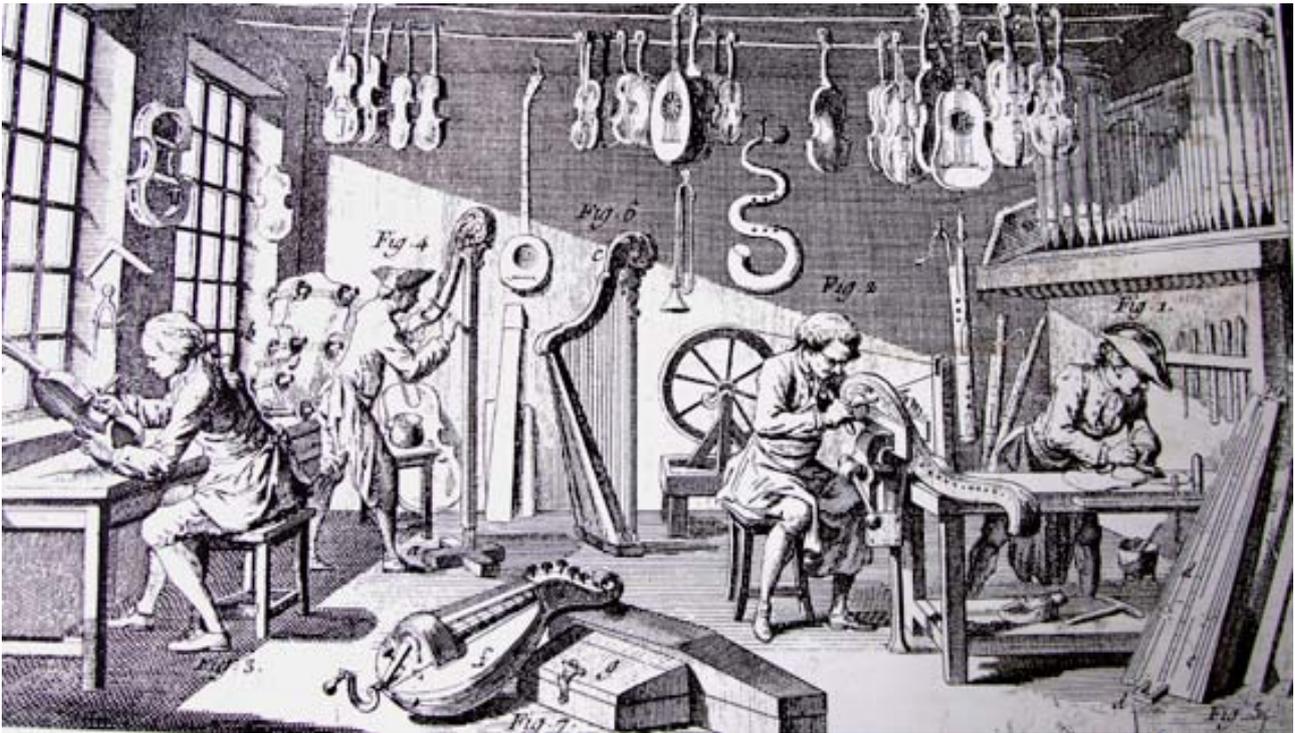


## The guitar in Europe: four centuries of masterpieces.



The violin makers and their work have always fascinated historians and musicologists who could thus study the codes and the functioning of a profession in constant evolution. They collected historic as well as social cultural information necessary to the comprehension of this activity, without ever differentiating guitar makers from violin makers. As the powerful corporations that, in the 18<sup>th</sup> century gave the status of “sworn master” to the best craftsmen, they classified instrument makers in several large generic categories; strings, organs, harpsichords and brass instruments. Until around 1760, there was no separation between guitar makers from violin makers, the same makers built violins, basses, quintets, viols, mandolins, harps, citers, guitars and hurdy-gurdies, that is, plucked and bowed strings. Inventories made in some violin making workshops – after the death of the violin maker – demonstrated this fact clearly by the stock of wood, inlays and uncompleted instruments remaining when the activity stopped.

