

Concerts for Young Audiences

Peter and the Wolf



Cover illustration: Lorraine Beaudoin

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HISTORY TELLS THE STORY

The Birth of Brass



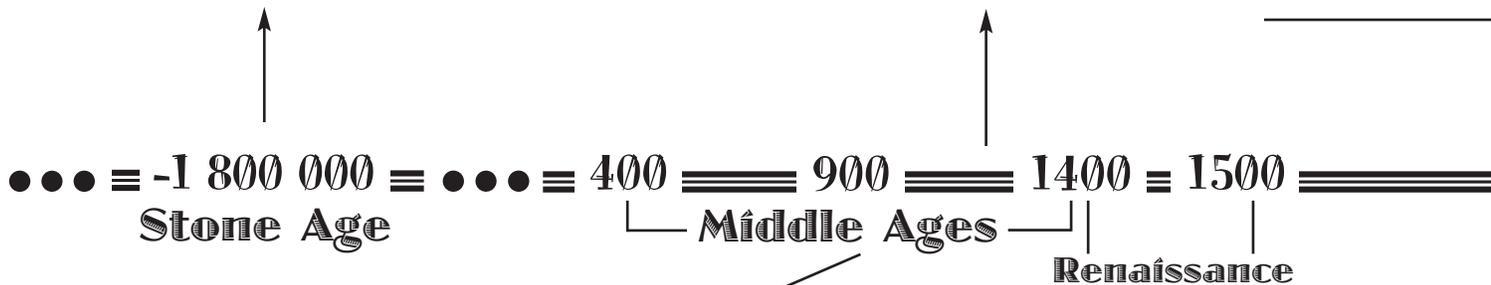
The trumpet and the horn: A shared history

In the Stone Age, man discovered an astonishing phenomenon. When he blew into a tube, the vibration of his lips was amplified and produced a sound. In order to experiment with sounds, he blew into whatever he found along the way: animal horns, tusks, and bones, shells, dried plants, etc. This is how the first wind instruments came to be.

For several millennia, man simply used what nature offered in order to make music. It was only around 2000 B.C. that man actually tried to build instruments. He made a horn out of clay that he then covered with bark.

The first metal horns and trumpets were made in the Middle Ages, but it was not until the 14th century that man discovered techniques that would allow him to make tubes and bend them as he wanted.

Despite this very important progress, trumpets and horns were still very rudimentary at that time. They were simply formed from a tube that had a mouthpiece on one end and a flared bell on the other end. Their sound capabilities were still very limited. Several inventions would help transform the instruments.



The sackbut: Ancestor of the trombone

In Spanish, the term “sacabuche” means “a pipe that is pulled.” This perfectly describes the trombone’s greatest quality: its slide system. This allows a musician to play a multitude of notes, which is what differentiated it, early on, from other brass instruments. The trombone closely resembles the sackbut. The main difference is that the sackbut’s tube is narrower than that of the trombone.



Two ancestors of the tuba

① The serpent is a wood instrument that owes its name to its sinuous shape resembling the letter S. It was born in the Renaissance. With holes similar to those on a flute, it allowed musicians to play a greater variety of notes. The serpent still exists today. It is now made of metal and is covered in leather.



During the Renaissance, brass instruments underwent various transformations.

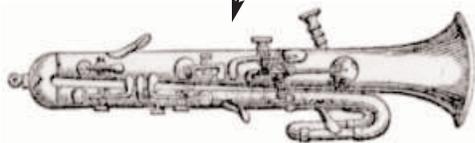
The trumpet's tubing was pierced and keys were added to give it the same playing possibilities as the flute. It was given a slide to give it the possibilities of the trombone. More notes were possible but the sound was not very good.

A system of extensions was implemented for the horn: crooks. When added to the instrument, these sections of tubing or crooks of different lengths allowed musicians to increase the series of notes that could be played.

The technique of muting the horn was developed. The horn player puts his hand into the bell of his instrument in order to change the pitch and sound of the notes.

Just before the beginning of the 17th century, the horn and the trumpet developed their personalities! The horn's funnel-shaped mouthpiece gave it a warm and smooth sound, while the trumpet's cup-shaped mouthpiece gave it a more ringing sound.

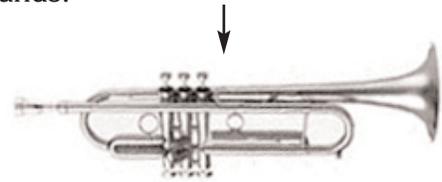
1600 ≡ 1800 ≡ AROUND 1820 → INVENTION OF THE PISTON VALVE SYSTEM →



② The **ophicleide** is the tuba's second ancestor. It is a U-shaped instrument fitted with keys. It is interesting to note that ophicleide means "keyed serpent." It can be said that it is the child of the Renaissance's serpent. The ophicleide in fact replaced the serpent as the instrument used to accompany singers in church.



