

A Study on Maurice Ravel Concerto for Piano and Orchestra in G major Focusing on the Orchestration (1)

モーリス・ラヴェル作曲ピアノ協奏曲ト長調におけるオーケストレーションの考察(1)

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モーリス・ラヴェルは音楽史上における最も偉大な作曲家の一人であり、多くの傑作を残している。彼のスマートで洗練されたオーケストレーションは広く知られ、オーケストレーションのヴィルトゥーゾで色彩と音色の魔術師と言われている。

モーリス・ラヴェルのピアノ協奏曲ト長調は彼の傑作の一つで、20世紀を代表する作品の一つであるばかりでなく、今日最も頻りに演奏されるピアノ協奏曲の一つである。彼は、この協奏曲の中で、独奏楽器であるピアノと近代的なオーケストラを最大限に活用している。このピアノ協奏曲は、現代の最もポピュラーなピアノ協奏曲第1番である、マグナス・リンドベルイのピアノ協奏曲（1991年作曲）を思い起させる。リンドベルイは、彼のピアノ協奏曲で、ラヴェルが彼の協奏曲ト長調で用いたのと同じサイズのオーケストラを用いている。

オーケストレーションは作曲家にとって最も本質的な技術の一つである。言い換えれば、オーケストラを扱うことと作曲するという行為は切り離すことができない。歴史的な作曲家の多くが独自の技術をオーケストレーションに見せている。中でも、ラヴェルのオーケストレーションは大変スマートで、デリケートで、しかも洗練されている。

本稿では、モーリス・ラヴェルのピアノ協奏曲ト長調第1楽章をオーケストレーションの観点から分析し、この作品の中でどのようにしてオーケストラ楽器用い魅力的な響きを創造しているのか、またどのようにして独奏楽器とオーケストラを有機的に扱っているのかを検証した。

I. Introduction

Maurice Ravel (1875-1937) was one of the greatest composers in music history. He composed many masterpieces, in which he manipulated musical instruments very effectively. He is especially famous for his intelligent and sophisticated orchestration; he is regarded as a magician of orchestral colours and timbres.

Ravel's Concerto for Piano and Orchestra in G major (1929-1931) is one of his best works and

one of the masterpieces written in the 20th century; it is also one of the most frequently performed piano concertos today. In this piece, he made the best use of both the piano, solo instrument, and the modern orchestra. This piece reminds me of Magnus Lindberg's Piano Concerto No. 1, one of the most popular contemporary piano concertos, which was completed in 1991 - its orchestration is influenced by Ravel's.¹ In order to make the piano audible, the concerto employs an orchestra the same size as that required by Ravel in his Concerto for Piano and Orchestra.² Lindberg shows his respect for the soloist; the piano stands out throughout the piece.

The art of orchestration is one of the most essential attributes of a composer; it is inseparable from composing music. Many composers have displayed their mastery over orchestration, for instance, Haydn, Mozart, Beethoven, Berlioz, Wagner, Mahler, Strauss, Ravel, Rimsky-Korsakov and Stravinsky - in particular, Ravel's orchestration is extremely clever, delicate and sophisticated. As for myself, I was able to learn many orchestration techniques by listening to the orchestral works by several modern composers, especially the works by Ravel.

The purpose of this paper is to analyze Ravel's Concerto for Piano and Orchestra in G major from the viewpoint of the orchestration and to discover how Ravel creates such a fascinating resonance; how he manipulates the piano and the orchestral timbre.

II. Background of Composing the Piano Concerto in G major

Throughout his lifetime, Ravel had composed two piano concertos, the Concerto for Piano and Orchestra in G major and Concerto in D major for the Left Hand. Both works were completed in 1931, which was during his later period. Both concertos reflect elements of jazz he encountered during his North American tour in 1928. Additionally, the Concerto in G major also has Spanish elements inspired by Ravel's first visit to Spain³; his birthplace near Basque plays a big role as well.