Except for the “Romanillos” and the “Antonioni” the dictionaries of violin makers – for the major part written in the 20<sup>th</sup> century – do not refer to the guitar, except in anecdotic ways, and often with contempt: read what Vannes wrote about Stauffer! : “...*In spite of (...) all these efforts and research, he was never considered any better than a guitar maker...*”. Or the awful calumnies that Henley wrote about the Pons brothers in the first edition of his dictionary that he suppressed afterwards. The documents that we could consult deal only with the repertoire, the music, the playing, the composition and the musical practice, the life of the composers or the musicians, but nothing about the techniques or technicians, nor instrument making. There are nevertheless some works about guitars made by luthiers, but dedicated mostly to our contemporaries, or the industrial American luthiers whose instruments are known the world over. About the golden era of guitar in Europe, apart a few statistics: corporation regulations, inventories after death, custom reports, craftsmen corporations, there is practically nothing. This is an omission we would like to correct. Since we have been “educated” by a profession that has for a long time been practicing the delicate art of expertise as well as the none less delicate art of restoration and since there is no tradition, method, or school dedicated to the instrument we are dealing with; since the role of museums is to conserve the instruments in their actual condition, we thought we would like to try and find the filiations, the

influences, trainings, styles or schools that could be pertinent to apply to our research and the working techniques of the makers of the string quartets: observations, doubts, comparison, drawings, identification, double checking, classification of the information, etc...

To start with, it is important to note that, contrary to the general thoughts, the set up and the structure of these two instruments – guitar and violin – similar but somewhat different – was the same in countries like France, Italy, Austria, Great Britain, Germany and Eastern Europe: a sound box on which a neck was applied. Often one or several nails reinforced this neck set up. In Spain, the neck and the upper block were one block in which the ribs were directly inserted, but almost the whole of Europe – starting in the 18<sup>th</sup> century – adopted the “glued neck” for the string quartet as well for the guitar, the lute or the mandolin. At the end of the 18<sup>th</sup> century, everything changed: strings, in the first place. The Neapolitan string manufacturer Savaresse, after having settled in Lyons, around 1770, offered musicians silk strings covered with metal. These new strings, better sounding than gut strings allowed for a greater tension but easily damaged the delicate gut frets. Makers had to invent a new fret system to resist to these new strings. It was the first step towards modernity for guitar and the system – still in use nowadays – of fixed inlaid frets on the fingerboard. The latter were first in brass like those used on citers and mandolins, then in bone, then in silver and lastly in nickel (“*maillechort*”) invented in France in 1829. Thanks to these new strings and these new frets, the guitar could evolve: around the years 1785-1790 from 5 courses (5 x 2 strings) it evolved to 6 single strings, with a short transition of guitars with 5 single strings, and lyre-guitars.. The guitar, thanks to this new register and its 6 distinct strings, developed and obtained great success. More and more, makers dedicated their work entirely to the guitar and numerous composers were inspired by this instrument.

In the period 1790-1800, Northern Italy was annexed in part to France and Italian artists, with their instruments – guitars and violins – were much requested in Paris, as well as Vienna and London, where they led successful careers. Beautiful Italian violins were much appreciated by the Parisian makers, and a new trend started for antique instruments, particularly instruments made in Cremona by the great masters. Parisian makers, led by Lupot, Chanot, Pique and then Vuillaume, developed a passion for this Italian patrimony. In this way, the world of violin making evolved and, around 1800, the maker chose his family of instruments: violins or guitars. Violin-luthiers dedicated their activities to an expensive instrument, with an aureole of prestige, inspired by an antique knowledge and a know-how based on the past and the making of beautiful copies of the masters. On the other hand, guitar-luthiers interested themselves in an innovative instrument, modern, but they were not so interested in antique instruments, which they quickly forgot or modified. In France, around 1795, the violin found its place in the conservatory and acquired its reputation of elitist instrument, while the guitar had to wait almost two centuries – the year 1969 – when it was taught by Alexander Lagoya and won its spurs.

We do not wish to polemize on the word guitar, on the beginnings of its use, on the differences or similarities noted with guiternes and other vihuelas, we started our observation at the precise moment when the three entities concerned started understanding each other when the word “guitar” was mentioned: the composer, the musician, and the maker. Let’s return to the beginning of the 17<sup>th</sup> century; the guitar was a complex instrument, of quality, that would remain - for almost 4 centuries -- the instrument most constructed and played in absolute. A complete instrument, elegant, technical, with its story, its authors, innovations and evolution, with composers and musicians. Therefore, a real patrimony which different styles are testimonies of a know-how typical to different regions in Europe, their history and their culture.



