



ACADEMY OF MUSIC AND DRAMA

The Vibrato on the Oboe

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ABSTRACT

Key words: vibrato, historical period, production, use, training.

In this research project I attempt to investigate the great trouble that involves the vibrato production on the oboe. It is often said that there are several ways to do it, but people will never agree about what is the most correct way. I also reflect on its use depending on the historical period, because a great controversy can be found on this issue. In this way, in addition to doing a research project, I will try to provide knowledge of its production, use and training in a correct way, because it seems an ability that not all the oboists can develop instinctively.

Index of contents:

| | |
|--|----|
| 1. Introduction..... | 5 |
| 1.1. Problem and context of the investigation..... | 5 |
| 1.1.1 Questions of the investigation..... | 5 |
| 1.1.2 Motivation of the researcher..... | 6 |
| 1.2. Objectives of the research..... | 6 |
| 1.3. Organization of the project..... | 6 |
| 2. Review of knowledge..... | 7 |
| 2.1. The use of vibrato through musical periods..... | 7 |
| 2.1.1 Baroque Period..... | 7 |
| 2.1.2 Classical Period..... | 10 |
| 2.1.3 Romantic period..... | 11 |
| 3. Vibrato production..... | 14 |
| 3.1. Technical forms of producing vibrato for an oboist..... | 14 |
| 3.1.1 Vibrato of fingers..... | 14 |
| 3.1.2 Vibrato of lip or mandible..... | 14 |
| 3.1.3 Diaphragmatic-abdominal vibrato..... | 15 |
| 3.1.4 Laryngeal or throat vibrato..... | 16 |
| 4. Personal experience on vibrato production..... | 20 |
| 4.1. Explanations compiled in class..... | 20 |
| 4.2. Sensations with different ways of producing and working on it..... | 31 |
| 5. Conclusions..... | 34 |
| 5.1. Conclusions based on the objectives set at the beginning of the work..... | 34 |
| 5.1.1 Conclusions based on the first objective..... | 34 |
| 5.1.2 Conclusions based on the second objective..... | 35 |
| 5.1.3 Conclusions based on the third objective..... | 35 |
| 6. References..... | 37 |

1. Introduction.

1.1. Problem and context of the investigation.

Vibrato is for the modern oboist like the shadow at the person; It is always there, but we almost never pay attention to it consciously. However, if we ever met a person without a shadow we would be surprised or, at least, we would look at him strangely. Something like this happens when we listen to an oboist who always perform without any of vibrato.

J. S. Bach, Concerto in A-dur for Oboe d'amore BWV 1055 - 2nd movement.

<https://youtu.be/CO3m769vAnc>

For anyone with some knowledge in music, vibrato is part of the oboe's expressive sound. Anyone who has tried to compose a music file using a MIDI sound base will have had to endure that repetitive and omnipresent "Oboe MIDI" vibrato. While it is true that the oboist must know how to play with this resource to use it or not at his or her whim and according to the demands of the music, it is rare for a soloist melody to be interpreted without using it.

But when we think of vibrato, we realize how many "gaps" there are with respect to its use, its technique and its teaching. Many oboists develop it in a natural way, imitating the vibrato of the singers, but for others, like myself, it is a challenge on which very few teachers or methods can to offer information.

1.1.1 Questions of the investigation.

In this project I will discuss different questions that the interpreter asks him or herself when vibrato is used on the oboe, always depending on the musical style and the own physiognomy of the oboist.

For this, a historical investigation from the Baroque period until the Romantic period about the use of the vibrato will be made first, because the use of it varied according to the musical period in which it was used. I will also analyze the different techniques of vibrato production.

The issues that arise for the investigation are the following:

- Within what historical periods and musical styles was the vibrato used and in what way?

- What are the different ways of producing vibrato in the oboe?
- Why the vibrato in the oboe can be an intuitive ability for some people and for others is so difficult to develop?

1.1.2 Motivation of the researcher.

Over the years, I have received classes from many teachers, who have given different explanations and methods on how vibrato is produced. However, I have only managed to produce it naturally and control it from my bachelor studies and is still developing it in the master studies. This has been possible thanks to an exercise of physiological self-analysis guided by the recommendations of my teachers.

The motivation to carry out this work stems from three points. On one hand, it arises from my problems about this technical resource of the oboe. On the other hand, the possibility of finding and collecting the different ways of explaining its production and finally, my interest in the ways of practicing it to be able to improve and develop my use of the vibrato.

1.2. Objectives of the research.

This work has an academic purpose and is intended to be of help for the better understanding and use of a resource as important as is vibrato for oboists.

For this reason, the objectives of the investigation are:

- Clarify how to use vibrato correctly in works belonging to different musical styles.
- Explore the different ways of producing vibrato and study its advantages and disadvantages.
- Investigate about the methods for the production and ways to practice the vibrato in the oboe.

1.3. Organization of the project.

First, I will do a review of knowledge through different musical periods and after that, I will explain the different ways of producing vibrato. Next I will talk about my experiences while I was learning how to produce it, using for that several interviews I have done and my own sensations. Finally, I will expose my conclusions about this project.

2. Review of knowledge.

In this part of the work will be collected the information found about how the resource of vibrato was used in function of the works of the different musical periods. This is intended to make a historical approach to the style of each era.

2.1. The use of vibrato through musical periods.

Next, I will discuss the use of vibrato from the Baroque period to the Romantic period. As well as its forms of use and production and the evolution of it.

It should be noted in this section the scarcity of documentary sources that speak clearly about the vibrato in the oboe, which leads one to think that is a technique little studied throughout history and has been left frequently at the expense of the interpreter's own taste.

2.1.1 Baroque Period.

The period which extends from the about the end of the sixteenth century to the middle of the eighteenth is in European music history considered as the Baroque period. The boundary dates are approximations, but it is convenient to take the dates from 1600 until 1750. The use of the term Baroque to describe the music suggests that historians believe its qualities are in some ways similar to qualities of contemporary architecture, painting, literature, and perhaps also science and philosophy.¹

Italy was one of the most influential nation in Baroque music of Europe from mid-sixteenth to the mid-eighteenth centuries. In the 1630s, France began to develop its own music style, by contrast, in England the glories of the Elizabethan and Jacobean ages disappeared at the end of the century followed to a capitulation to Italian style.²

The music goes through a profound aesthetic renovation in which the voices are polarized. Therefore, this polarization allows much more expressive melodies and for that reason will acquire special importance to some technics, first vocal and later instrumental, that look for an increase of the expressivity; as is the case

¹ Donald Jay Grout, *A History of Western Music* (W. W. Norton, 1973), 293 – 303.

