

# Vibrato

Choices and challenges in Dvořák's cello concerto

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#### **Abstract**

After realising vibrato is such an essential resource in strings and it can affect the quality of sound, I decided to reflect on it. The thesis is divided into two source parts, Vibrato subdivided in definition, terminology, evolution and the four main types and Dvořák subdivided in a brief composer's biography, the evolution in his aesthetics, and the context of composition of the concerto, of which the analysis of its first movement is presented at the end of the chapter. Then in the inquiry I present my proposal and my challenge for the interpretation of vibrato, which takes into account both the historical and stylistic issues of the composer and my own aesthetic criteria plus a comparison of how some soloists perform it.

#### **Key words**

Vibrato, Dvořák cello concerto, performance, musical characters.

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### Introduction

The topic of vibrato choices may be relevant for several reasons. The first is that vibrato is an essential resource for string players, and Dvořák's Concerto in B minor for cello and orchestra is one of the most important concertos for the instrument and also because besides me planning to perform it in my recital, it is one of the concertos asked when auditioning for orchestra. Another reason why it can be interesting is because when I make my interpretative approach to vibrato I am choosing from different types, based on a historical and aesthetic contextualization of the period of the concerto and considering the emotions or moods of the different sections. There is also a final reason, which has to do with the current approaches that are being developed in the world of solo performance of classical and romantic works, in which the aim is to adopt a more historical perspective, trying to use vibrato in the way it was used at the time of composition of each work.

### **Aim**

With the aim of exploring choices of vibrato, I have carried out a study of vibrato to find out what it is, how it has evolved through the different periods, what the main types are and how it is performed. I have also devoted a section to the biography and aesthetics of Antonín Dvořák, and a study of his Concerto in B minor for cello and orchestra, with the aim of adapting the choice of vibrato. The overall aim is to try to better understand the technical challenges of the vibrato, particularly in relation to Dvořák's compositional style.

## Theory

#### Vibrato

In this first section the term vibrato will be defined from an aesthetic point of view followed by the different terminology that have been associated with it throughout history. Then, the evolution of the use of vibrato on the cello is being described and finally, the four main types of vibrato and how it is performed will be explained.

### **Definition and terminology**

The term vibrato as it is conceived today comes from Italian and it denotes how fast or slow the pitch of a note can be altered. It is used not only in string and wind instruments but also in singing. In the first one, it directly affects the intensity of the sound and the timbre that it is perceived. Moreover, vibrato is found and has been used in different ways throughout the history in all the Occidental music from the first mediaeval period to the present. (Brown, 1999, p. 517; Moens-Haenen, 2001, n.p.; Campbell, Greated, Myers, 2008, n.p.).

Terminologically, there have been various ways of calling the string vibrato depending on the time and place where the performer or musicologist belonged. Terms such as close shake can be found in England, *Bebung* in Germany and Austria (despite the fact that Leopold Mozart used *Tremulant or Tremoleto*), *Ondulation* (used by Pierre Baillot in *L'art du Violon* (1834) or *Tremolo*, which also means a rapid repetition of notes in the same time or the rapid alternation of notes with different intonation. Nevertheless, what is conceived today as vibrato may not be associated with the above terms. As a matter of fact, what it is used nowadays comes from Italian, but it was not until far up the 19th century that the meaning of the words became the same as it is today. For wind instruments there are other expressions such as *flattement*, *flatté*, *plainte*, *langueur*, *ardire* or *trilleto*. (Brown, 1999, p. 517-518; Moens-Haenen, 2001, n.p.).

#### **Evolution of the vibrato**

First, it should be said that the cello's vibrato, given its history as an instrument integrated into the basso continuo and its later development as a soloist, was not as developed as the violin's. Although it is true that there are concertante works before the 19th century, such as the concertos of Antonio Vivaldi, Luigi Boccherini or those of Franz Joseph Haydn, among others, it was not until well into that century that the cello gained importance and its vibrato developed (Zurita, 2015, p. 173).

Historically, there have been two types of vibrato on the cello: the first is the bow vibrato or *ondulé* vibrato, which is performed by regulating the pressure on the bow, while the second type is performed with the left hand, which it is explained later in this section. During most of music history time, in particular between 1750 and 1900 vibrato and their variants were used as an ornament. Furthermore, countries and culture are also involved regarding its use. However, despite that, several referents from that time seem to agree stating that vibrato, as well as other ornaments, should be used in some notes as an enrichment and that the basic

sound should be a constant one. It is seen that the current aesthetic of the time Will undoubtedly affects the use of the vibrato (Zurita, 2015, p. 174; Brown, 1999, p. 521-524).

In one of today's first sources regarding the movement to which now it is conceived as vibrato it is said that:

To perform it [close shake], you must press the finger strongly upon the string of the instrument, and move the wrist in and out slowly and equally, when it is long continued swelling the sound by degrees, drawing the bow nearer to the bridge, and ending it very strong it may express majesty, dignity, etc. But making it shorter, lower and softer, it may denote affliction, fear, etc. When it is made in short notes, it only contributes to make their sound more agreeable and for this reason it should be made use as often as possible. (Geminiani, 1751, p. 9)

This quote from Geminiani's treatise *The Art of Playing the Violin (1751)* shows that vibrato is not only relatable to the production of sound of the instrument but also to emotions and how vibrato can help to transmit them. However, some decades later Leopold Mozart and Georg Simon Löhlein will challenge Geminiani's encouragement to use vibrato on short notes as much as possible. Leopold Mozart states that "those who tremble consistently on each note are as if they had the palsy" and G. Löhlein in his 1774 treatise suggests that "one must not be too liberal in its use; for if, as many do, one introduces it too frequently, the hearer will feel a sympathetic anxiety or an attack of cold fever" (Brown, 199, p. 525).

