

## WTC II/8 in D# minor – Prelude

This prelude is written in consistent two-part texture, with imitation occurring regularly. Techniques of counterpoint are also widely used, and there is not one moment where the feeling of polyphonic independence of the voices is lost. At a casual glance one might consider having to decide between a two-part fugue and an invention. The fact that the first measure features bass notes that serve as a harmonic support but do not take part in the polyphonic play is shared by the various invention-style preludes. But even the other prelude of the *Well-Tempered Clavier* that is composed as a two-part fugue, the prelude in F# minor vol. I/14, also introduces its subject against a neutral accompaniment in the lower voice. Nonetheless, an interpretation as a fugue encounters some more serious irregularities: The imitation of the main idea occurs in tonic position and not, as usual in a fugue, on the dominant. The main melodic idea only covers thirteen of the thirty-six measures, but its various forms of development account for much more. Moreover, there are repeat signs for the first 16 as well as the following 20 measures. It may therefore be less controversial to describe this prelude as a two-part invention.

The sections in this “invention” are defined, in addition to the usual harmonic processes, by the recurrence of the thematic material. This first overview gives only the harmonic processes.

- I mm. 1-9<sub>1</sub> tonic to tonic relative (D# minor to F# major)
- II mm. 9-16 on to the dominant (F# major to A# minor)
- III mm. 17-28<sub>1</sub> back to the tonic (A# minor to D# minor)
- IV mm. 28-36 tonic confirmed (D# minor)

The number of structurally analogous measures is striking:

- mm. 1-2 ≈ 28-29 (same key, counterpoint varied),
- mm. U: 3-4 / L: 3<sub>3</sub>-5<sub>3</sub> ≈ L: 21-22 / U: 22<sub>3</sub>-23<sub>3</sub> (transposed),
- mm. 6-8 ≈ 25-27 (transposed),
- mm. 15<sub>4</sub>-16 ≈ 35<sub>4</sub>-36 (transposed),
- mm. 17-19 ≈ 32<sub>3</sub>-34<sub>3</sub> (transposed, voices inverted)

To sum up the findings with regard to harmonic design and structural analogies, we can recognize that this invention conceals a typical Baroque binary form, found, e.g., in many of Bach’s suites, most particularly in allemandes.

The rhythmic pattern is generally simple. Most measures feature a combination of eighth- and 16th-notes. The pitch pattern encompasses frequent leaps both in the eighth-notes (see, e.g., L: mm. 6-8) and the 16th-notes (see, e.g., U: mm. 6-8). This simplicity is, however, counteracted not only by a few 32nd-notes but also by a very large number of ornaments. The basic character of this allemande-style invention is thus rather lively, but the tempo should be moderate rather than fast. The articulation must contrast a fairly gentle non legato in the eighth- and quarter-notes with legato style in the 16th-notes. Among the eighth-notes one can distinguish melodically intensive touch (as in U: m. 2) from a more neutral touch used in accompanying groups (as in L: mm. 6-8). The only occasions where eighth-notes are legato because they are paired as appoggiatura/resolution are indicated by the composer (see mm. 16 and 36). In the tied notes (mm. 4-5, 5-6, etc.), the 16th-note extension is treated as a 16th-note. Wherever abbreviation of this note due to phrasing is desired, it must be guaranteed that the syncopated effect is not destroyed. Expressing phrasing by dynamic means alone may be a better choice here.

Among the numerous ornaments, the turn in m. 2 with four 32nd-notes and the inverted mordents pose no problem as none of them needs an accidental for an artificial leading note. (Their lower neighbor notes are regular: F# in m. 3, B and E# in m. 4, A# and G# in m. 5; G# in m. 21, C# and F# in m. 22, B in m. 23.) Trills and mordents come with and without suffixes and also begin differently. In mm. 2 and 9, the mordents in the upper voice begin on the main note since they are approached stepwise and comprise a single three-note shake. The trill in m. 14, by contrast, begins on the upper neighbor note A#, shakes in three pairs, and ends with the indicated suffix.