In the 17<sup>th</sup> century, principally three countries shared the production of quality guitars: Spain, Italy and France. The making in Italy and France shared a common evolution. Spain, on the other hand, developed a particular making: the guitar gained its sixth string around 1770 and remained with six courses for a long time, until around 1830. Spanish artisans kept the specific neck attachment to the box and antique processes derived from lute making: a fan bracing and the bridge glued on the top for knotted strings. Their making techniques had to wait until around the end of the 19<sup>th</sup> century, when with the help of the great Antonio de Torres they imposed themselves to the whole of Europe, even to the whole world. Before that time, the guitars made in Spain were exported to both the Americas and to Great Britain, but never crossed the Pyrenees.

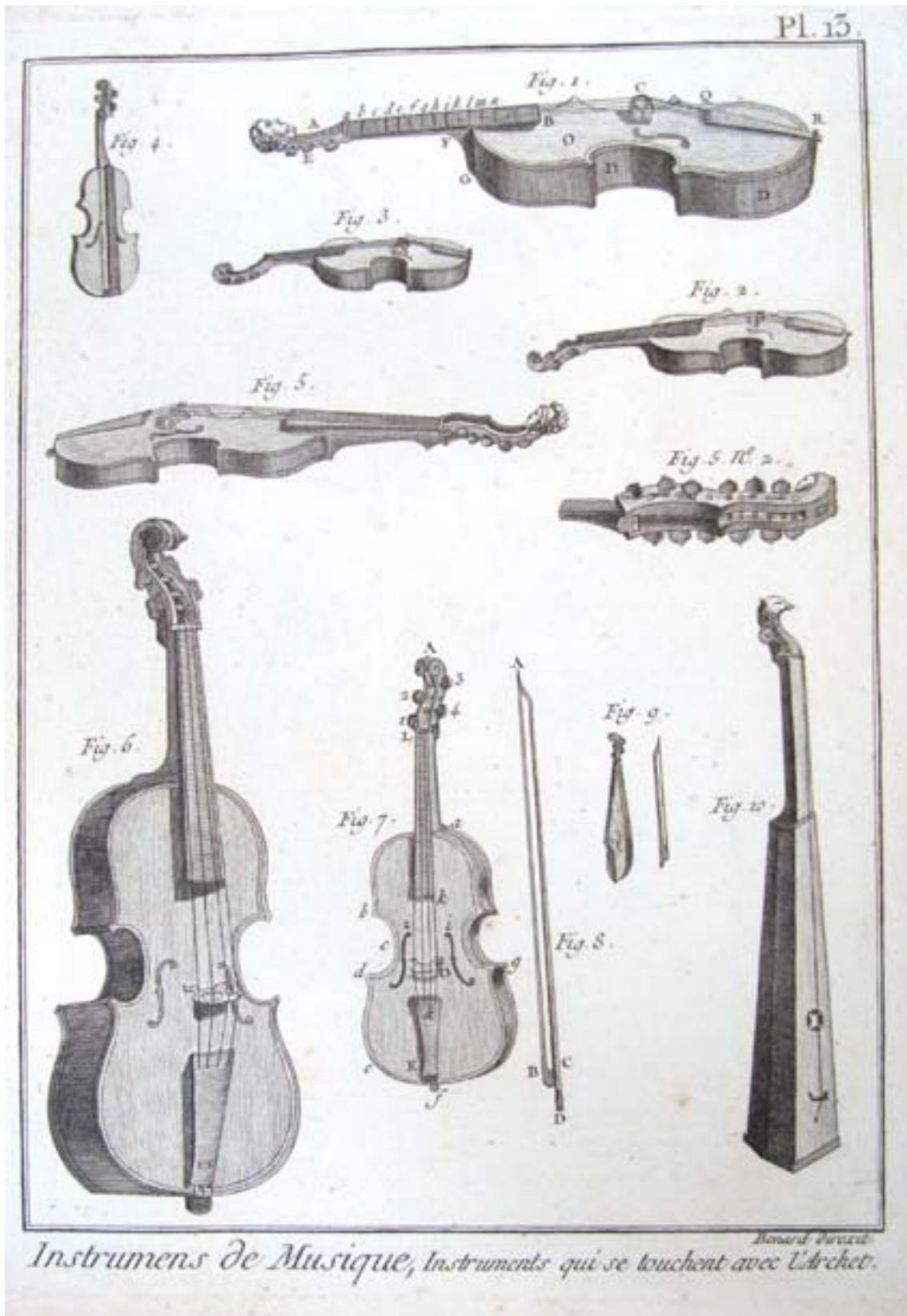
Let's come back to the non-Spanish guitars. In the 17<sup>th</sup> century, Italy – or rather the provinces that composed then the geopolitical scene of the Transalpine peninsula – offered the most beautiful guitars. Often, the makers originated from the Fussen area, in the south of Baviera. To respect the strict regulations of the corporations that required a limited number of registered luthiers, the latter had to leave their native towns very early, around 8 years of age for Pietro Railish for example, who then was hired by one of the Sellas brothers in Venice. The makers had to do their apprenticeship,

