



Music



Interpretation

through

Ages



Sara Escudero Solé
Tutor: Montserrat Folcrà
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GRATITUDES

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1. INTRODUCTION

I'm a seventeen year old girl called Sara Escudero. I've been surrounded by music since I can remember. I started studying it when I was five, and I've been playing the flute for nearly nine years. When I look at the future, I see myself playing the flute as well, and that's why I knew the topic of my research work since the first moment; music.

Unfortunately, I did not have the same facility choosing a concrete area of music. At first, I wanted to investigate some phenomena related with music and neurology, but the difficulties and impediments, as in terms of legal areas and in health, that this investigation would have involved, I had to discard that option.

As I want to study music pedagogy, I thought I could develop a work related with the way music influences the learning process and the advantages and disadvantages this would lead. I have to admit that I could have had a great experience, but it is also true that this is already studied, and I wanted to do something different to the "classical topics" related with music.

Another topic that would have been very interesting to investigate, was the difference between the public teaching and the private teaching in the superior grades of music; if there is a difference between the quality of studies and installations, the difference in level between the students of first course of one center and the other one, the difficulty level of the access exams, the variety of nationalities in both centers... This would entail analyzing the two principal superior schools of music in Catalonia, and compare them. I am afraid that this would have not been available, and it would have increased the existent "conflict" between them. I had to discard that option as well.

After thinking about it for a long time, and with the help of my research work tutor and my flute teacher, I decided to do something related with the instrument I play. I realized that I did not know anything related to the flute history or how it is made and tuned, and if I have to become a flutist, I think I must know some basics aspects of the instrument I play; that way, I'll be able to improve a lot more.

Finally, I formulated my hypothesis:

“The use of a contemporary flute to the work that is interpreted, is the most suitable option to the correct execution of the work.”

In other words, it is better to play a work from the 18th century with a flute which belongs to the 18th century, instead of playing it with the nowadays flute, or an older flute. I strongly believe that in some cases there are impediments of record and sound, and in other cases, the special color of the sound and all the nuances are lost. This research work will try to identify that, and demonstrate it.

OBJECTIVES and METHODOLOGY

With this project, I pretend to compare fifteen different models of flutes, and see the technical differences that exist between them. Also, I would like to acquire historical musical culture which concerns to flute interpretation between the eighteenth and twenty-first century. Analyzing the technical differences between the flutes, and how these differences affect when interpreting the works of the time will also help me to understand the instrument I'm playing, and how I should play it in every different situation.

To do this research project, I'm going to interview old music professionals, such as Montserrat Gascón or Joan Bosch. I also pretend to analyze scores that belong from the eighteenth to the twenty-first century and the technique required to interpret them. I'm going to help myself with books and music treatises. Finally, I pretend to record myself playing different models of flute, and comparing the interpretation, the sound, the effects, determining which is the most appropriate for the interpretation of that particular work and why, etc.

2. A LITTLE BIT OF MUSIC HISTORY. FROM 18th TO 20th CENTURY

Music has been present in our lives since the antiquity. Despite I could explain thousands of years of music history, I'm going to focus from the Renaissance (18th century) to the 20th century, as this is the period of time I'm going to focus in, while I'm doing this research work.

2.1. THE RENAISSANCE

The Renaissance began in Italy, in the late 14th century, and later it spread throughout Europe. This movement is called Renaissance, which means to birth again, because all the arts were searching to replay the magnificence of the Greek and Roman era, after the Middle Ages.

In the case of music, we can not say that this phenomenon happens, because the Greco-Roman music was monodic (just one melody), and during the Renaissance, there is a development and consolidation of the polyphony¹ that had appeared at the end of Middle Ages. The harmony got richer and more expressive. How to recognize it:

- The polyphony prevails, and it keeps up to perfection.
- There is a bigger awareness of harmony and the progression of the chords, and the dissonances are treated softly.

2.1.1. RENAISSANCE MUSIC FEATURES

- Music is based on the ecclesiastical medieval models, but those are used with much more freedom.
- Rhythmically, the time signature at the beginning of a score is already used, although there are not dividing lines yet.

1. A set of sounds executed simultaneously, each with its own melodic line, but which combine to form a harmonious everything.

- The melody does not exist by itself. Every melodic line depends on the other forming polyphony.
- The vocal music is really important during that period. There are two types of polyphony:
 - Contrapuntal polyphony: horizontal treatment of the voices. It helps to firm up the character and emotions of poetry. It causes a difficult comprehension of the text.
 - Homophonic polyphony: vertical treatment of the voices. Total comprehension of the text.
- The instruments are normalized, and family instruments are formed.

2.1.2. COMPOSERS

Now I'm going to mention some of the most important composers of the Renaissance. Their work in music is huge and they deserve to be mentioned.

- **Giulio Caccini** (Italy 1550-1618): he was one of the first ones to use the "singer saying" or recitative style in their works, of a great vocal virtuosity.
- **Giovanni Pierluigi da Palestrina** (Palestrina 1525- Rome 1594): Italian Renaissance composer of more than 105 masses and 250 motets, a master of contrapuntal composition. Palestrina lived during the period of the Catholic Counter-Reformation and was a primary representative of the 16th-century conservative approach to church music.
- **Des Pres** (France 1440-1521): he is considered the most significant figure of religious music. His works were the most copied in manuscript after his death. Her most important works could be *Hercules*, *Dux Ferraire*, or *Da pacem*.
- **Claudio Monteverdi** (baptized 1567-1643): Italian composer in the late Renaissance, the most important developer of the then new genre, the opera. He also did much to bring a "modern" secular spirit into church music.

2.2. BAROQUE

Baroque started the 1600 with the premiere of the first opera, and finished with the death of Johann Sebastian Bach, at 1750.

Chronologically, we can distinguish between three stages; the **primitive Baroque**, in which the opera and oratorio were born, the **full-Baroque**, in which the suite prevails, and we can find the passions and new forms of opera, and the **late Baroque**, where the sonata and concerto were developed.

2.2.1. BAROQUE MUSIC FEATURES

- Tendency to expressionism: showing the reality in an exaggerated way.
- Drama: presence of the sentiments and drama using dynamic and tempo contrasts.
- Mechanic rhythm.
- Use of contrapuntal texture.²
- Development of the continuous bass.
- Development of virtuosism: one of the virtuous musicians was Johann Quantz, a virtuoso of the flute.
- Improvement of the instruments.
- Birth of the orchestra.
- Birth of the Opera.