III. Analysis Focusing on the Orchestration

Instrumentation

Ravel employed the following musical instruments: piccolo, flute, oboe, English horn, clarinet in E-flat, clarinet in B-flat doubling clarinet in A, 2 horns, trumpet, trombone, timpani, percussion by 2 players (triangle, small drum, cymbal, tam-tam, wood-blocks, slap-sticks), harp, strings (8.8.6.6.4.), solo-piano. This light instrumentation reminds us of Mozart's piano concertos. Ravel mentioned in an interview with the Daily Telegraph that the Concerto in G was a concerto, in a strict sense,

¹ Risto Nieminen, et al., eds. *Magnus Lindberg*. Trans. Nick LE QUESNE. (Helsinki: Editions Ircum. – Centre Georges-Pompidou and Finnish Music Information Centre, 1993), p.103.

² Kimmo Korhonen. *Finnish Concertos*. Trans. Timothy Binham. (Helsinki: Finnish Music Information Centre. 1995), p.73.

³ Michael Thomas Roeder. *A History of the Concerto*. (Portland, Oregon: Amadeus Press, 1944), p.358.

written in the spirit of Mozart and Saint-Saëns.⁴

Structure

This concerto consists of the traditional three movements: fast, slow, fast.

Notation

At a glance, one can notice that Ravel did not use key signatures for the horns, trumpets and harp. It is common amongst the composers in the Western tradition to not use key signatures either for the trumpets and the horns. To this end, it is easy to assume that Ravel is just following the traditional approach, however, the fact that he did not use key signatures for the harp compels reconsideration. It is very likely that using key signatures for the harp is unsuitable for this piece as he often uses enharmonic equivalents for the sharp notes in order to pluck open strings; open strings resonate well.⁵

First Movement

First movement is written in sonata form. The exposition begins with a percussive whip-crack and bitonal arpeggios of G major and F-sharp major on the piano. These arpeggios are accompanied by the first theme, which has a Basque flavor, played by the solo piccolo marked *f* – it starts at the measure 2 and ends with playing the lowest note *ff* at the beginning of the measure 16. Having a crescendo in its lowest register from the measure 13-15, the piccolo gets reinforced by the flute.⁶ While the first theme is being presented, till the measure 13, the first violins, second violins and violas continue performing pizzicatos accentuating the off-beat, and violoncellos continue playing harmonics on the D-string. Meanwhile, the snare drum performs rolls imitating tremolos played by the violoncellos.⁷ All these accumulated, the beginning of the first movement is very effective. The dry whip sound at the beginning evokes a festive feeling, after which the piccolo introduces the first theme; the piece carries on in a lighthearted fashion (Example 1). The bitonality, rhythmic motion and dry sounds remind us of Stravinsky; for instance, his ballet music, *Petrushka*.⁸

⁴ *Ibid*.

⁵ Walter Piston. *Orchestration*. (New York: W. W. Norton & Company, Inc., Copyright 1995), P. 327.

⁶ Murray Augustus Allman. *An Analysis of Maurice Ravel's Technique of Orchestration*. (Denton, Texas: North Texas State College, August 1958), P. 132, <https://digital.library.unt.edu/ark:/67531/metadc663464/#who>

⁷ Richard Henry Jeric. *Portrait of a Life: Analysis of the Ravel Piano Concerto in G*. (2011), p. 32, https://etd.ohiolink.edu/rws_etd/document/get/ksuhonors1304360997/inline.

⁸ Michael Thomas Roeder. *op. cit.*, pp. 358-359.

The first theme is reintroduced by the trumpet at the measure 25, while the same chordal accompaniment is being performed as before - this time though with a fuller orchestration.⁹ During its reappearance, the horns and trombones play a big role, especially from measure 25-36, performing a motive of accented chromatic appoggiaturas. The piccolo also provides stimulus to make the music vivid performing a figure of accented chromatic grace notes.

The second theme consists of three parts. At the measure 44, like a soliloquy, the piano solo leads the way playing the first part of the second theme *mp*, while it also incorporates elements of jazz. From the measure 44-52, the other instruments are given rests; the piano is audible. The F-sharp major arpeggios produce a blues flavor and clash with the lowered third (Example 2).¹⁰

Example 2 Movement 1, mm. 44 -51.

