

Bach: Tempered and Transcribed **24 September 2017—Notes on the music**

Bach left two volumes of preludes and fugues “through all tones and semitones” – that is in all of the keys, both major and minor. The title, *Das wohltemperirte Clavier*, raises two important questions: how did Bach imagine an instrument would be tuned so as to play in all of the keys, and at exactly which keyboard instrument did Bach expect the pieces to be played.

By 1722, the date of the autograph manuscript, the old mean tone tunings had been supplanted by “circular tunings” for keyboard instruments, enabling them to play in all of the keys. There were a variety of such tunings, described by many theorists of the time; Bach’s “well-tempered” certainly did not mean “equal tempered,” the tuning most commonly in use today for keyboard instruments. It does not exclude that tuning, which had been in use for fretted string instruments even in the renaissance. But there were many other ways of creating “circular” tunings, enabling one to play in all of the keys. There has been much talk, but no definitive conclusion about what Bach’s favorite tuning may have been, but it is absolutely possible to tune in a single, unequal circular temperament and play all of the preludes and fugues without excessive aural discomfort. After all, the only thing in tune in equal temperament is the octaves: the perfect fifths are narrower than pure, and the major thirds are much wider. The advantage of other temperaments is that they impart a different flavor to each of the keys: some sound much “rougher” than others, some are more placid (i.e., they include more nearly pure thirds, as well as some that are pretty bad). In the eighteenth century, many writers attached emotional terms to the various keys—F-minor was “pathetic,” B-flat major “regal,” etc. This is not fanciful, since the keys did sound quite different. But note that writers from different areas did not agree on such descriptions, since different tunings were favored in different places.. One might also remember that the 24 preludes and fugues in Book 1 were not necessarily meant to be played as a cycle, in one sitting, and therefore in one tuning. A harpsichord or clavichord, the most likely household instruments Bach’s students would have played daily, can easily be retuned to accommodate the more “difficult” keys, those with many sharps or flats.

And which instrument? “Clavier” in mid eighteenth-century Germany simply meant keyboard. Later in the century it more often referred to the clavichord, the much softer cousin of the harpsichord. So any of the keyboard instruments found in Bach’s Germany might have been employed: organ, harpsichord, clavichord, the early piano. The pieces are exercises in both composition and in keyboard technique, and together illustrate the wide range of keyboard pieces in use by Bach and his contemporaries. They are pieces for private study and performance at home, not in the larger venues of the church or even the coffee house.

On the matter of transcription... Bach and his contemporaries often arranged and rearranged their own pieces and those of other composers for instruments and ensembles other than those originally intended. For instance, Bach arranged concertos by Vivaldi and Marcello for organ. In that spirit, I offer a modern transcription of the well-known D-Minor Violin Partita. This transcription was made by Nanette Lunde, an organist and harpsichordist, who has taken great care to transfer Bach’s ideas onto the keyboard. I heard her play the concluding chaconne a few years ago, and was simply transfixed. One has to admit that the piece is probably much easier on the harpsichord than it is on the violin. We’re used to playing double and triple stops, having all ten fingers available.

Fugue 1 à 4 in C Major, WTC I

Exposition: mm. 1–6, in which each voice in turn states the subject													Coda
m.	1	2	4	5	7	9	10	13	16	19	20–21	24	
S		G			C				G C		G	(C)	
A	C					G	D	C	G	E		F	
T			G		G		E	G		A	A	B	
B				C			G	G		D	E	(G)	

Fugue 1 in C Major is in four voices. The first four entries of the subject/answer are on C-G-G-C, whereas the usual order would be C-G-C-G. The answer is an exact transposition of the subject (a “real” as opposed to “tonal” answer), and is indistinguishable except in terms of the starting pitch. The design is not fancy: the subject is not manipulated, augmented, inverted – but it is stated beginning on every degree of the scale of C Major, and it is nearly always present. The first statements are 6 beats apart, then 1 beat, then 2. The final statements on C and F are inserted after a strong cadence on the tonic, as a little coda over a tonic pedal. Think of it like the “Amen” in a hymn. Parentheses in my chart indicate only a partial statement.

