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# Bach and Improvisation

~A research on how useful Bach is for improvising music. ~

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Examensarbete inom konstnärliga kandidatprogrammet i improvisation

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**Summery**


I wrote this thesis for myself and someone who would like to learn improvised music not from Jazz but Bach. I analyzed one composition by Bach, then I showed one example of using his idea to a Jazz standard tune. It was challenging for me to understand and analyze his composition as a Jazz improviser. To be honest I don't like to learn the music language from Bebop music but I like to play Jazz standard music. If someone would like to be good at playing jazz music, I think that it is important to know the music language in jazz.

I'm sure that knowing the compositions of Bach is helpful to improve our skills for your improvising music and playing jazz.

Thanks for people I've met and special thanks to my parents.



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# **1.Introduction**

## **a. My Background**

I was born in Osaka 1983 and lived there until I was 25 years old.

I started playing and studying music by myself, when I entered the Osaka City University in 2002. In the university, my major department was the science of physics, not music. Through studying physics, I have learned the thought which is how to learn the new things. It means that how it is helpful for knowing new things to understand the theory of the new world which you have not known. In music, the theory is the summery of the music from the people who have explored and been discovered in the musical languages. Theory is a heritage from them and it is also so helpful to understand for playing music as well as listening to music.

I knew that I did not have good ears to transcribe music so I could not play music well. But I was not so discouraged because I knew that I was a beginner so it could happen, and I also knew how useful it was to understand music theory.

I believe in the helpfulness of theory, having my experience with same situation in physics.

As time went by I started to play better and better and felt closer to music by reading and playing the music in theory books.

## **b. Thesis Goals**

I would like to examine how the compositions of Johannes Sebastian Bach are useful for improvised music, especially Jazz music.

The reason why I learn from Bach not from jazz is that I was tired of listening to Jazz music in Osaka. In my town Osaka, most jazz musician play the music from 40's to 50's from the USA. It is called Bebop<sup>1</sup>.

Please imagine that everyone plays the same phrases and the same swing rhythms. It was too boring for me, so I lost my energy to learn and play bebop jazz music. At the same time, I started to play more open and free improvised music which is typical music from ECM<sup>2</sup>.

That led me to Sweden.

Since I came here, I've had many experiences to play improvised music with many students and teachers. But why have I felt that the music we play is so opened and free improvised music. I was thinking about it, and I realized that it is two different ways to play improvised music between my town Osaka and here Gothenburg.

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<sup>1</sup> Bebop: is a style of jazz characterized by fast tempo, instrumental virtuosity and improvisation based on the combination of harmonic structure and melody.

<sup>2</sup> ECM (Edition of Contemporary Music): is a record label founded in Munich, Germany, in 1969 by Manfred Eicher. While ECM is best known for jazz music, the label has released a wide variety of recordings, and ECM's artists often refuse to acknowledge boundaries between genres. ECM's motto is "the Most Beautiful Sound Next to Silence,"

In my town Osaka, jazz musicians relied on licks that they've imitated from jazz giants. But here in Gothenburg musicians rely on their own ears, when they improvise the music.

I started to think about what was the attraction of Bebop. I was listening and playing open-improvised music in Gothenburg, I think it was the strength of the single line. I felt the strength of the single line in Bach's compositions for the violin as well. Thus, I focus on one composition "*Corrente*" from *Partita 1* by *Johann Sebastian Bach BWV 1002* and pick out the phrases with some concepts.

## **II. Analyze Bach**

Bach is a pioneer as a composer who expresses harmonic melodies with a single note. He has composed a single melody without harmony. But when people hear the melody, they can hear the harmony from his single note melody.

This is my hypothesis and it is also what I want to learn from Bach. He could describe the harmonic movement by using the single note without the harmony and chords.

It's obvious to see his composition for a solo instrument.

In the piece **BWV 1002**, Bach uses a lot of triads in several ways and variations.

Let's start analyzing BWV 1002.

First of all, I put two extra things on his music. One is the chord-name above the notes. Another thing is the scale-numbers<sup>3\*</sup> under the notes. It helps to understand visually that which note he uses over the chords.

## 1. Triads

### 1.1 Closed Triads

Triads consist of a root, a third and a fifth note over a chord.

We are used to play a triad at the same time as a harmony. It also has a possibility to be played each note separately as single notes.

He uses triad notes as single notes on this composition.

In bars 3 and 5 he uses Bm and D triad notes and he goes up in order from root.