Also, from the measure 52-54, a short interlude between the first part and second part of the second theme takes place, having the cymbals and woodblock perform off-beats in a steady eighth-note rhythm - this too lends a jazzy atmosphere. Meanwhile, the clarinet performs a theme like figure, which derives from the latter portion of the second theme's first part.¹¹ In the measure 53, the muted trumpet performs the same figure providing the theme with a jazzy feel.¹²

From the measure 55-62, here, the second part of the second theme is introduced by the piano solo only - off-beat eighth-note figures are characteristic (Example 3).

⁹ Richard Henry Jeric. *op. cit.*, p. 33.

¹⁰ Michael Thomas Roeder. *op. cit.*, p. 359

¹¹ Ichiro Nodaira. *Commentary on Maurice Ravel Piano Concerto in G major; Concerto in D major for the Left Hand.* (Tokyo: Ongaku no Tomo sha, 2015), vi.

¹² Richard Henry Jeric. *op. cit.*, p. 35.

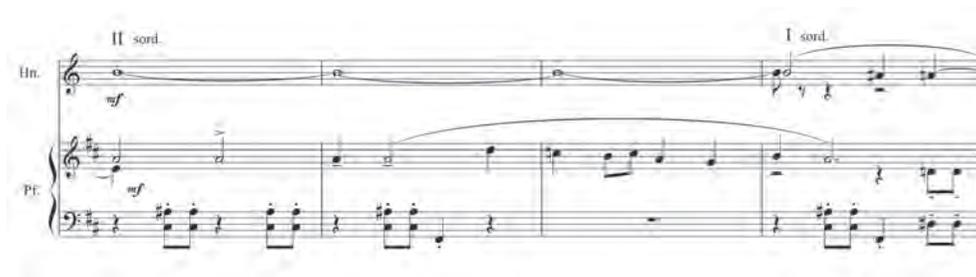
Example 3 Movement 1, mm. 55-62.



The measures 63-66, are a repetition of the measures 52-54. Like the measures 52-54, they function as a short interlude between two parts - this time between the second and third part of the second theme. The materials are extended in length more than before while some changes in orchestration can also be noticed. At the measure 63, the theme like figure reappears on the piccolo, which gets handed over successively from the clarinet to the muted trumpet – all the while, the harp performs glissandos.

From the measure 67-72, the third part of the second theme is stated by the piano solo - behind the piano, two muted horns perform alternately (Example 4).

Example 4 Movement 1, mm. 67-72.



Moving on, from the measure 73-95, the third theme is exposed mainly by the piano and, in the first half, the measures 73-83, the theme is interrupted twice by the off-beat eight-note figure, that which already had made an appearance during the statement of the second theme.¹³ During the interruption, dissonant notes are played in turns by the piccolo and horn along with the muted strings. In the latter half, the third theme is performed, yet again, by the piano solo only and continues to get developed freely.¹⁴

Next part, the measures 94-106, is a bridge between the exposition and the development. The first bassoon performs the theme momentarily replacing the solo instrument, the piano, and soars up to its highest register. Thereafter, it culminates in playing the long note E, practically the highest note¹⁵ - this adds an interesting aspect.¹⁶

¹³ *Ibid.*, p.35.

¹⁴ Ichiro Nodaira. *op. cit.*, p. vi

¹⁵ It is well known that Igor Stravinsky (1882-1971) employed the highest register of the bassoon in the beginning of *Le Scare du printemps*. Then he required D. Ravel E, a tone higher than Stravinsky wrote.

At the measure 102, Ravel makes use of enharmonic equivalents of sharp notes for the harp (Example 5). As he calls for E, C, D-sharp, E, while he writes F-flat, C, E-flat, F-flat instead, in order to obtain a richer sonority. As mentioned above, Ravel does not use key signatures for the harp in this piece; probably, in doing so, he concurrently avoids the complexity caused by the use of many key signatures and accidentals. Finally, at the very end of this section, the bridge between the exposition and the development, the piano solo performs the chord F-sharp 7 in the second inversion.