then conducted their activity far from their hometowns. Italy with its nice climate, its cultural and artistic life, willingly welcomed these talented craftsmen; moreover, the Catholic faith was generally protective towards those fleeing from the strictness of the Reform that was propagating itself in the north of Europe. That is the reason why many craftsmen left Germany to settle in Italy. They brought with them techniques and particular aesthetics, the contrast ivory-ebony for example, and the typical engravings in the style of Dürer that decorated the “cartouches” of the instruments’ fingerboards. The Sellas brothers and the Railish brothers, as well as Kaiser, Jungmann, Ertel, Grail, Stadler, Schmitt and so many others settled in numerous Italian towns and often integrated themselves by “Italianizing” their names.

The request for “Italian” guitars at that time was very important and luthiers offered - besides mandolins, lutes and other theorbs – two models of guitars: with flat or arched backs, dimensions varied. Tops had just a few bars, generally two above the rose and one below. The maker used a hot poker under the top’s surface before closing the instrument, so the top remained very flat at the joint and would not deform itself with time or by the strings’ tension. We found these fire marks on certain guitars from Naples until around 1850. The bodies were made of hard and acoustical materials, ivory or bone, serpentine, ebony, rosewood, connected between themselves by parchment stripes recuperated most of the time on antique books cut to this effect. The tops were richly decorated all around the rose and on the edges, sometimes almost all around the top. The fingerboard and the head were equally decorated with purflings and inlays, and the fingerboard often decorated with ivory or bone, the “cartouches” engraved with scenes like hunting, music, or pastoral life. A parchment rose, often enriched with wood, closed the instrument’s mouth. Those guitars were so beautiful, so refined and luxurious, that when the practice of music imposed new standards, their owners preferred to have them adjusted by a luthier rather than buying or using new ones. They were thus modified several times, maintained, and kept until our present days.

In the 17<sup>th</sup> century, it is well known, Italian makers not only made prestigious guitars for the courts and their entertainment, they also constructed sober musical instruments. Numerous documents testified of guitars and violins made on the same bench, for simple musicians. Thus, at the death of Andréa Guarneri in 1692, the workshop, the tools and the stock of wood were divided between his sons; thanks to the notaries’ acts that managed this inheritance, we know that this famous workshop constructed violins and guitars, as did the nearby Amati workshop and many others. Unfortunately, these guitars have not survived. Another example of Italian guitars were those made in Cremona around 1690 by the great Stradivari. (According to the inventories, only five still exist in the world and in the Museum in Cremona a fine guitar neck has been kept, probably due to the prestigious signature). Those magnificent guitars, by renouncing to the exuberance of ornaments in ivory, tortoise shell or mother of pearl, became sober musical instruments in wood, and were not collected as they deserved.

In Paris, the Voboam Family constructed the guitars that were the most requested. For almost 100 years, from 1630 to about 1720, René, the father, together with his brother Alexandre, his son and his nephews, offered numerous guitars to a varied clientele. The most luxurious were almost completely covered with tortoise shell creating complex geometrical design, only separated by fine purflings of ivory and ebony. The rosaces were in parchment, often in gold leaf. The guitar was King Louis the 14<sup>th</sup>’s favourite instrument, as well as the Music Superintendent Lulli, and thanks to this preference, guitar was with no doubt the most “trendy” instrument in Paris. The Voboam Family, together with their Italian colleagues, constructed simpler instruments as well, intended for musicians with modest means, without any decorations, made in fruit wood with simple ebony purflings, sometimes no purflings at all, and also in this case, only the instruments richly decorated



survived. In all cases, the interior construction was the same, spontaneous, with no excess in the finishing. A large block in the upper part of the instrument exerted pressure on the guitar's structure, but at the difference of their colleagues, the Voboam made it as light as possible and the ribs as well as the top were the more independent as possible from this block that held principally on the back. The Voboams were probably the first luthiers who specialized themselves in the

making of a single instrument, and no mandolin, nor cister, not even any viol, result being made by them, even though those were instruments very popular at the court.