2.2.2. BAROQUE MUSICAL FORMS

Among the religious vocal forms, we find cantata, oratorio, passions and the masses. As the main secular vocal form, we find the opera, which becomes more popular than religious music.

Instrumentally speaking, we can distinguish between the suite, the Sonata, the concert, and instrumental forms for keyboard instruments.

2. Composed of two or more independent melodies that sound together.

2.2.3. COMPOSERS

We can divide the baroque composers into four different styles. I'm going to highlight some of the most important of the following classification, according to their contribution to Baroque music.

Itlaian style	German style	English style	French style
Bright, grandiose and contrasted	Serious, in depth, and huge technical perfection	Majestic and courtier	Elegant and recharged
<i>A. Vivaldi,</i> <i>T. Albinoni</i>	<i>J. Pachelbel,</i> <i>G.P. Telemann,</i> <i>J.S Bach</i>	<i>H. Purcell,</i> <i>G. F. Haendel</i>	<i>M.A. Charpentier,</i> <i>F. Couperain</i>

- **Antonio Lucio Vivaldi** (1678 – 1741): Italian Baroque composer, Catholic priest, and virtuoso violinist, born in Venice. Recognized as one of the greatest Baroque composers, his influence during his lifetime was widespread over Europe. He is mainly known for his instrumental concertos (specially for the violin), as well as sacred choral works and over forty operas. His best known work is a series of violin concertos known as *The Four Seasons*. Though Vivaldi 's music was well received during his lifetime, it later declined in popularity until its vigorous revival in the first half of the 20th century. Today, Vivaldi ranks among the most popular and widely recorded of Baroque composers.
- **Johann Sebastian Bach***(1685 – 1750): German composer, organist, harpsichordist, violist, and violinist of the Baroque period. His music is revered for its intellectual depth, technical command, and artistic beauty.

* He will be explained largely below.

- **George Frideric Handel** (1685 – 1759): British Baroque composer, born in Germany, famous for his operas, oratorios, anthems and organ concertos. He was strongly influenced by the great composers of the Italian Baroque and the middle-German polyphonic choral tradition. We must highlight his *Messiah*

In terms of flute, Georg Phillip Telemann, was one of the most important composers of Baroque. However, Johann Joachim Quantz, is the most important flutist of Baroque, even though he did not compose as many works as Telemann. His *On Playing the Flute* is a treatise that every flute player must read. Another important flutist and composer is Jean-Martin Hotteterre, who will be explained widely later.

- **Johann Joachim Quantz** (1697 – 1773): he was one of the first professional flute players in 18th-century Europe. He began as a town musician, trained to play all instruments, but he began to specialize in the flute in 1719. In 1741 he entered the service of Frederick the Great of Prussia, where he remained until his death, composing, performing, and making flutes for the king. His *Essay On playing the flute* (1752) made him famous throughout Europe and attracted pupils who formed a "school" of flute-playing which remained influential for another hundred years.
- **Georg Philipp Telemann** (1681 – 1767): German Baroque composer and multi-instrumentalist. Almost completely self-taught in music, he became a composer against his family's wishes. After studying in Magdeburg, Zellerfeld, and Hildesheim, Telemann entered the University of Leipzig to study law, but finally he studied music. Telemann was one of the most prolific composers in history. We could highlight his flute concertos, his twelve sonatas for flute, or his sonatas for two flutes, for example, among more than 400 works.

2.3. THE CLASSICISM

This period started with Bach's death (1750), and finished approximately with Beethoven's death (1827). The historical context of classicism is the illustrate movement, which promoted equality for everybody through education. The break with the old regime came with the French Revolution.

2.3.1. CLASSIC MUSIC FEATURES

- The melodies are not as ornamental as they were in the baroque.
- Classic authors wanted to create beautiful and simple music.
- Delicate, bright, and elegant music.
- Total respect for the composition forms and rules.
- Regular and natural rhythm, importance of the melody, and easy tonality.

VOCAL FORMS

As in the Baroque, we can distinguish two types of music; the secular music with the Opera, and the religious music with Masses.

INSTRUMENTAL FORMS

In the Classicism, we find the Sonata, the Concert, the Symphony, the Trio, the Quartet and the Quintet.

2.3.2. COMPOSERS

We should highlight a few composers in the Classicism, but the most important of all of them is the famous Wolfgang Amadeus Mozart (1751-1951), which will be explained hugely later. We can also find other important composers such as:

- **Antonio Salieri** (1750 – 1825): he created some of the most popular Operas of the time, becoming a leading musical figure in Viennese, Parisian and Italian circles. He later focused on religious compositions and was a court musical director, also becoming a sought teacher of other classical greats.
- **Franz Joseph Haydn** (1732 – 1809): he was an Austrian composer, one of the most prolific and prominent of the Classical period. He is often called the "Father of the Symphony" and "Father of the String Quartet" because of his important contributions to these forms, apart from the evolution of the Sonata form. He taught Ludwig Van Beethoven.
- **Carl Philipp Emanuel Bach** (1714 – 1788): German musician and composer of the classical period, the second surviving son of Johann Sebastian Bach and Maria Barbara Bach. He was an influential composer working at a time of transition between his father's baroque style and the classical and romantic styles that followed it.
- **Johann Christian Bach** (1735 – 1782): German composer called the "English Bach". He was the youngest son of J.S. Bach and a prominent musician in the early Classical period. J.C. Bach received his early training from his father and, probably, from his father's cousin Johann Elias Bach.

In terms of flute, we should highlight the work of Mozart, and Carl Stamitz, which concertos are very important and are always present in the flute repertoire.

- **Carl Stamitz** (1745 – 1801): he was a German composer who wrote symphonies, and concertos for cello, flute, bassoon, violin and viola.
- **François Devienne** (1759 – 1803): he was a French composer who composed several hundred works for wind instruments, specially for the flute as he was the first flute professor at the Paris Conservatoire.

2.4. THE ROMANTICISM

In 1815, at the end of the Napoleonic wars, the European states restore the principles of the Old Regime. But the society could not go back. The revolutionary currents that had born with French Revolution appeared again, and patriotic feelings of all nations woke up. The bourgeoisie, the star of the nineteenth century, defended interests that did not coincide with the traditional order.