Example 5 Movement 1, m. 102.



The development starts at the measure 107 and the music starts developing gradually towards the climax of the development with some undulations. Both in the measures 126 and 134, in the high register of the first violins, divided into parts, perform quick octave glissandos making sharp metallic sounds. Also, as a counterpart, in the low register, the violoncello performs a glissando at the measure 130 and trombone at the measure 138.¹⁷ In the measures 150-152, the first horn performs figures derived from the materials that were repeated in the measures 13-24; the second horn performs off-beats. In the meantime, the piano solo performs the accented chromatic appoggiaturas heard before in the horns and trombones in the exposition.¹⁸ At the measure 152, all woodwinds and the trumpet perform two eight notes reminding the off-beat eight-note figures from the earlier part of the piece.¹⁹ These figures now produce rather brassy sounds. At the measure 165, the violas start performing a six-measure trill, and, at the measure 168, the second violins start performing a three-measure trill. Providing with a feeling of tension to the music, these trills propel the music to the climax of the development; at the climax the development section ends. The measure 171 is a brief cadenza, which leads the piece to the recapitulation.

The recapitulation starts at the measure 172. On the first beat of the measure 172, the bass drum marked *ff* signals the start of the recapitulation - it contrasts with the whip-crack in the beginning of the exposition.²⁰ Immediately after the signal majority of the orchestra, including the piano and the harp, enter in together and continue performing until the beginning of the second

¹⁶ Jan Richards. *Ravel Piano Concerto in G Major*. (Stanwell High School, 2009), [http://resources.hwb.wales.gov.uk/VTC/2008-09/music/irf08_49\(2\)/index.html](http://resources.hwb.wales.gov.uk/VTC/2008-09/music/irf08_49(2)/index.html)

¹⁷ Richard Henry Jeric. *op. cit.*, p. 36.

¹⁸ *Ibid.*, p. 37.

¹⁹ *Ibid.*, pp 37-38.

²⁰ *Ibid.*, p. 39.

beat of the measure 183 marked *f* or *ff*. The first theme in full tertian chords is played fortissimo by the piano and the bitonal chords of G major and F-sharp major are played likewise by the harp.²¹ The bassoons and horns perform the accented chromatic appoggiaturas and strings play chords pizzicato. Nearly all the instruments perform the rhythmic accompaniment against the theme performed by the piano solo extravagantly.²²

After the return of the second theme, the measures 191-203, a harp cadenza is placed (Example 6), and a chord played by the three violoncellos sustains the passage. The harp is employed very effectively. While the right hand continues to perform *glissando a piacere*, the left hand performs the third part of the second theme in harmonics - the glissandos' sounds are light and the theme rings beautifully. In the harp cadenza, the harp and sustained chords together create a delicate sonority. On the other hand, at the measure 12, harmonics by the strings²³ and triangle provide a rather tense atmosphere.²⁴

Example 6 Movement 1, mm. 191 to 198

At the measure 216, returning to Tempo 1 $^{\circ}$, the piano solo starts performing shooting arpeggios; the left hand performs A major and the right A minor.²⁵ These chords remind us of Bela Bartok's use of split chords.²⁶ At the same time, the violins, violas and violoncellos start performing glissandos, the double basses start performing an organ point with low A.²⁷ Meanwhile, the

²¹ *Ibid.*

²² *Ibid.*

²³ Walter Piston mentioned Ravel's mistake in notation; actual pitch produced by the sixth harmonic of the first violoncello on the measure 12. Walter Piston. *op. cit.*, p.86.

²⁴ "Harp harmonics are very soft and to be heard must be accompanied by a very light orchestration or played solo." (Samuel Adler. *The Study of Orchestration*. (3rd ed.; New York and London: W. W. Norton & Company, Inc., Copyright 2002, 1989, 1982), p.98.

²⁵ Richard Henry Jeric. *op. cit.*, p. 41.