The 18<sup>th</sup> century saw the success of the Parisian lutherie. We could not find any satisfying reason why, during the major part of the “*century of lights*”, we could not find “classical” guitars in Italy. The ever growing success of violin making and its famous makers probably monopolized all efforts, all attentions, and thus occulted the work of guitar makers. On the other hand, the guitar’s structure did not go through any notable change between 1690 and 1770. The makers went on working like in the previous century but made simple wooden guitars without any decorations, and none of those have survived.

A recent study underlined the fact that during the 18<sup>th</sup> century, in Italy, a new type of guitar was being played called “battente guitar”. These new guitars were set with metallic strings tied with small bone nails to the “brague” of the guitar (to the lower block). These strings were of 4 or 5 courses, sometimes more, and, like mandolins, had a bended top and a mobile bridge. They were “battues”, that is played with plectrums while guitars with gut strings were “pincées” (picked) with the fingers or with the fingernails. These guitars came from Calabria and the South of Italy. Very fashionable, they accompanied singing and dancing, but were not made nor played in other European countries, where cisters with metallic strings were preferred.

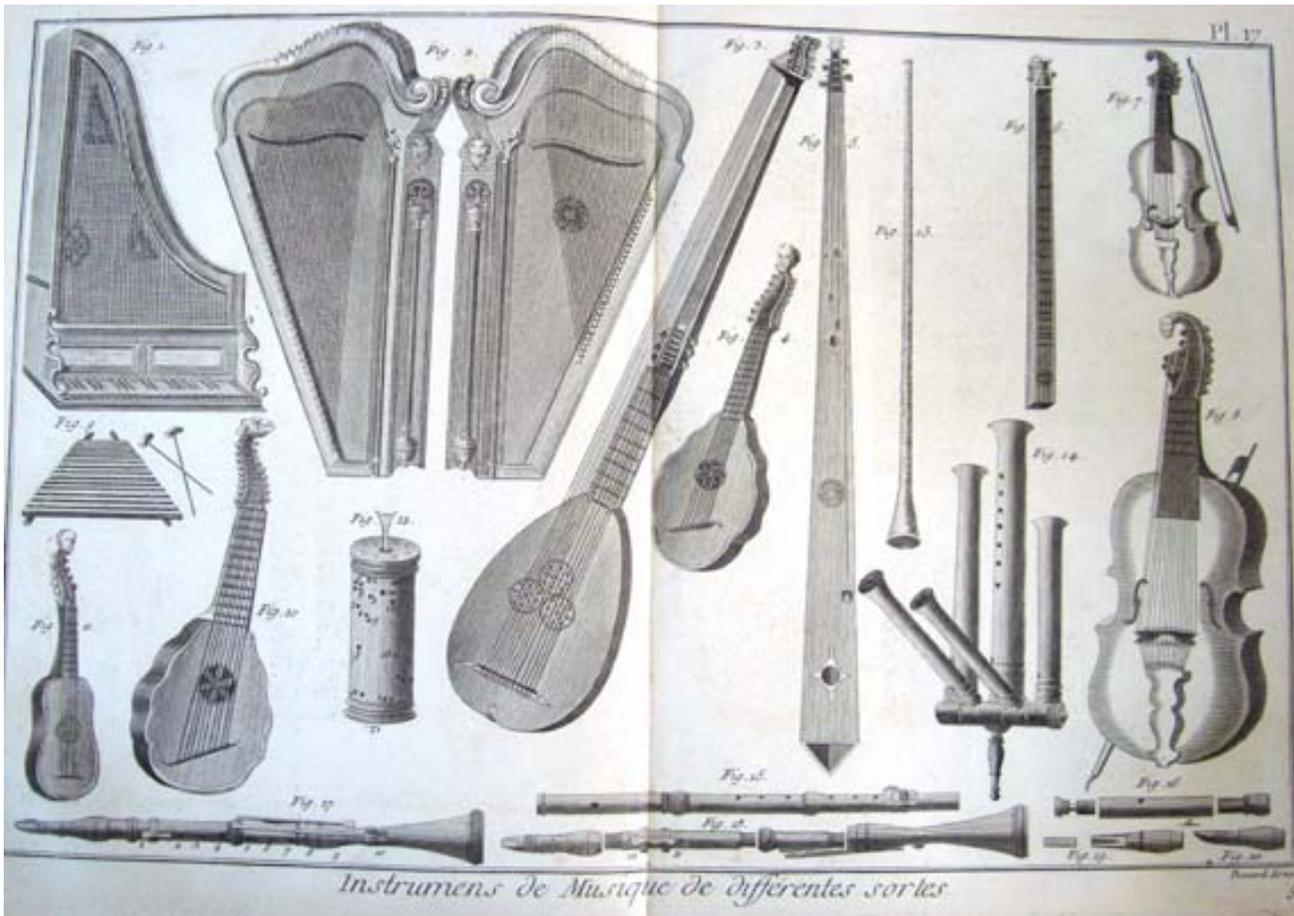
Italian makers, during the 18<sup>th</sup> century, made two types of guitars :

- very simple guitars, “Stradivari” type, particularly in the north of the country
- “battente” for the south, in fruit wood, of various dimensions, that for the major part remained in their original state – after the trend disappeared – and that history has difficulty in dating and identifying.

