

Listening to music played on a period instrument is like hearing someone's stories told in their own words and in their own voice. But it is not the authenticity of historical instruments that fascinates me most, but rather the amiable intimacy. Intimacy between the composer and his music, then his music and me. Intimacy between me and those who once lived before me, and who will live again through my music-making. Intimacy between the past, present, and future; between reality and the infinite possible worlds, where we are all connected with each other, and where we will find solace.

A story of the conical flute told in her voice.

What would she say?

How would she sound?

Where would she take us



Danse Printaniere - Allegretto, Op.157b, No.12 - Charles Koechlin (1867-1950) ^

Stalker (excerpt) - Andrei Tarkovsky (1932-1986)

Andante espressivo, Op.157b, No.12 - Charles Koechlin *

Suite in C minor, op.5, No.2 - Jacques-Martin Hotteterre (1674-1763) ^

Prelude | Allemande | Sarabande | Menuette I & II | Gigue

Sonate in B minor - Pierre Gabriel Buffardin (1693-1768) * Adagio | Allegro | Adagio | Vivace

Music, when soft voices die - Percy Shelley (1792-1822)

^ Baroque flute after Hotteterre, Theorbo, Viola da Gamba | a=392Hz

* Baroque flute after Buffardin, Harpsichord | a=415Hz

The Unnamable (excerpt) - Samuel Beckett (1906-1989)

Sonate in G major, op.30 No.3 - Ludwig van Beethoven (1770-1827), transcribed by Louis Drouet (1792-1873) ` Allegro assai | Tempo di Minuetto, ma molto moderato e grazioso | Allegro vivace

ray sair Large On 157h No.7 - Charles Koachlin #

Apparition - Victor Hugo (1802-1885)

Beau soir, Large, Op.157b, No.7 - Charles Koechlin #

Jean Louis Tulou (1786-1865) #

Nocture - François-Joseph Naderman (1781-1835) &

Larghetto sostenuto | Tyrolienne de Guillaume Tell | Ronoletto Allegro moderato

` Keyed-flute after Grenser, Fortepiano |

Keyed-flute by H.F. Meyer, c.a. 1870, Harp by Erard Freres, 1808 | a=435Hz

Invisible Arts - Alejandra Pizarnik (1936-1972)

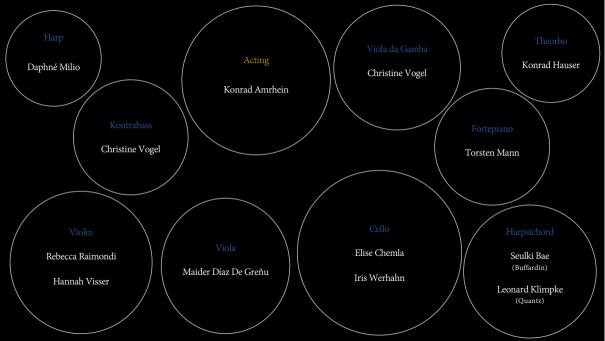
Marche Funebre, Op.157b, No.13 - Charles Koechlin (orchestration by Yat Ho Tsang) *

Night, the poem - Alejandra Pizarn

Concerto in G minor, QV5:196 - Johann Joachim Quantz (1697-1773) *

Allegro di molto, ma con brio | Larghetto | Presto

* Baroque flute after Buffardin, Orhcestra | a=415Hz





The development of the conical flute

The physical representation of an instrument changes alongside the musical aesthetic and expressiveness of its time. This is particularly true in the case of the flute. Being one of the oldest musical instruments, the flute has evolved substantially alongside the course of music development.

While Theobald Böhm (1794-1881) reinvented the "modern" flute 175 years ago in 1847, a same degree of change in flute construction also took place about 150 years earlier in around 1700. For a very long time, the cylindrical renaissance flute could not shine due to its inefficiency with chromatic notes. With the change of the flute into a conical shape and addition of a key - a mechanism that helps the flutist to open and close an unreachable tone hole flutists could finally play all twelve chromatic notes efficiently and effectively. Although this development only took place quite late in the second half of the 17th-century, this new flute quickly gained its popularity and flourished during the apex of the baroque music period.

a conical one-keyed flute with six finger holes in three parts. The most famous of them is Jacques-Martin Hotteterre (1674–1763), also known as "Le Romain". As a flutist at the royal courts of Louis XIV and Louis XV, as well as a composer, teacher and instrument maker, he was well known throughout Europe. Not only did Hotteterre produce musical instruments and volumes of high-quality music, he also wrote the first teaching manual for the one-keyed flute - *Principes de la flûte traversière* in 1707 covering the basic knowledge of flute playing and French baroque performance practice.