Fugue 2 à 3 in C Minor, WTC I

Exposition: mm. 1–8	9	10	13	15	17	20	22	26	28
S	A	Episode CS	Episode S	Episode CS	Episode S	Episode CS	Episode CS	Episode CS	S
A	S	Episode	Episode	Episode A	Episode CS	Episode	Episode	Episode	
B		S	Episode CS	Episode	Episode	Episode	Episode S	Episode	
Key: C minor		E-flat		C minor		0 0 0 0	C minor	coda	

Here too, the design is very simple. Each voice states the subject/answer in the exposition; each statement of the subject, except the first and last, is accompanied by a counter-subject. After the exposition, we move toward E-flat Major for the next soprano statement of the subject, but we are back in C minor for the Alto statement. In the next episode we go around the circle of fifths (0000), taking us right back to C Minor for a strong closing cadence. We could be finished, but the soprano has one more chance to state the subject with a thin accompaniment in the alto over a tonic pedal. The material in the episodes, which increase in length as we move toward the end, is closely derived from material you’ve already heard: the opening of the subject, and scales from the counter-subject. Nothing new! All but one of the statements of the subject/answer are at the original pitch level: C or G.

Fugue 4 à 5 in C-sharp Minor, WTC I

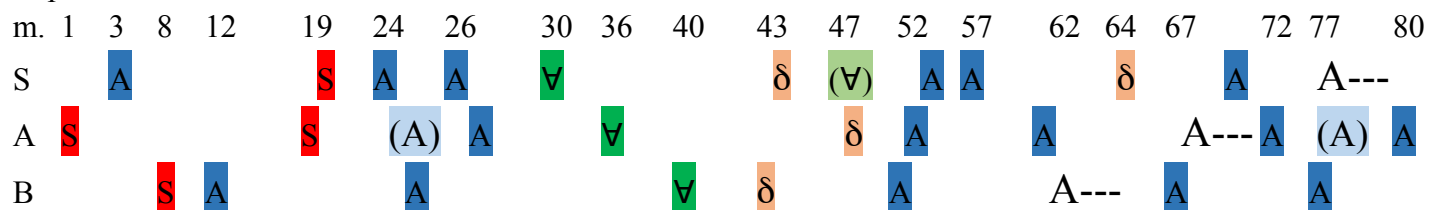
- Exposition: mm. 1–17: Subject 1 (half notes) on C# and G# in all five parts, from bass to soprano 1.
 mm. 18–34: **Subject 1** in lower three parts, on G#, E, C#, B, and E; perfect cadence on E
 mm. 35–48: **Subject 2** (eighth notes) introduced in outer parts, combined with Subject 1 in inner parts on C# and G#
 mm. 49–72: **Subject 3** (ascending fourth) introduced and combined with the other two subjects; subject 1 on F#, A, C#, and D#;
 m. 59 strong cadence on A as soprano 2 reenters with first subject on C#
 mm. 73–112: three subjects intertwined, leading to an expected cadence on C#, but with a "wrong" note in the tenor, which denies us closure (one manuscript copyist "corrected" the tenor note to G#)
 mm. 112–15: partial statements of subjects 1 (on F#) and 3 over tonic pedal



This fugue is much more complex: there are three different subjects, introduced in the first three sections and then combined and interwoven until the end. They are easily distinguished by means of rhythm: the first consists of long notes, the second of running eighth notes, the third includes a striking leap of a fourth, with the top note repeated in case you missed it somehow. The opening subject is reminiscent of, but not identical to, the B-A-C-H motive (B-flat, A, C, B-natural) spelling out the composer's name.

Fugue 8 à 3 in D-sharp Minor, WTC I

Exposition: mm 1-14



In this "difficult" key JSB plays many contrapuntal games. After the three voices each state the subject/answer, Bach gives us an extra statement in the bass. Both subject (**δ**) and answer (**∇**) are inverted (tipped upside down) and presented in close imitation (stretto). Kindly, JSB presents the inverted answer separately in each part, one after the other (mm. 30-42), which makes it easier to hear. Each voice also presents the answer in augmentation (**A---**, the note values are doubled), against the answer (or inverted subject) in another part. (**(A)**) is a dotted and augmented version of the answer. I wrote this fugue out in open score (one voice per staff) in order to pay more attention to all of this.