² Grout, *A History of Western Music*, 293.

with the vibrato.³

Curt Sachs wrote about the development of the oboe:

“In this context of great musical wealth, in the court of King Louis XIV, the instrument that we know today as Oboe (from the French Hautbois, a sharp instrument of wood) is born, thanks to a refined development of the renaissance chalumeau/shawm, in an attempt to adapt it to the new musical taste of the time. Instruments had to undergo a severe process of selection. Only those instruments which had a sufficiently wide range and enough flexibility to afford all dynamic shades from pianissimo to fortissimo could be kept”.⁴

There is much controversy in the few existing references about the use of vibrato in this period, this is because many interpreters and historians considered that vibrato was not used as a stylistic resource in the music of the Baroque.

According to Geoffrey Burgess the debate on vibrato and its effect on sound was resumed in the 1960s and 1970s between early music performers. At this time there was a need to return to the "authentic" interpretation practices, the pioneers of this movement sought to clean up the impurities of music and vibrato, which was crossed out as a sign of romantic interpretation, ended up almost eliminated from the interpretation of this style of music because it was considered that contaminated the pure sound of the old instruments. This was because as there were few references about vibrato prior to the twentieth century, it was considered not to be used in ancient music.⁵

Of course, vibrato has not always been used as we currently use it, but this does not mean that it did not exist. References have been found in which although the term vibrato does not literally appear, it can be assumed that they speak of this effect.

Two of the most important references appear in the treatises of Hotetterre (1707) and Quantz (1752). They speak of an ornament known as *flattement* calling it that was used in an intermittently, not used continuously, but on long notes, as a type of ornamentation and was usually accompanying the *messa di voce*. This type of wave of sound was produced with the fingers, is what is now known as

³ Grout, *A History of Western Music*, 293.

⁴ Curt Sachs, *The History of Musical Instruments*. (New York: W.W. Norton & Company, 1940), 535.

⁵ Geoffrey Burgess, “Vibrato Awareness” (The Double Reed Vol. 24 no. 4, 2001), 127-134.

vibrato of fingers.⁶

The vibrato of the eighteenth century is distinguished from modern practice in two ways: it was used intermittently, as an ornament; and was not usually produced with air. There was a kind of vibrato used in the oboe that was executed with the fingers, it was called *flattement* or 'tril minor'. In England it was known as 'softening', which consists of the effect of briefly blurring the quality of note tuning. In his role as a kind of soft triune, *flattement* was often performed on longer notes along with the *messa di voce*, or increasing – decreasing of sound, and was also used in the last notes of sentences to suggest continuity (for example, when was doing repetitions). Flattements were rarely marked; When they were, they were horizontal wavy lines on notes.⁷

The way to execute it was to cover partially or totally the next hole that is left open when playing a note in the flute or the oboe, this causes an oscillation in the color of the sound.

In the treatises of Hotteterre (1707) and Quantz (1752) the use of finger vibrato is recommended. Hotteterre explains in detail how to produce the vibrato of fingers on the flute and the oboe, which he calls *flattement*. This vibrato is produced by moving your fingers up and down over the holes at a small distance from the last hole covered in a note. Quantz also recommends the vibrato of fingers, but only makes a very brief mention of it.⁸

George Opperman (1950) also indicates that in Jacques Hotteterre's first published flute method *Principes de la Flute Traversière*, which appeared in 1707, we find a chapter devoted to two ornaments called *battement* and *flattement*. The first is a trill produced covering only the edge of the hole below the note played, or completely covering the second hole below the note played. The *flattement* of the low D, the lowest note on the flute, is produced by turning the flute from side to side, which decreases the interval. Since these procedures produce a downward ripple in the sound, these ornaments must be grouped with vibrato.⁹

In this period, we could also talk about other resources that resulted in an

⁶ Dwight Manning, "Woodwind Vibrato from the Eighteenth Century to the Present" (Performance Practice Review, Vol. 8, N° 1, Art. 6. Produced by The Berkeley Electronic Press, 1995), 67.

⁷ Geoffrey Burgess & Bruce Haynes, *The Oboe*, (New Haven & London: Yale Musical Instrument Series, 2004), 256-265.

⁸ Manning, "Woodwind Vibrato", 67.

⁹ Georges Opperman, "The Vibrato Problem" (Woodwind Magazine, Vol. 2, no. 6 & 7, 1950), 6.

effect similar to vibrato, these effects were also executed with the fingers and not with the air, there are the ones mentioned below.

The other more specialized forms of vibrato in the oboe were tremolo and glissando. The tremolo was a group of repeated notes of the same height under a ligature; It ascended to an air vibrato, but the defining feature of the tremolo was that the beats were in the rhythm of the piece in which it was used (usually eighth notes). Bach uses the tremolo regularly for the oboe. The glissando was a special form of the tremolo: it uses the same note, that ascends or descends by semitones; Is also frequently found in Bach's scores.¹⁰

G. P. Telemann, Oboe Sonata in A minor TWV 41 a:3 - 3rd movement.

<https://youtu.be/lswP9s7Ehvo>

2.1.2 Classical Period.

This period lasts approximately since 1750, when J. S. Bach died, until 1827, which is the year of Beethoven's death. Takes place in Europe with Berlin, Paris, Mannheim and Vienna as the reference cities and it establishes the classical musical forms.¹¹

The classical musical style is known in the rest of the arts as "Neoclassical" because of the earlier Classic period happened in Greece and Rome. This style avoids the complexity reached in the Baroque and Rococo and goes back to a most simple, symmetrical and standard form.¹²

During this period, the Symphony and the concertos for solo instruments, by the hand of Haydn and Mozart, developed and get the total maturity with Beethoven's symphonies, which will lead the way to the Romantic style. The orchestra increased the number of players adding wind instruments like flute, bassoons, oboes and horns and later clarinets, trumpets and trombones. For all the instruments that are part of the orchestra there are many solo concerts which give the chance to the musicians to show their technical skills.¹³

In this period it is begun to use the air vibrato although at the beginning did

¹⁰ Geoffrey Burgess & Bruce Haynes, *The Oboe*, (New Haven & London: Yale Musical Instrument Series, 2004), 256-265.

¹¹ Grout, *A History of Western Music*, 447-453.

¹² Grout, *A History of Western Music*, 447-453.

