/14 in F# minor – Prelude**

With the exception of very few measures, this prelude exhibits strict two-part polyphony. The opening idea is imitated in the lower voice and also recurs constantly in the course of the piece. As the initial imitation is placed on the fifth, the composition can be identified as composed in accordance with the principles of a fugue.

The first harmonic progression concludes at m. 2<sub>1</sub>. As it coincides with the initial statement of the “subject,” this cadence does not indicate a section ending. Conspicuous cadential formulas outside subject statements occur in mm. 12, 18-19, and 21-22. The first and third are perfect cadences, one in the dominant, the other in the tonic. The third presents an imperfect cadence (with the subdominant and dominant of F# minor).

Structurally relevant analogies are scarce in this prelude. Only the two measures immediately following the above-mentioned perfect cadences are composed alike (mm. 12<sub>3</sub>-14<sub>3</sub> ≈ 22<sub>1</sub>-24<sub>1</sub>, transposed from C# to F#). Their three-part texture with a sustained note in one voice and eighth-note + rest figures in another refers to the beginning of the piece (mm. 12-13 and 22 ≈ m. 1).

The basic character of this prelude is rather lively. This follows both from the simple rhythmic pattern consisting predominantly of 16th- and eighth-notes in a straightforward setting, and from the pitch pattern featuring leaps in the eighth-notes and a mixture of ornamental figures and broken chords in the 16th-notes. In fact there seem to be hardly any notes that would require emotional depth; so the tempo, reflecting truth, should be quite swift. Articulation demands a light quasi-legato touch for the 16th-notes and an effortless non legato for the eighth-notes.

The three ornaments (mm. 12, 18, and 21) in the prelude embellish cadential closes. All appear in a pattern typical for Baroque closing formulas, a dotted note followed by the anticipated resolution, and are therefore point d’arrêt trills: they stop short considerably before the succeeding 16th-note, preferably on the half-beat eighth-note or slightly before. The trills in m. 12 and m. 18 both begin on the upper auxiliary and, moving in 32nd-notes, comprise four notes. The ornament in m. 21, as it is approached stepwise, is launched from the main note and features only three notes: two 32nd-notes and a syncopated eighth-note.

Since the prelude in F $\sharp$  minor is being analyzed under the assumption that it is built along the lines of a two-part fugue, a crucial question is: how strict a fugue it is, and where does it deviate from the fugal pattern? The subject is established in the upper voice.<sup>1</sup> This initial subject statement brings about the first deviance from the model—a deviance that is common in preludes composed as fugues: it is not presented as an unaccompanied line but comes with two companions. One of these voices moves in eighth-notes interrupted by eighth-note rests and doubles the peak notes of the subject in parallel compound thirds, while the other consists of a sustained tonic keynote and its final octave displacement. In the course of the fugue the two structurally analogous statements, those after the perfect cadences in mm. 12-13 and 22-23, are also presented in a sudden three-part texture, each time with one voice acting as a pedal and the other moving in parallels to the subject peak notes. (For reference, this line of parallel eighth-notes will here be called “C” for “companion.”)

The following two subject statements allow for two fake counter-subjects to make their appearance. Both, as will be shown, derive from the “companion.” C1 is introduced in the expected position against the second subject entry in mm. 2-3. It consists of leaping eighth-notes and, if regarded as a hidden two-part structure, describes in its lower part the same parallel in compound thirds to the subject’s peak notes as the companion of the opening entry. (This can be seen most clearly in mm. 9-10.) C2 makes its first appearance in mm. 4-5 against the third subject statement. It is characterized by broken chords that are filled each with an additional passing note. The line built by the lowest notes of these chords is, once again, a parallel to the subject’s peak notes.

The example shows the relationship between the subject and its three companions. In light of the two following regular counter-subjects, the eighth-notes in m. 1 are revealed as a feature to be taken seriously since both derive strikingly from it. For easier comparison, all passages are transposed to the tonic and reprinted with the subject in the upper voice.

harmonizing companion                    C1                    C2

<sup>1</sup>Whether the A on the downbeat of m. 2 or the third 16th-note F $\sharp$  constitute the intended melodic ending is almost impossible to decide.