The invention of the piston valve system allowed the trumpet to produce lower sounds.



As for the horn, the piston system replaced the use of crooks, making horn players very happy!



Musicians could now change the length of the tube and the air column simply by pressing on the valves, thereby making it easier to play a wide variety of notes.

This invention also transformed the ophicleide and gave rise to the **tuba**. The tuba is made up of a large mouthpiece, a very conical tube, an upwards-facing bell, and three or four valves. Tuba players must be very strong, as the tuba is the largest and heaviest of the brass instruments.



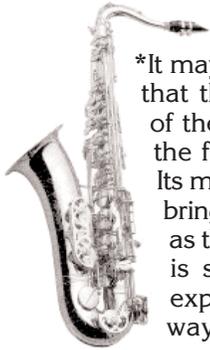
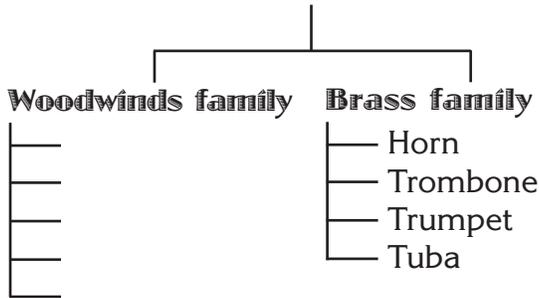
The piston system was also tried on the trombone but was quickly abandoned, for it did nothing to improve the sound. The structure of the trombone has therefore not changed very much in 500 years. Its slide is very efficient!



THE “DISCONCERTING” MAESTRO EXPLAINS

Brass instruments’ singular mechanism

WIND INSTRUMENTS



*It may come as a surprise to learn that the saxophone is a member of the woodwinds family, despite the fact that it is made of brass. Its mouthpiece and its keys, which bring to mind the clarinet, as well as the way that it is played, which is similar to other woodwinds, explains why it is classified this way.

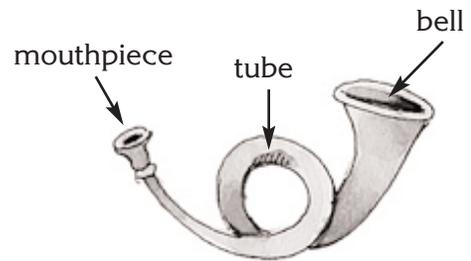
When a musician blows into an instrument, air goes through the tube and comes out at the bell, producing a sound.

The pitch of the notes produced varies depending on the length of the tube. The shorter the tube, the higher the notes, and the longer the tube, the lower the notes.

The phenomenon is the same in the brass family: the length of the tube is not the same in all brass instruments. If you would uncoil the tube of a brass instrument, its length would surprise you. The tube of certain brass instruments can be up to 5 metres long!

A PROBLEM...

For a long time, brass instruments only produced a limited number of notes. This was because they were only made up of a mouthpiece, a tube, and a bell. Musicians could not play all the notes in the scale. A means of increasing the number of notes was needed. Instrument makers therefore looked for a way of varying the length of the tube.



THREE BRILLIANT SOLUTIONS!



The trombone inherited this invention. The slide is made up of a small tube that slides inside a larger one. By sliding the small tube into the larger one, the overall length of the tube is changed. The slide therefore increases the number of sounds that can be produced.

 Invention **2**: **crooks**

Horns benefited from this invention. Crooks are tubes of different sizes that are fitted onto the instrument's main tube. With the use of crooks, the horn could play a wider range of sounds. These were used until the invention of valves, which offered even greater possibilities.



The horn...

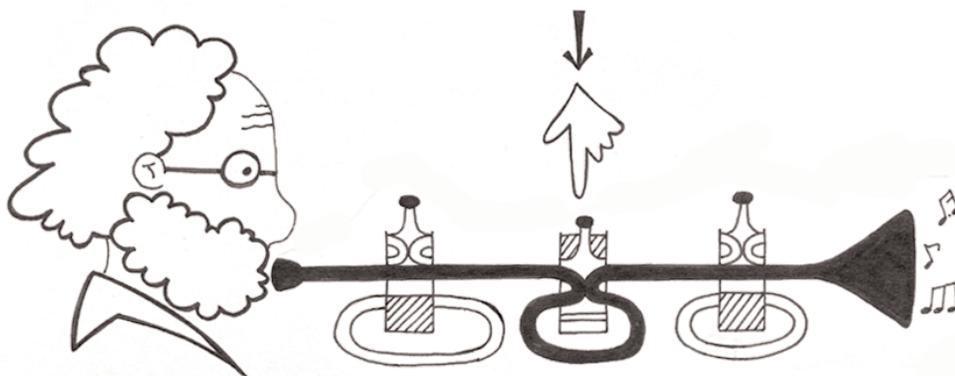
...and its crooks



 Invention **3**: **piston valves**

The piston valve system also allowed the length of an instrument's tubing to be varied. Each piston is paired with a specific length of tube. All of these tubes are connected to the instrument's main tube.