¹³ Grout, *A History of Western Music*, 447-453.

not have much acceptance as perceived in a declaration of Tromlitz of the year 1791 that says that the vibrato does not have to do with the air in the flute, this does not have a good effect, because it produces a sound like a wail; And anyone who does this gets his chest broken and ruins his playing completely, because he loses his firmness, and then he cannot maintain the firmness and purity of the tuning and sound; Everything wobbles out of the chest. ¹⁴

There are also references of the use of the vibrato in a letter written by Mozart, in her it speaks of that is a natural effect but of that one should not be abused of it because it removes purity to the sound. On June 12, 1778, Mozart wrote in a letter:

“The human voice trembles by itself, but this occurs to a degree that makes it beautiful - this is the nature of the voice that is imitated, not only in wind instruments, but also in string instruments, yes, even in The clavichord - but as soon as the limit is crossed, it is no longer beautiful, as it is against nature; It sounds like an organ when someone pushes the bellows.” ¹⁵

L. A. Lebrun, Oboe Concerto n°1 in D minor - 2nd movement.

<https://youtu.be/Crk1e6ib4D8>

2.1.3 Romantic period.

The romantic style was a complex of many individual styles with common elements, it was developed by musicians who were looking to resolve conflicts between their art and their environment. This style gets its characteristics from the classical period by composers like Mozart, Haydn and Beethoven. ¹⁶

The romantic rhythms are less vital and varied when they are compared with the classical, this is due to the change of the interest, which is now focus to lyrical melody. The sections and even complete movements would have the same rhythmic pattern and the highly developed classical forms were less satisfactorily handled by the romantic composers. ¹⁷

In imitation of vocal music, this period begins to establish little by little the use of vibrato in the wind, but with this appear the debates about its production.

¹⁴ Manning, “Woodwind Vibrato”, 67-68

¹⁵ Opperman, “The Vibrato Problem”, 6.

¹⁶ Grout, *A History of Western Music*, 537-546.

¹⁷ Grout, *A History of Western Music*, 537-546.

Problems arise as to how to explain how it occurs because air vibrato occurs more internally than fingers.

At the beginning of the period the two ways of producing the vibrato were still coexisting, but little by little the air vibrato was used. In 1830, James Alexander describes three ways of producing vibrato: first with a shaky movement or panting of breath, secondly, waving the finger immediately over the hole without touching the instrument, and Third, by the regular movement in the vibrated note; But carefully observing that the trembling finger covers only half of the hole. Later, in 1844, the virtuoso of the German flute Fürstenau similarly mentions three ways of producing the vibrato, except that here only one involved the fingers. In this instrument the vibrato can be produced either by a rapid alternation of air pressure as the best and safest of the means, or by causing the jawbone to move tremblingly while blowing.¹⁸

The last type of vibrato mentioned by Fürstenau will be known later as a lip or jaw vibrato. This type of vibrato is not usually used in the oboe as a stylistic resource, but rather as a sound effect since the auditory result is often too out of tune to be considered within the center of the sound.¹⁹

Answering the question about the production of air vibrato, the German flutist Maximiliano Schwedler, who is one of the first to say that air vibrato occurs in the throat, suggests a way to work it. Wind instrumentalists, as well as singers, produce the vibrato by means of a corporal organ, that is, the vocal cords. The acquisition of vibrato for wind instrumentalists is not easy. He suggests the following procedure: to form a good mouth, to blow a sound [...] and to perform the exercise of a "bleating" by moving the vocal cords. By using this "bleating" movement, an alternating opening and closing of the vocal cords is rapidly created, resulting in an interruption in sound. This exercise, while at first sounds very ugly and seems too vigorous, can begin to address the vibrato used by well-trained singers, as the instrumentalist learns to move the vocal cords in a lighter and calmer (almost inaudible).²⁰

But ideas also emerge contrary to the throat vibrato saying that air vibrato is to be produced by the diaphragm. Dwight Manning (1995) wrote that this type of "bleating" or "trembling" of throat vibrato, called chevrotement by the French,

¹⁸ Manning, "Woodwind Vibrato", 68-69.

¹⁹ Manning, "Woodwind Vibrato", 68-69.

²⁰ Manning, "Woodwind Vibrato", 69-70.

was disallowed by the successors of Schwedler and his school. Consequently, most woodwind players have rejected the concept that vibrato can be started in the throat. In its place, the most common thing has been to talk about producing vibrato through a rapid contraction of the diaphragm (the main muscle of inhalation).²¹

In the romantic period drastically changed the way in which the vibrato was used, it stops being used as an ornamentation to happen to be structurer of the musical discourse.

A. Pasculli, "Amelia" Fantasie for English horn and piano from "Un Ballo in Maschera" by Verdi. <https://youtu.be/VPq61cjMczo>

²¹ Manning, "Woodwind Vibrato", 69-70.

3. Vibrato production.

3.1. Technical forms of producing vibrato for an oboist.

In this part, I will make an analysis on the different ways of producing the vibrato from the technical point of view. The vibrato is a fundamental part of the sound technique for an oboist, between the forms of production there are the following.

3.1.1 Vibrato of fingers.

As explained in the introduction there is a type of vibrato called vibrato of fingers or *flattement* that was used mainly in the baroque as a form of ornamentation.

This type of vibrato consists of covering and uncovering the last hole or last holes that are left open when producing a note thus producing a variation of pitch and color on it, since when changing the position of the note in the instrument the harmonics change of the same. The use of this type of vibrato is easier and less aggressive in the baroque oboe although it is also used in the modern oboe, this is because the baroque oboe does not have as many keys as the modern oboe, which facilitates the use of this Type of vibrato since the fingers are in direct contact with the instrument.

Finger vibrato. <https://youtu.be/XnhqHL974kQ>

3.1.2 Vibrato of lip or mandible.

The lip or jaw vibrato is produced by the movement of the mandible down and up, which carries with it an oscillation in the pressure of the air produced by a greater space inside the mouth. This causes the tuning of the note to lower and then return to its initial position and thus produce a downward wave in the sound.

There may also be an oscillation in the sound making more or less pressure with the lips, although this is related to the jaw movement explained above, it can also cause the tuning of the note to rise by making more pressure with the mouth.

The effect produced by this vibrato is not much desired among oboists because there is a rather large detune accompanied by a loss of the center of sound. It is used as a required effect in certain works but is not usually part of the sound

technique in oboists.

It is not so in the case of the English Horn, in which this type of vibrato serves as a complement to the one performed abdominally or with the throat, given the greater dimension of the cane and the amplitude of the vibrato that this instrument needs. In any case, in rare cases we will see to use the lip vibrato in isolation to a previous oscillation of the column of air.

Lip or mandible vibrato. <https://youtu.be/zV1pcqugAY0>

3.1.3 Diaphragmatic-abdominal vibrato.

In this case the resulting variation in sound occurs due to an oscillation in the air column caused by an impulse that is born from the abdominal muscles and causes the diaphragm to rise.

This form of vibrato production can be a bit abrupt, since the set of muscles that produce it are very large and have a lot of force. In addition to this the diaphragmatic-abdominal vibrato cannot achieve great speed because the abdominal muscles cannot have a movement too fast.