A third companion to the subject is added in the second half of the composition. This companion appears in block chords that strike in eighth-notes separated by eighth-note rests. Its rhythmic pattern is thus that of the first-measure companion, and its scalar descent derives equally from the compound-third parallel to the subject's peak notes (see, in the right-hand part of mm. 14-15, the lowest notes E-D-C♯-B). This figure thus continues the development we have so far witnessed, leading from one mutation of the companion to the next in a logical way, from single notes via hidden two-part structure and broken chords to block chords. As these chords make no attempt whatsoever to establish any melodic line, one would not normally give them a counter-subject. However, for the sake of easier identification and because of their striking analogy with the other companions these chords shall here be referred to as C3. What is truly surprising is that the inversion of the subject is invariably accompanied by this C3, which then does not build the usual parallel. As a consequence, the ensuing subject entry in mm. 15-16, also an inversion, is accompanied by a compromise: one descending (originally parallel) and one ascending (now parallel) line. Finally in mm. 19-20, things appear upside down in that the subject is here returned to its original shape but the scale in the accompanying chords rises.<sup>2</sup> The fourth and final step in the development of the companion is the explicit parallel in compound thirds. This parallel occurs in mm. 20-21 but never again.

The subject entries in this "fugue" and their respective companions thus present the following picture ( $S_{inv}$ ,  $S_{par}$  = subject inversion or parallel):

mm.	1	2	3	4	5	6	7	8	9	10	11	12
U	S	C1		C2		S	C2		S			
L	C	S		S		C2	S		C1			
mm.	12	13	14	15	16	17	18	19	20	21	22	23
U	S	C2	C3	$S_{inv}$				C3	S		S	C2
L	C	S	$S_{inv}$	C3				S	$S_{par}$	C	S	

The few subject-free passages in this "fugue" are episodes in the usual sense. Some take their material directly from the primary features; see, e.g., the episodes in mm. 3-4 and 5-6, which display a motif (in imitation) composed of the subject's turn figure and a leap that recalls C1. The lower voice in mm. 8-9, the upper voice in mm. 10-11, and the lower voice in mm. 16-17 use the same motif, while mm. 11-12 and 17-19 constitute

<sup>2</sup>See in m. 19 the upper notes of the right-hand part. The immediate relationship between these chords and the chords in mm. 14-15 becomes apparent when one compares the lower notes here with the uppermost pitches there.

motivically free extended closing formulas. Shorter cadential formulas are found in the two remaining passages (mm. 21-22 and m. 24).

An attempt to define the structure in this “fugue” by grouping the subject statements into sections would probably carry the exercise too far. The only relevant structural caesuras in this highly virtuoso piece occur at the cadential closures. Thus performers should try to convey a polyphonic composition in two halves followed by a coda, and not the (theoretically possible) six fugal “rounds.”

## **WTC I/14 in F# minor – Fugue**

The subject of the F#-minor fugue spans four measures. It begins after a rest with the second quarter-note of the 6/4 measure, thus conveying the impression of an extended upbeat. Its conclusion is reached at m. 4, where the melodic line returns to the keynote F# after an ornamented G# representing the dominant harmony. The length of the final note is exceptional in m. 4; some later subject statements end with only an eighth-note.

The pitch pattern in the subject and in the entire fugue features mostly stepwise motion. The rhythm is highly varied, comprising eighth-notes, quarter-notes, dotted quarter-notes, etc. up to the subject’s tied 4/4-note. Syncopations appear frequently, two of them in the subject itself.

Phrasing in the subject permits two options, which create quite different effects. On a small scale, there are three similar note groups that can be interpreted as varied sequences: F#-G#-A is sequenced in contracted note values in G#-A#-B, and sequenced again (after an additional A#-G# pair) in A#-B#-C#. It is therefore possible to view the subject as consisting of three consecutive ascents the last of which is complemented with a descending motion. In this case, subtle subphrasing after the long notes ending the first two ascents (i.e., after A# and B in m. 2) is adequate. On a larger scale, it is also possible to imagine that these notes combine to a single gesture: an ascent through F#-G#-A—B—C# (or even F#-G#-A-A#-B-B#-C#). In this case, the long notes are directed forward instead of serving as transitional endings, and the tension between one long note and the next is further enhanced by additional artificial leading notes (A#, later B#). If this is what a performer feels, the subject should not be broken into smaller units but conceived as a single curve. (By the way, the short instances of backtracking during the ascent find their equivalent in the descent, which also falls in two sweeps.)