We can assert that the classical guitar, set up with gut strings, was French, mostly Parisian, for the major part of the 18<sup>th</sup> century. The makers Lambert, Michelot, Saunier, Deleplanque, Caron or Renault, etc. demonstrated it. At that time, the guitar pattern became codified, the diapason was more or less defined (around 63cm), and the making by all these luthiers followed more or less the same schema. The top was free from any obstacles (inlays or decorations that could prevent playing), the selected materials were more flexible; tortoise shell or ivory were substituted by fruit wood, harder and more acoustical, or exotic woods, rosewood, satinwood, mahogany and of course maple. We could find two bars above the mouth and one below, around 1800, the first bars in “X” or “Y” shape were invented.. Typical inlay called “pistagne” or “pistaille”, inherited from the Voboams, were set around the guitar and the mouth, and a parchment rose, for the most beautiful models, closed the top. The inner linings were in spruce, very fine, the blocks were in linden tree, slightly concave to make the instrument lighter, and the inside was as refined as the outside. The neck was always glued on the ribs crown, but the reinforcement nail was not in use anymore. Towards the end of the century, a radical change announced itself.

Luthiers went on investigating how they could increase the power of the guitar and how to extend its register. After several attempts – more or less successful – like the guitars with two tops made by Lambert and Saunier, the complicated decacordes by Caron or Lejeune, the theorbed instruments with 6 strings on the neck and two or three bass strings outside the neck, and some lute-guitars, it resulted in a lyre-guitar that obtained a real success – from 1780 to 1820. These instruments meant the definite passage to the 6 strings. It was simultaneously in Paris and Naples that the first modern 6-string guitars made their appearance around 1780-1785. After several trials of 5 single stringed guitars, the makers added the E 6<sup>th</sup> string that gave the instrument its definite colour.

During the whole of the 18<sup>th</sup> century, Spain continued to make remarkable instruments. Around 1770, a 6<sup>th</sup> string was added as well, which remained double until around 1830. Napoleon 1<sup>st</sup> met defeat in Spain and the borders between France and Spain remained shut for a long time – the Spanish luthiers became known and appreciated much later.



In the beginning of the 19<sup>th</sup> century, France and Italy were leaders on the guitar market, together with Austria, Germany and England. Those countries, in spite of the conflicts that opposed them but thanks to the agreements between them, shared the same taste for music, liked the same composers, same interpreters, and same makers. Principally, Pons and Lacôte in France, Guadagnini and Fabricatore in Italy, Stauffer and Ries in Austria, and Panormo in England. Europe as a whole was more or less directed by France and its allies which allowed for an easy circulation of arts and culture. Musicians and composers were the real “stars” in the European courts and their instruments object of curiosity and envy. Guitar, as always, was considered by painters – who are the testimony of our societies – like an object of pleasure and culture.

The 19<sup>th</sup> century was a grand century for guitar. Equipped with its new strings, its new tessitura, its new chord and with its power increased, guitar seduced composers. Makers were evolving and techniques were getting refined. The neck was now wedged in the upper block and the ribs to better resist the tension of the strings. In France, the Pons brothers, then Lacôte, brought more improvements to the guitar :

- . the particular joint neck/.heel
- . the new small bars under the fingerboard to answer the higher notes
- . another bar below the bridge
- . the use of new veneered exotic woods on light and sounding spruce – and the back in one-piece
- . the beginning of breaking pegs , then tuning machines.

In Italy, the large “moustaches” of the Neapolitan guitars made by the Fabricatore dynasty and the large bridges of the Guadagninis’ guitars straightened the guitar tops and did not need the supplementary bar in the lower part. Laprevotte, and after him all the guitars made on the

“Molino” pattern, preferred to set the bars in the same direction as the grain of the wood, like on a violin.

Then the ebony fingerboard was lowered on the top, set half way down in the wood, in the case of guitars by Fabricatore or Filano, and lastly – and this is of real importance – the lower nut (bridge) was mobile and adjustable.