The main melodic idea upon which this “invention” rests, M1, is a little over one measure long. It begins and ends on a downbeat. Built exclusively of 16th-notes, it describes a curved line in which a zigzagging ascent to the fifth in the first half is answered by a descending scale in the second half. Surprising in this line are the pitches at the outset of the descent: they represent the melodic minor scale, which is more common in ascents. The dynamic shaping follows the straightforward curve. Thus the climax falls either on the octave D# (if the tempo is taken slow enough to feel an offbeat 16th-note) or on the fifth A# (the rhythmically and metrically more convincing choice, particularly at a swifter pace).

There are altogether thirteen statements of M1. Most appear in pairs at the octave. The following table gives the keys only of the statements thus paired, with capital letters for major, lower-case letters for minor keys.

1.	mm. 1-2	U (d#)	7.	mm. 17-18	L
2.	mm. 2-3	L (d#)	8.	mm. 19-20	U
3.	mm. 9-10	L (F#)	9.	mm. 28-29	L (d#)
4.	mm. 10-11	U (F#)	10.	mm. 29-30	U (d#)
5.	mm. 11-12	U (a#)	11.	mm. 32 <sub>3</sub> -33 <sub>3</sub>	U
6.	mm. 12-13	L (a#)	12.	mm. 33 <sub>3</sub> -34 <sub>3</sub>	L
			13.	mm. 34 <sub>3</sub> -35 <sub>3</sub>	U

M1 undergoes a number of small changes in the course of the piece. In mm. 18<sub>1</sub>, 20<sub>1</sub>, 33<sub>3</sub>, and 34<sub>3</sub>, the descent in its second half begins not from the octave but from the seventh, with the effect that it reaches the keynote on the final 16th-note of the measure. Consequently, the interval to the ensuing downbeat is modified in all cases. In mm. 18 and 20 it is raised to a fourth, whereas in mm. 33 and 34 the transition to the counter-motif is such that the strong-beat note is not perceived as belonging to the motif.

Bach creates two companions for M1. In keeping with the terminology used in polyphonic compositions they will be referred to as “counter-motifs.” CM1, introduced in mm. 2-3, plays around the keynote and fifth. It begins with three eighth-notes (the leading-note followed by the keynote and its octave), centers in an ornamented descent, and concludes, after a rest, with another leading-note/keynote pair. The single climax of this counter-motif falls on the middle beat and thus coincides (almost or exactly) with that of the main motif. CM1 recurs several times, albeit heavily disguised. In m. 9, the 16th-note figure begins with F#-E# (instead of E#-F#) and ends on the octave. The ornamented descent is the same, but the resolving final pair is omitted. In m. 12, the initial eighth-notes octave leap is diminished to a sixth. The descent, twice as fast as before, occurs an octave lower than expected and is followed by another leap, and the ending (G\*-A#) appears faster and a little earlier than it should, with unexpected notes following. Finally in mm. 28 and 29, only the descending figure, now even on a different degree of the scale, can be identified.

The second counter-motif (CM2) is introduced in the second half of the prelude (U: mm. 17-18). It is characterized by a symmetrical structure in which the second half acts as an inversion of the first. There are two broken seventh chords in the same rhythmic pattern on beats 1 and 3 respectively and two “turn”-figures on beats 2-3 and 4-1. Regarding its dynamic design, the rhythmic details, surprising in a composition with an otherwise so simple rhythmic pattern, demand that the climaxes fall on the two syncopations. This counter-motif thus exhibits a greater polyphonic independence than the first. It recurs four times, in L: mm. 19-20, L: mm. 32<sub>3</sub>-33<sub>3</sub>, U: mm. 33<sub>3</sub>-34<sub>3</sub> and, considerably modified, in L: mm. 34<sub>3</sub>-35<sub>3</sub>.