The subject's harmonic layout is simple in its large steps but fairly complex in the small ones. This is caused both by the artificial leading notes in the subject and by the high degree of chromaticism throughout the fugue. The main steps of the simple progression are represented by the three long notes, with A (m. 1) for the tonic, B (m. 2) for the subdominant, both C♯ and the ornamented G♯ (m. 3) for the dominant and the final F♯ (m. 4) for the return to the tonic. The more complex harmonic progression, which Bach uses, e.g., in mm. 15-18, is shown in the example below. The Roman numerals reveal how Bach in his harmonization of the subject actually passes through the keys of B minor and C♯ major—the subdominant and dominant keys of F♯ minor:

F# minor: i vii i  
B minor: V  
C# major: V<sup>7</sup> IV vii i  
V-Vi

The C♯ at m. 3<sub>1</sub> provides the climax. The highest pitch, it is the goal of the ascending sequences or, in the alternative interpretation, the target of the powerful ascent with its enhancing chromaticism. The preparation of the climax and with it the degree of urgency expressed in the subject is different in both concepts. In one scenario, the climax is reached in consecutive sweeps each of which begins newly in a relatively relaxed way. (A string or wind player would decrease volume on the long notes.) In the second case, the tension grows constantly and thus more powerfully through all notes. (A string or wind player would increase volume during the long notes so as to incorporate them into the long crescendo. Keyboard players can only imagine this.) The character expressed in the two different interpretations has a considerably different impact.

There are nine entries in the course of the fugue:

- |               |                |                |
|---------------|----------------|----------------|
| 1. mm. 1-4 T  | 4. mm. 15-18 S | 7. mm. 29-32 T |
| 2. mm. 4-7 A  | 5. mm. 20-23 A | 8. mm. 32-35 B |
| 3. mm. 8-11 B | 6. mm. 25-28 S | 9. mm. 37-40 S |



The subject undergoes hardly any modification. The answer is real, with all intervals kept intact, and only in one statement is the beginning slightly varied (see in m. 25 the 3/8 upbeat C#-F#-D# instead of the simpler 2/4 approach C#-D#). However, a more significant modification, the inversion of the subject, does occur twice. It is heard in the context of the alto entry in mm. 20-23 and recurs in the bass statement in mm. 32-35. Neither stretto nor parallel are found in this piece.

There are two counter-subjects. One is conceived as a fairly regular companion to the subject, the other materializes only twice. CS1 is introduced against the second subject statement, in mm. 4-7 (tenor). It consists of two clearly distinct halves. The second segment presents the extended version of a closing formula (see the typical leaps D#-G#-C# and the do-si-do figure with its classic syncopated rhythm), while the first half is characterized by frequent note repetition. On closer inspection one detects that the pattern actually consists of note pairs: C#-B, B-A#, A#-B, and so on. The pairs are harmonically conceived either as main note + anticipation (mm. 4-5 and 13-14) or as appoggiatura + resolution (see, e.g., mm. 8-9). Whichever their harmonic background, these patterns are well known in Bach's music under the name of "sigh" figures. In this counter-subject it is vital to distinguish between pairs that constitute genuine "sighs" and others that do not and should therefore sound different.<sup>3</sup> Dynamically, the first subphrase represents a gradual diminuendo to G#. The second subphrase builds a crescendo up to the half-note C# and ends with a final relaxation.

CS2 first appears against the third subject statement, i.e., in mm. 8-11 (tenor). It begins on the second quarter-note (C#) and consists of three subphrases. The first ends on the dotted half-note B. Its ending is then sequenced in diminution, after which the third subphrase sets out from the syncopated C# with an ascending portion of the melodic F#-minor scale followed by a descent in natural F# minor. This subphrase, and with it the entire counter-subject, should regularly end with the resolution on the downbeat of the final measure. In this first appearance, however, the resolution note A is delayed. Several dynamic representations are possible for this counter-subject. The climaxes of the first and second subphrases could fall either on the long B and on the F# in the diminished partial sequence,

<sup>3</sup>The two notes in a true "sigh" are usually neighbor notes; they always represent different harmonic steps. Leaps, especially if they occur within a single harmony, are therefore not "sighs" and should not be played as pairs. Notes that appear in the context of "sigh" figures but do not belong are: the octave leap in m. 15 where the lower F# is the end of one subphrase, the higher F# the beginning of the actual CS1; similarly in mm. 19, 22, 29, and 32.

