



# Configuration of Modulations in Theme and Transition Sections in Beethoven Op 110 Piano Sonata Part One

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## Abstract

Started his musical training at an early age, Ludwig van Beethoven has become one of the composers who made his mark in the classical period with his extraordinary skills and training. The composer has approached the musical theories of his time in a more innovative manner and he has made innovations in harmony, form and modulation concepts with his music. One of the most fundamental reasons of these innovations and diversification is the impacts of the French Revolution which are also evident in his works, because Beethoven has found himself right in the middle of this revolution and this dragged him to ideological innovations quite different than other composers of the time. Musical historians emphasize that these innovations have occurred in the medieval and maturity period of the composer. Although the impacts of W. A. Mozart was felt before his maturity period, Beethoven's innovative impacts have started to be more evident and stand out in his every other work. It is said that op. 24 Spring Sonata and op.28 Piano Sonata that he composed in 1801 are significant representatives of these impacts. Op 110 Piano Sonata is also one of the maturity period works of Beethoven and it is one of the three piano sonatas that he has composed between 1821 and 1822. It displays the basic elements of sonata form in itself and it consists of 3 main parts. The titles of these parts are Moderato cantabile moltoespressivo, Allegro molto and Allegro ma non troppo.In this study, the modulation structures in theme sections and transition bridges of the first section in Moderato cantabile moltoespressivo character structure will be discussed. Modulation structures are one of the most fundamental composition elements which preserves the dynamism and freshness and ensures continuity of a work. It is observed that these structures have acquired a different aspect in Beethoven's character compared to the perception of the time. This study will shed light to how the contrast concept which is considered as one of the important elements in composition material is used in modulation sections of Op 110 Piano Sonata and its necessity in piano training.

*Keywords:* Beethoven, form and modulation, sonata, form in music

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# Beethoven Op 110 Piyano Sonatı Birinci Bölüm Tema ve Geçiş Bölgelerindeki Modülasyonların Kurulumu

# Öz

Küçük yaşta müzik eğitimine başlayan Ludwig von Beethoven, olağanüstü yeteneğiyle ve aldığı eğitimle klasik döneme adını yazdıran besteciler arasında yer almıştır. Beethoven, klasik dönemin ve klasik dönemden romantik döneme geçişin en önemli ve en verimli besteçilerindendir. Beşteçi, zamanının müzik kuramlarına daha yenilikçi yaklaşmıştır ve müziğiyle gerek armoni, gerekse de form ve modülasyon kavramlarına yenilikler getirmiştir. Bu yeniliklerin ve farklılaşmanın en temel nedenlerinden biri eserlerine yansıdığı da hissedilen Fransız Devrimi'nin etkileridir. Çünkü Beethoven kendisini bu devrimin ortasında bulmuştur ve bu durum onu döneminin diğer bestecilerinden oldukça farklı fikirsel yeniliklere sürüklemiştir. Bu yenilikler için müzik tarihçileri tarafından bestecinin orta çağı ve olgunluk döneminde ortaya çıktığı vurgulanmaktadır. Bestecinin olgunluk döneminden önce, W.A. Mozart'ın etkisi seziliyor olsa bile Beethoven'in yenilikçi etkileri her eserinde gittikçe belirginleşmeye ve ortaya çıkmaya başlıyordu. 1801 yılında bestelediği op. 24 İlkbahar Sonatı ve op.28 Piyano sonatı bu izlerin belirgin temsilcilerinden olduğu söylenmektedir. Op 110 piyano sonatı da Beethoven'in olgunluk dönemi yapıtlarındandır ve 1821 yılında bestelediği, 1822 yılları arasında yazdığı üç piyano sonatından birisidir. Eser kendi içinde sonat formunun temel ögelerini göstermekle birlikte 3 ana bölümden olusmaktadır. Eserin bölüm başlıkları "Moderato cantabile molto espressivo", "Allegro molto", "Allegro ma non troppo"dur. Bu çalışmada, "Moderato cantabile molto espressivo" karakteri yapısındaki birinci bölümün tema bölgelerindeki ve geçiş köprülerindeki modülasyon yapıları ele alınmıştır. Modülasyon yapıları bir eserin dinamikliğini ve tazeliğini koruyan, eserin sürekliliğini sağlayan en temel kompozisyon ögelerindendir. Beethoven'ın kendi karakterinde dönemin anlayışına göre bu yapıların daha farklı bir boyut kazandığı da gözlemlenmektedir. Kompozisyon materyalinde önemli ögelerden olan kontrast kavramı, op 110 piyano sonatının modülasyon bölgelerinde nasıl sağlandığı ve piyano eğitiminde gerekliliğine ışık tutacağı düşünülmektedir.