The “invention” features two other motifs besides M1. Naming them creates a little problem as the first obviously derives from the main motif and the second, though not related to the main motif, derives very definitely from the previous one. To avoid confusion, they will appear here with consecutive numbering regardless of their relationships. The initial two statements of M1 are followed by M2 (see U: mm. 3-4). It begins on the second eighth-note of the measure with a fragment of the zigzag known from M1 and continues with a short descent also reminiscent of the main motif. The two segments are then complemented by an eighth-note leaping up a fourth to an ornamented peak note that is tied over. This pattern distinguishes this motif from the preceding main material. M2 is imitated in stretto (L: mm. 3<sub>3</sub>-4<sub>3</sub>). The sequence of both the original and its imitation (U: mm. 4-5, L: mm. 4<sub>3</sub>-5<sub>3</sub>) features a strongly varied first half and thus severs all ties with M1. A partial sequence of the fourth leap follows (L: second half of m. 5) and can be recognized, without its ornament, at the beginning of the accompaniment figures in the three following measures. With these broken chords in the lower voice Bach creates a gradual descent that contributes to the shaping of this portion of the prelude: E#-G#-C# (m. 4), D#-F#-B, C#-E#-A# (m. 5), B-D#-G# (m. 6), A#-C#-F# (m. 7), G#-B-E# (m. 8), and F# (m. 9). M2 recurs, complete with imitation and varied sequence but in inverted voices, in mm. 21-23. In addition, its first half, the segment that is related to M1, reappears three times in mm. 13-14 in almost complete parallel motion and a further four times—twice with neutral accompaniment, twice with a disguised parallel—in mm. 30-32.

M3 also comes in two versions: as a trunk, and with an extension. The trunk begins like M1 and M2 after the strong beat and ends on the next strong beat (U: m. 5 E#-E#). Among the eight regular 16th-notes, the initial four and the last are melodic, describing a turn-figure and, after interrupting escape notes, its resolution. (The melodic idea is thus conceived as E#-D#-C\*-D#—E#.) In this format M3 is sequenced (see mm. 5-6: D#-D#). In three further sequences, the non-melodic inner segment is extended and thus lengthens the motif to full-measure scope (M3a see mm. 6-7<sub>1</sub>: C#-C#, 7-8<sub>1</sub>: B-B, 8-9<sub>1</sub>: A#-A#). The dynamic shaping of this motif takes the play with melodic and non-melodic components into account. The first four 16th-notes sound in a dense legato of considerable intensity, the broken-chord insertion is lighter both in touch (quasi legato) and in dynamics (*diminuendo*), and the final note, while soft at the end of the decrease, picks up the more intense tone color of the melodic notes.

The prelude comprises four sections. The first introduces all motifs with the upper voice in the lead (mm. 1-9<sub>1</sub>). After the initial M1 statements,

the remainder of the first section is dominated by descending peak-note lines in both parts creating a protracted decrease in tension (see U: mm. 3-9<sub>1</sub> the final notes of each motif, G#-F#-E#-D#-C#-B-A#; L: mm. 4-8 the final notes of M2 and its partial sequences, C#-B-A#-G#-F#-E#).

Section II matches a twofold set of M1 statements with partial quotations of M2 and a free cadential close. As the second pair of M1 statements inverts the voices and thus creates the effect of an ascending sequence, the beginning of this section expresses a tension increase. The M2 sequences do not respond with the expected relaxation since Bach transposes the last segment upward (U: m. 14). The increasing tendency is then continued through the peak notes in the upper voice (mm. 14-15: F\*-G\*-A#) and only released from m. 15<sub>3</sub> onward. The rhythmic density of the cadential close thwarts true relaxation.

Section III combines all motifs from section I as well as several features from section II in a new way. Owing to the heightened rhythmic density of CM2 and its dynamic independence from M1, the beginning of this section represents the greatest tension so far in this prelude. The alternation of this intense combination with the dynamically fairly weak expanded M3 creates strong contrasts from one measure to another.

Section IV presents yet another combination of thematic material. This juxtaposition, while not as dramatic as the previous one, admits even less relaxation than any of the preceding sections. The development from the polyphonically less intense M1/CM1 combination to the more active M1/CM2 match alone would call for a buildup. In addition, the three final M1 statements are conceived with growing harmonic tension. Even the M2 sequences, which convey a decreasing tendency, are here set in a pattern of increasing textural density (mm. 30-31). Only the figurative close, which picks up immediately from the main motif, brings forth a degree of relaxation and thus concludes the prelude on a moderately soft note.