or on the initial notes in these subphrases. In the third segment, the syncopated C $\sharp$  competes for the climax with the highest pitch of this subphrase, F $\sharp$ . This counter-subject recurs only once in its entire length, and even then it is heavily varied (compare A: mm. 29-32 with T: mm. 8-11). As if to make up, the third subphrase of CS2 appears separately in mm. 16-18 (tenor). The example below shows the phrase structure and dynamic design in the subject and its two counter-subjects:

Musical score for three parts: CS1, CS2, and S. The score consists of four staves. CS1 (top staff) has a treble clef, a key signature of one sharp, and a tempo of eighth note = 120. It contains six measures of sixteenth-note patterns. CS2 (second staff from top) has a bass clef, a key signature of one sharp, and a tempo of quarter note = 120. It contains two measures of eighth-note patterns. An brace groups CS1 and CS2. The S part (bottom staff) has a bass clef, a key signature of one sharp, and a tempo of quarter note = 120. It contains two measures of eighth-note patterns. Below the S staff, the word "or" is followed by a measure of eighth-note patterns where the first two notes are connected by a horizontal line and the last two notes are connected by a diagonal line. The measure after that is a measure of eighth-note patterns where the first note is connected to the second by a diagonal line and the third note is connected to the fourth by a diagonal line.

The F $\sharp$ -minor fugue comprises six subject-free passages:

E1 mm. 7-8 E3 mm. 18-20 E5 mm. 28-29  
 E2 mm. 11-15 E4 mm. 23-25 E6 mm. 35-37

We can distinguish three episode motifs, two of them remotely related to the primary material: M1 in its simple shape of four ascending notes is the most prominent episode motif in this fugue. Both its rhythmic gesture, which consists of three eighth-notes followed by a three eighth-note value, and its pitch pattern, which contains artificial leading notes, recalls a segment from the center of the subject (compare E1: E-F♯-G♯-A, F♯-G♯-A♯-B and B-C♯-D♯-E, C♯-D♯-E♯-F♯ with mm. 2-3: G♯-A♯-B♯-C♯). The dynamic shape of M1 is a crescendo. M2, consisting of the first six notes of CS1 with their upbeat, two “sighs,” and a final note, is prevalent in E3, E4, and E6. Dynamically this motif takes up the subtle groupings from the counter-subject, albeit within an overall diminuendo. M3 appears exclusively in E2 and is only vaguely defined. One could describe it as a concave curve with the climax in the center, at or close to the lowest point of the curve.

A musical score page showing two measures of music for orchestra. The key signature is A major (three sharps). Measure 11 starts with a forte dynamic. Measure 12 begins with a piano dynamic. The music consists of various instruments playing eighth and sixteenth note patterns.

The fourth episode stands out as different from the others because it emerges from the preceding subject statement without any clear beginning. The soprano in mm. 23-24 continues the descent in syncopations begun toward the end of the subject entry (see mm. 22-23 F♯ E, continued in mm. 23-25: D-C♯-B). At the same time, the bass presents sequences of the variation of the CS1 beginning that accompanied the end of the inverted subject (mm. 22-23: D A♯ ≈ 23-24: B-F♯ and, shorter, ≈ 24-25: G♯-E♯). Similarly, the alto also extends the end of the subject statement in varied sequences (compare m. 23: G♯-A-B-C♯ with the ensuing groups F♯-B and E-F♯-G♯-A). This entire episode can thus best be regarded as an extension of the preceding subject statement.

The structure of the episodes and their interrelationship is interesting. E1 recurs faithfully (except for the octave displacement) in E5 and thus creates a distinct symmetry. E1 also reappears, slightly varied and with an accompanying voice, as the first segment of E2 (see T + B: mm. 11-12) and of E3 (see S + B: mm. 18-19). The second segment of E3 features a parallel presentation of M2 in the outer voices (soprano and bass) followed by imitation, also in parallel (in what seems like the inner voices but is actually the alto and the bass after an octave displacement, since the tenor is resting). This pattern is taken up in E6: see m. 35 with a sequence in m. 36. This creates a second structural analogy.

Finally, there are two cadential formulas apart from the one in the final measure. One appears in m. 20 where the key of C♯ minor is confirmed in a perfect cadence. The other formula, with a dangerously similar-looking bass line, marks the end of the above-mentioned subject extension (see m. 25). This one, however, is not only an imperfect cadence, but it also overlaps with the beginning of a new subject statement in the soprano. It thus does not qualify as a structural caesura.