The first source regarding vibrato in particular for the cello is a German treatise written in 1802 by Joseph Alexander and entitled *Guide to the Cello* in which it is referenced in its two forms (*ondulé* and the left-hand vibrato). Despite this, J. Alexander does not provide any new information regarding the aspects already mentioned above. Another later teatrise, also German, from 1825 by Friedrich Dotzauer in which states that "in sustained sounds some soloists have the habit of vibrating (tremolo), that is, shaking the finger back and forth" (Zurita, 2015, p.174). And it is these, the soloists, who will spread the use of vibrato according to the words in the Gazette Musical of François-Joseph Fétis on Paganini's Paris debut in 1831:

A certain effect, among which the German journalists and musicians who had written about Paganini did not speak at all, is that of a tremulous vibration of the string which he frequently employs when he sings, and which is particular to him. This effect noticeably affects the human voice. (Zurita, 2015, p. 180)

This trend, developed in Paris, poses a contrast with the other forming trend in the German zone since in 1840 Bernhard Romberg, another well-known German cellist, published his treatise entitled *the Cello School* and stated that:

Formerly the close shake was in such repute that it was applied indiscriminately to every note of whatever duration. This produced a most disagreeable and whining effect, and we cannot be too thankful that an improved taste has at length exploded the abuse of this embellishment. (quoted in Brown, 199, p. 528)

After reading this statement, Romberg seems to agree with both L. Mozart's and G. Löhlein's opinions regarding the use of vibrato even though the statement was published more than half a century later. Moreover, he differs completely from F-J. Fétis states it's happening in the French zone. From the middle of the 19th century onwards these two contracted trends will be the leading ones regarding the use of vibrato.

Below an example, of a piece by Joachim Raff entitled *Erinnerung* composed in 1854 in which he asks for "molto vibrato":



Illustration 1: Erinnerung op.86/2 by Joachim Raff c.130-137 Source: Zurita, 2015, p.189

As shown in the picture of this chapter, Raff is asking for is not what pedagogues and some performers do in the Germanic area. From the middle of the 19th century, it is possible to identify two different points of view regarding vibrato in Europe which are the German and the French-Belgian. The first one is represented by Joseph Joachim and his followers and then, the second one is spoken for by Fritz Kreisler, who studied for many years in Paris where there was a tendency to use the vibrato in a more constant and intense way including tending towards a possible continuous vibrato. Thus, another change of aesthetics can be observed from the mid-19th century onwards: while the German school remained in the "old" aesthetic, the Franco-Belgian school embraced the new one. These tendencies will continue until practically the beginning of the 20th century (Brown, 1999, p. 534-535; Zurita, 2015, p. 179-182).

In the 20th century, the continuous vibrato began to be developed and it is defined as "the fundamental production of tone" (Brown, 1999, p.521). This happened because vibrato came to be considered as an expressive resource used to create new colours in the tone, always seeking coherence and adaptation to the character of the music¹. The first treatise on continuous vibrato for strings is Siegfrid Eberhard's *The Moving Tone of the Violin* (1910). The acceptance of this type of vibrato in singing and other instruments comes later than in strings (Becker, 1929, p. 201-202; Brown, 1999, p. 521).

Nowadays a new way of performing is being developed, as more and more internationally renowned soloists, such as Steven Isserlis or Jean-Guihen Queyras, try to perform the works, either in terms of articulation or vibrato, as it was done at the time. This can be seen in their

<sup>&</sup>lt;sup>1</sup>A personal note considering how important vibrato is for string instruments also in an orchestral setting: after having worked a few weeks with Malmö Symphony Orchestra I have realised that when playing in an orchestra if a string instrument is playing the same melody as a wind instrument; when trying to blend with it, the use of the vibrato will be relevant. If the string musician uses a lot of vibrato they will not blend as good as if vibrato is used in a very light way or as ornamenting the melody.

various recordings of both concertos and sonatas for cello and piano from the whole of the 19th century. In these recordings the performers make a choice of articulations or vibrato as they were used at the time of composition.

#### Vibrato types

When talking about types of vibrato on the string, it is important to know that there are only two variables at our disposal: speed and amplitude. Therefore, there are only going to be four different types of vibrato:

- A fast and wide vibrato
- A fast and narrow vibrato
- A slow and narrow vibrato
- A slow and wide vibrato (Mantel, 1985, p. 40)

It should be noted that slow and wide vibrato are not commonly used in works of the classical repertoire proper, but rather as variations halfway between fast and wide vibrato.

### How to perform it

A lot of string players and especially cellists think that vibrato is made with only the fingers without realising that it's a movement made from, mostly, the forearm. To make a good vibrato it is necessary to have a good position of not only the hand and fingers but also the arm and then it is also necessary to be able to control speed and width. Afterwards, the movement itself is first backwards (towards flat intonation) and then back to the note, but never onwards (towards sharp intonation) otherwise the vibrato will sound questionable. Below is shown an illustration and an explanation of all the parts involved in making vibrato (Etxepare, 2011, p. 68-69).

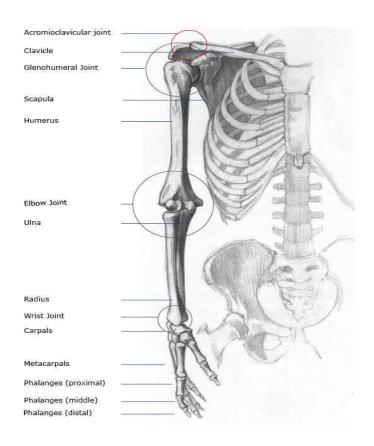


Illustration 2: Bones of the right arm with the forearm in normal position. Source: H A. Chung, (2019), n.p.

#### Scapula

The scapula, which is normally not considered, is the bone which allows humans to lift the arm since it connects the clavicle with the humerus. This bone does not have a direct purpose regarding vibrato since it is not involved in it, however if it is taken in mind and the connection named above is understood then the player will be able to both, have a good mobility of the arm having it relaxed and prevent injuries in the muscles which are protected by the scapula (Etxepare, 2011, p.97).

