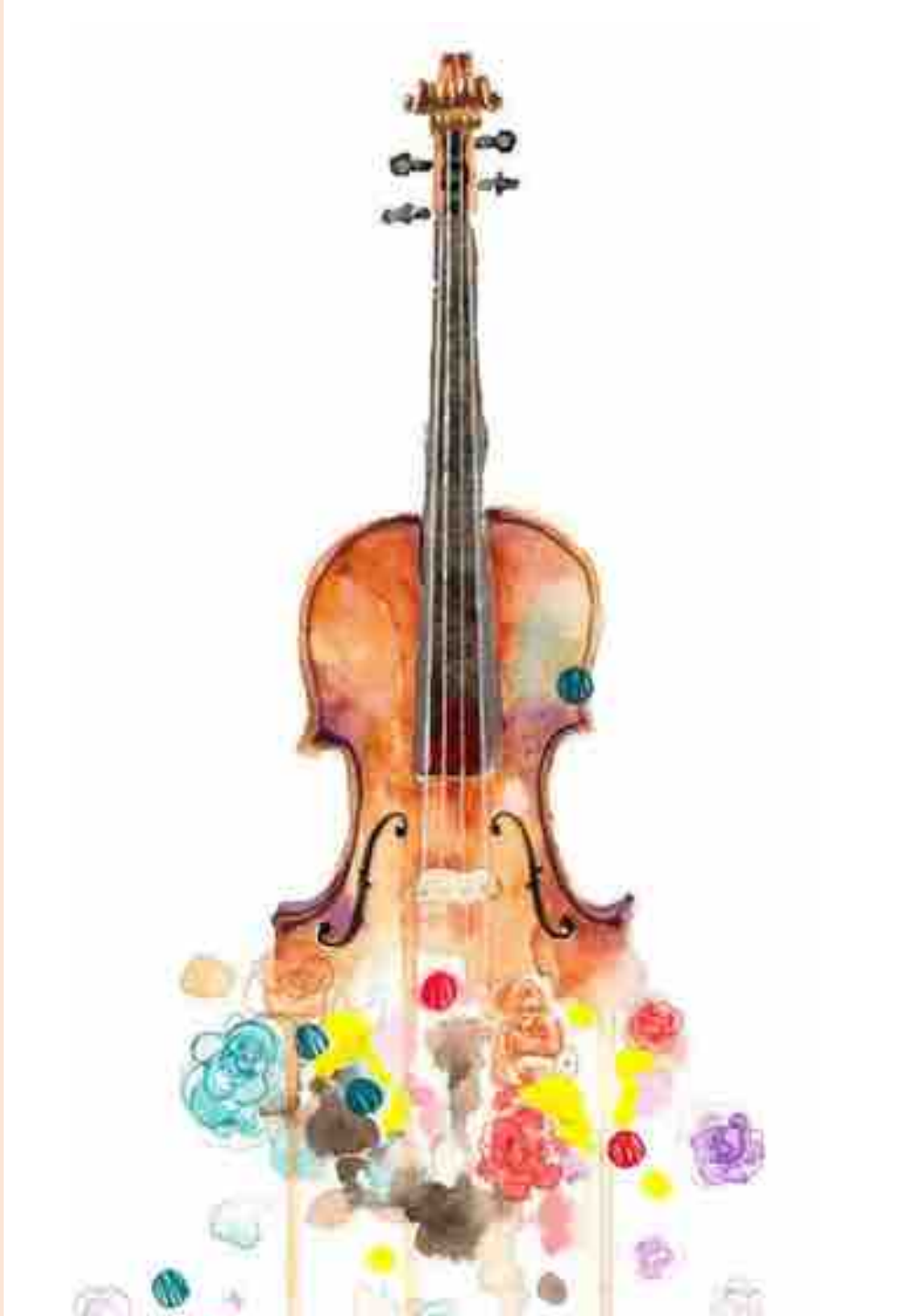
A brief introduction to the world of violins

Chiara Moretti – 3CLIC

What is a violin?

The **violin**, sometimes referred to as a fiddle, is a wooden string instrument. Most violins have a hollow wooden body and are the smallest and highest-pitched instruments (soprano voice) in the family in regular use.

Violins are essential instruments in a wide variety of musical genres. They are most prominent in the **Western classical** tradition, both in **ensembles** (from chamber music to orchestras) and as **solo instruments**; not to mention their leading role in **folk music**, including **country music**, **bluegrass music** and in **jazz**.