The features described above also determine the role played by each episode in the dynamic development of the composition. E1 and E5 both begin slightly softer than the end of the preceding subject entry, after which they prepare the subsequent entry in a twofold crescendo. E2 sets out with a similar buildup. This is followed by a gradual release generated by the overall descending direction of the M3 appearances. A complete relaxation is held at bay by the frequent quotations of the outgoing M1 in the bass of mm. 13-14. E3 begins with the same active gesture followed by a gradual diminuendo in m. 19 and a complete relaxation in the perfect cadence. E6 picks up the gradual release. It is a bridge to the subsequent entry. Finally, E4 continues the diminuendo in the subject ending and thus, at a moment of particularly low tension, creates an anticlimax.

Both the fugue's pitch pattern with its prevalence of stepwise motion and the rhythmic organization with its variety of note values are unequivocal in determining the basic character of this fugue as rather calm. The frame for the tempo is set on the one hand by the required tranquility of character, and on the other hand by the rather long note values, which still need to be perceived as "alive." In other words, the eighth-notes must be slow enough to convey serenity, but not so slow as to impede the listener from taking the entire subject on one breath, and thus cause the subject to fall into pieces. The articulation is generally legato. Only the first half of the first counter-subject as well as the episode motif derived from it feature slurring in pairs, following the pattern of the "sigh" figures. The only notes to be played non legato are the consecutive leaps in the second half of the counter-subject (e.g., m. 6: D♯-G♯-C♯) and the cadential-bass patterns in mm. 20, 25, and 39-40. For the relative tempo of the prelude to the fugue, a good and feasible solution is: one measure in the prelude corresponds with half a measure in the fugue. (Approximate metronome settings: prelude beats = 112, fugue beats = 84.)

The only ornament in this composition is the trill in the subject. As it is complemented by a resolution, it is note-filling. Approached in stepwise motion it begins on the main note sustained for the duration of an eighth-note and then shakes in 16th-notes, ending with a suffix. This trill, being an integral part of the subject, must be transferred to the D♯ in m. 6 and to the G♯s in mm. 10 (where it is indicated in brackets), 17, and 31, i.e., to the second-to-last notes of all original-shape entries,<sup>4</sup> as well as to the B in m. 23 and the E♯ in m. 34, i.e., to the second-to-last note of inverted entries.<sup>5</sup>

The entering order of the voices and their respective surrounding texture, in conjunction with the explicit cadence at the end of E3, define the fugue's binary structure: The full ensemble of four voices is reached in the fourth statement. In the middle of m. 20, a cadential formula closes this section in C♯ minor, the minor dominant of the home key. The subsequent entries manifest a protracted suspension before the full ensemble is reached once again:

<sup>4</sup>In the subject's final statement, the Picardy third of the ending impedes execution of the trill. The ordinary trill on G♯ would shake with A as its upper note. This A, however, clashes with the A♯ in the middle voice. A trill with A♯ is obviously also out of the question because of the preceding A♭. This subject ending must therefore remain unornamented.

<sup>5</sup>Students sometimes ask whether trills are also upside down in inverted statements. The answer is: no, ornaments are not inverted.

- inversion, 3 voices, no CS (mm. 20-23),
- original, 3 voices, with CS1 (mm. 25-28),
- original, 3 voices, with CS1, CS2 (mm. 29-32),
- inversion, 4 voices, no CS (mm. 32-35), and only then
- original, 4 voices, with CS1 (mm. 37-40).

The two halves of this fugue are largely analogous: both begin with a subject entry without thematic companion followed by an entry accompanied by CS1 and rounded off by an episode with only M1. Both continue with a third statement accompanied by CS1 + CS2. Only the ending of the two halves differs.

The harmonic outline is straightforward. The four subject statements of the first section are all in F# minor (on the tonic, dominant, tonic, and tonic respectively). The episode concluding this section modulates to the key of the dominant. The five statements in the second section are again all in F# minor (on the tonic, dominant, tonic, subdominant, and tonic respectively). In other words, the harmonic succession is the same in both sections, with only the “additional” statement in section II on an unprecedented step.

bars	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
S																				
A																				
T																				
B																				

  

bars	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
S																					
A																					
T																					
B																					

In both sections of this symmetrically built fugue, the tension rises gradually but constantly from entry to entry. The episodes E1 and E5 have bridging function within a forward-thrusting direction, while E2 and E6 convey a receding direction, and E4 is conceived as an extension of the preceding statement without any explicit change of color. Only E3 with its cadential formula has concluding character.