One of the explanations found on the production of "diaphragmatic vibrato" states that:

“In the diaphragm vibrato, the movement of the mouth occasionally induces the movement of the lips, although the true base of the vibrato is the diaphragmatic muscle, located below the lungs. The diaphragmatic vibrato is achieved by pressure blows that we perform with this muscle on the air column. This vibrato is more delicate and convincing than the lip. To be able to perform this type of vibrato we must know the function that exerts this muscle on the air column and exercise with exercises aimed directly at achieving greater fluidity during the performance.”²²

In this explanation the author reflects his sensation when producing the vibrato, that he locates in the abdominal zone of the body. A similar explanation of the production of the "diaphragmatic vibrato" has been found in a translation of the book *The Oboe* by Leon Goossens and Edwin Roxburgh in it is said:

"The muscular control of the vibrato resides in the abdominal support of the diaphragm. The mobility of the mouth can lead to minimal labial movement in slow

²² Francisco Pineda, *Memoria sobre el oboe y su pedagogía* (Valencia: Rivera Editores, 2003), 64.

melodies; But the real control resides in the diaphragm".²³

These explanations about the production of vibrato with the diaphragm are due to the fact that until a few years ago it was not demonstrated that the muscle of the diaphragm, being an involuntary muscle, cannot be moved consciously, but that the movement is produced by the abdominal muscles that cause a movement in the diaphragm.

An article written by Dwight Manning (1995) shows a series of experiments that explain in more detail the production of vibrato. It attempts to answer the controversial question about the exact nature of vibrato in woodwind instruments. In 1963 Jochen Gärtner began experiments using electromyography to document the electrochemical reaction of muscle groups in twelve flutists. It summarizes the results as follows:

- Vibrato does not originate in the diaphragm as stated above.
- Due to its form of production, "diaphragm" vibrato should in fact be referred to as "thoracic-abdominal" vibrato.
- The diaphragm is fixed in the feeling of support. The alternation of tension and the release of the air are caused by a periodic compression and release of the abdominal and thoracic muscles.
- In all cases the larynx is actively participating along with muscular activity. Therefore, the "thoracic - abdominal" vibrato is always a mixed type.
- The "thoracic-abdominal" vibrato tends to be of low frequencies (less than 6 Hz).²⁴

Diaphragmatic-abdominal vibrato. <https://youtu.be/FJSVL7Gywrw>

3.1.4 Laryngeal or throat vibrato.

This way of producing the vibrato is made by an oscillation in the sound caused this time by the contraction of the muscles of the throat. Unlike the abdominal muscles, the muscles in the throat are much smaller and, although they have less force, are easier to control and can move faster.

In order to control throat vibrato, it is necessary that the muscles of the face, neck and upper chest are very relaxed, since any type of tension caused in this area will

²³ Leon Goossens & Edwin Roxburg, *Oboe* (Macdonald & James, 1977), 78.

²⁴ Manning, "Woodwind Vibrato", 71.

prevent the vibrato from coming out or can be heard from outside.

According to Manning (1995) some experiments are made that demonstrate that the larynx also participates in the production of the diaphragmatic-abdominal vibrato. In one of the experiments discussed in the previous section by Gärtner, there were also results related to the vibrato of the larynx.

- We have been able to document purely laryngeal vibratos without any involvement of the abdominal muscles, thoracic muscles, or diaphragm.
- The highest frequencies (7 Hz) were produced by subjects with purely laryngeal mechanisms.
- The laryngeal vibrato has the widest range of all types of vibrato.
- Larynx vibrato is preferred in dynamics such as pp in all registers.²⁵

Some of the most recent research on woodwind vibrato was started in 1986 in Denton by a physician of otorhinolaryngology in collaboration with professors Charles Veazey and Maria Karen Clardy of the faculty of woodwind at the University of North Texas. Several physiological functions were studied using a fiber-optic laryngoscope connected to video and audio recording equipment with the following results:

- As expected, there was no laryngeal activity on the clarinet, since it was vibrato produced by the jaw.
- The vibrato activity on the flute, the oboe and the bassoon varied greatly among individuals, but there was no doubt that the vibrato originated in the throat, not the diaphragm.
- The movement of vibrato was evident in the vocal cords, arytenoid cartilages, the back of the tongue and the posterior wall of the pharynx (constrictor muscles).²⁶

Such experiments are currently changing the conceptual and technical approaches to vibrato and will undoubtedly affect the future of interpretive practice. The curiosity for the physiological functioning and the diverse concepts of vibrato production that have occupied woodwind musicians for centuries must be ideal to serve the music we play and the audiences for which we perform.

²⁵ Manning, "Woodwind Vibrato", 71.

²⁶ Manning, "Woodwind Vibrato", 72.

Laryngeal or throat vibrato. <https://youtu.be/P8LNUr2Rwns>

Jan Eberle (2006) explains that within the throat area there is another type of vibrato called as tongue vibrato. This vibrato is produced by saying "i-o, i- or, i-o" while playing. If you try to say this while placing a finger inside your mouth, with each "i-o" you will feel like the middle of the tongue arches to touch your finger and then back down. This movement produces an oscillation of sound but has adverse effects on pitch and timbre.²⁷

In his search for the right vibrato for each person, Eberle locates 5 specific ways or zones to produce vibrato from the throat and presents and exercises them individually. Presented in order, from the "upper" position, that is, the uppermost part of the throat, closer to the cane, to the "lower", located below the throat, further away from the cane.

- Whistle. Vibrato can be produced by whistling a song without entering intonation. You feel the movement in the soft area under the chin about two inches behind the jaw.

Whistle vibrato. <https://youtu.be/6YQZ2PJe8Xg>

- "Sister." Saying the first syllable of the word "sister" repeatedly produces a vibrato ("sis, sis, sis"). Care should be taken to pronounce "sis" and not "tis" the action should be done with the whistle of the "s", instead of articulating "t". Attention must be paid to making the air flow constant while repeating the syllable. With this way of producing the vibrato you feel the movement in the area of the tonsils.

"Sister" vibrato. <https://youtu.be/LAUqsBZLluc>

- To sing. When a note is sung and vibrated, if you place your fingers over the vocal cavity (upper part of the throat) you should feel some vibration in this area. You will probably hear the vibration, but you will not be able to feel its location. This type of vibrato is the "classical vocal vibrato".

To sing vibrato. <https://youtu.be/UkT4mVco9vo>

- Cough. If you imagine you are coughing, you feel the movement that this

²⁷ Jan Eberle, "Vibrato: No Longer a Mystery!" (The Double Reed, Vol. 29 no. 3, 2006), 128-130.

action creates on the sides of your throat and slightly below the walnut.