3 Bm  
r m3 5th r m3 5th

5 D  
r 3rd 5th r 3rd 5th

---

<sup>3</sup>scale-tone numbers

Bm7

Root \*r    minor3rd m3    5th    7th    9th    11th    b13th



In bar 11 up wards in order from minor3rd

11 Bm

m3 5th r m3 5th r

In bar 17 he uses D triad down wards in order from the root note.

17 D

r 5th 3rd r

He uses triad with mixing both directions up and down, bars A15, B5, B18.

15 G 5 Em

3rd r 3rd 5th r 3rd

m3 r m3 5th r m3

r 5th 3rd 5th 3rd r

He uses the octave intervals with root notes.

1 Bm 17 D A

r r m3 5th r m3

r 5th 3rd r r r

## 1.2 Triad + 7<sup>th</sup> note

When he adds the 7<sup>th</sup> note to triad, he uses the 7<sup>th</sup> note as the last note for leading to the next chord. This 7<sup>th</sup> note is used to resolve the chord to the nearest chord tone in the next chord.

He uses just a half step or a whole step between the 7<sup>th</sup> note and the next note.

In bar A25-26 and B20-21

## 1.3 Spread triad + $\alpha$

So far I have considered triads without big steps, now I stretch my vision to see the new side of triads which is called **Spread triad**<sup>4</sup>.

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### <sup>4</sup> Spread triad

It means that you spread out the middle note of the triad one octave higher.

It has two inversions as the following.

When he uses spread triad, he plays some of those extra notes after the spread triad. I would like to talk about some other extra notes. If the note follows downwards, he uses these two types of three notes, 7<sup>th</sup>13<sup>th</sup>5<sup>th</sup> or 9<sup>th</sup>Root7<sup>th</sup>, after the spread triad.

**Type(1) 7<sup>th</sup>13<sup>th</sup>5<sup>th</sup>**

In bars A2,4,6

2 F#  
5 r 3rd 7th b13 5th

4 A  
5 r 3rd 7th 13th 5th

6 Em  
m3 5th r 7th 13th 5th

Detailed description: This block contains three musical staves in treble clef with a key signature of two sharps (F# and C#). The first staff (bar 2) is for the F# chord and shows a sequence of notes: 5th, rest, 3rd, 7th, b13th, and 5th. The second staff (bar 4) is for the A chord and shows: 5th, rest, 3rd, 7th, 13th, and 5th. The third staff (bar 6) is for the Em chord and shows: m3, 5th, rest, 7th, 13th, and 5th.

**Type(2) 9<sup>th</sup>Root7<sup>th</sup>**

In bars A10,27, B22

10 F#  
5 r 3rd b9th r 7th

27 Bm  
m3 5th r b9th r 7th

22 A  
5th r 3rd 9th r 7th

Detailed description: This block contains three musical staves in treble clef with a key signature of two sharps (F# and C#). The first staff (bar 10) is for the F# chord and shows: 5th, rest, 3rd, b9th, rest, and 7th. The second staff (bar 27) is for the Bm chord and shows: m3, 5th, rest, b9th, rest, and 7th. The third staff (bar 22) is for the A chord and shows: 5th, rest, 3rd, 9th, rest, and 7th.

If the note goes upwards, he uses close triad after the spread triad notes. In bars A12, B3:

12 Em G 3 Bm

m3 5th r r 3rd 5th m3 5th r 5th r m3

This is the alternative for spread triad, he uses the 7<sup>th</sup> note instead of root note, bar A16 and B17.

16 A7 17 E

3rd 5th 7th 5th r 3rd 3rd 5th 7th 5th r 3rd

## 2. Diminished

So far I'm not concerned with diminished phrases, he used Harmonic minor scale for Diminished phrases.

21 F°

r m3 b5th 6th b13th b5th

For example, he used F# harmonic minor scale over F diminished chord in bar A21.

I would like to add extra rule for diminished phrase in the following.

On the spread triads +  $\alpha$  Type(1), it should be concerned with **6<sup>th</sup>b13<sup>th</sup>b5<sup>th</sup>** ,bars A19 and B12

Let us see more examples of using diminished phrases.

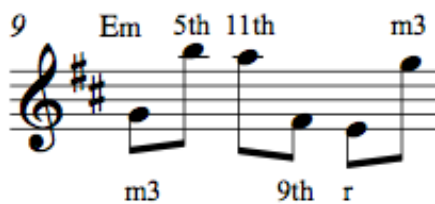
In bars A23, and B8.

### 3.Counterpoint

I would like to write about the phrases which is based on counterpoint. Counterpoint means the composition method based on two or more lines that are independent in contour, rhythm and harmony. On this composition, Bach shows some examples of using simple counterpoints. He uses two types of techniques which are "high and low" and "changing the range".