In France, England or Austria, holes were made on the bridge and the top for a better sustain of the strings and a stronger tension, but in Italy bridges with knotted strings were preferred.

Guitar became the absolute instrument, so popular that everyone wanted to be part of the success: composers – Italians for the most part – started a real “style war” by associating with the makers to promote models and sonorities they preferred to their pupils. Thus, Carulli worked with Lacôte, Legnani, with Stauffer; Sor and Aguado – even though of Spanish nationality – played guitars made by Lacôte and Panormo, Molino imposed his very particular model inspired by the famous guitar-violin made by Chanot, and Giuliani never abandoned his Fabricatore. In all cities of Europe, hundreds of passionate teachers taught guitar to enthusiast pupils and numerous concerts were given to a passionate public.

After 1810, the request for guitars became enormous and a real industry started in Mirecourt, in the east of France, and in Markneukirshen in Saxonia. In Mirecourt, between the years 1800 and 1840, tens of workshops started constructing a large number of guitars to be exported all over the world, thus creating a style, a school. The same happened after 1840 for the violin. In Markneukirshen, the exports went to Austria, Russia, and Germany. The craftsmen rarely signed their production, leaving the commercial aspect of their instruments to the dealers and to the factories that produced hundreds of instruments every year, in all categories. Mirecourt, this small village in the East of France, became the provider of specialized workers in violin making for the whole of Europe, and some of them left their native Vosges to go elsewhere to try and make fortune: Guiot, Gérard, Boulangier, the Roudhlof brothers and one of Chanot’s son moved to England; Lété, Noisiel, Calot, Bastien, Pacherel moved to Italy; Aubry to Spain. Others went to the far away Americas. Italy went on making quality instruments with characteristics typical of each region: Naples, Venice, Rome, Turin or Milan, Catania, etc. Very often, the same luthier made guitars and violins, thus avoiding the industrial rationalization and its factories.

In Vienna, cultural capital of Eastern Europe, the Italian composer “in residence” Luigi Legnani asked Georg Stauffer, former cabinet maker who became luthier, to construct instruments according to a particular pattern he was affectionate to. Thus, the luthier constructed a new guitar model: a larger body, more proportioned, very straight at the waist, with relatively low ribs, a rose that cut the top in two, and very often the diapason rather short. The back was very fine, rather arched, and strong bars straightened it. The top was very thick, almost with no bars. He also invented a system of adjustable neck/fingerboard which, by means of a simple screw, allowed the musician to adjust the height of the strings. The fingerboard was also carved between each fret to allow the guitarist to play the chord to create a sort of vibrato, and proposed – very early in his career – mechanics hidden under a silver plaque very finely engraved. His most audacious innovation probably remained the “Arpeggione” that Shubert loved, and for which in 1824, the composer wrote the beautiful sonata in la minor. Unfortunately the instrument was forgotten and nowadays this composition is played on cello... Stauffer, his sons, and his pupils after him, remained one of the most innovative luthiers of the beginning of the 19<sup>th</sup> century and gave his name to a particular style that other luthiers adopted later on. We have to remember that Fender later on used the beautiful heads made by Stauffer, and that a certain Christian Frederick Martin – his worker – expatriated to the U.S. and created the firm CFMartin in 1833. Both these American guitar giants owe a lot to the modest Viennese luthier.

In London, the Panormo family was “THE” reference in the matter of guitar-lutherie. Originally from Palermo, trying to escape poverty, the father Vincenzo and his family expatriated first to Paris around 1760, where he constructed nice violins. Rapidly, around 1783, the family settled in London and there the eldest son, Louis, became guitar-luthier. His label specified that he made “Spanish guitars”, probably so that his instruments would not be mistaken with what was called at that time “English guitar”, a kind of ceter with metallic strings, very trendy in those days. Nevertheless, this maker made guitars in the Spanish tradition, with a fan bracing but, strangely, a bridge that pierced the top; the distance between the holes was so precisely calculated that they went through exactly between the threads of the fan bracing. Starting in the 1820s, he added mechanics on his guitar heads, because English musicians did not like pegs. No one knows if it was because of the humid climate, or because his father was a violin maker and therefore varnished his instruments, but he was one of the first European maker to start varnishing the top of his guitars. Lastly, he offered a particular fingerboard with slightly arched surface called “radius”. Louis Panormo did not work alone, his brother Joseph was collaborating with him, then his nephew Edward. He employed several workers, some of which were directly recruited from Mirecourt and collaborated with some Parisian makers as well, like the Pons brothers. Louis had another passion: constructing violin bows! He constructed a beautiful and personal model, still much in demand by musicians today.