Romanticism was a cultural movement that accompanied the time of the bourgeois revolutions. The romantic spirit pervaded all the aspects of life; from philosophy to politics. Liberal economists and politicians demanded more space for individual initiative, and poets and artists asked for total freedom to create.

The Romanticism introduced a sense of individuality into the music. The artist expressed his personal feelings and hopes. The Romantic musician did not write what the public expected from him, but what he wanted to inspire the public. They tried to express through music what was difficult to do with words.

2.4.1. ROMANTIC MUSIC FEATURES

- Taste for virtuosism and technique.
- Beautiful and passionate melodies.
- Use of a very flexible tempo: it is modified throughout the piece with small *accelerandos* and *ritardandos*. This is called tempo "rubato".
- Rich variety of dynamic effects. Constant use of *crescendos* and *diminuendos*, along with spectacular contrasts between *pianissimo* and *fortissimo*. Flexibility in movement and reach dynamics are the most noticeable characteristics of Romantic music.
- Harmonies are enriched with constant changes of tone.

2.4.2. COMPOSERS

Romanticism has many important composers who did a really great job and whose work has extended to the present. I'm going to mention some of the most relevant.

- **Ludwig Van Beethoven** (1770 – 1827): his work covers all the genders and it is thick in emotional content, but at the same time it has a radical musicality. He published his first pianist works at 12, and he is the precursor of the romanticism. His most important works are the 9 Symphonys, Piano Concerts, Violin concerts, *Für Elisa*, *Moonlight Sonata*...
- **Carl Maria Von Webber** (1786 – 1826): he was an orchestra conductor and a pianist. He can be considered as the creator of the German Opera. His most important works are Operas like *Der Macht der Liebe* (El poder de l'amor) or his famous *Clarinet Concerto No. 1 in F minor, Op. 73*.
- **Gioacchino Rossini** (1792 – 1868): he highlights as a comic opera composer. His most famous work is *The Sevilla Barber*.
- **Franz Schubert** (1797 – 1828): he is one of the composers who matches the Classicism with the Romanticism. He provided Lied as his nearly exclusive creation and he composed more than 600 of them. He also wrote music for orchestra, opera, chamber music and religious music.
- **Hector Berlioz** (1803 – 1869): he was the french highest representative of romanticism. He was orchestra conductor and music critic.. With the *Fantastic Symphony* (1830), he produced an esthetic revolution. In 1844 he published the *Treatise on Instrumentation and Orchestration*, the first book which talked about that.

- **Piotr Ilich Tchaikovski** (1840 – 1893): he was the creator of the contemporary Russian movement. He composed symphonies, violin concerts, piano concerts and ballets (*The Nutcracker*, *The Sleepy Beauty*, *The Swan Lake*).
- **Frederic Chopin** (1810 – 1849): virtuous pianist and composer. His works are mainly for solo piano. His most important works are 2 concerts for piano and orchestra, 3 piano sonatas, 4 scherzos, 25 preludes and 19 nocturnes.
- **Wilhelm Richard Wagner** (1813 – 1883): German composer, theater director, and conductor who is mostly known for his operas. Wagner revolutionized opera through his concept of the Gesamtkunstwerk ("total work of art"), by which he was looking for the synthesis of the poetic, visual, musical and dramatic arts with music, and which was announced in a series of essays between 1849 and 1852. His compositions, particularly those of his later period, are notable for their complex textures, rich harmonies and orchestration. His advances in musical language, such as extreme chromaticism, greatly influenced the development of classical music. The effect of his ideas can be traced in many of the arts throughout the 20th century; their influence spread beyond composition into conducting, philosophy, literature, the visual arts and theater.

In terms of flute, we should highlight composers who created works to explore the technical possibilities of the flute, like Franz Doppler and Paul Taffanel.

- **Franz Doppler** (1821 – 1883): he was a flute virtuoso and a composer best known for his flute music. He also wrote several Hungarian operas for Budapest with great success. His ballet music was popular during his lifetime.
- **Paul Taffanel** (1844 – 1908): he is usually considered to be the founder of the French Flute School that became extremely important in mid 20th century in Europe and America. He pursued a brilliant career as a soloist and as an orchestral player, as one of a group of French musicians who made strenuous efforts to develop a national musical style.

Taffanel became Flute Professor at the Paris Conservatoire in 1893. Taffanel began work on a history of the flute and a method book, both of which were completed after his death by his pupils Louis Fleury and Philippe Gaubert.

2.5. 20th CENTURY

The 20th century covers from the 1900's approximately, to nowadays music. It is a very extensive and complex period, and this is the reason why I have decided to expose the most important ideas.

At the beginning of the 18th century, composers used the chromaticism constantly. They did so to avoid a clear and predominating tone all over the piece.

2.5.1. DODECAPHONISM

Dodecaphonic music appeared in 1923 thanks to Arnold Schoenberg³. It consisted in using the 12 sounds of the scale in a concrete order to make music. This sequence would be repeated all through all the piece.

2.5.2. IMPRESSIONISM

Impressionism is one of the artistic movements we can relate with literary symbolism and the pictorial impressionism.

It starts and develops in France at the end of the 19th century and it is characterized by the chromaticism and the game of lights and images.

3. Arnold Schoenberg: Austrian composer and painter, associated with the expressionist movement in German poetry and art.

2.5.3. COMPOSERS

We have to highlight composers like Gabriel Fauré, who will be mentioned later, Claude Debussy or Igor Stravinsky.

- **Claude Debussy** (1862 – 1918): French composer who opened up a new concept of harmony where the chords had independent sonority. He is an important composer for the flute because of his *Prélude à l'après-midi d'un faune (Syrinx)*. He is also known for his preludes, nocturnes and *La mer*.
- **Igor Stravinsky** (1882 – 1971): Russian composer and orchestra conductor. Principal creator of the musical awareness that we have nowadays. He contributed with a new concept of rhythm and musical structures. One of his most important works is *The Consecration of Spring*.

We have to highlight some important composers of flute music such as Claude Debussy or Paul Hindemith.

- **Paul Hindemith** (1895 – 1963): he was one of the principal German composers of the first half of the 20th century. He sought to revitalize tonality and also contributed writing compositions for everyday occasions. We can highlight his *Sonata pour flute and piano*.