French family of musical instrument makers, the Hotteterres, were said to be the inventors of the first baroque flute –

A three-part conical flute has a cylindrical head and a reversely tapered body. The diameter is wider at the head and narrower at the foot of the instrument, while a three-part cylindrical Boehm-flute has a conical head and a uniform diameter throughout the body. The conical shaped body of the baroque flute allows a less spread-out tone hole positions for the hands, and also helps with intonation of high notes and gives a darker but richer sound. Like its predecessor, the cylindrical Renaissance flute, this new type of flute was still built upon the notes of D major and requires the player to correct the other notes with the change of air and the help of fork fingerings. As a result, some notes are strong and bright, while some can only be played dark and soft. The quality of the notes on the conical flute

can never sound even.





This seemingly limitation and flaw from our modern point of view is however favoured by the baroque music aesthetic of inequality. The baroque flute can sound pure, sacred and heavenly in one tonality, but complex, sensitive, earthy in another. Having a great understanding of his instrument, Hotteterre expanded the tonal and musical boundary of the flute.

Like instrument makers, 18th-century wind players were expected to be adequate for all types of wind instruments. Since Hotteterre, a new generation of musicians specialising in the flute started to emerge and stretched the virtuosity

of the flute even further. More composers became interested in writing for the flute. Flutists were soon in demand and started to travel between cities and countries to perform with different ensembles and orchestras. However, each city had its own pitch level and a flute cannot switch pitch level easily like a string instrument. To overcome this problem for traveling flutists, flute makers came up with the solution of dividing the body of the flute further into two parts. The three-part flute (Head-Body-Foot) then became a flute in four parts (Head-Upper and lower Body-Foot). By only replacing the upper body part with a longer or shorter one (*corps de rechange*), the flute can then alternate between different pitch levels within an acceptable range and at the lowest economical cost. This baroque flute in four parts became the norm in around 1730.



Baroque flute after Buffardin with 3 corps de rechang

Bach family. Philidor, Braun, Pisendel, Veracini, Weiss, Zelenka were among his colleagues. He was also the flute teacher of Johann Jacob Bach (older brother of Johann Sebastian), Wilhelm Friedemann Bach, and, most importantly, Johann Joachim Quantz (1697-1773). Buffardin is also believed to be the flutist, whom Johann Sebastian Bach had in mind when he composed many of his flute music, like the Partita for unaccompanied flute, some of his flute Sonatas,

and many of the demanding flute parts from his Cantatas.

Son of a French instrument maker, Pierre Gabriel Buffardin (1693-1768) was considered one of the greatest flutists of his time and a pioneer in flute making. Some inventions of the baroque flute in four parts are attributed to him. Well-travelled, he built an international career and connections to many famous composers and musicians, including the

The sensitivity, virtuosity, portability, accessibility and endorsement from powerful figures helped the flute to gain popularity among amateur musicians in Europe. Some of the most influential amateur flutists include: Frederick the Great (1712-1786), who employed and studied the flute with Quantz for more than 40 years. His famous love in the flute and taste in music has shaped the development of *Empfindsamkeit* style, in which the flute thrived; One typical

example of "Nobile Dilletante" is Carl Theodor von der Pfalz (1724-1799), whose love in flute, music and art attracted

famous musicians all over Europe to his court in Mannheim. Together they established The Mannheim School music style, and set the foundation of classical orchestra and symphonic music. The ever-growing flute amateur market around the mid-18th-century demanded not only more and better instruments, but also music, flute teachers, teaching

manuals and methodical material. To name a few examples: Handel's flute Sonatas in his Op.1 (1732), Telemann's 12

solo Fantasías (1732/33), Quantz's On Playing the flute (1752), and even later Mozart's Flute Quartets and Concertos can be viewed as products resulting from the amateur flutists market of this time.