#### **Elbow and Forearm**

The elbow joint is an articulation that not only allows the flexion and extension of the arm but also connects the humerus with both ulna and radius, so the humerus is linked with the forearm too. The last mentioned is one of the most important parts of our arm for several reasons. It allows the supination and pronation movement, which will be explained later, it is also the part of our body where most of the muscles responsible for the movement of the hand and fingers are located and finally, the forearm and elbow, when in a good position,

enables the whole arm to have enough height to avoid tension or overload when vibrating (Etxepare, 2011, p. 96).

#### Forearm's movements

Pronation and supination are the rotational movements that we can perform thanks to the elbow. While in pronation the palm of the hand is facing downwards, in supination it is facing upwards. If we take this explanation to the cello, we would have to place the point of observation next to the first finger, so that if you rotate the hand bringing the knuckles closer to that point of observation you are pronating and if you move them away, you are supinating (Etxepare, 2011, p. 68-69).

The three illustrations will show the different shapes our hand could have on the instrument: the parallel position, the pronated position and the supinated position:







Illustration 3: Forearm positions: parallel, pronation and supination. Source: Photo of the author

However, despite existing three different positions only two are used, the parallel and pronated positions. The supinated position, besides looking not good, when tried feels wrong since the pressure is made against the string it also goes against the gravitation.

#### **Finger**

The fingers of the left hand have two important roles when playing the cello. They are involved regarding the sound in general since it is necessary for the finger to lower the string to the fingerboard firmly to define a good intonation and the vibrato. The other role, which is related to vibrato, is when looking for different types of vibrato it must be taken into account how much fingertip is being used (Etxepare, 2011, p. 69).

# Dvořák cello concerto op. 104

In this second section of the thesis the composer's biography will be explained, followed by an evolution of his aesthetics. To close the chapter, the context of the concerto and the analysis of it will be explained.

### Dvořák's Biography

Antonín Dvořák was born the 8th of September of 1841 in a small village named *Nelahozeves*, nowadays belonging to the Czech Republic, approximately 22 km away from Prague. He grew up in a family close to music because his father, in addition to being a butcher and an innkeeper, entertained his customers with the zither. Despite the multiple jobs his father had, the family did not have a comfortable economic position as there were eight siblings. Eventually the business of the inn went bankrupt, and the father began to devote himself professionally to the zither. However, during the years in the inn, Dvořák listened to different folk dances in the dancing hall. He began at the age of six to study violin and singing and a couple of years later he played solo in the village's church (DAHA, n.d., n.p.; Döge, 2001, n.p.; Isserlis, 2018, p. 237).

At the age of 12, his father sent him to Zlonice in 1853 to continue studying violin and beginning to study German since it was considered the first language due to Bohemia belonging to the Austro-Hungarian Empire. In 1857, he began his studies at the Prague Organ School and in November of that same year he played the viola for the concerts of the Cecilia Society. Thanks to that opportunity, he had the chance to hear pieces performed by Franz Liszt, Clara Schumann or Han von Bülow. In 1859 he finished his organ Education as the second-best student in the class (DAHA, n.d., n.p.; Döge, 2001, n.p.; Isserlis, 2018, p. 237).

From 1862 he was principal viola in the orchestra of the Provisional Theatre, the first Czech theatre in Prague. During the first years he performed works by Wolfgang Amadeus Mozart, Carl von Weber and Jacques Offenbach as well as operas by Gioachino Rossini, Gaetano Donizetti, Vincenzo Bellini and Giuseppe Verdi, but in 1866 when Smetana became director of the orchestra the repertoire changed radically. It began to focus on Czech composers of the time such as Smetana himself, Bendl or Janacek and Slavic composers such as Glinka. In 1864, he met Josefina Čermáková, a really important character regarding his B minor Cello Concerto and her sister, Anna, the woman he married. Dvořák remained in the orchestra until 1871, at a time when he also composed in his spare time. From this time onwards, the orchestra became interested in an opera of his entitled The King and the Charcoal Burner, which in its first version was a disaster, but after being completely rewritten was one of the composer's first successes in Prague (DAHA, n.d., n.p.; Döge, 2001, n.p.; Isserlis, 2018, p. 238-239).

After this, in 1874 he received a state scholarship to Vienna to study, and in the second year he met Johannes Brahms and Eduard Hanslick. Both of them, amazed by his talent, decided to help him, especially Brahms, who eventually wrote to his publisher in Berlin in 1877, Fritz Simrock, recommending Dvořák's music to him. Simrock then published the Moravian Duets op.32, which became a success. Thanks to Dvořák's meeting with Brahms, our composer got

a publisher to print works for him to make himself known beyond Bohemia. The impact was such that Simrock's publishing house continued to print his works until the end of his days. Moreover, over the years the friendship between Dvořák and Brahms grew stronger, to such an extent that Brahms wrote to a friend of his saying: 'We shall eat from the same plate and drink from the same cup' (Schonberg, 2004, p. 105). Years later, when Dvořák was in New York, Brahms even ended up revising certain works for him (DAHA, n.d., n.p.; Döge, 2001, n.p.; Isserlis, 2018, p. 239).

In August 1883 Dvořák was invited to London by the Philharmonic Society to perform different works of his in the following concert season. After a few months, they performed his Stabat Mater, the overture Husistká, Symphony No. 6 and his second Slavonic rhapsody among other works. Dvořák's great success in England led him to visit England eight more times. In all these visits he played oratorios, the dances, and Slavic rhapsodies as well as his seventh and eighth symphonies among other works. In 1891 he was awarded an honorary doctorate by Cambridge University (Döge, 2001, n.p.; Isserlis, 2018, pp. 239-240).

Another important thing to mention, as it is also related to his B minor Cello Concerto, is all the visits he did to Vysoká, a village where he visited Anna's sister, Josefina, and her husband. It is important because it is surrounded by fields and forests, a classic theme in Dvořák's works and also because he bought first and then transformed into a summer house for his own family a farmstead from the same Count as Vysoká where he and his family spent numerous Summer and where he composed most of his works (DAHA, n.d., n.p.).