Cough vibrato. <https://youtu.be/4prC6xBKy3k>

- Laugh. When placing your open palm where the chest joins the neck you should place the thumb on one side of the neck and the other fingers on the other. When you laugh, you feel the movement along your index finger, your thumb, and the part of the hand between them.

Laugh vibrato. https://youtu.be/GkzT_Xuv_bA

According to Eberle, each oboist must find the zone or combination of zones in which it is easier to perform the vibrato and exercise them separately to strengthen the laryngeal muscles that produce it. ²⁸

²⁸ Eberle, "Vibrato: No Longer a Mystery!" 128-130.

4. Personal experience on vibrato production

In this section, I will collect the information of the interviews conducted with four of the teachers who I have received classes throughout my bachelor's and previous musical studies. In addition, I wanted to extract a series of exercises that would help with its production and with how to work on the vibrato in the oboe. I am also going to speak of my sensations when I was practicing with the different ways of producing it.

4.1. Explanations compiled in class.

In order to compile the explanations received from the teachers I have worked with; I did a series of interviews following a guide of five questions. From each of them I have extracted some conclusions through the comparison of the answers given by the interviewees.

❖ Question 1. How would you define vibrato?

The first question of the interview was about the definition of vibrato. Next, I will cite the definitions provided by the teachers in the interviews.

The first interviewee is Jose Antonio Masmano Villar, who was my professor of orchestral repertoire at the Conservatory of Music of Aragon. The definition given in the interview was as follows:

For me, vibrato is a variation of a sound, regular or periodic in time. That variation can be of several of the qualities that the sound has, it can be a variation of the tuning, the timber, or also of the intensity, that can be achieved today with electronic devices. I think it is an artistic resource, an ornament that the musicians can put into the sound.

Another of the interviewees is Román Enrique Álvarez Mayor, who was my professor during the last three years of the professional degree courses at the Professional Conservatory of Music in Salamanca. His answer to the first question was:

The vibrato is an expressive resource that most woodwind instruments use, there are some that do not use it like the clarinet, but the rest of them do, both to make changes of color or give variety to the sound and to increase the intensity and drama of a passage

or highlight it. The vibrato does not have to be used always; you must choose the places where to use it as a resource.

The next interview that took place was to Manuel Angulo, who was teaching wind quintet classes at the Conservatory of Music of Aragon during the last two years of my bachelor's degree.

The vibrato is an oscillation of the sound produced by the change of tuning, by the change of volume or by the two things at the same time and serves to give expression to the sound, the phrase and the music. Depending on the style, the passage and the expression you want to give, you change the speed and the amplitude.

Another interview was made to Francisco José Gil Ferrer, professor of oboe at the Conservatory of Music of Aragon and my professor for four years of my bachelor's degree. His answer regarding the definition of vibrato is as follows:

It is a sound oscillation that can be defined both in terms of frequency and height of the note, as in terms of intensity but surely is a combination of both. I prefer to think more that it is a difference of intensity, especially in the sense of not losing the center of the note, the center of the tuning, which is the danger when it is very focused in the height of the note, in the frequency. But surely it is a combination of both things and according to the person one thing is more important than the other.

Of all the definitions given by the different professors I drew the following conclusion:

Vibrato is a resource of the oboe technique that consists of oscillating the sound to give it color, depth and expressiveness. This variation can be in intensity, pitch or timbre. It is used to highlight passages or notes of a work within the interpretation and helps the musical expression.

❖ **Question 2. Do you consider that there are different types of vibrato?**

The second question dealt with the different types of vibrato, this question was made without specifying a priori a concrete criterion of classification, to see in function of which criterion they answered. The criteria that I have drawn from the different responses of teachers to this question are:

a) According to the forms of production.

According to the forms of production there have been five different types of vibrato.

- Diaphragmatic-abdominal vibrato: is produced by impulses from the abdominal muscles.
- Throat vibrato: is produced by a contraction of throat muscles and looking for a change in the intensity.
- Vibrato of fingers: is produced by covering the second hole closest to the note that is being played. It was used as a type of ornamentation in the baroque, it is a mixture between trill and vibrato although it has more characteristics of trill than of vibrato in terms of organization and speed.
- Vibrato of language: It is produced by pronouncing different vowels and usually provokes a change of tuning, although, it can also be of intensity.
- Vibrato of lip or jaw: It is done by relaxing and contracting the mouth, this causes a change in the tuning and it is usually used as a resource in contemporary works. However, there are some oboists who use it as their main form of vibrato production, but in these cases, the tuning is not so remarkable, and the vibrato is more integrated into the sound.

b) According to the effect on the sound.

In terms of the effect that it produces on the sound they classified the vibrato in two forms.

- Within the sound: the vibrato must maintain the tuning and the oscillation must have a speed between five and seven oscillations to the second (more or less).
- Out of sound: the tuning is less stable, and the frequency of the wave can be either very slow or very fast.

c) According to how it affects the tuning.

Depending on how it affects the pitch, the wave can be ascending, descending or doing both.

Intonation vibrato. <https://youtu.be/spOpaZfrczw>

d) According to the style of the country where it is used.

According to the country where it was used, one of the interviewees spoke of French vibrato, which is wider and produces a sense of tranquility. He also talked about that a few years ago, depending on the regions or countries, the way the woodwind section vibrated was different.

e) According to their musical application.

For its application in the musical works the interviewees have distinguished three types of vibrato:

- Vibrato as ornament: vibrato as an ornament is used mainly in baroque music, serves to highlight or give continuity to concrete notes.
- Constant vibrato: the constant vibrato is used for example in works of the romantic period to accompany the musical discourse.
- Vibrato according to the context: this type of vibrato is used in works of different periods accompanying the harmonic context or the important points of the sentences.

❖ Question 3 What is your criterion for the use of vibrato depending on the different musical works?

The third question of the interviews was about the criterion of the use of vibrato in the different works of the different musical periods.

All teachers who were interviewed agree that vibrato should not be used always and in the same way, although not all would make a classification by periods of the use of vibrato.

The premise is not to put vibrato in everything, but to use it as a stylistic resource, I like to play many times without vibrato to get a color. Obviously as you move in different periods of the history of music, if you are playing something romantic, vibrato is much faster and more intense, but you can vary the speed, so you can also slow it down. Neither do I think that in the same period you have to play with a specific type of vibrato, within the same piece, to look for something richer and find more differences while playing it, you can vary the types of vibrato you use in terms of intensity, speed, or play without vibrato. (Jose Antonio Masmano)

Not even within the same historical period it should be played with a specific type of vibrato. Furthermore, within the same piece, the types of vibrato must be varied to look for more wealth while playing.