During Mozart's time, second half of 18th-century, the "baroque" one-keyed flute was still the norm, although it had

already evolved to favour the higher register. The development to extreme changes in dynamics and expressions in music, as well as the ever-growing size of the orchestra around mid 18th-century triggered the second stage of flute development. Flutists were pushed to play higher, the weaker notes of the flute stronger, and in more foreign tonalities. These challenges were solved by adding new tone holes onto the flute in an acoustically better-placed position. These new tone holes are then covered by keys. When the keys are not pressed, the flute functions just like a normal baroque flute. When one feels the need to play a weak note stronger, one can then uncover the designated tone hole by pressing the corresponding key. British flute makers, like Pietro Florio (c1730-1795), were the first to experiment with additional keys.



8-Keyed flute after Grenser with 2 corps de rechange

By the time Ludwig van Beethoven (1770–1827) was a young man, three more keys (Bb, G#, F) had been added to the flute, and by the time of his ninth symphony (1824), a flute would have at least six keys (C, Bb, G#, 2xF, D#). The evolvement of the flute was reflected in the more prominent and soloistic flute parts in symphonic music throughout the 19th-century. In comparison to the Böhm-flute, this type of conical flute with multiple keys is now known as simple-system flute. However, one should not be misled by the name. The new tone holes make the notes easier to play, but, on the contrary, the key mechanism further complicates the fingering system.

Europe continued to improve their flutes. In pursue of the best flute, they experimented with different materials from crystal to ivory, expansion of the range and the further addition of keys, but all their instruments shared the same basic conical body construction as the baroque flute. Quality of notes were still uneven. The unevenness of the conical flute was however perceived as sweetness, a spectrum of sound colours and sensitivity. However, due to its limitation, the simple-system flute was gradually becoming an orchestral instrument, and has a limited role as a solo instrument.

With the support of the huge flute amateur market, and competition among others, flute makers and flutists around



Keyed flute made by Stephan Koch in Wien, around 1815

the most prominent exponent of German flutist and close friend of Carl Maria von Weber; Louis-François-Philippe Drouet (1792-1873), a Dutch-born flutist, teacher of Louis Bonaparte, Napoléon's brother, lived and worked in Europe and America, and famous for his extraordinary fast fingers and double tongue (thus the title "Paganini of the flute"); Jean Louis Tulou (1786-1865), French virtuoso, professor, official flute supplier at the Paris Conservatory and

later an ardent opponent of the Böhm-flute; Charles Nicholson (1795-1837), British virtuoso who represented the

British flute playing and was famous for his big sound, virtuosity and Adagio playing; and Theobald Böhm.

Some of the most famous simple-system flutists of the 19th-century include Anton Bernhard Fürstenau (1792-1852),



Keyed flute made by Theobald Böhm, around 1839

concert in London given by Nicholson, who played on an English type of flute with relatively big tone holes. Böhm was struck with the volume of Nicholson's sound. Determined to build an even louder but also easier-to-play flute himself, Böhm went on to study acoustics at the University of Munich and invented a new type of flute in 1832. It is a conical flute that has large tone holes, acoustically correctly placed. The fingering system of this flute was greatly simplified with the use of a newly invented key mechanism – ring keys. This flute is now known as conical ring-keyed flute. With this new tone hole placement and fingering system, all tonalities became more even and equally playable. But Böhm was not satisfied with its sound volume. He realised that adding and changing tone holes and keys would not solve his problem entirely.

Böhm started his music career as a gifted simple-system flutist and maker. In 1831, he went on a tour and listened a



In 1847 he invented a second flute - a metal flute with even larger tone holes (larger than a normal fingertip can cover) and, opposite to the conical flute, of a cylindrical body and a conical head. The cylindrical body and large tone holes gave the flute an even, brighter and more penetrating sound. This 1847 design then stood the challenge of western music development for more than 170 years and is nowadays known as Böhm-flute or modern flute.