Anahtar Sözcükler: Beethoven, form ve modülasyon, sonat, müzikte form

#### **JOURNAL OF EDUCATION AND FUTURE 177**

## Introduction

Beethoven is a composed who is considered as quite productive and innovative in the history of music. During the French Revolution, the revolution's impacts have reflected on his music. For that reason, the composer's music is divided into three main periods. In the second period in which he started to find his own identity, most of his works were heavily influenced by the French Revolution. His maturity period, which is considered as the third period, is the period in which all innovative ideas sprouted. The innovations and improvements he has made in the sonata form in this period have shed light to many composers after him. Sonata types have changed in time and made their mark in the classical period ahead of other forms in mid-18th century.

The main topic of this study, Configuration of Modulations in Theme and Transition Sections in Beethoven Op. 110 Piano Sonata Part One, is a theme which shows that Beethoven was a composer who thought differently and focused on improvement. Beethoven may use all kinds of materials as modulation elements. With this aspect, he differs from other composers, because Beethoven has used even silence as a modulation tool. Sudden rests during the thematic traffic in his music makes transition to different tones natural. What is presented here is a modulation attitude which is outside the general and known modulation operation and which is innovative. In Op. 110 Piano Sonata, modulation operation and theme bridges are configured with traditional structures. Tone centres which are presented as structural and harmonic in traditional sonata perception are as follows: They consist of three main parts structurally. These are Exposition (1<sup>st</sup> and 2<sup>nd</sup> theme), Development – Reexposition.

In Exposition part, the fundamental themes are introduced. Tone centres of themes may be different and there may be transition bridges or modulation bridges which interconnect these themes. The scale which ends with the whole or dominant root of the main theme is the place where destinationbridge starts. In this bridge which develops towards second theme, sometimes smooth decorations are made mostly from main theme motives. Sometimes composer may use new ideas in this bridge. The second theme which is in contrast with the main theme character is heard in dominant tome in major works and in related major in minor works. In the development section, the themes and motives in exposition are addressed and processed in various ways.

Development section is like the laboratory of a composer. He makes all kinds of thematic or motive development in this area. It is an area which is creased by diversification of themes and in which the composer displays his creativity. Reexposition reaches the main tone with the dissolution of the dominant and enters into repetition of the exposition. In the compositions of classical period, this second section is prepared with dominant which takes long in general. The length of development section is mostly equals to the length of exposition. Reexposition section starts with hearing the main theme in main tone and themes in the first section are repeated under dominance of the main tone. Only towards the second

theme, the destination bridge which forms the connection settles the end on dominant. While works in minor tone makes the second theme heard in related major in exposition, it is mostly heard in the same tone.

Advanced technique and most of the trends in communication of music in Beethoven's music reveal the thematic elements he had written in a complex way in some sonatas. For that reason, his last five piano sonatas are very important and considered as masterpieces. The perception of existence of the themes outside the known classical perception of sonata form is impossible. Changes are experienced continuously about the harmonic progresses in Beethoven. Dome improvements such as extending, changing or shortening themes are seen in these sonatas in Beethoven's music.

Especially the Piano Sonata Op. 110 can provide more convenient reference on these matters. By combining different factors in various appearances, Beethoven has created a piece which is bedazzling with its various and emotional peaks. Syncopated partitions and arpeggio structures in the first theme are felt as floating above rhythmic time. Then, it combines an emotionally exhausted pain with a second movement which is classified as a musical joke. When each one of these movements are analysed, they reflect the details in the music and harmonies and melodic ideas which are important in terms of form elements.