After all the successes and tours, he had several offers to work as a professor of composition in major European cities, all of which he turned down until June 1891, when he received an offer from Jeannete Thurber, president of the American National Conservatory of Music in New York. After much discussion with his wife, he finally accepted and left for New York in September 1892, with his wife and two grown-up children. His first appearance on the American stage was at Carnegie Hall in October. In November he wrote his friend Hlávka a letter saying:

The Americans expect great things of me. I am to show them the way into the Promised Land, the realm of a new, independent art, in short a national style of music! ... This will certainly be a great and lofty task, and I hope that with God's help I shall succeed in it. I have plenty of encouragement to do so. (Döge, 2001, n.p.)

Once this is read, we can see that Jeanette Thurber invited him mainly to help American composers create their own national style. His stay in the United States was a success, with the premiere of the Ninth Symphony in December 1893, in addition to the concerts he gave. After this, J. Thurber tried to extend his contract for two more years, which Dvořák accepted, but the economic crisis of April 1894 finally prevented our composer from receiving the full salary agreed with the Conservatory. After spending the summer in Bohemia, he returned to the United States, although as he shows in the next letter it was different:

If I could work with as few anxieties as I do in Vysoká, I would have been finished long ago. However, I cannot do it here — I have to teach on Monday — I have Tuesday free — but I am more or less busy on the other days of the week — in short, I cannot give so much time to my work — and if I could I would not feel like it — and so on. In short, it would be best to be back in Vysoká — I am refreshed there, I rest, I am happy. Oh, if only I were home again! (Döge, 2001, n.p.)

To this last period in New York belongs the work on which this thesis is focused and it was practically his last work before leaving in 1895.

### **Evolution of Dvořák's style and aesthetics**

As mentioned in the previous chapter, Dvořák came from a family with musical inclinations and later studied classical composers. In this section we will see how his compositional style evolved until he created his own characteristic style.

In order to discuss Dvořák's style and aesthetics, his work is going to be divided into 5 different compositional periods. The first period runs from about 1860 to 1865, then from 1865 to 1872 which is followed by the third phase until 1886. Later comes the American period until 1895 when he goes back to Bohemia and finally, the last one until 1904.

During the first phase, Dvořák says of himself: "It is not that I was incapable of producing music, but I did not have enough technique to express everything that was in me. I had ideas and I could not express them perfectly". During this period, he is known to have devoted himself to bringing his language close to the standards of earlier composers such as Mozart, Beethoven and Mendelssohn in order to be able to use the already standardised forms, such as sonata form or lied form, among others. From this period, the design of the first String Quartet op. 2 and 1st Symphony op. 3 should be highlighted, since, like Haydn and Mozart, among other composers, he relates the four movements of both works with a rhythmic motif in order to give coherence to the work (Döge, 2001, n.p.).

Throughout the late 1860s, his style develops to a close Liszt and Wagner style since Dvořák begins to emphasise, above all, a use of constant modulations to distant tonalities, as well as even employing tonal ambiguity, as for example in Quartet No. 4 B019, in which the main tonality is E minor and ends in B Major. Also noteworthy from this period is his first String Quintet, the first four String Quartets, the first two Symphonies and the Cello Concerto in A major B010 with piano accompaniment, among other works (Döge, 2001, n.p.).

From 1874, when he met Brahms through a scholarship, he began to create his own style with possible nationalist colour. During this period, it is worth noting that the modulations are more conservative and conventional. In addition to this, he employs syncopated rhythms with elements of Slavic dances such as the Polkas, Mazurkas, Spacirka and Furiant (used in the third movement of the 6th Symphony) and there are strong contrasts in dynamics. The main works of this period are: the third to seventh Symphonies, Dumka, the Quartets Nos. 5 to 11, several songs in which he uses traditional themes, Bagatelles, three series of Moravian Duets, the Piano Concerto in G minor, Mazurkas, Slavonic Rhapsodies and the first series of the Slavonic Dances (Döge, 2001, n.p.; Schonberg, 2004, p. 102-103; Isserlis, 2018, p. 269).

Once the second series of Slavonic Dances were composed, from 1886 until 1895 Dvořák continued to develop these nationalistic colours where he employs 'a new musical and pictorial poetics' (Döge, 2001, n.p.). Also, elements of nature and pastoral themes and fanfares become much more important. Of particular note from this period are the Dunky Trio, the 8th Symphony, the overtures Carnival and Othello and the Rondo in G minor for cello and piano. The characteristics of these years are maintained during the three years he

spent in the USA, where he composed the 9th Symphony, the American Quartet No. 12, No. 13 and 14, the Concerto in B minor for cello and orchestra op.104, among other works (Schonberg, 2004, p. 102-103; Döge, 2001, n.p.).

In the last stage of his life he ended up composing programmatic music such as Vodník, Polednice or Holoubek based on poems by the Czech K.J. Erben and then only operas. Several overtures, symphonic poems such as Ondina, The Witch of the Midday or The Dove of the Forest are worth mentioning. His last work was Armida, an opera in four acts (Döge, 2001, n.p.).

To sum up, before Dvořák created his own and unique style he went through and learnt from the classics, then tried the most progressist German style due to the big influence of the German culture where he lived and grew up. Later, he simplified his compositions and started step by step introducing elements of the Czech's folk until he fully developed it arriving in the American period in which he composed most of the current known works. Dvořák wrote a vast variety of genres, from string quartets, symphonies, concertos, and small pieces such the Rondo in G minor for cello to operas, symphonic poems, dances, cantatas and mass (Döge, 2001, n.p.).

#### Context of the B minor Cello Concerto op. 104

"Why the hell didn't I know you could write a cello concerto like that? If I had known, I would have written one long ago". Brahms' words after reading and listening to the entire concerto (Layton, 2004, p 75).