- 1** If the musician blows into the instrument without pressing down on any valve, the air will follow its natural path, just as though there was no added tubing. Therefore, the sound does not undergo any change.
- 2** However, when the musician presses down on a valve, the air makes its way through the added tube before continuing on its way through the main tube. The air's path is therefore lengthened, modifying the sound.
- 3** If several valves are depressed at the same time, the air travels along an even longer path. The air goes down different paths, which can be shorter or longer, depending on which valves the musician presses. With the valve system, the number of possible notes was increased, to the great delight of musicians!



A three-valve system is used for the horn, trumpet, tuba, and sometimes for the trombone. A four-valve system is used only for the tuba.



SOLFA TEACHES US

How to Produce Sound on Brass Instruments

Did you know that brass instruments produce the loudest sound compared to all others except electric instruments?

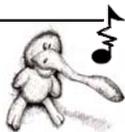
BLOW INTO THE MOUTHPIECE

- 1 You must first close your lips and put them onto the mouthpiece.
- 2 Then you must vibrate or buzz your lips by blowing a small but strong stream of air through them.

The vibration of the lips vibrates the air column inside the instrument's tube. The vibration of the air column produces sound. The sound is amplified by the instrument's bell.

To play low notes, the lips must be loose and relaxed, while high notes require the lips to be tight.

Blowing into a brass instrument is not an easy task. It requires a little patience and many hours of practice!



Did you know that in French, a wrong note played by a brass player is called a “canard” (duck) or a “couac”? This is most probably since the wrong note can sometimes sound like a duck quacking. Even experienced brass players can sometimes hit a wrong note from time to time. (In English, a wrong note is sometimes referred to as a “bum note”).

Illustration : David Durrenberger (www.koubis.com)

Drip, drip, drop

Blowing into an instrument causes fine droplets of moisture to form inside its tube. Some may even make their way out of the bell. But don't believe for a minute that it is because musicians spit into their instruments! These droplets are indeed water but they are simply the result of condensation and humidity in the player's breath. When warm air meets the cool metal, water vapour in the air turns to liquid.

To ensure that accumulating humidity does not affect the sound, musicians must frequently dismantle certain parts of their instruments to remove the moisture.

A short lesson in Italian grammar



This Italian flag is missing something. Can you fill in its appropriate colours?

In Italian, the singular form of many words ends in an **o** and the plural ends in **i**. For example, we make a **glissando**, but several **glissandi**.

In English, when we pluralize these Italian words, it is acceptable to apply the English rule for the plural form by adding an **s**. We can therefore say **glissandi** or **glissandos**.

AN ARRAY OF EFFECTS FOR BRASS INSTRUMENTS

Trill

The rapid alternation of two notes, played repeatedly.

Staccato

A staccato is a detached note. To produce staccati, you must make small strikes with your tongue—as if you were rapidly saying “ta-ta-ta”—while pursing your lips against the mouthpiece.

Glissando

A glissando is a way to play two or several notes of different pitch in one continuous sound, that is, without making the notes distinctly separate from one another (like in staccati). To produce a glissando, a trombonist moves the slide while blowing. The glissando progressively varies the pitch.

Muting

Muting involves placing one hand into the instrument’s bell while playing in order to vary the pitch and sound of the notes. This technique is used mainly by horn players.

The sound quality of most brass and other wind instruments can also be changed with the use of a mute. The mute is an accessory that is placed into the instrument’s bell.

An excellent means of communication!



Before being heard in brass bands and orchestras, most brass instruments were first used as means of communication.

For example, for a long time the horn was used to transmit messages. It was regularly heard to announce the time or to warn of danger. It also allowed the shepherd to call his flock, the baker to tell clients that his bread had just come out of the oven, the mailman to announce his arrival and departure, hunters to be informed of what was going on around them, etc. The sounds and codes used were different depending on the situation so that people could clearly interpret the many messages.

The trumpet was also used to communicate. It called farmhands in for dinner, warned of danger, and scared away enemies and dangerous animals.