Contributions of Ludwig van Beethoven in classical period sonata form: the basic principle which process the sonata form in Beethoven's music is that the lifestyle that the artist has lived and reflected in his music are seen in every step. Beethoven's music wanders around a series of dramatic contradictions. A theme or a musical phrase responds to a contradicting theme or musical phrase. A passage in a rhythm is responded by a passage in another rhythm. High pitched pieces are responded by low pitched pieces, solo instrument sounds are responded by mass sounds and a tonality is responded by another tonality. The end of the work consists of the summary and resolution of contradictions. According to Vincent d'Indy (Hodeir, 2003, p. 91), there are six types of development ways in Beethoven'ssonatas:

- Rhythmic development: Continuity of single rhythm over various melodies and harmonies
- Melodic development: Change in harmony and rhythm while melody remains the same
- Harmonic development: Change in rhythm and melody while harmony remains the same
- Increase or extension: development of any motive of a theme by adding new notes and extending its melodic borders

- Decrease: Removing some notes of the theme
- Stocking: Stocking a few themes or phrases

Abovementioned techniques are in fact the different presentations of the structures which Beethoven uses in composition techniques and exist in the foundations of music. Contrast is quite important in music. Beethoven realizes this concept accurately in his music. Op 111 piano sonata is composed in A flat major tonality. The first theme in the exposition section is also in the same tone. The second theme is in E flat major in dominant tonality. In the piece which modulates to different tones in development section, the reexposition section is in main tone. However, the second theme group in this section is also in the same tone.

### Structural Analysis and Exposition Section of Op 110 Part One

 $1^{st}$  theme – transition bridge –  $2^{nd}$  theme

It can be divided into sections as exposition, development, reexposition, secondary development, reexposition and coda. First and second themes in the exposition section are in A flat major tonality. Then the transition bridge carries the piece to the third theme which is heard in E flat major axis. The 3 themes in the exposition section are different than the classical sonata structures. The first step in development section starts with the motives of the first theme. The first theme encountered in the reexposition section is again heard in A flat major tone and then connects to the transition bridge. In the secondary development section, tonality becomes D flat major and this section takes its motives from the second theme. It connects to the exposition again with the modulations of the transition bridge. This section which is heard in A flat major is presented with the motive characters of the third theme.

## 1<sup>st</sup> Theme Section

Between 1<sup>st</sup> and 4<sup>th</sup> measures, it starts in tonic (A flat major) axis and ends in dominant seventh chord. The theme which starts with simple chords leads into syncopated rhythmic figures

Figure 1

First Theme  $1^{st} - 4^{th}$  Measures



In the example where the section of first four measures is given, it is seen that two-measure tonic dominant relationship is presented in association with ornamented notes. From the  $5^{th}$  measure, motives of the theme section are clearly heard in the

main tonality. The section is in a quite elegant and lyrical character. The arpeggio character shown in Figure -2 also shows itself in the transition bridge as well.

Figure 2

Second Theme 5<sup>th</sup> - 8<sup>th</sup> Measures



In the structure where tonic dominant symmetric relation stands out, D flat major tonality dominant chord is heard beginning from the 9<sup>th</sup> measure.

Figure 3

Dominant Chord

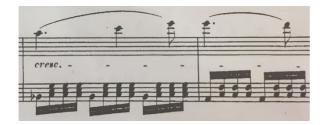


Figure 4

Transition Bridge Arpeggio Character



Transition bridge which comes after the first theme contains modulations which prepares for the second theme. These modulations are heard with arpeggios which starts from the main tone. The second theme is arrived with the notes and chromatic movements which are altered on the transition bridge where dominant tonic relation is presented with arpeggios.

In the 18<sup>th</sup> and 19<sup>th</sup> measures, a section is realized using faster inactivity and extreme intervals. This gives a contrasting element in the material and suddenly arrives in a section which is marked as both piano and molto legato. E flat major modulation is completed with cadence in its first beat in 28<sup>th</sup> measure. The second large group of exposition is realized in E flat major tone as expected.