We can also find the **neoclassicism** (which sought to avoid the emotionalism of late romantic music by reviving the use of counterpoint, forms such as the classical suite, and small instrumental ensembles), **expressionism** (which sought to express emotions, and which is characterized by the use of symbolism and exaggeration), **atonalism** (no use of the tonality), and the **electronic and contemporary music**.

3. BASIC CONCEPTS

In order to understand better this work I think I should explain some basic concepts related with the flute. This basic concepts are the tuning and the fingering.

3.1. THE TUNING

Tuning systems seek to build a series of vibrational frequency relationships, that become the notes of a scale. These relationships are studied independently of the absolute height of any of the notes, and are described only as intervals between them.

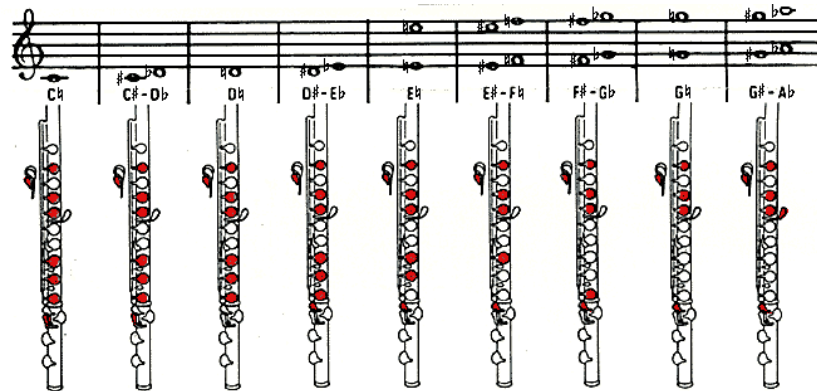
Tuning is measured with hertz, which is the frequency unit of the International System of Units. One hertz represents one cycle per second. For example, in physics an Hertz is applied to the measurement of the number of times that a wave is repeated in a second. The magnitude measured with Hertz is called frequency and it is, in this regard, the inverse of the period. One hertz is the frequency of oscillation that a particle undergoes in the period of one second.

The "A 440" is the name given colloquially to the sound which produces a vibration of 440 Hz and serves as a standard reference for tuning musical height.

3.2. THE FINGERING

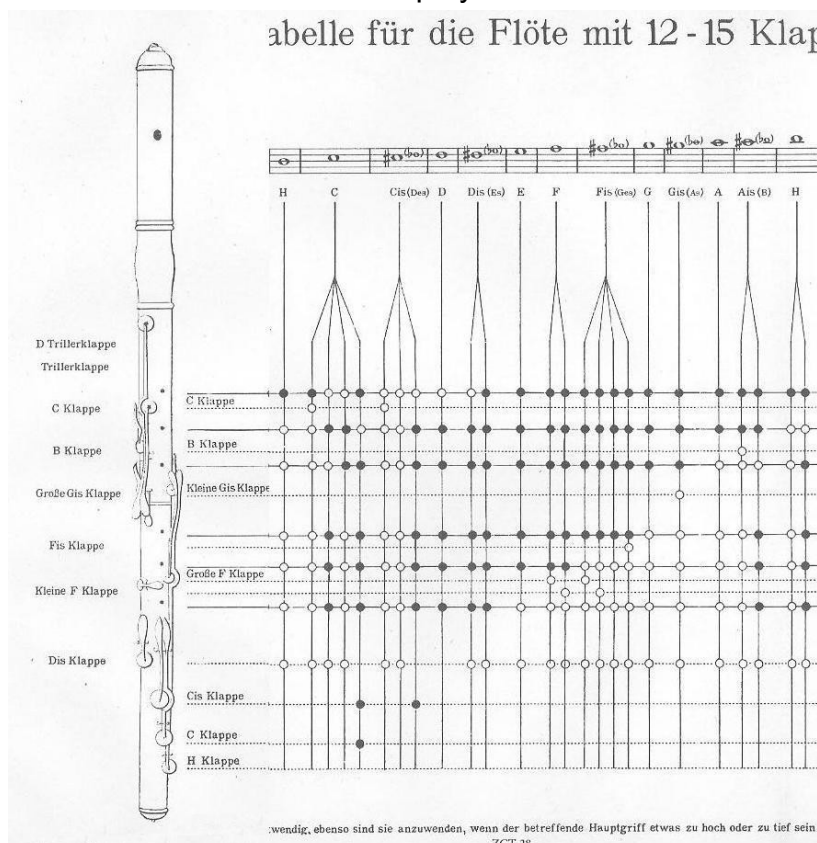
In music, the fingering determines the location and positions of the fingers that the interpreter must take to play the different notes of the instrument. In terms of the flute, the fingering changes in every model, as we will be able to see below.

This is an example of a fingering chart for the actual flute. The keys that must be covered in order to do each note are highlighted in red.



Actual flute's fingering chart. <http://www.flutetuitionuk.com/fchart1.gif>

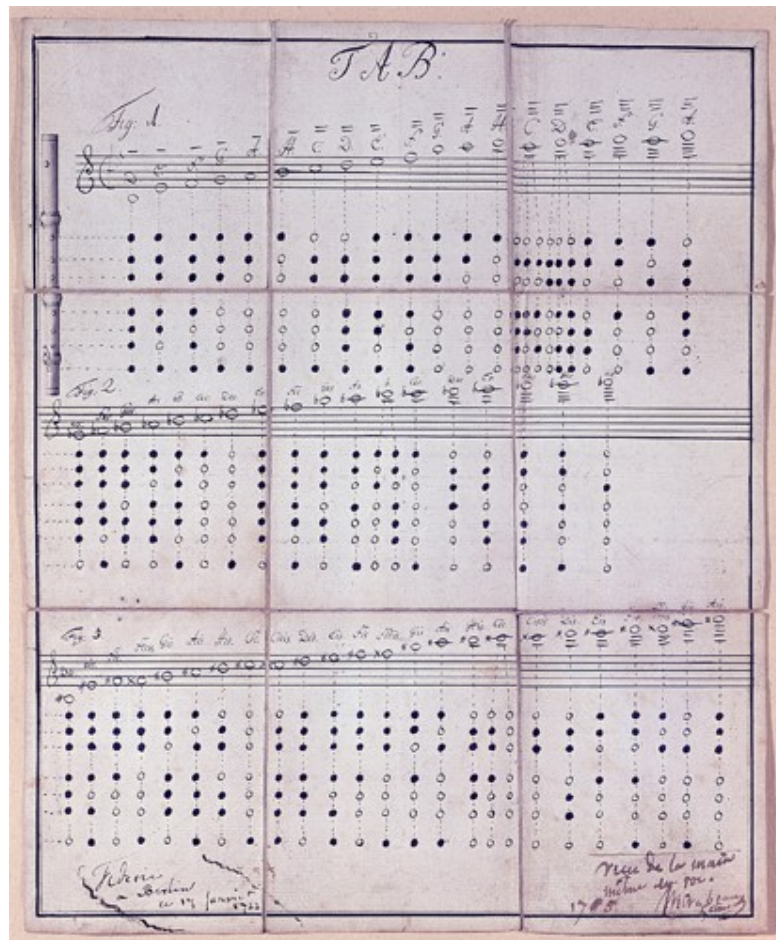
The following image shows a piece of Ernesto Koehler's⁴ fingering for the 12-15 key flute, after 1900. It shows us different ways of playing the same note. The black circles indicate the holes that must be covered to play the note.