Music in Action

Build a megaphone using a cone of stiff cardboard. Use the megaphone to communicate with a classmate. Together, come up with a series of codes that combine short and long sounds, like those used in Morse Code.

TELL ME ABOUT PETER AND THE WOLF

Peter, a Young Pioneer, lives at his grandfather's home in a forest clearing. One day, Peter goes out into the clearing, leaving the garden gate open, and the duck that lives in the yard takes the opportunity to go swimming in a pond nearby. The duck starts arguing with a little bird ("What kind of bird are you if you can't fly?" – "What kind of bird are *you* if you can't swim?"). Peter's pet cat stalks them quietly, and the bird—warned by Peter—flies to safety in a tall tree while the duck swims to safety in the middle of the pond.

Peter's grandfather scolds Peter for being outside in the meadow alone ("Suppose a wolf came out of the forest?"), and, when Peter defies him, saying that "Boys like me are not afraid of wolves", his grandfather takes him back into the house and locks the gate. Soon afterwards "a big, grey wolf" does indeed come out of the forest. The cat quickly climbs into a tree, but the duck, who has excitedly jumped out of the pond, is chased, overtaken and swallowed by the wolf.

Peter fetches a rope and climbs over the garden wall into the tree. He asks the bird to fly around the wolf's head to distract it, while he lowers a noose and catches the wolf by its tail. The wolf struggles to get free, but Peter ties the rope to the tree and the noose only gets tighter.

Some hunters, who have been tracking the wolf, come out of the forest ready to shoot, but Peter gets them to help him take the wolf to a zoo in a victory parade (the piece was first performed for an audience of Young Pioneers during May Day celebrations) that includes himself, the bird, the hunters leading the wolf, the cat and grumpy grumbling Grandfather ("What if Peter *hadn't* caught the wolf? What then?")

In the story's ending, the listener is told that "if you listen very carefully, you'd hear the duck quacking inside the wolf's belly, because the wolf in his hurry had swallowed her alive."

Character	Original version	Brass Quintet
Peter	Violins	All the instruments
Grand-pa	Bassoon	Tuba
Wolf	Three horns	Horns and other instruments
Duck	Oboe	Trumpet
Bird	Flute	Trumpet with mute
Cat	Clarinet	Trombone



LET'S GO TO A CONCERT

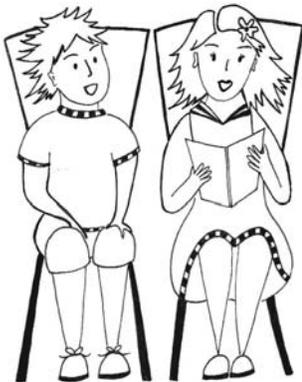
You can keep this guide and refer to it every time you go to an opera or concert. It sets out various rules that you must follow before, during and after the concert, and information about applause, an ancient custom that has continued to this day.

Read the guide carefully to become an experienced concertgoer!

1 BEFORE the concert

To make sure you don't distract the artists and audience, turn off any electronic device (watch, pager, cell phone, etc.)

Make sure you don't arrive late for the concert. It is preferable to arrive 10 to 15 minutes before the concert is scheduled to begin. This will give you time to read the program!



2 DURING the concert

To show your respect for the musicians and the audience, don't talk to the people next to you. Silence is essential to allow the musicians, and everybody at the concert, to concentrate.

Candies and sweets should only be eaten outside the concert hall. They can make a lot of noise and disturb your neighbours if you unwrap them during the concert.

Unless there's an emergency, never leave the concert hall during the performance. If possible, wait for the intermission.

The musicians on the stage are aware of everything going on in the hall and hear all the sounds made by the members of the audience. By keeping a respectful silence, you will allow the performers to give the best concert possible.

3 AFTER the concert

Make sure you haven't forgotten anything on or under your seat. Leave the concert hall calmly, without pushing or shoving. Take the time to discuss the concert with your friends.

It is often possible to meet the performers after a concert to congratulate them or ask them questions. Sometimes, the musicians come back on stage to meet the audience members; if this is the case, you just have to go up to them and speak to them. If the musicians do not come back on stage, ask one of the ushers where to go to meet them backstage or in their dressing room.



CLAP YOUR HANDS

To show your appreciation during a concert, you can clap your hands.

In a concert, it is customary to applaud the performers at the end of each piece. If the piece is in several movements, you should wait for the end of the last movement and leave a moment of silence, just as the musicians leave a moment of silence between movements.

At the opera, a different system applies. The audience often applauds the singers at the end of a well-known or difficult aria, as well as applauding at the end of each Act. At jazz concerts, the audience often applauds the players after each solo improvisation.