Böhm's vision of making a flute capable of producing all 12 notes evenly and loudly was too far ahead of his time. When the first model of Böhm-flute came out in 1832, Wagner (1813-1883) and Liszt (1811-1886) were still in their early 20s and Brahms (1833-1897) was not born yet. Music was still comfortably grounded on tonalities for at least 50 more years. Böhm's contemporary flutists understood the potential of his new flutes, but they had little to no need of

early 20s and Brahms (1833-1897) was not born yet. Music was still comfortably grounded on tonalities for at least 50 more years. Böhm's contemporary flutists understood the potential of his new flutes, but they had little to no need of switching to and re-learning a new instrument, which may potentially sabotage their already established careers. Flutists like Fürstenau and Drouet, however, did encourage their students to take up the new flute. For more than half a century, different types of simple-system flutes and two types of Böhm-flutes coexisted in Europe.



Boehm flute made by Böhm & Mendler in München, around 1870



Late 19th-century is certainly the most exciting and colorful period for flute development. British flutists adopted the Böhm-flute quickly due to their preference of big sound, but many also wanted to keep the old fingering system. This

resulted in many types of hybrid British flutes, like the Siccama, Clinton, and Radcliff system flutes. On the other hand, many of Böhm's conservative German colleagues strongly rejected his inventions due to its sound and stayed faithful to their old flutes. They continued to make new development and improvements to their simple-system flutes,

and responded with the Pentenrieder, Pupeschi, Schwedler, and later Reformed system flutes.

authority system ironically made the adoption of a new instrument faster.

French flutists were the first to embrace the Böhm-flute fully. As early as 1839, a course on the conical ring-keyed Böhm flute had already been proposed at the Paris Conservatory. Due to the then flute professor and official flute supplier Tulou's strong objections, the course was not approved. Instead, Tulou responded to the Böhm-flute with his improved system – the *flûte perfectionée*. However, soon after his retirement in 1860, the Böhm-flute was adopted, and through the conservatory's influence, flutists over France quickly followed. Their centralized, conservative music

positions all over the world. Their superior technique inspired and encouraged composers to write music confidently in a language that moved away from tonality in the late 19th-century. German-speaking symphonic composers and conductors, such as Richard Strauss (1864-1949) and Gustav Mahler (1860-1911), also opted for the cylindrical

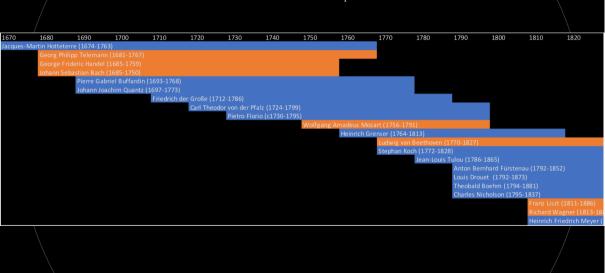
Böhm-flute. After Claude Debussy's (1862-1918) prominent and sensitive use of the Böhm-flute in his *Prélude à l'après-midi d'un faune* in 1894 — the beginning of modern music, as considered by Pierre Boulez (1925-2016), the Böhm-flute "brought new breath to the art of music". Given the development of complexity and atonality in music with a strong emphasis on the evenness of all 12 notes in the beginning of the 20^{th} -century, the die-out of conical flute became inevitable. Its development ended together with the death of its last advocate <u>Maximilian Schwedler (1853-</u>

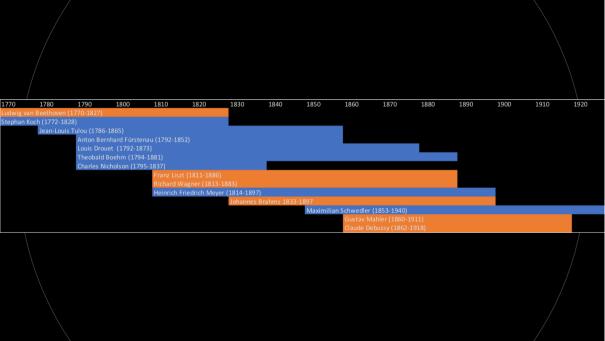
Boehm flute made by Vanotti in Milano, around 1930

The French Flute School then produced generations of excellent Böhm-flutists who dominated teaching and solo flute

1940).