²⁶ *Ibid.*

²⁷ *Ibid.*

woodwind section performs the long notes forming A major and A minor simultaneously,²⁸ when the piccolo, clarinet and trumpet perform the theme like figure from the second theme with flutter-tonguing.²⁹ One can also notice the trombones and double basses performing glissandos directly before the measure 221. In the measures 221-227, the harp cadenza reappears in an altered arrangement: while the horn performs the theme, woodwinds imitate harp's glissandos.³⁰

When the orchestra becomes quiet, the piano cadenza begins. In the first part of the piano cadenza, the right hand trills and intricate left hand arpeggios imply the third theme. In the latter part, when the strings start to perform along, both hands outline the third theme in piano arpeggiations; the first violins perform the theme as well.

Lastly, the coda starts at the measure 255, returning to Tempo Primo. The measures 255-268 correspond to the first part of the development,³¹ the measures 269-280 to the second part³² and the measure 281 to the fourth part of the development³³. In the measures 295-320, the fragments of the first theme are repeated constantly. The measures 313-323 are the last part of the first movement, which is played by tutti, while the chords performed by the strings propel the music forward. From the measure 317-320, Ravel, very skillfully, adds double stop technique on the second violins, violas and violoncellos, making use of open strings well. On the first beat of the measure 321, the music reaches the climax of the first movement and finishes with *ff* performing descending figures.

IV. Closing Words

I have gone over the first movement with an emphasis on the orchestration. The process allowed me to know some parts of advanced orchestration techniques and virtuoso writing for the soloist(s). I also noticed that occasionally Ravel makes use of the thin orchestration in order to make the solo instrument audible. Furthermore, the influence of Stravinsky, Gershwin, Jazz, Basque music and more, were also evident, and, not only that, it was clear that he developed his music by adding the new elements he had been inspired by. What I learned this time might be useful for other composers. I am now going to analyze the second movement and third movement in order to know Ravel's orchestration even more profoundly.

²⁸ *Ibid.*

²⁹ *Ibid.*

³⁰ Michael Thomas Roeder. *op. cit.*, p.360.

³¹ Ichiro Nodaira. *op. cit.*, p. x.

³² *Ibid.*

³³ *Ibid.*

Bibliography

- Adler, Samuel. *The Study of Orchestration*. 3rd ed.; New York and London: W. W. Norton & Company, Inc., Copyright 2002, 1989, 1982.
- Allman, Murray Augustus. *An Analysis of Maurice Ravel's Technique of Orchestration*. Denton, Texas: North Texas State College, August 1958. <https://digital.library.unt.edu/ark:/67531/metadc663464/#who>
- Jeric, Richard Henry. *Portrait of a Life: Analysis of the Ravel Piano Concerto in G*. 2011. https://etd.ohiolink.edu/rws_etd/document/get/ksuhonors1304360997/inline
- Korhonen, Kimmo. *Finnish Concertos*. Trans. Timothy Binham. Helsinki: Finnish Music Information Centre, 1995.
- Nieminen, Risto, et al., eds. *Magnus Lindberg*. Trans. Nick LE QUESNE. Helsinki: Editions Ircum – Centre Georges-Pompidou and Finnish Music Information Centre, 1993.
- Nodaira, Ichiro. Commentary on *Maurice Ravel Piano Concerto in G major, Concerto in D major for the Left Hand*. Tokyo: Ongaku no Tomo sha, 2015.
- Piston, Walter. *Orchestration*. New York: W. W. Norton & Company, Inc., Copyright 1995.
- Richards, Jan. *Ravel Piano Concerto in G Major*. Stanwell High School, 2009. [http://resources.hwb.wales.gov.uk/VTC/2008-09/music/irf08_49\(2\)/index.html](http://resources.hwb.wales.gov.uk/VTC/2008-09/music/irf08_49(2)/index.html)
- Roeder, Michael Thomas. *A History of the Concerto*. Portland, Oregon: Amadeus Press, 1944.
- Ravel, Maurice. *Concerto for Piano and Orchestra in G major*. Edited by Durand, Milan: Universal Music MGB Publications Srl, 2009.