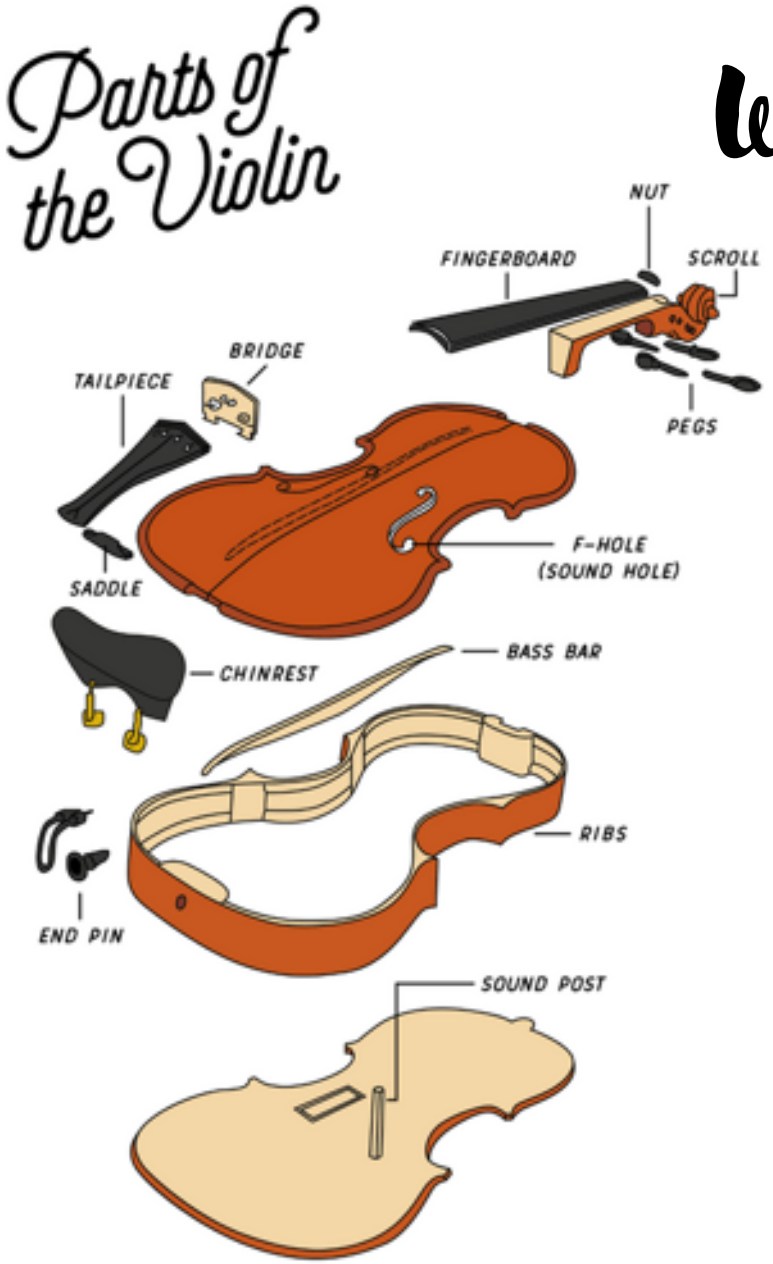
What are its origins?

The Arabian **rabab** and the **rebec**, which came from the Eastern countries during the Middle Ages and were played widely in Spain and France in the 15th century, are considered to be the ancestors of the violin.

The origins of the violin are controversial, but most historians agree that it was first crafted in the **16th century** in Northern Italy by **Andrea Amati**, the founder of a globally recognised school of violin making in Cremona.