## **WTC II/8 in D# minor – Fugue**

The scope of this subject does not pose a problem: while there are—as Bach demonstrates masterfully—a host of possible harmonizations throughout the phrase, the return to the tonic occurs unfalteringly on the downbeat of the third measure. This gives the subject a very balanced length, with the final note complementing the initial rest to add up to two full measures.

The pitch pattern also displays a clear direction. Beginning on the keynote, which is reinforced by a short deviation to the leading note, the subject features three ascending motions, the step D#-E# in m. 1 and the fourths D#-G# and E#-A# in m. 2, before ending in a downward motion (mm. 2-3: A#-G#-F#). The rhythmic pattern includes eighth- and 16th-notes as well as two dotted quarter-notes, both placed as syncopations. This rhythmic structure has a bearing on the perception of the melodic shape. As the second of the fourths is metrically unaccented while the preceding rising motions are reinforced by the two syncopations, we may hear the following line underlying the subject: D#-E#-G#—F#.

The harmonization of the subject shows great variety, as the entirely different solutions in mm. 7-8, 21-22, and 40-42 demonstrate. The initial note repetitions can represent the tonic or the subdominant, the leading note C# may stand for the dominant or the tonic relative, the syncopations for either dominant-ninth + subdominant or dominant relative + dominant, and so forth. Ample use of chromaticism owing to the secondary material's artificial leading notes adds to the versatility and beauty of this fugue. This can be seen particularly well in mm. 21-22, where bass and tenor use ten of the twelve semitones. Unchallenged in all entries is only the return to the tonic on the final note—never a fragment earlier. This resolution, as well

iv V V<sup>7</sup> i<sup>6-5</sup><sub>4-3</sub> V<sup>7</sup> VII V<sup>7</sup> i

as the curve underlying the subject's contour, defines the phrase as an indivisible whole. The harmonic setting in the example stems from the analysis offered in the study by L. Czaczkes.

The dynamic outline follows the prominent features. The tension grows through the leading note and the first syncopation all the way to the second syncopation, which is propelled by the fourth leap. Thereafter, it subsides throughout the final half measure. There are 16 subject statements.

1 mm. 1-3	A	6 mm. 17-19	A	11 mm. 27-29	S
2 mm. 3-5	T	7 mm. 19-21	T	12 mm. 30-32	A
3 mm. 7-9	B	8 mm. 21-23	S	13 mm. 32-34	T
4 mm. 9-11	S	9 mm. 23-25	A	14 mm. 40-42	B
5 mm. 15-17	B	10 mm. 25-27	B	15 mm. 43-45	S
				16 mm. 43-45	T



The subject receives a real answer without any interval adjustment. The modification of the first step from a minor second to a minor third, i.e., the kind of change that is expected in the answer, occurs only later in the fugue in three consecutive entries (mm. 15, 17, 19). Another entry enlarges the first step to a whole tone while lowering the step above the keynote (m. 32: C# and E). Two entries feature a Picardy-third modification at the end: after a statement in the minor mode, the final note is raised to the major third (see mm. 27 and 29).

The fugue features one stretto, one parallel, and one inversion. The overlapping occurs in mm. 23-25 where the entry in the alto is followed first by a fake entry in the tenor (see m. 24: E E E D# E# F\*) and then by a complete entry in the bass. The inverted subject statement is also the one that appears in parallel to another entry (see mm. 43-45: soprano with subject in original shape, tenor with subject in inversion).

Bach has given this subject one companion, but only for the first half of the fugue. It is introduced in mm. 3-5 against the answer. Characterized by its ascending three-note figure, it seems like an ornamentation of a simple scale (mm. 3-5, alto: E#-D#-E#-F#-G#-A#). While it shares many of the subject's traits

(compare, e.g., the ascending three-note groups with the rising fourths), it differs significantly in that it presents only one gesture: a rise in pitch and tension,

contrasting with the curved shape in the subject. CS1 recurs, with slight modifications, in mm. 7-9, 9-11, 15-17, 19-21, and 21-23.

There are eight subject-free passages.