Antonín Dvořák had already written a cello concerto before he wrote the B minor concerto opus 104. This was the A major concerto of 1865, the score of which remained unfinished as the composer only wrote the soloist's part and a piano accompaniment, because the cellist to whom the work was dedicated, Ludevit Peer, left Prague that same year, taking the score with him before Dvořák could orchestrate it. Dvořák, despite having written that first solo work for cello, took a negative view of the cello, saying that he disliked 'the nasal quality of the treble and the gibberish of the bass' (Layton, 2004, p. 75). Nevertheless, twenty-six years after the success of the A major concerto, he wrote a Rondo in G minor op.94 and Silent Woods which is a transcription of one of the six duets op.68. The motivation for writing a second cello concerto probably comes from the idea suggested by his friend Hanus Wihan, to whom the work was dedicated, as well as his attendance at the Brooklyn premiere of Victor Herbert's Cello Concerto No. 2 (Layton, 2004, 75).

The concerto was composed between late 1894 and early 1895, before returning to Prague, and was finally premiered in London in 1896 by Leo Stern and conducted by Dvořák himself. Despite being written in the USA it has the colour and setting of his Bohemian nationalist works. The work relates to the person who was his first love, and later became his sister-in-law, Josefina Kounicová, because when the composer learned that she was ill he added, in the second movement of the concerto, a fragment from a lied he himself had composed in 1887-88, Josefina's favourite, called *Lasst mich Allein* op.82. In 1895 when Dvořák realised that Josephine had died, he decided to change the ending by adding another fragment from the

same lied. Isserlis has this to say about the concerto: 'It has it all: a memorable and epic first movement, a quiet and nostalgic slow movement and a radiant last movement, which at the end suddenly changes its character, so that Dvořák can say his last and fond farewell to Josefina' (Isserlis, 2018, p. 270; Schwarm and Tesch, 2013, n.p.).

Below is a fragment of the lied in which the same melody appears in the second movement, played by the cello. If we compare both fragments, we can see that while in the first staff the key signature has five sharps, in the second staff it has two flats because we are in G m. Another important difference is the time signature, the change from 4/4 in the lied to 3/4 in the concerto. Also, I have indicated with dashes the notes that would correspond one fragment to the other to facilitate their comparison.

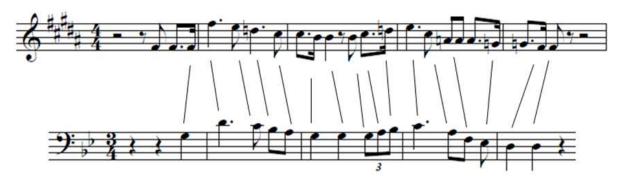


Illustration 4: A. Dvořák: Lasst mich Allein c. 10-14 and A. Dvořák: Cello Concerto 2º Mov. B. 42-46.

Looking at the beginning of the melody and comparing it with the last measures of the third movement played by the violins I. In this case the only difference is the time signature as the same notes appear.



Illustration 5: A. Dvořák: Lasst mich allein c. 2-4 and A. Dvořák Cello Concerto 3rd Mov. B. 468-471

### Brief formal analysis of the first movement of the Concerto

The first movement of the concerto is formally structured in the standards of sonata form, i.e. a first part where the ideas are presented (A), the second part where these ideas are developed and modulated (B) and the third and last part, where the same ideas are recapitulated (A') in the main key, in this case B minor. To help clarify the structure I have made four tables with each large section of the analysis of the first movement. Within the A would be both the orchestral and solo exposition.

ORC	CHESTRAL	<b>EXPOSI</b> 1	ION
A Theme	1st Transition	B Theme	2nd Transition
b. 1–30	b. 3 –55	ъ. 55–75	b. 75–86
Bm / B Acolian	Bm-DM	DM	DM-BM

SOLOIST EXPOSITION			
A Theme	3rd Transition	B Theme	4th Transition
b. 87–94	ъ. 95–139	b. 140-156	b. 157-192
BM / B Aeolian–CM	CM-DM	DM	Bm-DM





Illustration 7: A. Dvořák: Cello Concerto 1st Mov. B. 1-4 and B. 23-28

The beginning of the A theme is introduced by the clarinets and bassoons. It then reappears in the violins I followed by a progression until it reaches the first orchestral tutti which occurs in bar 23 where Dvořák writes "Grandioso".

The repetition of the A theme that appears in b. 23 is practically the same as the A theme when the cello introduces it in bar 87. The main differences are that when the cello exposes the A theme, it is in B major / B Aeolian as well as the incorporation of the chords.



Illustration 8: A. Dvořák: Cello Concerto 1st Mov. B. 87-95

The next important passage in terms of the soloist's vibrato is in what I have called transition 3 at bar 128 onwards. To be studied are five bars in which the head of theme A reappears, in bars 128-132, but this time with a somewhat different character.



Illustration 9: A. Dvořák: Cello Concerto 1st Mov. B. 128-132

Then comes theme B, presented for the first time by the soloist. This is played in the orchestral exposition by the horn in the first half-phrase and by the clarinet in the second half-phrase, which in turn varies at the end to give way to the second phrase. When exposed by the cello it appears the same. In the illustration below we can see the horn on the first pentagram and the cello on the second pentagram. The only difference is the triplet that replaces the two eighth notes. In addition, I have highlighted in circles both jumps (4th and octave) that appear in this lineal melody.



Illustration 10: A. Dvořák: Cello Concerto 1st Mov. B. 56-64 and B. 139-147

After the B theme, we have several passages in which the vibrato does not play an important role and for that reason I am not going to study them. The next segment to be studied is the theme in Ab minor which is located in the development.

	DEVELOPMENT		
5th Transition	1st Episode	2nd Episode	6th Transition
b. 192–223	b. 224–239	b. 240–260	b. 261–270
DM-Ab m	Ab m	G# m–BM	BM

Illustration 11: Development analysis table. Source: Own elaboration.