### 3.1 type(1)Compound Melody

In the bars B9, it's obvious that he just split the phrase in compound melody.



In bar B9, the high note phrase move down 5<sup>th</sup> to minor3rd in order, and the low phrase follow the movement minor3rd to a root note.

The first note which is the minor3rd note is the same as the last note of the phrase, but the last one is one octave higher than the first one.

Let's see one more example in bar B11.



In the high part, it starts with minor3rd and ends with a root note. The lower one moves down root to 5<sup>th</sup> note. As same as bar 9, the phrase starts with a root note and ends with one octave higher root note.

### 3.2 Type(2)Octave displacement

See bar A7

In this case, it's not immediately obvious what kind of technique he uses. With changing the two notes one octave lower, it's easier to see the original line. See in the following score:

The shape is almost straight, with the exception between the first note b9th and the second note 7th. Seeing the last note, we can find the last piece root note on this phrase. And the last root note works as the lead note to the next phrase.

More Example: In bar B33 to 36, he appropriates the same technique on each bars.

With changing these notes the same as I did, these lines shape straightened descent lines and the last note works to resolve the chord to the nearest chord tone in the next chord.

33

G#7(#11)      D      Cmaj7      D#7(#11)

5th 3rd #9th b9th r #11th    maj7 13th 5th 11th 3rd 7th    maj7 13th 5th #11th 3rd    maj7 5th 3rd #9th b9th r #11th

In both type(1) and type(2), these lines follow the descent direction.

### III. Bach to Jazz

In this chapter, I compose solo lines using these ideas that I have written about in the last chapter. The song which I choose is the Jazz standard tune "All the things you are". This song has originally 4/4 swing, but I compose the solo lines for 3/4 swing waltz to make it easier to use these ideas from Bach's Partita which I was working with.

Here is the example to show how useful these ideas are.



# All the things you are

solo line by Yuusaku Ichio

The musical score is written in treble clef with a key signature of three flats (B-flat, E-flat, A-flat) and a 3/4 time signature. The melody consists of eighth and quarter notes. Chord changes are indicated by letters above the staff lines.

Staff 1: Fm<sup>7</sup>, Bbm<sup>7</sup>, Eb<sup>7</sup>, A<sup>b</sup>maj<sup>7</sup>

Staff 2 (5): D<sup>b</sup>maj<sup>7</sup>, Dm<sup>7</sup>(b<sup>9</sup>), G<sup>7</sup>, C

Staff 3 (9): Cm<sup>7</sup>, Fm<sup>7</sup>, Bb<sup>7</sup>, E<sup>b</sup>maj<sup>7</sup>

Staff 4 (13): A<sup>b</sup>maj<sup>7</sup>, Am<sup>7</sup>(b<sup>9</sup>), D<sup>7</sup>(b<sup>9</sup>), Gmaj<sup>7</sup>

Staff 5 (17): Am<sup>7</sup>, D<sup>7</sup>, Gmaj<sup>7</sup>

Staff 6 (21): F<sup>#</sup>m<sup>7</sup>(b<sup>9</sup>), B<sup>7</sup>(b<sup>9</sup>), E, Gm<sup>7</sup>(b<sup>9</sup>), C<sup>7</sup>(b<sup>9</sup>)

Staff 7 (25): Fm<sup>7</sup>, Bbm<sup>7</sup>, Eb<sup>7</sup>, A<sup>b</sup>maj<sup>7</sup>

Staff 8 (29): D<sup>b</sup>maj<sup>7</sup>, Dbm<sup>7</sup>, Cm<sup>7</sup>, B<sup>o</sup><sup>7</sup>

Staff 9 (33): Bbm<sup>7</sup>, Eb<sup>7</sup>, A<sup>b</sup>maj<sup>7</sup>, Gm<sup>7</sup>(b<sup>9</sup>), C<sup>7</sup>(b<sup>9</sup>)

## **Conclusion**

The purpose of this thesis was to find out if it was possible to use Bach's single lines for improvising music. I found out that it was possible to improvise using his single lines. The first time I listened to Bach's compositions, I was excited for some reasons. I felt like a light went on in my head and I could understand the secret of the single strong melody.

While I was writing this thesis, I could get my ideas deeper when I was improvising with single notes.

For example on "All the things you are": In bars 1 and 2, I used the ideas of triad that I was writing about chapter 1.1 Closed Triad and 1.3 Spread Triad.

In bar 47, I used the diminished phrases that I was writing about chapter 2.

In bars 19 and 20, I used the technique of counterpoint that I was writing about chapter 3.1 type(1) high and low.

