

A History of the Flute

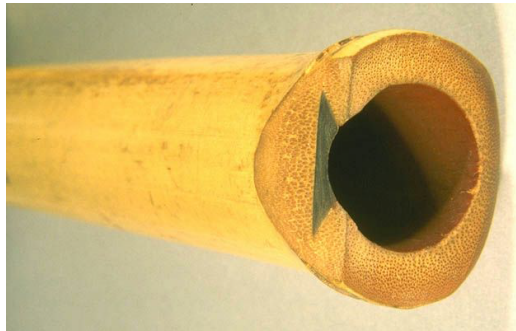
Trevor Wye

1. Whistles

What a daunting prospect to write a simple flute history without missing anything. Looking at a pamphlet a few years ago, it stated that in the South Pacific Islands, those tiny islands south of Hawai, there are about 1300 different named flutes. Our modern flute is just one of thousands of flutes worldwide of all shapes and sizes from miniature ocarinas to giants like the Slovakian Fujara.

A sensible way to begin would be to understand how flutes are made to emit sound and so we will look at the four main varieties. These are *Endblown* where the player blows across the end of the tube; *Sideblown* as in our modern flute; a *Fipple* or encapsulated such as is found in a referee's whistle and a *Globular* flute such as in ocarinas and gemshorns. In all cases, the air is directed against a sharp edge which causes the air to alternate between entering the tube where it meets resistance, then shifting to going outside the tube. This alternation takes place at great speed causing the air inside the tube or vessel to vibrate and so make a sound.

In the endblown flute shown below, the tube is held upright and the air directed across the cutaway top of the tube.



The fipple flute is sounded by the player directing air through a tube or windway against the sharp edge. An example is the recorder and the pitch is changed by covering the holes down the tube in succession.



Globular flutes are sounded either by blowing across a hole or via the fipple which is connected to the 'globe' shown above, though the way the instrument responds is unlike the whistle; the notes can be changed by uncovering *any hole*, no matter in what position it is placed. Another example is the gemshorn shown below left and this can be played by covering or uncovering the holes *in any order*. It is the same for the ocarina shown below centre The ocarina shown on the right is pre-Columbian and about 700 years old. The figure is itself playing a quena and the instrument plays only one note.



Author's collection

In every continent, early man discovered how to make a bone, a piece of tube or a hollow nut shell sound, in one form or another. We can only guess as to how these discoveries were made, but animal or even human bones were amongst the first flutes. While sucking out the marrow from a broken, dried bone, perhaps it was blown into, possibly by a child when playing. All around the world by ponds, lakes and rivers are reeds which when broken, might present an open end to the wind. An empty, dried gourd or nut shell can be made to play one or two notes by blowing across a hole.

Let us imagine this scene...

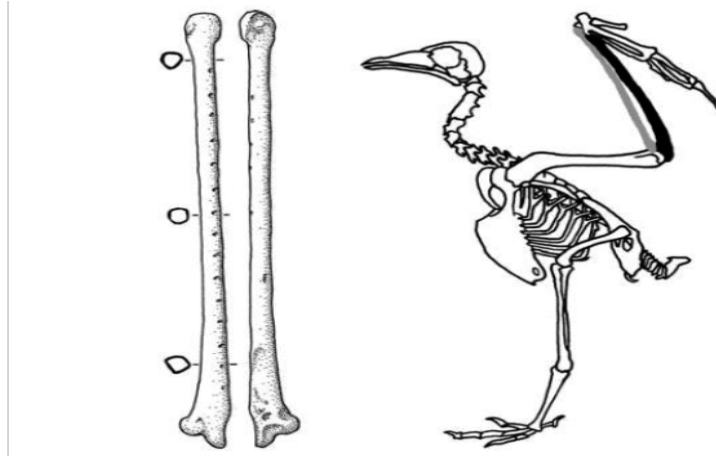
A young man, Exzibxzctl - or Zibby as he was known as by his friends - was rather different than the rest of the tribe. He was ceaselessly curious, often examining unusual objects he had found and spending his time making useful tools for his family. One windy day, he was down at the lakeside cutting and collecting reeds to repair a roof. Nearby where he worked, he could hear an occasional moaning noise which seemed to increase as the wind blew stronger. Although fearful at first, he soon realised it came from a particular spot and getting closer to it, he saw there were broken reeds and soon realised that it came from a particular broken reed. He didn't touch the reed but when he returned the next day, the reed was silent. It was not long before he associated the wind with the noise.