In episode number 1 there is a melody corresponding to theme A, but this time Dvořák writes it with a totally different character and key (B Aeolian / B major to Ab minor) despite being accompanied by tremolos on violins I and II and the violas and by pizzicatos on the cellos as in the exposition. The character is changed by the fact that instead of writing *forte* he writes *mezzoforte* in addition to the *molto espressivo e sostenuto*.



Illustration 12: A. Dvořák: Cello Concerto 1st Mov. B. 223-227

After this part, the next piece that concerns us in terms of vibrato is the appearance of theme B in the recapitulation.

RECAPITULATION		
B Theme	7th Transition	CODA
274 204 PM	b. 285–319	b. 319—354
o. 271–284 BM	BM	BM

Illustration 13: Recapitulation analysis table. Source: Own elaboration.

Now, if we compare this theme B with that of the exposition, we can see that it is shortened because the repetition is missing. However, although the interval with which it starts and the general pattern is the same, the character, and therefore the vibrato, of the recapitulation (marked in blue) will be different from that of the exposition (marked in black) due to the change in dynamics and character between *forte-pianissimo* and *molto espressivo-dolce*.

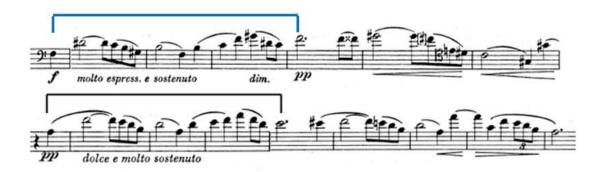


Illustration 14: A. Dvořák: Cello Concerto 1st Mov. B. 270-276 and 139-147.

After repeating the theme again, this time in B Major, come the same passages as in the Exposition, and as I said before, they are not important for an analysis of vibrato. The last important piece is at the beginning of the CODA.



Illustration 15: A. Dvořák: Cello Concerto 1st Mov. B. 323-324

At this point, the drawing should be familiar to us, as it belongs to the head of the A theme. With this motif the cello joins the orchestra just before the beginning of one of the last passages before the end of the first movement.

It is worth noting that in the recapitulation of the concerto, not only does it not recapitulate with the A theme as traditionally done, but neither the theme nor its derivatives reappear until the coda. Perhaps, this may be due to the importance of the Ab minor theme in the development, which in turn, as I explained before, comes from theme A, and for this reason the composer did not want to repeat it in the recapitulation.

### **Method**

To carry out the aim of this thesis I have used specific bibliography, contrasting different authors as for example Classical and Romantic Performing Practice 1750-1900 by Clive Brown (1999) key book for the elaboration of the chapter on the evolution of vibrato, or the article in Grove Music Online by Klaus Döge (2001) for the realisation of the bibliography and aesthetics of Dvořák. Then, to get to know the concerto in more depth, as well as having studied and performed it, I have carried out a musical analysis of its first movement to find out which sections are most relevant to the vibrato approach. In the analysis section of the thesis I have included illustrations of the excerpts on which I focus the work in order to help understand the analysis. I have also recorded myself and compared and analysed my use of vibrato in relation to the score and to recordings with well-established performers.

# **Inquiry**

Vibrato performance proposal

In this chapter I will make a proposal for the interpretation of vibrato according to my aesthetic criteria for the different passages mentioned above. In addition, each fragment will be accompanied by one or more versions of soloists to compare what each one proposes.

The first decision that needs to be made in this proposal for the interpretation of vibrato is to choose between two ways of using it. The ways, which I have referred to in the historical section, are vibrato as an ornament or as a basic form of sound production. Therefore, I have chosen vibrato as an ornament because the publication of the treatise on continuous vibrato (1910) is later than when the concerto was composed (1894-1895) and premiered (1896) (Brown, 1999, p. 521).

The first fragment I am going to analyse is the soloist's entrance at bar 87. This is the first time the cellist is heard after an 86-bar orchestral introduction. At this point the cello has a cushion of tremolos on violins II and violas, pizzicatos by cellos and double basses and in the chords of bars 90 clarinets and bassoons start playing with half notes.



Illustration 16: A. Dvořák: Cello Concerto 1st Mov. A Theme. B. 87-94

The *forte risoluto* indicated by Dvořák, plus the fact that it is the first soloist's intervention, should be played with an energetic and intense sound. As for the character, in my view, it is one of those pieces in which Dvořák shows that "one of his special talents was to write music that 'snatches victory from the jaws of defeat' – that leaves one with the feeling that, whatever pain and tragedy one might experience" (DAHA, n.d., n.p.). Luckily in this excerpt there's no challenge when choosing vibrato because to help achieve this character, the vibrato should be "fast and wide" (Mantel, 1985, p. 40), so the fast speed helps create tension and make it energetic and intense; being wide will contribute to make the sound bigger. The actual challenge in this excerpt is a technique challenge because somehow, in my own experience I feel it's much easier to do a thinner vibrato and especially in this B note. The arrows indicate that I am going to increase the speed of the vibrato while maintaining the width so that it will help me drive the phrase from bars 88 to 89 and 92 to 93.

After comparing some international soloists such as Rostropovich, Gautier Capuçon and Jean-Guihen Queyras<sup>2</sup> I have heard that all of them agree with making a big and fast vibrato. However, while in Rostropovich's version (https://youtu.be/nJSlmoXpzfM?t=263) the phrase feels static because of a lack of direction, Capuçon (https://youtu.be/FVKb3DwPFA8?t=227)

vibrato use with Rostropovich meanwhile Gutman is in between the old school and what soloists do nowadays such as Weilerstein and Capuçon.