E1	mm. 5-7	E5	mm. 29-30
E2	mm. 11-15	E6	mm. 34-40
E3	m. 23 (eighth-notes 2-5)	E7	mm. 42-43
E4	m. 27 (eighth-notes 2-5)	E8	mm. 45-46

The episodes establish two distinct motifs. M1 is introduced in E1 where it dominates the uppermost voice (from B# in m. 5 to F# in m. 7). It recurs in E2 (T. mm. 11-13 and A. mm. 13-15) and in E6 (T: mm. 35-37)

where its second half is sequenced. A four-note figure that accompanies the motif's first appearance (m. 5: B $\sharp$ -A $\sharp$ -A $\sharp$ -D $\sharp$ ) also recurs (A: mm. 37-38). M2 appears in a preliminary shape already in E4 (T: m. 27, from B to C $\sharp$ ) but gains its full size only in E6 where it is followed by a sequence (S: mm. 36-37). Its extension features a descending 16th-note group (S: mm. 38-39) that is imitated and sequenced throughout the remainder of E6.

Four of the subject-free passages suggest a harmonic conclusion, but in only one of them does this conclusion coincide with the end of the episode: in E8 the cadence concludes not only the episode but the entire piece. In E3, the soprano sounds a traditional do-si-do figure, but this formula with its cadential return to D $\sharp$  major at m. 24<sub>1</sub> overlaps with the subject entry in the alto. Similarly, the F $\sharp$ -major cadential formula in mm. 29-30 ends on the fourth eighth-note of the next subject entry. In E6, by contrast, the cadential close occurs after the first 12 measures, in m. 35<sub>3</sub>, while the episode continues for another five measures, dividing this episode into two segments (E6a and E6b).

The role each episode plays in the dynamic design is determined by its motivic and cadential content. Thus E1, E2, and E6b all create a contrasting color that is used as a kind of negative preparation for the following subject statement. E3, E5, E6a, E7, and E8 wrap up a preceding entry. They bring forth a slight diminuendo, but not with a change of color.

The rhythmic variety, together with the high content of leading notes and other alterations, indicates a rather calm basic character. Yet as the eighth-notes and longer note values carry the melodic line while the 16th-notes serve as embellishments, the pace should not be too slow. The tempo proportion between prelude and fugue must be complex: Given the identical time signature in both pieces, a simple translation of the pulse would give a dull result. One good way of relating the two pieces is to use an imagined eighth-note triplet (instead of the actual four 16th-notes in each beat) for the pivot: a triplet eighth-note in the prelude corresponds with a 16th-note in the fugue. (Approximate metronome settings: prelude beat = 80, fugue beat = 60.)<sup>1</sup>

The articulation in the fugue is predominantly legato. Detached playing is only required in connection with the leaps in the episode motifs (in M1 after the D $\sharp$  and F $\ast$  in A: m. 6, before and after the higher A $\sharp$  in T: m. 5,

<sup>1</sup>The "translation" is achieved by mentally continuing the prelude's pulse while dividing each quarter-note into a triplet. These triplet-beats are then regrouped in pairs and, as soon as they are perceived as independent pulses, each pair is converted into one of the opening eighth-notes of the fugue.

and throughout the broken chord in M2) as well as in the cadential-bass patterns (mm. 30, 35, 43, and 46).

There are four sections in this fugue. The first comprises the four initial subject statements bridged, between two entry pairs, by the contrasting E1. The section concludes at m. 11<sub>1</sub> on the minor dominant (A# minor, the alto with a resolution of the suspension). In the subsequent measures, the reduced ensemble—the alto rests in mm. 12-17, the soprano in mm. 17-21—indicates the beginning of a new section. The second section begins with an episode (E2) followed by four consecutive subject statements. The cadential extension of E3 concludes it at m. 24<sub>1</sub> on the tonic with Picardy third. Thereafter the ensemble is once again reduced to three voices. The third section begins with a stretto whereby the entry in the alto, setting out earlier, overlaps with the preceding cadence. Because of this irregularity, the bass entry has more weight with regard to the structure and counts as the group leader in this stretto. Short, half-measure episodes build bridges between this stretto and the next soprano statement as well as between it and the following alto statement, while the fourth entry, in the tenor, follows without interruption. The cadential close provided by E6a concludes this section on the middle beat of m. 35 in A# minor, the minor dominant. The ensuing episode returns once more to three-part texture. The fourth section begins again with an episode (E6b) before launching its bass entry. As a first subject statement in a new section this bass entry avoids the full four-part texture. Bach does not achieve this by reducing the ensemble but by accompanying the statement with metrically regular chords and thus changing the texture to near homophony. The bass entry is followed, after the short E7, by the parallel statements in soprano and inverted tenor. The final episode E8 concludes the fugue in D# major.