Ernesto Köhler's fingering chart. <http://www.oldflutes.com/charts/koehler/index.htm>

4. **Ernesto Köhler** (December 4, 1849 – March 17, 1907): flutist and composer who composed over 100 works for the flute.

This image, illustrates the fingering chart by Johann Joachim Quantz⁵. It dates from 1750 approximately.



J.J Quantz fingering chart. © Musikinstrumenten-Museum des Staatlichen Instituts für Musikforschung Preussischer Kulturbesitz, Berlin <http://www.jjquantz.org/index.php/flute-teacher>

This last chart, as the previous one, consists in marking with a “0” the holes that must not be covered.

5. **Johann Joachim Quantz** (30 January 1697 – 12 July 1773): German flutist, flute maker and composer.

4. HISTORICAL EVOLUTION OF THE FLUTE

It is thought that the beginning of the flute took place in Kenya. The following picture shows one of the first bevels. Thanks to them, we have flutes nowadays. Blowing perpendicularly to the hole, we can produce the sound.



Kenya Flute. Own source



Kenya flute. Own source

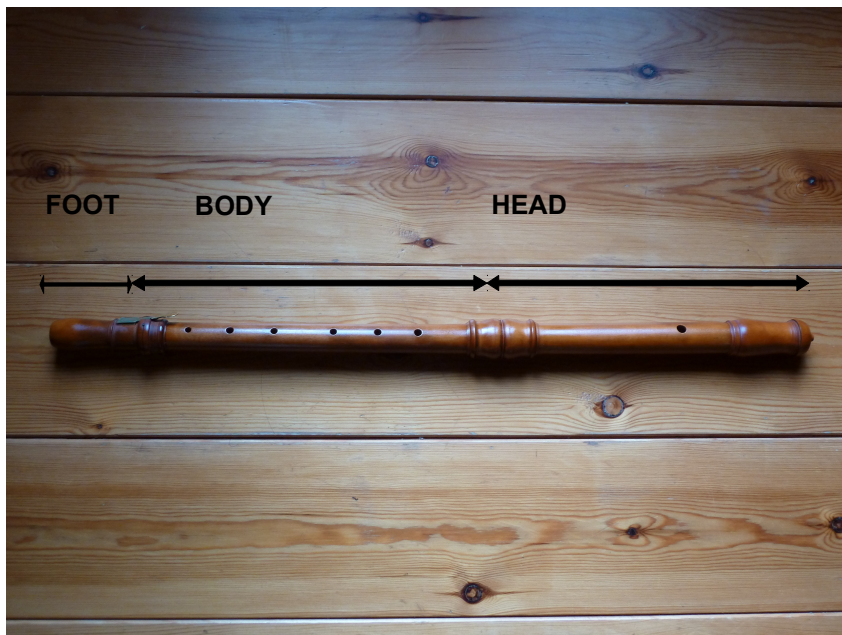
Now, we travel from Kenya to Occident, where we will set our investigation.

From the 15th century to the 18th, we can find the Renaissance flute. It is thought that this is the origin of the flute we know nowadays. It is formed by a unique cylindrical piece. It has six holes, and another one for blowing. It is tuned to 440Hz



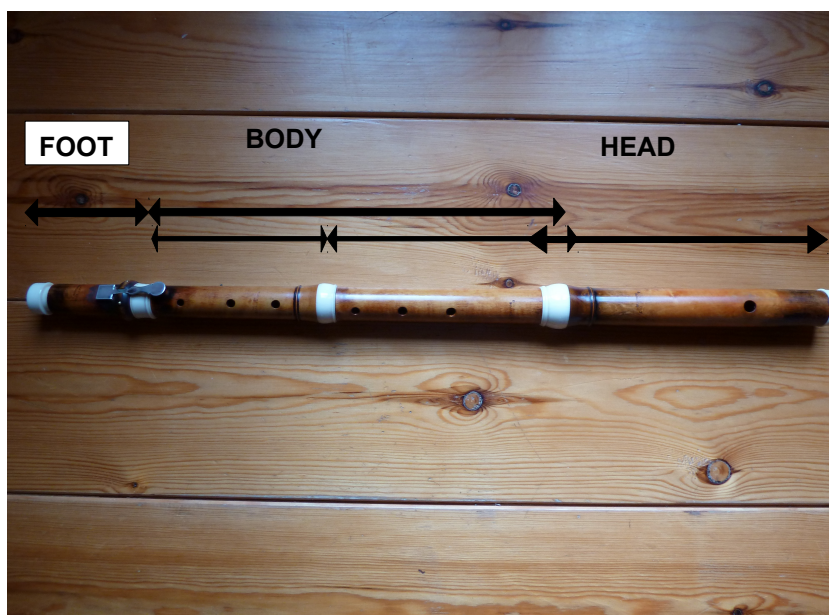
Renaissance flute. Own source

It is a mystery for all the historians and flutists how we passed from the Renaissance flute to the first modern flute, the French flute (centuries XVII and XVIII). It is divided into three pieces (head, body and foot), and it has six holes, another one for blowing, and a key. It is tuned to 392 Hz.