<sup>&</sup>lt;sup>2</sup> I have chosen these three artists between others for severals reasons such as: history and importance in the 20th century (Rostropovich), special sound and vibrato besides of being one of the most renowned soloists nowadays (Capuçon) and last, the new trend of historical performances achieving an amazing pure sound (Queyras). Nevertheless, I must mention a few legendary recordings and performers such as Jacqueline du Pré, Natalia Gutman, Zara Nelsova, Maria Tarasova and Alisa Weilerstein. Du Pré, Nelsova and Tarasova share the same point of view of the

achieves after speeding the vibrato towards the next bar. Queyras (https://youtu.be/Pv6xgtzEM-I?t=213) also gets direction. Furthermore, it is worth noting that Rostropovich chooses a continuous vibrato while Capuçon stops it in each beginning of the B note and Queyras in this excerpt also vibrates all the important notes without stopping as Capuçon does. As stated before, the challenge I find in this excerpt is to not make a thin vibrato and to get that the vibrato matches the sound I'm producing as you can see in this video: https://youtu.be/OfSFaev50xc

As I mentioned in the previous section, when he repeats the head of the theme in the bars 128-132, he does so with a somewhat different intention, but with a similar character. In this part, the orchestra accompanies the solo cello with three different motives. The clarinets and flutes have round trills, and the strings, with the exception of the violas, have two quavers in the first part of the bar, while the oboes and bassoons have an eighth-note and sixteenth-note motif with semitone distance.

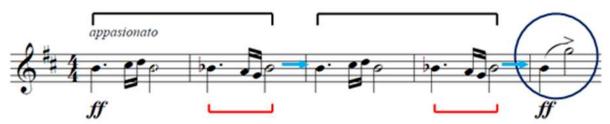


Illustration 17: A. Dvořák: Cello Concerto 1st Mov. A Theme. B. 128-132

Dvořák now, as well as changing the forte risoluto for a fortíssimo appassionato, changes the second bar and then repeats them, creating a feeling of doubt, of not knowing what decision to make. The character playing the solo cello seems indecisive until he resolves with the jump of 6th which then leads us to the B theme. Therefore, the sound should be even more energetic and intense than in the beginning. As for the vibrato, my challenge here is how to make the B different from the previous one since the only thing that really changes is the octave. As mentioned in the first chapter, in Mantel's description of vibratos I want to use the fourth kind "a slow and wide vibrato" (Mantel, 1985, p.40) to give the Bb a bit more of amplitude. For that I will have to make it a bit slower, especially in the beginning of the note otherwise it's not noticeable as heard in this video: https://youtu.be/14RafP9oJhk

The function of the arrows is the same as in the previous piece; to indicate where I would increase the vibrato speed to drive the phrase. After comparing the soloists once again, now not only the selection of vibrato is different but also the tempo. Both Queyras and Capuçon have a faster tempo than Rostropovich, however Rostropovich and Capuçon vibrato are a bit slower and wider than Queyras'. The three of them now agree, choosing to vibrate all B and Bb making it similar to a continuous vibrato.

In B theme, the orchestra accompanies the cello in two main ways. In the first phrase, which would be from the beginning until the bar 147, the strings accompany it with half and whole notes, making the accompaniment a cushion so that the soloist can sing without the pressure of being covered up. In the second phrase, the upper strings change to tremolo and the bass ones to pizzicato, besides the winds are added in an organised way. The accompaniment of the second phrase, divided into three half-phrases, is marked in red in the score: in the first, the flutes and clarinets enter in bar 149, while in bar 150 they do not play, and then in the second half-phrase, instead of repeating this scheme, they play in both (bars 152-153). Then in the third, oboes and bassoons are added, and finally in bar 156 the horns join in.



Illustration 18: A. Dvořák: Cello Concerto 1st Mov. B Theme. B. 135-157

The slowing down of the tempo indicated by the composer, together with the *pianissimo* and the *dolce e molto sostenuto* indicate that the sound should be rather soft, sweet and played very *legato*. A thin vibrato of medium speed can help to create an atmosphere of tranquillity and contemplation, as if it were a pleasant memory. Relating these two states to the sources, clearly a mix between the second and third type of vibrato that Mantel states. When playing this excerpt, I try to visualise how happy Dvořák was after coming back from the USA where he was "enjoying the company of his family and the pleasant surroundings of Vysoká" (Döge, 2001, n.p.).

Moreover, to help the direction of the phrase I would give a point more speed in the notes I have rounded off. The arrows increase the vibrato speed except for the one in c. 141 which indicates a decrease in the use of vibrato. Finally, so as not to make half of the 1st and 2nd half-phrases the same, in the first half-phrase I would not use vibrato except in the rounded notes, and in the second half-phrase I would use it again with the increased speed for the phrasing. In the 3rd half-phrase, as the nuance changes to forte animato, I would use a more present sound and a faster vibrato, but with the same amplitude.

This B theme is the most controversial regarding vibratos since its character may not be as defined as the A theme. That's why it is possible to see how Rostropovich uses a faster and intense vibrato while Capuçon vibrate almost every note without doing continuous vibrato and Queyras only vibrates support notes, even though when there's a clear direction of the phrase, due to a crescendo written by Dvořák, he vibrates all the notes to help achieve that direction. The main challenge I find in this fragment is, rather than looking for a slower and a thinner vibrato, to make the vibrato I use make sense with the kind of sound needed without making the sound intense again: <a href="https://youtu.be/qVv8xg8Q1Fg">https://youtu.be/qVv8xg8Q1Fg</a>.

The next passage I analyse is that of the Ab minor theme which appears in bar 224 onwards. As I commented in the previous section of the work, it is based on the head of theme A but its character is different due to Dvořák's new annotations. The three treble strings accompany the soloist with tremolos and the cellos with pizzicatos. The clarinets have held notes, and from bar 229 onwards what seemed to be a passage with a single protagonist becomes a duo passage with the addition of the solo flute.



may give us a hint of the vibrato that could be used. However, by writing *mezzoforte* and *molto espressivo e sostenuto* he will differentiate this theme in Ab minor from theme B. Both themes share the need to be played very legato, but in terms of character, although I consider them to be somewhat contemplative, the one in Ab minor has a touch of suffering. As it is

stated in DAHA, "Dvořák suffered plenty during his life, mainly during his difficult first thirty-six years of poverty and professional frustration capped by the deaths of his first three children, and his psyche had its share of foibles" (DAHA, n.d., n.p.).