Also, when playing the same piece with different instruments, for example with the baroque oboe, the application of vibrato may be different. This is because many authors seek with the vibrato a certain impurity in the sound that the baroque oboe has as something natural, by the forks and the closed digits. Therefore, as in the modern oboe it is more necessary to promote this inequality or impurity to the sound.

G. P. Telemann, Oboe Sonata in A minor TWV 41 a:3 - 1st movement (modern oboe). <https://youtu.be/tBB-7SlazIU>

G. P. Telemann, Oboe Sonata in A minor TWV 41 a:3 - 1st movement (baroque oboe). <https://youtu.be/PEe4dWL-lOM>

It depends on each piece, each phrase or even each context, the music itself is the one that in the end accommodates the vibrato to its best interpretation. [...] for the same work by playing it with a different instrument, the application of vibrato may be different. [...] the same piece, interpreted with the same instrument, with the same taste on the part of the interpreter, the physical space itself can make the vibrato have to be different. At some point it is necessary to consider its use or not and how it is produced. (Francisco José Gil)

The use of vibrato can also depend on the acoustics of the room where it is played, in a same work played with the same instrument and the same musical taste, there may be different needs regarding the application of vibrato.

In any case, there is a series of guidelines depending on the historical period

in which the work is composed. This is also due to the real opportunities of using vibrato. For example, you cannot use vibrato in a baroque piece in which there are short motifs that work with small melodic cells, than in a romantic piece, which uses much longer phrases that need the sound to be continuously directed. The music itself accommodates the vibrato to its interpretation.

The guidelines extracted for the use of the vibrato in function of the different periods have been the following:

a) Baroque.

In this period the vibrato is used as an ornament, a way to carry the sound, to create a musical direction on the long notes. It is an ornament and a resource of color.

J. S. Bach, Partita in G minor, Corrente. <https://youtu.be/jbSHmaotuzo>

b) Classicism.

Interpreters generally use less vibrato in this period, this is because it is a more structured music and therefore the vibrato must be also.

W. A. Mozart, Oboe Concerto in C major, 2nd movement.
<https://youtu.be/aASyTvYsW94>

c) Romanticism:

In the works of this period you can use a vibrato of variable speed that sometimes can be faster and more intense and in others slower and calmer. The vibrato can be inherent within the sound but, depending on the phrase, can also modulate the sound and it may appear or disappear. Sometimes also the continuous vibrato is used. Goossens introduced this type of vibrato to imitate the strings. The pieces of this period give many chances when it comes to choosing vibrato, because they have more movement and faster changes.

R. Schumann, Three Romances for Oboe, 1st movement.
<https://youtu.be/53gTOfVvu8I>

❖ Question 4. Could you explain how Vibrato is produced from a technical point of view?

As for the question about how they produce the vibrato, all the answers agree that, after a search of the area that originates and controls the vibrato, they prefer the throat area.

I tried to practice and enhance the vibrato with the throat, doing it by a change of dynamic, in which the speed or intensity of the vibrato is varied. What I was intent to do is that, keeping the same pitch, I played a stronger note and a more piano one. If you measured, it is sure that there would be a slight variation on the pitch, but the idea is that only a dynamic variation will happen.

Producing vibrato requires a certain technical condition, muscle relaxation and control over the sound. You should have enough flexibility to quickly change the dynamics to produce vibrato.

When it comes to raising the speed of the vibrato is easier to think about the throat. A vibrato that can be varied in speed and that it is easy to produce, needs to be controlled from the throat. Of course, you always need continuity in the air, first you think in the sound and then you add the vibrato.

This vibrato was discouraged by some authors, such as Evelyn Rothwell in her book of oboe technique. Rothwell says that only very seasoned interpreters should be daring with this kind of vibrato. The danger is that focusing attention on the throat will lose the sense of support of the air, which is fundamental. You must always keep in mind that you should not lose support; This is the danger, or the question, that must be taken into account.

However, each person has different physical characteristics and it is difficult to transmit a sensation to another person, there are many people who have a very strong vibrato production sensation from the abdominal area and surely it is true that they feel as the source of vibrato than the throat area. Because of this, some people say that vibrato comes from the diaphragm, the membrane that separates the respiratory system from the digestive. Therefore, when you are playing it is difficult to differentiate if the movement is transmitted from the throat to the diaphragm or vice versa. Of course, it can cause an oscillation in the sound from the abdominal muscles, but imagine that you do not have so much control, when you want to exaggerate the vibrato a lot, you can feel movement from the lower

part of the lungs, but in general, the diaphragm moves sympathetically when the oscillation is triggered from the throat area.

Until a few years ago it was taught the “diaphragmatic” vibrato, but when you look for this type of vibrato you would find a problem with the speed, because it is difficult to make a fast vibrato using only the abdominal muscles. When this method was attempted to increase speed, the throat begins to function in an unconscious way, so you can feel like you are continuing to do the diaphragmatic-abdominal vibrato, but you are using the throat instead. However, we can affirm that, at a low speed, the vibrato can be produce exclusively with the muscles of the abdomen.

When some teachers attempt to teach vibrato without good training in sound projection and stability, the way to learn it is usually by using the abdominal muscles, this can cause a body blockage due to the excessive force that is needed to produce it from the base, because you need to move the entire system to make an oscillation.

Nowadays, as I said before, there are scientific studies that show that in all cases the production is more in the area of the throat, disregarding the physical sensation that each oboist may have. There are also oboists who play with a magnificent sound, with a very expressive and very controlled vibrato and yet they also move their mouth, as is remarkable in the case of the English horn soloist of the Berlin Philharmonic, Dominik Wollenweber. When we see Dominik playing the English horn, the movement of his lower jaw is more than evident. Thus, there is a distinction between the vibrato used in the English horn and the oboe.

The English horn, although is technically similar to the oboe, uses, as a rule, and in a very special way in the music of the romantic period, a vibrato much slower and marked than the oboe. It could be said that the tessitura of the instrument takes it to resemble more with a bassoon in the high register than with an oboe in the low register. The jaw vibrato is then made necessary as a complement, allowing a larger and slow oscillation. Very similar to what a bassoonist could look for. This is the reason why Dominik Wollenweber so clearly uses the jaw vibrato when playing the English horn. He does so far less when playing the oboe.

In conclusion, there is not only one correct way to produce vibrato. If the

oboist is guided by the sound, the quality of the attacks and his personal taste, surely will find his/her own way of doing it naturally and integrated in the sound.

❖ **Question 5. What kind of exercises do you use to teach vibrato to your students?**

With the fifth question I have tried to compile exercises that can serve the oboists to produce and work with the vibrato. In this part I wanted to make some steps to obtain the vibrato of the following way.

a) Conditions for the appearance of vibrato.