On the next windy day, he cut off that piece of reed, and held it up to the wind. In a certain direction, it sang and before very long, Zibby found out how to make the reed appear to come to life. At first, he believed it was the spirit of his ancestor who had been drowned near that spot, but with his unusual intelligence, he realised that he could make the reed talk by blowing across it.

When he returned to the camp, he gathered everyone together and blew across the top of the reed. There was great wonder and everyone was afraid of him because of his enormous power in making a piece of wood speak. He became the tribe's chief and his fame grew far and wide. With his special reed, he was able to make to crops grow and the animals bear many young. He was the all-powerful King Zibby.



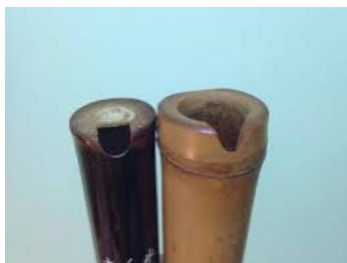
Above left is part of a what is believed to be a bear's bone and was found in a cave in Slovenia. It dates from about 43,000 years ago and perhaps the oldest flute so far found. It appears to be endblown and to have at least 5 finger holes



3)

Some 35,000 years old endblown flutes were found in a cave in Germany, made from a vulture's wing bone. Similarly in China, endblown flutes made from crane wing's bones date from about 9000 years ago. Cranes have very light bones, hollow and thin. If the reader asks their butcher for a goose wings bone, they will be very surprised at how light they are and, because they are hollow, how easy it would be to make a musical pipe out of one.

The Xiao and the Shakuhachi. Below left is the business end of a Xiao, one of the oldest traditional Chinese instruments. The word Xiao means endblown bamboo flute. The Xiao hasn't changed in 1,000 years and even then perhaps only the material, from bone to bamboo root. Its sound is dark and sorrowful.



The flutes below are the Japanese Shakuhachi whose name originates from shaku, an old unit of measurement and a hachi meaning eight. It is thought to have originated in Asia and arrived in Japan about 10,000 years ago. Several ancient shakuhachi from the Nara period are kept at shrines and temples. The shakuhachi has five finger holes but is different from its relative, the Chinese Xiao, the holes being tuned to a minor pentatonic scale. The sound is hollow and with a rather mystical tone and a relatively big dynamic and tone colour range. It has a range of between two to three octaves.



6)



7)

The shakuhachi players above wear the traditional basket, thought to be a disguise because hundreds of years ago, they were sent into enemy camps to observe and to spy. The lower stout end is part of the bamboo knot and served as a weapon when necessary.

In North America, flutes of various kinds have been found which are around 7,000 years old onwards. The flute below was found in a burial mound in Labrador, Canada and dates from 5,500 BC.



The Quena below is another endblown flute originating from the Andes in South America though common throughout Argentina, Ecuador, Colombia, Bolivia and Chile. The Quena is made of *tatora*, a plant like a reed and the length is about 35 cm with 7 finger holes. The earliest quena was found in a cave dating from 2,130 B.C. The Quena - sometimes written as 'kena' - is traditionally used for festivals and often accompanies folk dances.



8)

The Ney -or Nei below, is an ancient Middle Eastern flute with origins from Egypt, and one the oldest instrument still in continuous use. In some Arab countries, it is the only wind instrument in their culture. It is an endblown flute made of *arundo donax*, the same reed used in making oboe and clarinet reeds. It is about 50 to 70 cm long with 6 finger holes. Some ney have a mouthpiece to protect the fragile blowing edge. Its origin can be dated back to ancient Egyptian times, 3,000B.C.



9)



(10)



(11)

Panpipes or the Pan-Flute



12)

The panpipes are a series of endblown pipes of graduated lengths bound together. The longer the pipe, the lower the pitch. The name came from an ancient Greek story which has been told in various forms, most commonly in a gentle version about Pan falling in love with a maiden and courting her. She fled and hid in the reeds on a river bank and Pan, slashing at the reeds to hunt for her, was unsuccessful and so made a set of pipes from the reeds which he bound together with wax to mourn his lost love. This instrument was called the panpipes.

So goes the romanticised version. The picture below shows more accurately Pan's real intentions!



13) *Pan and Syrinx* (1925) - Rubens

A special circular pan flute found in the regions of Laos in Thailand is shown below on the left. To produce different tones, the musician rotates the instrument while playing.