Regarding the vibrato I propose, in general, a first type of vibrato "a narrow and fast" (Mantel, 1985, p.40) except at the moments I have marked in the score due to the crescendo and above all to the dissonance (tritone) of bar 230 which coincides with the climax of the phrase. From the crescendo to the G× I suggest that the vibrato widens a little, doing a mix between first and second type. After this climax of the phrase I suggest returning to the previous vibrato coinciding with the decrescendo and little by little, descending with the *mezzopiano* to pianissimo dynamics, to make the vibrato disappear.

This time all the soloists agree with the type of vibrato used fast and narrow. However, Queyras achieves a purer sound not depending as much on the vibrato as Capuçon or Rostropovich since both use more vibrato in general. This excerpt is very special for me because it's my favourite part of the first movement and also one of the hardest points for me. I also feel I can't achieve the intensity I'd like to give while keeping a very thin and delicate sound: <a href="https://youtu.be/GeHzQtn-2dA">https://youtu.be/GeHzQtn-2dA</a>

Moving on, the next fragment is theme B when it appears in the recapitulation. The composer, although he has changed the initial nuance and cut the first phrase of this theme, does not change anything in the accompaniment, so that what I am saying about the orchestration of theme B in the exposition happens here as well.



Illustration 20: A, Dvořák: Cello Concerto 1st Mov, B Theme, B, 270-284

The indication of *forte* and *molto espressivo e sostenuto* will reveal that at the beginning of this phrase both the sound and the vibrato should be large. Therefore, I would suggest a first type of vibrato, wide and fast, since the character that, in my opinion, belongs to this first part of the theme, is triumphant or victorious, especially after the closure of the development. Once he writes the diminuendo I think that both the sound and the vibrato should be transformed and softened because the character becomes more peaceful and dreamier. Once we reach the *pianissimo* indication, which is the second part of the theme, it is exactly as when it appears in the exposition. Therefore, I would use the vibrato in the same way as before. I have marked what for me is the climax of the *forte* and the vibrato should be brought up to that point and then decrease as the composer indicates. The only remarkable

thing is the big jump when Dvořák writes the treble clef and that, coinciding with the forte, would enlarge both the vibrato and the sound.

As we have already seen before in this theme, Rostropovich differs regarding the use of vibrato in comparison with Capuçon and Queyras. The first part of the theme they all agree in a fast and big vibrato but in the second part of it, despite have the *pianissimo* and as I believe a clear change of character Rostropovich keeps the same type of vibrato while the other two make it as in the exposition. Once again, the challenge is achieving a big and intense vibrato and sound in the first part and then it's about making it as in the exposition: <a href="https://youtu.be/NcU92y3mJqU">https://youtu.be/NcU92y3mJqU</a>

The last passage is the entrance of the cello in the Coda at bar 323. Once again the soloist is accompanied by *tenuto* notes in the oboes and quavers and sixteenth notes in the strings.



Illustration 21: A. Dvořák: Cello Concerto 1st Mov. Coda. B. 323-324

The *fortissimo* and *molto appasionato* indicate that the whole coda will have a strong and triumphant character. Thus, the vibrato should be type one, fast and wide, once again to achieve a bigger sound. In the second bar, where the A#, I propose to differentiate it with the vibrato as I have done the previous times, giving it a little more amplitude.

In Queyras version you can hear a very thin and almost disguised vibrato while in Capuçon in Rostropovich it is very noticeable since they choose a big and fast one. I find it challenging when arriving at the Coda and due to the whole intensity of the concerto I arrive a bit tense which makes it difficult to have a nice vibrato as in the beginning.

## Conclusion

After carrying out this inquiry, I have been able to reach the following conclusions. Regarding the first chapter, referring to the evolution of vibrato and how it is performed, I have found that vibrato will be affected by the different musical aesthetics and its use will vary whether we are in the Baroque, Classicism or well into the 20th century. It will vary from being considered a mere ornamentation as in Baroque or Classicism to ending up being the main form of sound production using continuous vibrato.

Regarding the section dedicated to Dvořák, I have been able to see the evolution of his musical style, and the influence on his music of various nationalist composers, such as M. Glinka or Smetana, among others, with a special influence of the latter during the period when he conducted the orchestra of the Theatre in Prague, when Dvořák was the principal viola. Other aspects of his life that will come to define his style are his study of classical composers, the importance of rhythm derived from the traditional dances of his country, as well as the longing he had for his beloved Bohemia, as he himself says in the letters I quoted above. Therefore, his own style will be characterised by rhythms, his continuation of classical forms and his love for Bohemian music and nature.

As for the last part of the project I could see how all the important passages in the first movement of his concerto, as far as the use of vibrato is concerned, were always thematic, i.e. they belonged to the theme A, B or their derivatives. So, one could say that in Dvořák the thematic parts are especially important if we focus on vibrato. On the other hand, the use I have proposed for vibrato in an ornamental way is a use of expression either through phrasing or the different moods of each fragment.

Due to the current relevance of the subject, I believe it is worth highlighting the relevance of this interpretative proposal for the vibrato. This, together with the fact that the Concerto was composed between 1894 and 1895 and that the first treatise on the vibrato continuo dates from 1910, leaves open the possibility of a great debate among soloists.

Finally, I would like to add that personally, this study has helped me, besides knowing more about the piece and the composer, to be much more aware of the different aspects of vibrato, whether it is its realisation or its different uses. It has also made me more aware of the importance of searching for the emotions or characters of the different sections of a work to consciously give a meaning to the work and thus be able to communicate it better not only to future audiences but also to students.

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# **Appendices**

# **First Appendix**

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