First, there are several conditions that the performer must meet before attempting to produce the vibrato.

- Find the moment to start working with the vibrato using it to relax the muscles of the student.
- Having a good air support when playing helps with the flexibility in the throat area.
- Ask for keep the air support.
- You should have the ability to be relaxed and open well the throat area.
- Relax the lower jaw.
- The reed should be free in the mouth, without excessive pressure by the mouth.
- Look for the air to flow freely.
- The sound must be stable.
- There must be control over the breath.
- There must be a control over the volume of the sound.
- To begin with, you must have got a good resonance.

- And finally, before beginning with the production of the vibrato, you must have in mind the sound that you want to reach. Think about the sound result of the vibrato.

b) Ways to start producing it.

In this part I will discuss how to begin to feel where the vibrato is born in our body and how to produce an oscillation in the sound.

- Activate the neck, throat and tongue area. When singing the vocal cords vibrate, producing vibrato. Regarding the oboe the cords would be the blades of the reed. In the oboe you need to adjust the tuning and the intensity considering what you did while singing.
- Start slowly so that students are aware of what is happening in their body when they want to produce an oscillation in the sound.
- Feel the different ways of producing vibrato. Feel all possible sources to find the most comfortable one for the interpreter. Make an oscillation on an easy note, first producing it only with the mouth, then trying to produce it by means of contractions of the abdominal muscles and finally focus the attention on the area of the throat, thinking in doing “oi” and keeping always the air support.
- Locate where you are feeling the vibrato. The ideal place will be where the vibrato takes place without losing the quality of the sound, the timber or the tuning.
- Begin to make the vibrato out of the instrument, so that the pressure necessary to produce the sound does not interfere the movement of the muscles that control the vibrato, and gradually work on the instrument and raise the pressure until the sound is produced with vibrato.
- Produce rhythmic oscillations, necessary for coordination, although this results in a false or unnatural vibrato.
- Listen to how the oscillation occurs and whether it goes up or down.

c) Exercises to work on it.

After having managed to produce waves in the sound comes the time to work with this resource technically for its subsequent musical application.

- Make a note piano and then a strong note, first attacking each one and then linking them.
- Give speed to this using a metronome, doing a rhythmic acceleration by adding each time a beat.
- Rhythmic exercises combining measurements up to 5 oscillations per second. Start by making two oscillations, then triplets, then move to sixteenth notes and finally to quintuplets on the same note.
- Do the same exercise on a scale, changing both measure and note.
- Make five oscillations per second and change the note irregularly, outside the pulse, to work the continuous vibrato.
- Make the vibrato accompanied by dynamics, raising the speed when you grow to *f* and lower it when you decrease until *p*.
- Work from less oscillations to more and more oscillations and then go back to less.
- Having the ability to stop it and start it will indicate that you have some control over vibrato.
- To integrate the vibrato in the sound you must make *sforzandos* supported in the vibrato, what is intended with this exercise is not starting from a clearly established measure keeping the spontaneity.
- Work with the amplitude of the wave making more differences between the dynamics or looking for a greater difference in the tuning, that the note lowers more and increase more. It has nothing to do with speed.

Example of exercise: dynamics vibrato. <https://youtu.be/mYPGsRhIFwg>

d) Musical application of vibrato.

This section looks for the musical application when you have obtained a technical control over the vibrato.

- Move your fingers over the oboe but with the reed outside and make vibrato thinking about the melody but listening what happens with the reed.
- Include vibrato in simple melodic lines. An arpeggio, scale or small melodic design. Practice on this a constant vibrato and one that varies on the melodic line.
- Practice a melody slowly so you can feel and hear what vibrato is like on every note.
- Practice putting the vibrato progressively into a melody and removing it.
- Think of the dosage of vibrato to adapt it to the context or to the music.

Adapt the vibrato that is used to the work that is played using, for example, the guidelines proposed in the previous question.

4.2. Sensations with different ways of producing and working on it.

I have done in recent years a work of self-analysis in relation to the different ways of producing and working vibrato.

The reason for wanting to do a work on vibrato also relies on the technical problems I encountered when I tried to develop this technique. This could have originated in not having in my earlier studies a continuous monitoring by a single teacher. Changing each course or every two years the teachers made impossible to get to work correctly the vibrato.

The first approaches to the production of vibrato occurred during the last courses of the degree I did before my bachelor, trying the diaphragmatic-abdominal vibrato. An oscillation in the air caused by the contraction of the

abdominal muscles. With this way of producing it, at first, I did not obtain great results, due to the tension that I had already in my body that avoid vibrations to happened, which was adding an overexertion by the abdominal muscles. It took me quite a while to get oscillations in my sound, that still did not have the right characteristics to be able to be vibrated. With time and with enough effort I was able to get little oscillations, but they could not be used in a musical context and I did not had control over them, in fact, the oscillations only appeared at certain moments and in certain notes.

Later, when I continue my studies in the Superior Conservatory of Music of Aragon, I began again to work with the vibrato from scratch. Together with my new teacher, I started by locating the different sites from which the vibrato can appear and found three fundamental focus: the jaw or the lip, the abdominal area, and the neck or throat area. It was possible to produce the vibrato from the three parts, finding that the most natural for me was the throat area, but with the problem that, due to the muscular tension in this area, the vibrato obtained was very subtle and not very noticeable. After, during my studies at the Master in Orchestra Performance in the university of Gothenburg, with my professor Marten Larsson, I continue practicing and developing my production of the vibrato and I become to be able to control and use it.

The problems I found in trying to produce the vibrato from the throat had their origin in an excessive tension in the muscles of the neck caused because I suffer from bruxism; An involuntary habit of tightening the jaws without a functional purpose, especially when sleeping, and causing tension and pain in the head, neck and ears. Because of this, I also had the jaw out of place, with consequent problems of lack of mobility and pain, which eventually led to the dentist. Nowadays, some of these problems have been solved gradually.

Looking for the relaxation of the muscles from the neck through exercises proposed by my teachers and other techniques, I was able to produce the vibrato naturally and more audible form the throat. Although there was also another problem, because I never was before able to use this resource, I had problems with the musical application of the vibrato. Therefore, during my bachelor studies, I started to use the vibrato in a merely technical way and later, using as a tool singing, I began to put the vibrato in the execution of pieces in a musical way.

