

ANALYSIS OF J.S. BACH'S INVENTION NO. 8 IN F MAJOR

This is the first Bach Invention I usually teach to my piano students. The hands are relatively easy to coordinate and it can be analyzed with minimal theory background: all we need is to be able to recognize patterns. The words in bold are music theory terms just in case not all of you are familiar with them. I provide a minimal glossary below but please look for a fuller definition online. The entire 2 pages of this Invention are easily divided into 3 distinct "elements" or patterns and a 4th, derivative element. Please refer to the PDF below where patterns are highlighted.

1. The first, orange element is generally a broken **triad** in 8th notes, presented either in **root position** (mm. 1, 2, 12, 13, 16 etc.), in an **inversion** (mm. 3, 4, 8...), with an **added 7th** (mm. 7, 22-25) or just as implied chords (with some notes omitted) indicated by pairs of notes (mm. 11, 15, 33). Even though these combinations of 8th notes may look different, they are all manifestations of the harmonic idea stated in measure 1.

2. The second, yellow element is the pattern of descending sets of four 16th notes. The start of these **sequences** can vary but they run in 4 - note units, starting with the second 16th of each beat and going up one note to start the next link.

3. The third, green element is most clearly repetitive: 4 16th notes stated 3 times and then again two notes (an **interval** of a 3rd) below for the next measure. It's important to see these groups as divided into two layers: 2 lower, moving notes (see A-Bb, F-G and D-E in mm. 4-6) and repeated, static upper notes (C, A and F) because this subtle implication of 2 voices makes sense when we consider our last, derivative element below.

4. The fourth, blue element starts in m. 15 and looks completely new except for the interplay of 2 different parts: alternating notes on the bottom and a repeating note on top. If you look carefully you will see that the first 4 notes in the right hand of m. 15, **C-Bb-C-A**, are the same as the 3rd element notes in m. 4 but backwards: **A-C-Bb-C**. The 16th notes in mm. 19 – 25 change this pattern slightly as part of a brief **development section** but they are very much related to each other and to measure 4.

Measures 10-11 and the last 2 measures function as necessary **cadences** (harmonic resolutions), ending the first section and the entire piece, respectively. They present slightly different pattern combinations and are usually more difficult for students since they don't repeat as much as the rest of this piece. Places like that should be practiced separately.

After looking through this piece and seeing the patterns it's impossible to go back to just playing the correct notes. You will now have a new appreciation of this framework of patterns and every note will be "in its place." You may even notice the fact that mm. 1-6 are written in perfect canon. See if you can discern patterns in other Inventions or Sinfonias. The closer you look, the more you will discover.

***Triad**: a basic harmonic unit, a chord consisting of 3 notes. Google **major, minor, diminished and augmented** triads. Triads (and harmony in general) are always analyzed from the bottom upwards.

***Root position**: a basic triad position with the notes close together and the main note on the bottom, like **C-E-G** for **C major**.

***Inversion**: when the notes of a triad are stacked differently. **E-G-C** (from bottom to top) is called 1st inversion and **G-C-E** is 2nd inversion.

***Chord with an added 7th**: when a 4th note is added to a triad (and it's not a triad by definition anymore) the resulting interval from the root of the chord is a 7th.

***Sequence**: when a group of notes is repeated exactly (same melodic and rhythmic pattern) from another starting note.

***Interval**: the "distance" covered between 2 notes, including the notes themselves, most easily seen on the keyboard when counting white keys, i.e. C to E is a third, C to G is a fifth and C to B is a seventh (a very rough guide ☺).

***Development section**: a stretch in the second half of the piece where the new material is introduced for variety before the beginning material is repeated.

***Cadence**: chords ending a piece or a section of the piece.

Vivace. (♩ = 132.)

INVERSION

ROOT POSITION
mf

4

f

dim.

7

cresc.