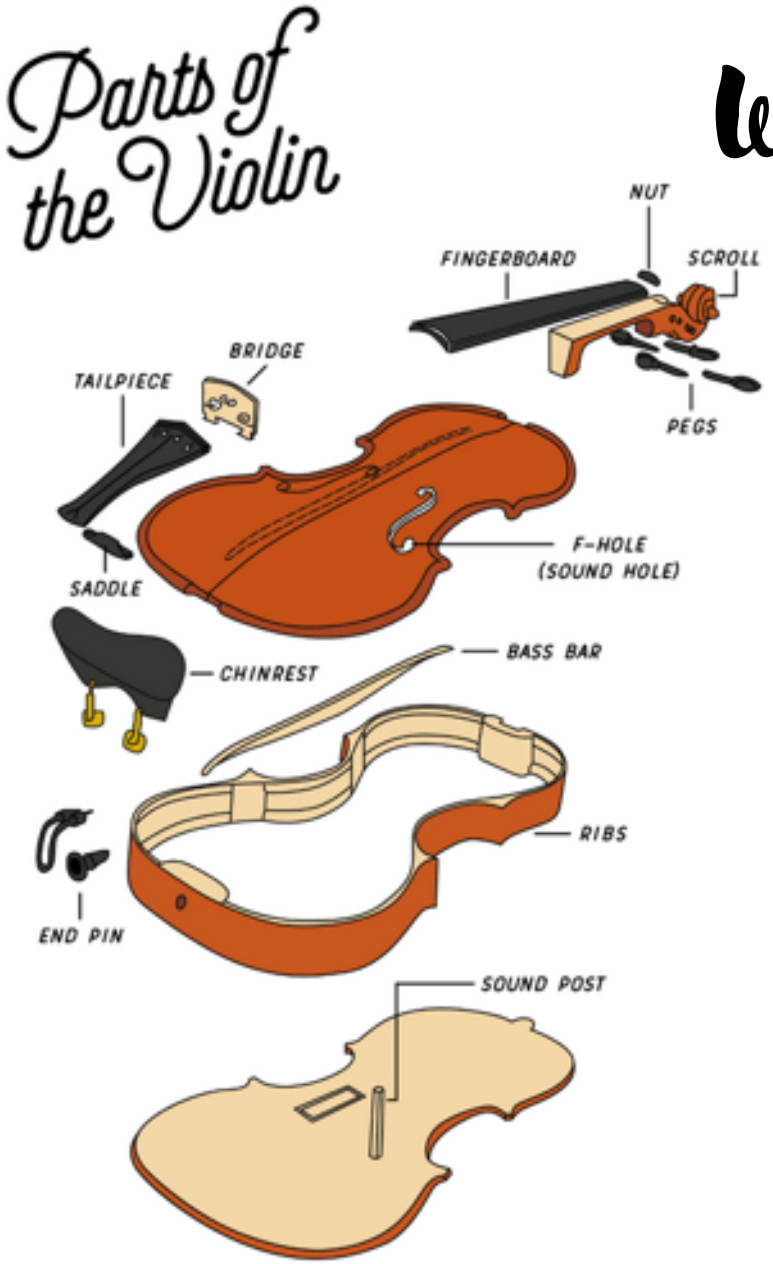
In the following 150 years, Amati's family members took the violin a notch higher in terms of perfection. They made some modifications to improve its sound and projection. Not only did it become a popular musical instrument, but also an admirable work of art. By the 17th century the violins had spread out to all European countries. At this time, they were the inspiration for the invention of other string instruments like the **viola**. In the 18th and 19th century they became famous worldwide.

Nowadays, although Europe and Asia are popular for having several factories that produce violins on a large scale, the most appreciated ones are handcrafted by individual luthiers using the same methods employed by the classical Italian violin makers centuries ago.



What are the main components?

Scroll. The decorative top of the violin, it usually resembles a scroll, even if it can be shaped differently, creating, for instance, a person's head.
Pegs. Four wooden pegs around which the strings are wound, they have a key role in tuning the instrument's strings. Tightening a string raises its pitch, loosening a string lowers its pitch.
Nut. A small piece of wood between the pegbox and the fingerboard. It has four notches, one for each string to emerge over the fingerboard.
Fingerboard. The surface where the fingers press down on the strings. It's generally made of ebony.
Top. The front of the violin. In most violins, it is made of spruce wood while the back is made of maple wood.
Ribs. The thin strips of wood that wind around the sides of the violin, connecting the top and the back to create the soundbox of the violin.
Strings. A violin has four strings tuned in intervals of fifths and made of steel, synthetic materials or animal gut. They are strung over the fingerboard, from the pegs to the tailpiece.



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F-holes. The two holes from which sound emerges from the violin promoting resonance along with the violin's hollow build. They are shaped like cursive Fs.

Bridge. A decorative and functional piece of maple wood that balances underneath the strings transferring vibrations from the strings into the body of the instrument. The bridge is not glued on, it's held in place by tension. The force that the strings exert on the bridge is equal to around 90 pounds.