French flute. Own source

Twenty years later, in 1720, J.H.Rottenburgh developed a new model of flute known as the Baroque flute. Searching for the power of the higher notes, the body was divided in two parts. It was tuned to 415Hz.



Baroque flute. Own source

J.H. Rottenburgh's son developed an other flute, which was more rounded and thin than his father's one.

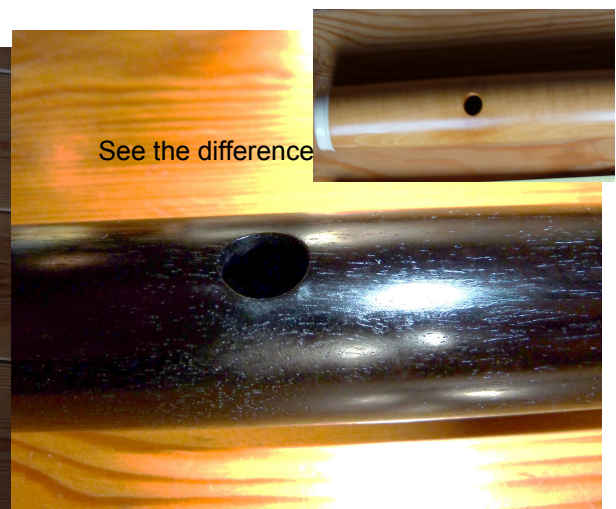


J.H. Rottenburgh's son flute. Own source

Later, at the ending of the 18th century, the Classical flute, also known as the “Mozart flute”, appeared. Increasingly thin and rounded, the classical flute has an oval mouthpiece instead of the rounded mouthpiece that its predecessors had.



Classical flute. Own source



With that flute model, the notes F and Bb sounded very weak, so they invented the keys to give more power to that notes.



Improved Classical flute. Own source

As we have explained, the romanticism is characterized by the exaltation of feelings and the break with all the established forms of the classicism. One of the ways of breaking, was changing the tuning of the instruments. The Prerromantic flute was tuned to 438Hz. It was impossible to tune, unless a part of the flute was cut. So that is exactly what they did. As we can see, a part of the body is shorter than the classic flute.



Prerromantic flute. Own source

Prerromantic flute



Classical flute

More recent is the romantic French flute, which had more notes. It included the Bb in its long and short position, the long F, G, G# and low C.



Romantic French flute. Own source



At the same time, and searching more power of sound, the flute with ivory head was invented.



Ivory head flute. Own source



Ivory head flute. Own source

Finally, in the 20th century, the Boehm⁶ system was installed. This is the predecessor of our actual flute. It has wooden body and metal keys.



Boehm flute. Own source

Today, in 2013, we can find thousands of flutes; wooden flutes with metal keys, silver flutes, gold flutes, flutes made with carbon fiber, alto flutes, piccolos, bass flute, contra-alto flutes, and a lot more. The most popular though, is the transverse flute tuned in C, also called “concert flute”, or just “flute”. It is made of metal, usually with nickel (if we talk about a flute for beginners), silver (if we talk about a semi-professional/professional flute), or gold (if we talk of a professional flute). Anyway, the material goes to the pleasure of the interpreter.



Muramatsu flutes.

<http://iwk.mdw.ac.at/userfiles/images/floete/Testinstrumente.jpg>



Muramatsu flutes.

<http://nationalconventengmedium.com/attachments/muramatsu-flutes.jpg>

6. **Theobald Boehm** (1794 – 1881): German inventor and musician, who perfected the modern concert flute and its improved fingering system (now known as the "Boehm system"). He was a virtuoso flautist, and a celebrated composer for the flute.

It is divided into three parts; head (which has a lip plate), body and foot, and it has metal keys.

5. INTERVIEWS

In order to verify my hypothesis, I contacted with some old music professionals who also play the nowadays flute and I made them some questions. Below, you will find information of the people I got in contact with, and the conclusions that we can extract from their interviews, the transcription of which is in the annexe.

5.1. MONTSERRAT GASCÓN



Montserrat Gascón.

http://www.palimpalem.com/6/montsega-scon/userfiles/DSC02509_5452112.jpg

The first interview I did, was to Montserrat Gascón. Born in Barcelona, she studied flute with Salvador Gratacós there, and with Willy Barcelona in Stuttgart (Germany). She has attended several courses taught by renowned flutists as Jean-Pierre Rampal and Alain Marion, among others.

Later, she studied Baroque Traverso with Alain Polak, and later, she went deeper in the interpretation of early music with historical criteria with Jordi Savall, Wilbert Hazelzet, Rolf Lislevand, Hopkinson Smith and Ton Kopman.

As a soloist she has recorded six CDs and has performed throughout Europe, America and Middle East, performing in cities such as Barcelona, Madrid, Paris, Zurich, Rome, Prague, Moscow, New York, Dallas, Mexico City, Havana, Bogota, Santiago de Chile, Cairo, etc. Nowadays she teaches at the Superior Music School of Catalonia (ESMUC).

From her interview, we can affirm that what changes the most between the old flutes and the actual flute, is the power and the color of the sound. The “wooden sound”, has a sweetness and warmth that we can not find with the modern instruments.

On the other hand, the modern instruments have more power of sound, they are tuned accurately, and they have a more agile and lightweight mechanism.

5.2. LAIA SAPERAS

Born in 1985, Granollers, she was graduated with the Superior Music Grade in old music interpretation in ESMUC, where she studied with Marc Hantaï. Interpreter of the groups *Kassia* and *Le Petite Écurie*.

Nowadays she works at *Els Amics de la Unió* as a flute teacher, and also as a piano, musical language and orchestra teacher. Moreover, she works at the Musical Primary at Escola Pia de Granollers.

At the same time, she studies the Humanities degree at UAB University.

From her interview, we can conclude that the old flutes are used to reproduce the sound and the color that the music from that time had. The election of one flute or another also depends on the musician and how much they like to sound like the old flute players. For her, this is a challenge, and it is the funniest point of playing old music.

Playing contemporary music with an old flute is nearly impossible and absurd, but it is possible to play a baroque piece with the modern flute. This means, that Bach can be played like Wagner, for example. This phenomena is also caused by the musical education. Nowadays, it is much easier to study a modern instrument than an older one.



Laia Saperas.