Timeline of flautists and composers





a dream I had
Schöne Träume. Erschreckende Träume. Füllende Träume. Schmerzliche Träume. Jeder Traum, den ich unkontrolliert geträumt habe,

wurde in einen Teil meiner Erinnerung übersetzt. Es gibt einen Traum, an den ich mich sehr genau erinnere. Hell und leer war es. Darin war ich ein glücklicher kleiner Junge, der mitten in der Welt auf einer weißen Schaukel schaukelte und so hoch wie möglich schaukeln wollte. Ich konnte sie nicht sehen, aber ich wusste, dass es meine Eltern waren, die mich drängten. Hin und her. Höher und schneller. Ich lächelte stumm, aber mein Herz schlug lauter, als die Anziehungskraft auf es stärker wurde. Es dauerte lange, bis ich endlich den höchsten Punkt in der Luft erreichte. Plötzlich waren die Schaukel und meine Eltern verschwunden. Ganz allein wurde ich

"Erinnere dich an dein erstes Geräusch".

gelassen. Das einzige, was mir geblieben war, war das Echo der Stimmen meiner Eltern, die sagten:

alone with the echo of my parents' voices saying,

"Remember your first voice".

Beautiful dreams. Frightening dreams. Fulfilling dreams. Painful dreams. Every dream I've uncontrolably dreamed has been translated into a part of my memory. There is one dream that I remember very clearly. In it I was a happy little boy, swinging on a white swing in the middle of the world. It was light and empty. I wanted to swing as high as possible. I couldn't see it, but I knew my parents were pushing me from behind. Back and forth. Higher and faster. I laughed silently, but my heart beat louder as the pull grew stronger. It took some time before I could finally reach the highest point in the air. Suddenly the swing and my parents disappeared. I was left

Let everything that's been planned come true. Let them believe. And let them have a laugh at their passions. Because what they call passion actually is not some emotional energy, but just the friction between their souls and the outside world. And most important, let them Lass alles, was geplant wurde, wahr werden. Lass sie believe in themselves. Let them be helpless like children, glauben. Und lasst sie über ihre Leidenschaften lachen. Andrei Tarkovsky because weakness is a great thing, and strength is nothing. Denn was sie Leidenschaft nennen, ist in Wirklichkeit Excerpt from movie Stalker When a man is just born, he is weak and flexible. When he keine emotionale Energie, sondern nur die Reibung 1979 dies, he is hard and insensitive. When a tree is growing, it's zwischen ihrer Seele und der Außenwelt. Und das (original text in Russian) tender and pliant. But when it's dry and hard, it dies. Wichtigste: Lasst sie an sich selbst glauben. Lasst sie hilflos Hardness and strength are death's companions. Pliancy sein wie Kinder, denn Schwäche ist etwas Großartiges, und and weakness are expressions of the freshness of being. Stärke ist nichts. Wenn ein Mensch gerade geboren ist, ist Because what has hardened will never win. er schwach und biegsam. Wenn er stirbt, ist er hart und unempfindlich. Wenn ein Baum wächst, ist er zart und biegsam. Aber wenn er trocken und hart ist, stirbt er. Härte und Stärke sind die Begleiter des Todes. Biegsamkeit und Schwäche sind Ausdruck der Frische des Seins. Denn was verhärtet ist, wird niemals siegen.

Music, when soft voices die, Vibrates in the memory— Odours, when sweet violets sicken, Live within the sense they quicken.

Music, when soft voices die Rose leaves, when the rose is dead, Are heaped for the beloved's bed; And so thy thoughts, when thou art gone, Love itself shall slumber on.

Percy Shelley

Musik, wenn leise Stimmen ersterben, klingt nach in der Erinnerung. Düfte, wenn süße Veilchen ermatten, leben in den Sinnen, die sie erregen.

Rosenblätter, ist die Rose vergangen, werden dem geliebten Menschen zum Lager gestreut; Und so deine Gedanken; bist du gegangen,

soll die Liebe weiter schlummern.