Soundpost. A wooden post located on the right inside the violin, precisely under the bridge. It is crucial for transmitting vibrations of the strings into the body of the violin to create sound, therefore its placement can change the quality of that sound, in terms of volume and tone quality.

Tailpiece. The somewhat triangular piece of wood where the strings are attached on the lower end of the violin.

Chin rest. A shaped piece of wood or plastic attached near the tailpiece on which it is possible to rest chin and jawbone.

Saddle. A block on the inside of the violin that contributes to support the tailgut and the tension of the strings.

How does a violin work?

A violin produces sound through any combination of **vibrations** of its **four strings**. Violin playing requires two distinct techniques performed by a player's **two hands**.

The left hand contributes to produce specific pitches by pressing down on the violin's strings at various points along its fingerboard. The technique is known as "**stopping**."

The right hand is used to vibrate the strings. It can be done by either plucking them (known as ***pizzicato***) or by gliding a bow across them (known as ***arco***). The last technique is by far the most prevalent one within violin literature, and it requires both down-bowing and up-bowing.

Who is the luthier?

A luthier is someone who builds, repairs, or restores string instruments such as the violin, viola, cello and double bass. This term comes from the French name ***luth***, which means lute.

A violin maker will likely only work four to five hours a day to help maintain a high level of mental focus while working on multiple instruments at a time, carving some instruments whilst others dry. Each instrument requires about **150** contact **hours** before it is ready to be played. Because of these reasons, a master violin maker, using traditional methods, working full-time in a workshop, will craft around ten to fifteen violins a year.

During his lifetime, Antonio Stradivari produced roughly 1,116 instruments, at an average of 14,5 instruments a year.

Who was Antonio Stradivari?

Stradivari was still a pupil of Nicolò Amati in 1666 when he started to place his own label on violins of his making. His first products, following the smaller Amati's models, were solidly constructed and covered by a thick yellow varnish. In 1684 Stradivari began to produce larger models, which, dating from 1690, represent a complete innovation for what concerns the proportions. Later, from 1700, he again broadened and improved his model.

The Stradivari's method of violin making created a standard for subsequent times. He devised the modern form of the violin bridge and set the **proportions** of the contemporary violin, with its shallower body that yields a more powerful and penetrating tone than earlier violins.

Despite being a hotly debated topic, the secret formula of Stradivari's varnish, which defines the acoustic perfection of his violins, has never been discovered.

What about the Violin Museum of Cremona?

The Violin Museum, suitable for everyone, is the greatest expression of the deep bond established between Cremona and violin making.

It includes the Stradivari finds, the reconstruction of a violin making workshop, not to mention two collections of inestimable value: the **Treasure trove** and the **Friends of Stradivari** along with a collection dedicated to the products of the best contemporary violin making in the world.

The museum's collections of string instruments comprise violins, violas, cellos, and double basses dating from the 16th century to the present.

The **historical collection**, one of the most prestigious in the world, incorporates pieces by famous Italian violin-makers (mostly from Cremona) such as **Andrea Amati** , **Nicolò Amati** , **Antonio Stradivari** and **Giuseppe Guarneri "del Gesù"**.

When and where is it?

Opened to the public in September 2013, the Violin Museum is housed at the *Palazzo dell'Arte*, an imposing Fascist era brick construction built in 1941 based on a project by architect *Carlo Cocchia*, renovated after a design by the architectural practice *Arkpabi to* house the new museum.

In addition, inside the Museum there are also the **Auditorium,** awarded in 2016 by the Industrial Design association, and two prestigious laboratories: the non-invasive diagnostic one of the University of Pavia and the acoustic one of the Polytechnic of Milan.

What does the exhibit consist of?

The **exhibition of historical instruments** begins in the so-called *Treasure Chest* – a gallery in which violins, violas, and cellos built from the 16th to the 18th century are theatrically showcased – whose walls resemble the interior of a violin case because of their red velvet shades of colour.
This section also includes outstanding instruments by Antonio Stradivari, Andrea Amati, Girolamo Amati, and Giuseppe Guarneri "del Gesù".
In the following room, original 18th-century documents and working tools from the **workshop of Stradivari** are on display.

The permanent exhibition continues with a section dedicated to modern violin-making and with the **Friends of Stradivari** exhibition, which features historical instruments on long-term loan from international institutions and private collectors.


Thank you for your attention