It may already have become obvious from this description that there is a remarkable symmetry in the layout of this fugue:

Sections I + II encompass 23 measures, as do sections III + IV.

Sections I and III conclude in A# minor, while

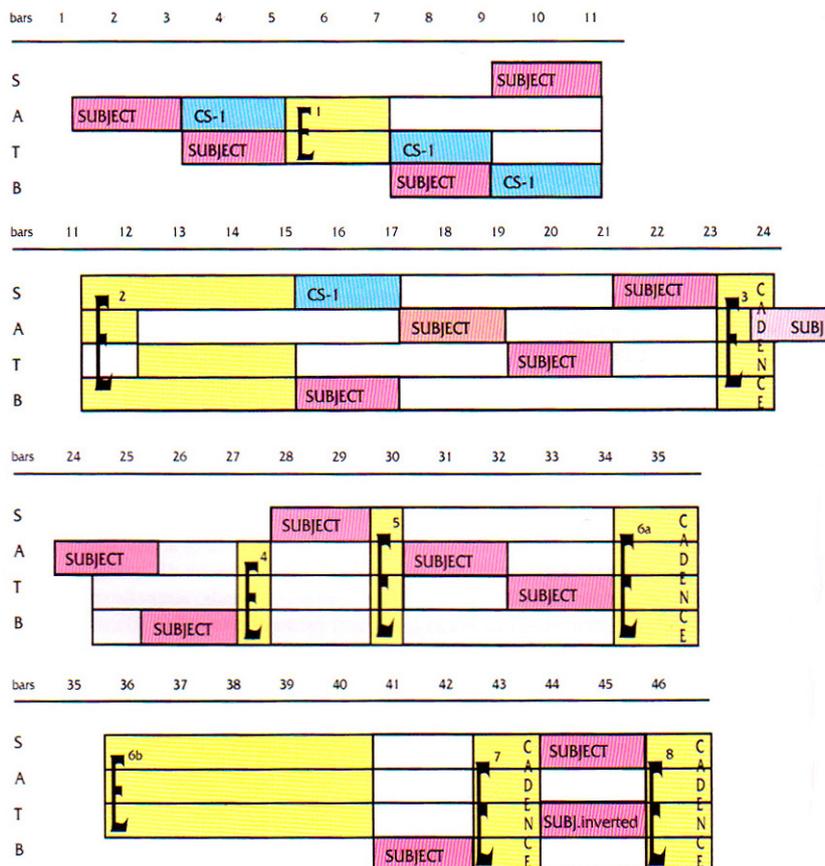
sections II and IV end in the tonic with the Picardy third.

Sections II and IV both begin with a longer episode, while

sections II and IV both end with similar cadential extensions

(E3 and E8 respectively).

An essential difference between the fugue's two halves additionally underpins the binary effect: almost all entries in sections I + II are supported by the counter-subject, whereas sections III + IV do not quote it even once.



Bach designs the fugue’s first half as a graded tension increase. The first two subject statements are contrasted with one, the following two with two quotations of the episode motif. The ensuing four subject entries in uninterrupted succession heighten the tension further before it is rounded off by a concise cadential formula contributing the expected relaxation.

The second half begins with an overlap and a stretto, thus immediately propelling the tension upward. Three further subject entries in four-part setting, interspersed only by half-measure episodes, retain the tension at a high level that is only abandoned at the cadential close of this section. The episode opening section IV provides the longest span of contrasting color in the fugue. The section ends, after the cadential return to the home key, with the climax in the parallel subject statements.