## JOURNAL OF EDUCATION AND FUTURE 181

## Figure 4

The Section Where the Second Theme Starts Appears in the Second Measure in the Image



Figure 5



Modulation patterns which appear in the development section between  $40^{\text{th}}$  and  $55^{\text{th}}$  measures are as follows:

# A flat major

F minor (Fm) C dominant seventh (C7 – F minor dominant seventh) F minor (Fm) C dominant seventh (C7 – F minor dominant seventh)

Fminor (Fm) C dominant seventh (C7 – F minor dominant seventh) F minor (Fm) A flat dominant seventh (C7 – F minor dominant seventh)

D flat major A flat dominant seventh (Ab7) D flat major **F dominant seventh (F7)** 

B flat minorF dominant seventh (F7)B flat minorE flat dominant seventh

As seen in the above chart, the measures of the development section which starts with the related minor related to the main tone wander around the dominant seventh of the related minor tone. The second modulation pattern has led to a different tone centre with the dominant seventh of the main tone. Appearance of D flat major tone is because it is the forth degree of A flat major which is the core tone of the sonata. It generally consists of principles formed by I-IV-V-I functions. This pattern is broken with F dominant seventh chord which appear in the section related to D flat major. The section transferred to B flat major returns to the main tone of the sonata with E flat dominant seventh chord.

In Figure 6, accompaniment plan played with F minor fourth sixth chord cycle shows itself in the scale playing which consists of C dominant seventh notes.

Figure 6

F Minor – C Dominant Seventhsection in Development Section



After this section, Beethoven realizes the tonal changes step by step in a balanced way within the framework of the tonal plan stated above.

### Reexposition

Reexposition section appears as expected in the concept of classical sonata. It happens with two times returns as in both the main tone and the  $56^{\text{th}}$  measure. Interestingly, the whole previous section is allocated to the development of the theme. This certainly indicates its beginning in the repetition of the exposition section. While the right hand plays the theme, the left hand accompanies with note arpeggios. This continues up to the  $60^{\text{th}}$  measure. At this point, melody and accompaniment are replaced. The  $62^{\text{nd}}$  measure is a transition to the next section of the movement.

### **Development Section (2nd Section)**

It is not a section which always occurs in traditional sonata forms and a secondary development section is not necessary for completing the sonata form.

However, it is widely used. In fact, another aspect of the secondary development is that materials are used clearly.

Beethoven returns to the tone centre and general line in a strange way by wandering around the tone which is not quite close to the structure before resolving into A flat major tone. In the section where harmonic modulation is presented, a homogenous modulation was realized. Starting from the  $63^{rd}$  measure, the theme occurs in a transposed position. Since this theme is already presented in the main tone, it is not necessary for this.

Figure 7

Enharmonic Modulation Section – E Major / Fflat Major – 66th and 69th Measures)



Although Beethoven does not completely sacrifice the material he presents in main tone, he has gained a significant advantage in the composition in terms of contrast by transposing it to another tone. After the melodic expression of the two themes ends, tonality becomes major centred. This modulation is provided with F flat major.

### **Conclusion of Reexposition**

In the 87<sup>th</sup> measure, the repeated section is summed up with the introduction of the theme in main tone for the third time. Other than tone change, it is almost a perfect copy of the first expression of the theme.  $96^{th} - 104^{th}$  measures form an extension of this theme and the phrases are repeated on the chords which emphasize E flat major with second secondary B flat dominant seventh chord. This movement offers a series of simple, silent and retained chords which turns tonality into A flat major tone in a certain way.

# **Conclusion and Discussion**

Beethoven op. 110 piano sonata is an important masterpiece which can be used in piano training. It is one of the advanced level works of Beethoven and it is well known in the literature. The structure of the piece contains innovations with the classical sonata structure. While modulation areas wander around the main tone,

transition to further tonal centres within the framework of contrast perception reveals the expertise of the composed in this area. Its harmonic structure does not show the opposite of what is known in these aspects. However, unexpected tonal transitions in small sections bears the signature of Beethoven in the piece. Structurally, although the piece is within the framework of classical sonata perception, it also shows innovations within itself. This also makes the piece more interesting. Thanks to the developments in the piece which support contrasting structures, it reveals the difference in sonata literature. Piano instructors and students may deliver more efficient performances in the matters specified herein to better understand and convey the sonata. In those aspects, Beethoven, the essential composer of the training music repertories in music schools and his pieces will be useful to not only the listeners but also the students who receive piano training and everybody who wants to learn how to listen to music well.

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