10

f

mf

13

p

16

Musical score for measures 16-18. The piece is in B-flat major. Measure 16 features a treble clef with a triplet of eighth notes (B-flat, A, G) and a bass clef with a triplet of eighth notes (B-flat, A, G). Measure 17 continues with similar patterns. Measure 18 shows a treble clef with a quarter note (B-flat) and a bass clef with a quarter note (B-flat). Dynamics include *cresc.* and *mf*. Fingerings are indicated with numbers 1-5. Fingerings for measure 16: Treble (2, 1, 2, 3), Bass (1, 3, 5, 2). Fingerings for measure 17: Treble (2, 1, 2, 3), Bass (1, 3, 5, 2). Fingerings for measure 18: Treble (2, 1), Bass (1).

19

Musical score for measures 19-21. Measure 19 starts with a treble clef (B-flat, A, G) and a bass clef (B-flat, A, G). Measure 20 continues with similar patterns. Measure 21 shows a treble clef with a quarter note (B-flat) and a bass clef with a quarter note (B-flat). Dynamics include *f*. Fingerings are indicated with numbers 1-5. Fingerings for measure 19: Treble (1, 2, 3), Bass (4, 3). Fingerings for measure 20: Treble (2, 1, 2, 3), Bass (2, 1). Fingerings for measure 21: Treble (2, 1), Bass (2, 1).

22

Musical score for measures 22-24. Measure 22 features a treble clef with a triplet of eighth notes (B-flat, A, G) and a bass clef with a triplet of eighth notes (B-flat, A, G). Measure 23 continues with similar patterns. Measure 24 shows a treble clef with a quarter note (B-flat) and a bass clef with a quarter note (B-flat). Dynamics include *dim.*. Fingerings are indicated with numbers 1-5. Fingerings for measure 22: Treble (3, 2, 2), Bass (1, 1). Fingerings for measure 23: Treble (1, 2, 3), Bass (1). Fingerings for measure 24: Treble (3, 4, 5), Bass (4).

25

Musical score for measures 25-27. Measure 25 features a treble clef with a triplet of eighth notes (B-flat, A, G) and a bass clef with a triplet of eighth notes (B-flat, A, G). Measure 26 continues with similar patterns. Measure 27 shows a treble clef with a quarter note (B-flat) and a bass clef with a quarter note (B-flat). Dynamics include *mf* and *dimin.*. Fingerings are indicated with numbers 1-5. Fingerings for measure 25: Treble (3, 4, 5), Bass (4). Fingerings for measure 26: Treble (2, 1, 5), Bass (3, 2, 1, 5). Fingerings for measure 27: Treble (1, 4, 2), Bass (3).

28

Musical score for measures 28-30. Measure 28 features a treble clef with a triplet of eighth notes (B-flat, A, G) and a bass clef with a triplet of eighth notes (B-flat, A, G). Measure 29 continues with similar patterns. Measure 30 shows a treble clef with a quarter note (B-flat) and a bass clef with a quarter note (B-flat). Dynamics include *mf*. Fingerings are indicated with numbers 1-5. Fingerings for measure 28: Treble (1, 4, 2), Bass (4, 1, 3). Fingerings for measure 29: Treble (1, 2, 5, 2, 5, 1), Bass (4, 2). Fingerings for measure 30: Treble (3, 4, 4), Bass (5, 5, 4).

31

Musical score for measures 31-33. Measure 31 features a treble clef with a triplet of eighth notes (B-flat, A, G) and a bass clef with a triplet of eighth notes (B-flat, A, G). Measure 32 continues with similar patterns. Measure 33 shows a treble clef with a quarter note (B-flat) and a bass clef with a quarter note (B-flat). Dynamics include *cresc.* and *f*. Fingerings are indicated with numbers 1-5. Fingerings for measure 31: Treble (4, 4), Bass (2, 1, 1). Fingerings for measure 32: Treble (4, 4), Bass (1, 1). Fingerings for measure 33: Treble (4, 4), Bass (1, 1).