... perhaps it's a dream, all a dream, that would surprise me, I'll wake, in the silence, and never sleep again, it will be I, or dream, dream again, dream of a silence, a dream silence, full of murmurs, I don't know, that's all words, never wake, all words, there's nothing else, you must go on, that's can feel it, they're going to abandon me, it will moments, or it will be mine, the lasting one, you must go on, I can't go on, you must go as there are any, until they find me, until you must go on, perhaps it's done already, perhaps they have carried me to the threshold my story, that would surprise me, if it opens, it

don't know, I'll never know, in the silence you don't know,

that didn't last, that still lasts, it will be I, Samuel Beckett on, I'll go on, you must say words, as long they say me, strange pain, strange sin, Excerpt from The Unnamable perhaps they have said me already. of my story, before the door that opens on will be I, it will be the silence, where I am. I

I'll go on.

I can't go on,

you must go on,

all I know, they're going to stop. I know that well, I

be the silence, for a moment, a good few



Tú que cantas todas mis muertes. Tú que cantas lo que no confías al sueño del tiempo, descríbeme la casa del vacío. Alejandra Pizarnik háblame de esas palabras vestidas de féretros que habitan mi inocencia. Artes Invisibles | Invisible Arts Con todas mis muertes vo me entrego a mi muerte. con puñados de infancia, con deseos ebrios que no anduvieron bajo el sol, y no hay una palabra madrugadora que le dé la razón a la muerte, y no hay un dios donde morir sin muecas.

You who sing all my deaths.

You who sing what you don't trust
to the dream of time,
describe the house of emptiness to me,
tell me about those words dressed in coffins
that inhabit my innocence.

With all of my deaths

I surrender to my death,
with fistfuls of childhood,
with drunk desires,
that didn 't walk under the sun,
and there's no early-rising word
that gives death reason,
and there isn't a god for dying without a grimace.

Alguien ha encontrado su verdadera voz y la prueba en el mediodía de los muertos. Amigo del color de las cenizas. Nada más intenso que el terror de perder la identidad. Este recinto lleno de mis poemas atestigua que la niña abandonada en una casa en ruinas soy yo.

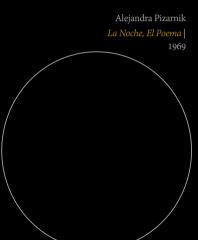
Escribo con la ceguera desalmada con que los niños arrojan piedras a una loca como si fuese un mirlo. En realidad no escribo: abro brecha para que hasta mí llegue, al crepúsculo, el mensaje de un muerto.

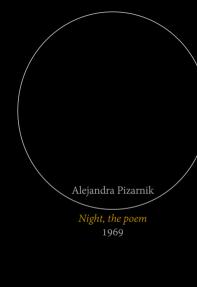
Y este oficio de escribir. Veo por espejo, en oscuridad. Presiento un lugar que nadie más que yo conoce. Canto de las distancias, escucho voces de pájaros pintados sobre árboles adornados como iglesias.

Mi desnudez te daba luz como una lámpara. Pulsabas mi cuerpo para que no hiciera el gran frío de la noche, lo negro.

Mis palabras exigen silencio y espacios abandonados.

Hay palabras con manos; apenas escritas, me buscan el corazón. Hay palabras condenadas como lilas en la tormenta. Hay palabras parecidas a ciertos muertos, si bien prefiero, entre todas, aquellas que evocan la muñeca de una niña desdichada.





If you find your true voice, bring it to the land of the dead. There is kindness in the ashes. And terror in non-identity. A little girl lost in a ruined house, this fortress of my poems.

I write with the blind malice of children pelting a madwoman, like a crow, with stones. No—I don't write: I open a breach in the dusk so the dead can send messages through.

What is this job of writing? To steer by mirror-light in darkness. To imagine a place known only to me. To sing of distances, to hear the living notes of painted birds on Christmas trees.

My nakedness bathed you in light. You pressed against my body to drive away the great black frost of night.

My words demand the silence of a wasteland.

Some of them have hands that grip my heart the moment they're written. Some words are doomed like lilacs in a storm. And some are like the precious dead—even if I still prefer to all of them the words for the doll of a sad little girl.

Translation by Cole Heinowitz