When I composed single lines on "All the things you are", it was hard to know which of the Bach lines I should use and also how they should be arranged. It was also hard to figure out if they should ascend or descend in order to balance the song.

It takes time to make full use of these ideas for using to improvising music. But it is also my pleasure to learn and practice them more through my life as an improvising musician. I will analyze the other compositions of Bach to get familiar with his sophisticated musicality.

# "Corrente" from Partita for Violin

## BWV 1002

Johann Sebastian Bach

**A**

Bm F# Bm A  
 r r m3 5th r m3 5 r 3rd 7th b13 5th r m3 5th r m3 5th 5 r 3rd 7th 13th 5th

5 D Em F#7 B7 E7 C#m  
 r 3rd 5th r 3rd 5th m3 5th r 7th 13th 5th 3rd b9th r 7th 3rd 7th 3rd 9th r 7th r m3rd

9 F#7 Bm F# Bm Em G  
 3rd 7th 11th m3 9th m3 5 r 3rd b9th r 7th m3 5th r m3 5th r m3 5th r r 3rd 5th

13 A7 5th D G A7  
 3rd 5th r 3rd 5th 7th 3rd r 5th 9th r 7th 3rd r 3rd 5th r 3rd 3rd 5th 7th 5th r 3rd

17 D A D A° Bm  
 r 5th 3rd r r r r r maj7 13th #5th 13th m3 b5th r 6th b13th b5th m3 5th r 13th 7th 5th

21 F° F#m D7(b9) C#7  
 r m3 b5th 6th b13th b5th m3 5th r m3 5th 7th b9th 3rd 5th 7th 13th 5th 5th 7th 3rd 5th 7th 11th

25 C#7 F#m Bm G  
 3rd 5th r 3rd 5th 7th m3 5th r b9th r 7th m3 5th r b9th r 7th r 3rd 5th r 7th maj7th

29 B° F#m F#  
 r b5th 6th b5th r m3 5th m3 9th r 5th maj7th r 3rd 5th 7th b9th 11th 5th 3rd r

2

**B** Dmaj7(#9) F#7 Bm A D#°

maj7 3rd maj7 #5th 3rd r 9th 7th 3rd r 5th 7th m3 5th r 5th r m3 5th r r b5th m3 b5th

5 Em D G#° Am7 D#°

m3 r m3 5th r m3 5th r r b5th m3 b5th m3 5th r 13th 7th 5th r m3 b5th 6th b13th b5th

9 Em B7 Em G#°

m3 5th 11th 9th r m3 5 r 3rd 7th b13 5th r m3 9th 7th b13th r b5th r m3 13th b13th b5th

13 Fmaj7 A° Em B#5 Em

5th 3rd 5th maj7th r 3rd b5th 6th r 6th b5th 9th 5th m3 r #5th r 3rd r 9th m3 5th maj7th r

17 E A Bm E7 Am

3rd 5th 7th 5th r 3rd r 5th 3rd 5th 3rd r 5th m3 r 3rd r 7th m3 5th m3 r 5 7th

21 D A D A

3rd 5th 11th 9th r 3rd 5th r 3rd 9th r 7th 3rd r maj7 9th r 13th 3rd 5th 7th 9th r 7th

25 D7 G A7 Bm

3rd 7th 13th 11th 5th 5th r 5th 3rd 5th #11th 13th r 7th 13th 11th 5th 3rd m3 m3 9th r maj7 r

29 F#7 G7 C#7 A7

3rd 5th r 3rd 5th 7th 5th 7th 5th 3rd b9th 3rd 3rd 5th r 3rd 5th 7th b9th 3rd b9th 13th 3rd 5th

33  $G\#7(\frac{\#11}{9})$  D Cmaj7  $D\#7(\frac{\#11}{9})$

5th 3rd #9th b9th r #11th maj7 13th 5th 11th 3rd 7th maj7 13th 5th #11th 3rd maj7 5th 3rd #9th b9th r #11th

37 E7 F#7 Bm F# B7

3rd 5th 7th 9th r 7th 5th 11th 3rd b9th r 7th m3 5th m3 r r 3rd r 7th b13th 5th 11th 3rd

41 E7 C#7 F#7  $D\#^{\circ}$

r maj7 r 3rd r 7th r 7th b13th 5th 11th 3rd r maj7 r 3rd r 7th r m3 b5th 6th b13th b5th

45 Gmaj7 F#7 Bm

r maj7 7th maj7 #11 5th 7th 3rd 11th 5th r 3rd r m3 5th r m3 5th r