Some of the exercises that I have been used to work with the vibrato are, for example, the following:

- The first exercise consisted of playing a note with a focus sound, a correct tuning and being relaxed and then, when you had all these factors, try to let the vibrato emerge thinking about relaxing the throat area.
- Once you manage to produce the vibrato in a natural way, you should start working in a rhythmical way, this is because the rhythm is the basis of the coordination, which is a fundamental need to get any technical resource to work. I practiced from a note that began in *p* during four pulses of metronome at a speed of quarter note = 80, later a crescendo was made in four other pulses until a more comfortable dynamic, as it can be *mf*, and from there it was relaxed to allow the vibrato to happen, it was not necessary to produce a number of concrete oscillations within a pulse, only that the note lasted four pulses. Then in four other pulses it turns to *p* and another four pulses are used to hold the *p* and check that the sound is not tense.
- The next exercise that arises is on this same course of five rounds doing the same with the dynamics but with a vibrato from the beginning, varying the speed of it.
- The vibrato was also exercised changing notes, by means of arpeggios, in which you must first find all the qualities that the sound must have and then add the vibrato trying to follow the melodic line.

With these last exercises I did use the vibrato as a tool to look for relaxation and a better placement of the sound. The work of the vibrato and sound are a feedback, if the system is able to relax the vibrato can flow naturally, and if I can produce the vibrato this will help the sound to occur in a more relaxed way.

5. Conclusions.

5.1. Conclusions based on the objectives set at the beginning of the work.

The objectives marked at the beginning of this work were the following:

- Clarify how to use the vibrato correctly in pieces belonging to different musical styles.
- Explore the different ways of producing vibrato and study its advantages and disadvantages.
- Refer the interpreter to find a method for the production and study of the vibrato in the oboe.

5.1.1 Conclusions based on the first objective

The conclusions I drew regarding the way to use the vibrato correctly in pieces belonging to different musical styles, are the following:

- Currently, the correct use of vibrato does not only reside in the musical period in which the piece is written, it also depends on the instrument with which it is played and even the room, as all this will cause a different result on the final sound.
- In the Baroque period, although there are no literal references to vibrato, they used other terms such as *battement*, *flattement*, *tremolo* and *glissando*. In this period the ornamentation is the base of the interpretation and therefore, the vibrato was used in this way. The vibrato at this time was usually produced with the fingers, not with the air. It is a resource to change the color of the sound.
- In the classical period the interpreters begin to use the vibrato of air, although at the beginning it is not too accepted. In the works of this period the vibrato is not used much since this music is usually very structured and therefore, the vibrato as well.
- In the romantic period drastically changes the way in which vibrato was used, it is no longer used as an ornamentation to become a structurer of

musical discourse. In this period the air vibrato is established.

5.1.2 Conclusions based on the second objective.

After research, interviews with teachers, and personal experience, I can conclude that there is not a single universal way of performing vibrato, but several areas are involved in its creation to a greater or lesser extent.

- The vibrato being as an internal and very slight body movement, it is very difficult to locate its origin. Although, scientific studies have been carried out that have only succeeded in dismantling the theory that the diaphragm cannot autonomously perform that number of oscillations per minute, the rest of the muscles involved in its creation are still difficult to recognize and we rely, at the time of explaining the way of producing vibrato, more in sensations than in real movements.
- The diaphragm, larynx, tongue, or jaw work together to achieve a slight and rapid oscillation in the airflow. But it is difficult to attribute the origin of the vibrato to one in particular, since when opening or closing the larynx will cause a movement of the column of air that will inexorably be transmitted to the diaphragm making it vibrate by sympathy, and at the same time, by varying the air flow, our jaw will make small movements to correct the possible defacements that this causes.
- For all this I can conclude this point by saying that the way to produce vibrato will vary slightly in each oboist and it will respond to a physiological sensation rather than a particular muscle work. While it is true that the final result will be similar in almost all performers and will lead to a joint work of the aforementioned muscle areas, it would be ideal for the musician to know and work separately the various ways to produce it, in order to finally reach with which he/she can get a better result.

5.1.3 Conclusions based on the third objective.

The conclusions I drew from directing the interpreter to the production and the way of working the vibrato, would be the following:

- You have to reach all the fundamental conditions of the sound so that the vibrato can be added to it. These would be a proper tuning, and a sound centered and relaxed.
- In order to be able to produce the vibrato naturally, it is necessary to locate where each interpreter feels and look for it from a relaxation of the area that produces it and a correct support of air.
- The way to work the vibrato technically it must be done by rhythmic exercises in which you add the oscillations. This is necessary because the coordination of all the elements of the technique is fundamental for the vibrato to function in a natural and relaxed way.
- In order to introduce the vibrato musically into the performance you must have your own criterion based on the ideal sound that you want to achieve.

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Videos.

J. S. Bach, Concerto in A-dur for Oboe d'amore BWV 1055 - 2nd movement.

<https://youtu.be/CO3m769vAnc>

G. P. Telemann, Oboe Sonata in A minor TWV 41 a:3 - 3rd movement.

<https://youtu.be/lswP9s7Ehvo>

L. A. Lebrun, Oboe Concerto n°1 in D minor - 2nd movement.

<https://youtu.be/Crk1e6ib4D8>

A. Pasculli, "Amelia" Fantasie for English horn and piano from "Un Ballo in Maschera" by Verdi. <https://youtu.be/VPq61cjMczo>

Finger vibrato. <https://youtu.be/XnhqHL974kQ>

Lip or mandible vibrato. <https://youtu.be/zV1pcqugAY0>

Diaphragmatic-abdominal vibrato. <https://youtu.be/FJSVL7Gywrw>

Laryngeal or throat vibrato. <https://youtu.be/P8LNUr2Rwns>

Whistle vibrato. <https://youtu.be/6YQZ2PJe8Xg>

"Sister" vibrato. <https://youtu.be/LAUqsBZLluc>

To sing vibrato. <https://youtu.be/UkT4mVco9vo>

Cough vibrato. <https://youtu.be/4prC6xBKy3k>

Laugh vibrato. https://youtu.be/GkzT_Xuv_bA

Intonation vibrato. <https://youtu.be/spOpaZfrczw>

G. P. Telemann, Oboe Sonata in A minor TWV 41 a:3 - 1st movement (modern oboe). <https://youtu.be/tBB-7SlazIU>

G. P. Telemann, Oboe Sonata in A minor TWV 41 a:3 - 1st movement (baroque oboe). <https://youtu.be/PEe4dWL-lOM>

J. S. Bach, Partita in G minor, Corrente. <https://youtu.be/jbSHmaotuzo>

W. A. Mozart, Oboe Concerto in C major, 2nd movement.

<https://youtu.be/aASyTvYsW94>

R. Schumann, Three Romances for Oboe, 1st movement.

<https://youtu.be/53gTOFVvu8I>

Example of exercise: dynamics vibrato. <https://youtu.be/mYPGsRhIFwg>