Romanian panpipes, curved in shape are shown on the right. The most famous soloist is probably



14)



15)

George Zamfir. Recordings can be heard of National Rumanian music as well as the popular flute repertoire such as Mozart and Quantz Concertos. The virtuosity is astonishing. The author once asked a soloist after a concert how he could play chromatic notes, and he demonstrated on one tube by skillfully 'bending' the notes in such a way as to play a chromatic scale.

Sideblown Flutes The Dizi (or *ti*, or *ti tse*)

The dizi is a Chinese sideblown flute, and a major musical instrument widely used in many genres of Court music, folk, ritual and religious music as well as Chinese opera. Several kinds are shown below left. The dizi has an extra hole covered by a membrane called a *dimo*, made from an tissue-thin bamboo shown above right. This gives a brighter, buzzy and much louder tone. Setting the *dimo* in place is a special technique but some western players simply use 'cling-film' or very thin tough plastic film. Though not as

effective, it gets a reasonable result. This is one on many of the family of Chinese flutes and a Taiwanese professional player once showed his flutes case of 17 flutes required for his profession.



16)

The Shinobue in Japanese means bamboo flute, originating from the Chinese dizi. Like the dizi, it is an all-purpose entertaining instrument but sometimes used, with a drum, to celebrate rice planting.



17)

Ryuteki or Dragon Flute



18)

Also from Japan, it is made of smoked bamboo and is painted inside with a hard lacquer to give it a powerful tone.

Bansuri and Venu



19)

The Bansuri is a traditional North Indian transverse flute and appeared at around 100 B.C. It is made of bamboo, is side blown and with 6 finger holes plus vent holes in the foot. The bansuri is strongly related to Hinduism and is usually called Krishna's flute. Krishna is one of the most popular gods in Hinduism and his flute believed to have magical power. *'When Krishna plays the flute the whole world is filled with love. Rivers stop, stones are illuminated, lotus flowers tremble; gazelles, cows and birds are entranced....'* One of the great historic masters of the Bansuri was Pannalal Ghosh and he can be heard on YouTube. It can be played on either side of the body. Another great master is Pannalal Ghosh who gave a recital at the Royal Festival Hall a few years back. He is pictured below left.

The Venu is the South Indian flute and has eight finger holes and is associated with Carnatic music, music which even though written for flutes is usually sung. The players perform this music in a singing style.



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21)

Amongst the more uncommon flutes is the nose flute and the reason for playing this flute with the nostril breath is that some people in SE Asia believe that the way to the soul is through the nose and that when someone dies, the soul escapes from the nostrils. It does seem logical to play music using the nose breath.

The raga is a series of between 5 and 9 notes upon which a melody is built though the way and mood the notes are played is more important than the notes themselves..

The traditional way to study the bansuri was to ask a great master who may allow the student to listen to lessons, perhaps even from another room. After some time, the teacher might allow the student to listen in the same room and perhaps play something. The method of learning was to copy exactly what the teacher played with no variation whatever. In that way, ragas and other melodies would remain almost unchanged for hundreds of years.

The Fujara from Slovakia is shown below. It is about 6ft long and has three finger holes but many other notes are possible using the natural harmonics of the three notes. It is used by shepherds and is played upright.



Animal bones have been widely used for flutes but so too have human bones. Shown below is a human tibia flute, a copy of one found in Germany which was about 10,000 year old. This example is 30 years old and made by the author.



This curiosity below is the Bull-Roarer from Australian played by holding the end of the cord and whirling the wooden piece around the head. They come in many sizes and when twirled fast enough, makes a low-pitched growling sound.



Throughout the world, people have discovered ways to make vessels and tubes sound, often by accident. In some instances the flutes have developed into refined musical instruments and others have remained as primitive whistles. As people traveled, so ideas were exchanged and new flutes emerged.

Some curious examples of historic flutes are ocarinas whirled around on a piece of string; pipes with finger holes *underneath the tube* as well as on top, to be played with the top side of the little finger; a flute which was only to be played by a man, a woman even *seeing* the instrument would be put to death (Papua New Guinea); panpipes filled with explosive and sent aloft after a performance as a kind of musical firework; tibia flutes freshly made from the legs of a defeated enemy to celebrate victory and perhaps honour the foe... these are just a few of our family of curiosities.

In the next part, we will look at the European development of aerophones which resulted in the one-keyed flute, the traverso or baroque flute which later developed into the modern flutes we all play today.

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With thanks to Miss Ngating Wong for picture suggestions and internet hunting!

Instruments: Human tibia, Bullroarer and pre-Columbian ocarina; author's collection

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