<http://www.amicsdelaunio.org/web/images/stories/saperas.jpg>

5.3. JOAN BOSCH

Born in Caldes de Montbui, he began his musical studies at the music school of his hometown. He studied modern flute with Vicents Prats and Magdalena Martinez. He participated in several summer courses where he received advice from masters such as Boris Bermann, Eric Hoepfich, Donna Agrell, Alfredo Bernardini, Josep Borràs...

Alain Polak initiated him into the world of historical instruments, and became Marc Hantaï's student at the Superior Music School of Catalonia, taking regularly suggestions with Wilbert Hazelzet (soloist of the Amsterdam Baroque Orchestra). In 2008 he obtained the degree in historical interpretation.



Joan Bosch (Flaustaff group file)

In the field of education, he completed his musical studies with the Diploma of Education, being professor at Josep Maria Riera Granollers Conservatory, where he is also Head of the Ancient Music Department. He was director of the municipal music school in La Garriga (1988-1997) and Caldes de Montbui (1998-2004).

He has offered concerts throughout Europe as a part of various chamber groups and orchestras with directors like Ottavio Dantone, Strynkl, Marek, Zefiro, Alfredo Bernardini, Enrico Onofri and musicians such as Marc Hantaï, Kenneth Weiss, Jacques Ogg, Wilbert Hazelzet or Isabel Rey.

He has been a finalist in the competition Chamber Music Paper Capellades twice and won the podium Chamber Music San Juan Vilatorrada.

He specialized himself with flutes belonging to the 18th century, because he had the necessity to interpret the baroque language as best as he could.

“Les possibilitats d'articulació, el fet de que cada tonalitat tingui el seu propi color ben exclusiu determinat pel sistema de digitació -entre altres coses-... no ho podia trobar en les flutes d'avui en dia.”

(“The possibilities of articulation, the fact that each tone has its own unique color determined by the fingering system – among other things -... I could not find it in nowadays flutes.”)

He states that the evolution is marked by the brand of the moment, the new music that the public expects. That is why he always talks about using the most appropriate instrument for each period, as each instrument offers different services suitable for the music for which they were created.

The power of the sound of the actual flute can not be compared to the power of sound of the baroque flute, but the special sonority of determined notes of the baroque flute can not be produced with the actual flute.

Each instrument has its own characteristics, and each instrument should be used to perform the music of the period of time for which they were created.

Finally, we must say that with an old flute we can not play works that have not been composed for it, as it has smaller register and poorer sound. But we can definitely play old music with the actual instruments. If the musician knows the music features of that period and reproduces them, the result can be satisfactory.

6. RECORDINGS

To demonstrate my hypothesis, I have recorded Joan Bosch and myself playing different models of flutes. Attached to this written report, there is a video where you will be able to see that recordings. During the video I will announce and explain what we are going to listen, with which flute it is played and what we must take into account to notice differences between flutes.

We have chosen works from different centuries, and what follows is a brief summary of the composers who wrote them.

6.1. FINAL 17th CENTURY

The piece you are going to hear, is an anonymous work called *Air Tendre Mon petit*.

6.2. JEAN-MARTIN HOTETTERRE

Jacques Martin Hotetterre (September 29, 1674 – July 16, 1763), also known as Jacques Martin or Jacques Hotetterre, was a french flutist and composer.

He became the most famous of a family of producers and performers of wind instruments. Jacques-Martin was the most gifted of his dynasty along with his father Martin.

Hottetterre lived and studied in Rome at the beginning of his career, and his nickname "the Roman" comes from that period. He spent two years (1698-1700) working for Prince Francesco Ruspoli in Rome. Hottetterre gained fame largely due to his talent playing the flute, an instrument for which he wrote a number of pieces, significantly extending the repertoire of the same. He also played the bassoon, oboe, and musette.



Jean-Martin Hotetterre.
<http://www.classical-composers.org/img/hottetterre.jpg>

Besides teaching, Hotteterre continued the family tradition of instrument makers. It may have been him who made a number of changes in the design of the flute.

You will be able to hear one of his suites during the video.

6.3. JOHANN SEBASTIAN BACH



Johann Sebastian Bach.

http://upload.wikimedia.org/wikipedia/commons/thumb/6/6a/Johann_Sebastian_Bach.jpg/250px-Johann_Sebastian_Bach.jpg

Johann Sebastian Bach (March 21, 1685 – July 28, 1750) was a German organist and composer of Baroque music, member of the most extraordinary musicians family.

His prolific work is considered the peak of Baroque music, and one of the highest expressions of universal music, not only for the intellectual depth of his works, also for their technical perfection and artistic beauty and for the synthesis of various styles of the time.

Bach is a source of inspiration for later composers from Mozart and Beethoven, through Schoenberg and Brahms.

His works are among the most outstanding classical music. We have to highlight more than two hundred and twenty church cantatas, and more than twenty two profane cantatas, *the Brandenburg Concertos*, *The Well-Tempered Harpsichord*, *the Mass in B Minor*, *the St. Matthew Passion*, *The Art of Fugue*, *the Musical Offering*, *Goldberg Variations* and *the Christmas Oratorio*, plus numerous vocal works, orchestral works for organ, harpsichord and other instruments.

During the recordings, you will be able to hear the *Sonate in e-moll for flute and basso continuo*.

6.4. WOLFGANG AMADEUS MOZART

Wolfgang Amadeus Mozart, whose full name was Johannes Chrysostom Wolfgangus Theophilus Mozart (Salzburg, January 27, 1756 – Vienna, December 5, 1791), was an Austrian composer and pianist, master of Classicism, considered one of the most influential and outstanding musicians in history.



Wolfgang Amadeus Mozart.
<http://www.biographyonline.net/music/images/mozart.jpg>

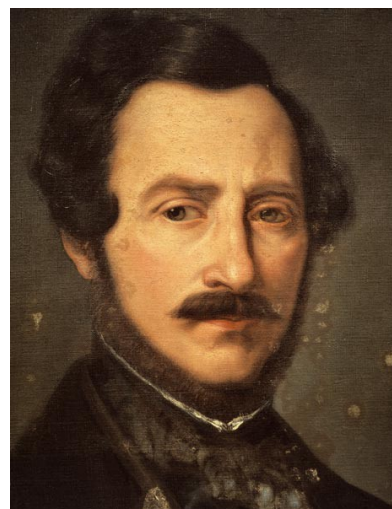
Mozart's work covers all genres of his time and reaches over six hundred creations, and many of them are considered masterpieces of symphonic music, chamber music, piano music, opera, and choral, achieving a universal popularity.