Spain was rich with several important and beautiful lutherie schools: Cadix, with Benedit, Guerra, Sanguino, and the Pagès dynasty; Madrid, with Munoa and the large family of Ramirez, started by Francisco Gonzalez and their pupils; Barcelona and the Altamiras, Garcia, Simplicio, then Fleta, Valencia and Grenada and their more modest makers that built – like in Mirecourt – thousands of more affordable guitars. Due to political incertities, Europe discovered the Spanish makers’ masterpieces in a much later period. Spanish star musicians like Sor or Aguado played their compositions in Europe on non-Spanish guitars and the production from their own country -- although beautiful -- remained unknown. Spanish lutherie took its revenge after 1870, when the maker Antonio de Torrès became very famous for the instruments bearing his name. Larger, wider, his guitars conquered all amateurs, and his guitar model became THE reference model.

After 1870, in Europe, almost no guitar were made with a parallel bracing and bridges piercing the top. This luthier really revolutionised the evolution of guitar making. One day, to prove the validity of his acoustic theory, he built a guitar with a cardboard box, “poor” and inert material and only the top and the bars were in wood. This guitar was tried and played “blind” behind a curtain, in front of a very demanding audience and at the unanimity, it won “best sonority”. Torrès had proven that the top and the bars, the thicknesses, the tension of the wood were determining factors for the instrument’s sonority, not the quality of wood used or the hardness of the materials. Today, this guitar is part of the collection of the Museum of Music in Barcelona. Torrès became “THE LUTHIER” of guitars: there is a “Before” Torrès and an “After” Torrès, like there was a *Before* Stradivari and *an after* Stradivari.



In the beginning of the 20<sup>th</sup> century, guitar making in Europe slowly declined. Perhaps because energies were monopolized by darker preoccupations. In the 1930s, following the example of Mario Maccaferri, numerous Italian luthiers settled in Paris: some violin makers, but mostly guitar makers, and a rebirth of guitar making took place, mostly in the Jacobacci workshops, Enesa, Favino, Castellucia, Buccolo, Buzatto, Di Mauro, Papalardo, Emanuele, etc. These craftsmen constructed a different lutherie, played successfully by a new generation of musicians. A new youth was given to the guitar, a new enthusiasm and a new repertoire. Jazz guitar remained a good example of European lutherie: box in plywood, low cost materials, but good technique that offered certain advantages of strength and sonority, and a very particular bracing taken directly from the Milanese luthier Mozzani giving the instrument and its metallic strings a particular sonority that seduced many musicians. In Mirecourt, factories still constructed and exported a lot, but there were already a lot of competitors: classic guitar in Spain with their own factories offering favourite models at a lower cost. At the end of the 1960s, the last factories in Mirecourt definitely shut, while, as a paradox, a new rise in the handicraft lutherie, guitar as well as violin, took its flight.

Today, guitar remains one of most constructed instrument in the world; without hard feelings, it ranges from the most industrial mass production to the confidential creation of some unique pieces for privileged artists. We only wished to pay tribute to this magnificent instrument that musicologists and historians curiously have not taken into consideration; our scope was to inform about its history, its rich patrimony, its evolution, techniques and artisans. During 4 centuries, from the end of the Renaissance until today, played by star musicians in the European courts as well as street musicians, it has been a companion to all events – important or less – of our European cultures.

We would like to end this essay by reminding that guitar has been collected from the beginning of its creation; for the elegance of its models, the quality of its construction the diversity of its

materials the modernity of its culture and the talent of its makers. These instruments are so representative of a culture and a "*savoir-faire*" that in Paris during the Terreur in 1792, Antonio Bartolomeo Bruni, violinist at the "Comédie italienne", residing in Paris, was assigned by the Convention to make the sinister inventory of musical instruments belonging to the "immigrants and condemned", to be inventoried as works of art and with this title confiscated by the State so that they would not leave the country. Today, most of these confiscated instruments are present in our museums. The beautiful collections that were taken apart in the beginning of the 20<sup>th</sup> century have also enriched the museums and have also helped the birth of new passions and new collections. These collections, visible for the major part, help us understand how the instrument forgotten by the academic doctors, encyclopaedists and other lexicologists after 4 centuries of creativity, evolution and transformation, still enchant us today, surprise us without ever drowning under the dictates of the "ancient masters".



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