We can highlight many of his works: more than 50 symphonies, more than 27 piano concertos, violin concertos, woodwind concertos, thousands of chamber music works, The Coronation Mass, The Requiem Mass in D minor, and lots of other compositions.

During the video, you will be able to listen to a fragment of his *Flute Concerto in D major, K.314/285d*

6.5. GAETTANO DONIZETTI

Gaetano Donizetti, whose full name was Domenico Gaetano Maria Donizetti (November 29, 1797 - April 8, 1848), was a very prolific Italian composer of operas. Although his repertoire of composer includes a large number of genres, including religious music, string quartets and orchestral works, he is mostly known for his poetry.

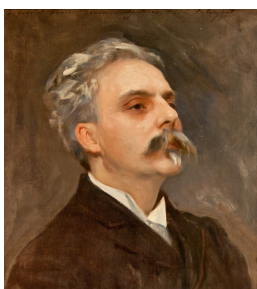


Gaetano Donizetti.

http://www.reprodart.com/kunst/italian_school/gaetano-donizetti.jpg

His *Sonate for flute and klavier in C*, will be interpreted during the recording.

6.6. GABRIEL FAURÉ



Gabriel Fauré
http://upload.wikimedia.org/wikipedia/commons/c/c2/John_Singer_Sargent_-_Gabriel_Faur%C3%A9.jpg

Gabriel Urbain Fauré (May 12, 1845 – November 4, 1924), was a French composer, organist, pianist and teacher. He was one of the principal French composers of his generation, and his musical style influenced many 20th-century composers. Among his best-known works are his *Pavane*, *Requiem*, nocturnes for piano and the songs *Après un rêve* and *Clair de lune*.

Although his best-known and most accessible compositions are generally his earlier ones, Fauré composed many of his most highly regarded works in his later years, in a harmonically and melodically much more complex style.

You will be able to listen to *Fantasie op.79 for flute and piano* which, apart from being a beautiful work, deploys a wide range of technical and sound possibilities.

7. CONCLUSIONS

This section will collect all the conclusions that we can extract from this work, in order to verify or refute the hypothesis ***The use of a contemporary instrument to the work that is interpreted is the most suitable option to the correct execution of the work.***

It consists of two parts, one that collects the video conclusions, and another one that collects the general conclusions.

7.1. VIDEO CONCLUSIONS

After recording and preparing the attached video, I have realized that many differences between flutes exist. Each flute is different, and each flute has its own characteristics that make it special.

Playing a more modern piece than the flute that is used, is absurd and sometimes nearly impossible. The tuning changes, the articulation needs more agility, the register required increases, and more power of sound is needed.

As modern composers wrote that works for modern flutes, the old ones are not up to scratch. A clear example of this is Gabriel Fauré's fantasy. It can not be played with a flute that doesn't use Boehm system, and we have proved it using the classical flute to play it. There are impediments of register and agility of mechanism.

On the other hand, we can use a modern flute to play an older composition, and we have examples of it during the whole video. We can play music from the Renaissance to 20th century with the nowadays flute. But, if we do that, the nuances and the special color of wooden sound are lost.

Baroque music, for example, was composed to be played with flutes of their time. This means, that in order to do a reliable performance of a Baroque piece, the musician should use a flute of that time, or he should know how baroque musicians conceived music. That is why a good flutist should read music treatises and document in order to play baroque works, for example, correctly.

7.2. GENERAL CONCLUSIONS

I strongly feel that this work has helped me to know how I should interpret different works better, and it has helped me to know a little bit more if the instrument I play and to expand my conception of the flute. I was not conscious that there existed more models of flute, and that they are still used today. I was stuck with the actual flute, and before, I played all the same.

At first, I wanted to compare fifteen different models of flutes, and finally, I have only compared 8 of them during the attached video, even though I have mentioned 11 models of flute throughout the work.

To do the research work, I wanted to read treatises and analyze all the scores that have been used, but finally this has not been necessary.

I had the intention of making the video all by myself, but, as each flute has a different fingering (and I can not learn 8 different fingerings in a summer), I had to ask for some help. This has generated setbacks as it turned up to very difficult to meet with Joan Bosch (he is always busy and working).

I also needed help to edit the video, and it was also difficult to meet Aaron, the boy who installed the program and helped me, because he is always busy too.

The fact of doing the research work in English, has also slowed down the fulfillment of the work.

Having done interviews to 3 old music professionals, I can conclude that:

What changes the most, a naked ear, between the old flutes and the actual flute is the power and the color of the sound. The “wooden sound” has a sweetness and warmth that can not be found with modern flutes. Apart from more powerful, modern flutes are tuned accurately and they have a more agile and lightweight mechanism.

The election of playing one flute or another (old or modern) depends on the musician. Playing contemporary music with an old flute is nearly impossible and absurd, but it is possible to play a baroque piece with the modern flute. This means, that Bach can be played like Wagner for example. This phenomena is also caused by the musical education. Nowadays, it is much easier to study a modern instrument than an older one, at a conservatory level.

To make a reliable interpretation of a work, apart from knowing the music features of the time, and playing it with no mistakes, we should use an instrument that actually, was created to interpret that music. The evolution of the flute is marked by the current fashions. Instruments must adapt to the music of their time, and musicians have to play the works that people wants to hear, and they should play them as the public likes. That is why we should use the most appropriate instrument for each period, as each instrument offers different services suitable for the music for which they were created.

The power of the sound of the actual flute can not be compared to the power of the sound of baroque flute, but the special sonority of determined notes of the baroque flute can not be produced with the actual flute.

Finally, we must say that with an old flute we can not play works that have not been composed for it, as it has smaller register and poorer sound. But we can definitely play old music with actual instruments.

Taking all of this into account, we can conclude that the hypothesis, ***The use of a contemporary instrument to the work that is interpreted is the most suitable option to the correct execution of the work***, is verified, even though we must take into account that music interpretation depends on the musician pleasure. That is why it is called interpretation. And making a truthful interpretation of a work, with the actual flute for example, has an equally valid and satisfactory result, if the musician knows how he has to play the music of each time.

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