12 tailles de violon recreated
by Giovanna Chitto’
&
Antoine Laulhère
2007-2008
The story of the first rebuilding of the missed "tailles de violon" played in the Orchestre des 24 violons du Roy (1577-1761).

An order from the Centre de Musique Baroque de Versailles with Patrick Cohën-Akénine, Jean Duron, and the Orchestre des Folies Françoises.

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Introduction

Patrick Cohën-Akēnine

From all musical projects for the last 50 years, the great discovery of the baroque repertoire in France is one of the most beautiful adventures. And the work is still in progress: the innovative project for the reconstitution of the orchestra *les 24 Violons du roy* is still to be completed.

The music played in the Château de Versailles in the 17th century served firstly the Sun-King, Louis XIV, and his Court. The King’s orchestra, named *les 24 Violons*, had an unusual sound, quite unique. The musicians of this orchestra played instruments which had particular size and tone. In the 18th century, this orchestra was in competition with the Italian orchestra which benefited from a wide exposure. When the first state orchestra ceased to exist, it carried away its so characteristic sound, because Italians players used other instruments: they performed their music notably with viola. From this time to now the French baroque music of the 17th century is performed on Italians instruments!

The project managed in partnership with le Centre de Musique Baroque de Versailles and *Les Folies françaises*, a French orchestra specialized in the rediscovery of the French baroque repertoire, is to bring together again the authentic violin family which was used in the orchestra *les 24 Violons du Roy*. Because there is no copy of any of the original instruments, creating this orchestra must begin by rebuilding them, in close collaboration with two instrument-makers and Patrick Cohën-Akēnine, musical director of *Les Folies françaises*. These exchanges allowed a new birth for instruments of the time as the *taille de violon*, the *quinte de violon* and the *haute-contre de violon*. Appropriate drying solutions were used to modify the resonance of the instruments and make the tone as perfect as it can be.
1630: Strings of *les 24 Violons du roy* orchestra during the reign of Louis XIII and Louis XIV

1720: Strings of *les 24 Violons du roy* during the reign of Louis XV and Louis XVI
1720 : Strings in European orchestras (Italy, Germany, England)

1780 : Strings in the orchestra of the Opéra de Paris
A rebuilding of the tailles de violons from les 24 Violons du Roy

During 2007-2008, 12 tailles de violons was rebuild by Antoine Laulhère and Giovanna Chitto'

Antoine Laulhère and Giovanna Chitto’ - Luthiers-

Our contribution

An order for 12 instruments out of 24 is fascinating for the instrument-maker because he has to think of the global sound of the orchestra as well as characterize each instrument to the part devoted to it.

In this case, so exceptional, our work have been much more difficult due to the fact that no taille de violon has emitted any sound for more than 200 years.

Inventory of the elements

Except for some descriptive accounts of the time and the musical parts written for these instruments, there is no certitude, no point of reference…

Some comparable instruments are preserved in the music museums of Brussels and Paris. They are interesting for the technical construction. But all of them remain silent, and their ‘old-fashioned’ destiny led them to be modified years after years. These modifications damaged them so much that they cannot be used as model and it is difficult to identify them as taille de violon.

Recent research by musicians and institutions produced important information concerning the musicology and the playing. They have been essential to understanding the tone and renewed interest in the many forgotten bowed instruments of the 17th and 18th centuries. But these works, as interesting and valued they are, cannot be used as sterile truth.
And the Centre de Musique Baroque de Versailles asked us for high-performance instruments to play for a long time in an actual baroque orchestra, much more than a literal copy for a museum. Therefore we tried to rebuild a historical instrument adapted for performing.

**Reconstitution of a tone and an adapted ergonomy**

We had to make a list of questions about the rebuilding: concerning the structure, these lost instruments are only different from their ‘surviving brothers’ by the size... Building these instruments isn’t too strange... On the other hand, we have no information about the tone and the ergonomy; therefore, all is deduction and adaptation.

Just as we choose an actor devoted to his role, musicians and musicologists could deduce the tone of these lost *tailles de violon* from the role devoted to them in the music. They try to pass their feeling of the tone on to us as best as they can... Then we had the pleasure of building these instruments from this feeling, with the tone and character defined.

The quality of the partnership with *les Folies françaises* and the Centre de Musique Baroque de Versailles allows us to enter the musical world of these *tailles de violons*. Our contribution in this work was a fascinating adventure because the subjective aspect of this kind of work is an original undertaking that allows us a relative freedom in the realization.

It is the same for the ergonomy, adapted and improved with each musician.

**A historical rebuilding**

**Sources:**

- The size of the violins has been described in a rare treatise of the time (Marin Mersennes, *Traité de l’harmonie universelle* – Paris 1636). This has been used to start the rebuilding of all the *haute-contre*, *tailles* and *quintes de violon*.
- An anonymous ‘oversized’ violin built in Paris around 1700 and well preserved has been chosen as an example; this violin, too small for being a *haute-contre de violon*, is too big for a violin. Survivor of the craft made by the Parisians instrument-makers of the time (original and too much ignored), we use this big violin as a model for designing the 3 rebuilt violins and thinking to make a lot of structural choices.

**Building technique**

On many ways, the craft of an instrument-maker is nearly the same that it was in the 18th century. The tools, the glue and specific technique are from this pre-industrial period. Moreover, we are lucky today to benefit from modern analysis made on ancient instruments that allows us to rediscover old process (abandoned in the 19th century but that we, instrument-makers, like so much). For this work, we tried to use these old techniques, especially when they are involved with the tone or the esthetic of the instruments.
A rediscovered varnish
The treatment applied to the wood and the varnish I use come from a long personal research, made of meetings, several obstinate tries and study of impure resin in order to find a forgotten process to dry the varnish. This exclusive process – found and developed since 1995 for our specific craft – is from an expertise started in antiquity and exported to all of Europe. This technique has been forgotten due to the technical progress and a lot of new scientific discoveries made in the beginning of the 19th century in chemistry (see our lecture during the Colloque sur les vernis anciens – Cité de la Musique – March 2007). This technique is from the affresco, adapted to the varnish, the aim of which is a slow mineralization of the wood to harden its surface. This mineral hardening creates harmonics when the wood is in vibration, it gives more richness of tone especially with gut strings. We use, for our instruments, a formula from the 18th century and traditional minerals, which have to be dried slowly (minerals are applied in a coat of primer) and need a complex elaboration. As for wine, this varnish is fully ready after one year.

Portrait and character of these violins.
The haute-contre de violon measuring 37.5 cm. It is only 2 cm more than a violin. In spite of this small size it is tuned as a viola (C-G-D-A). The short sound box makes it an ‘imperfect violin’ and it is not adapted to the low string, which sounds muffled and feeble. That’s surely why it is rarely played in the scores of the time. But this short sound box gives a typical sound, especially on treble strings, distinct from the violin and very well adapted for counterpoint.

The taille de violon measured 45 cm. This instrument is the nearest to the viola (generally sized 42 cm). The instrument has a good presence, dynamics and precision, and a really different sound from the haute-contre.

The quinte de violon seems to be an impossible instrument: with a sound box of 52.5 cm it looks like a tenor-violin or a small cello for children... played on the neck, as a viola! This instrument with its extreme size has been our best surprise; the playing, developed by musicians who are interested in this kind of instruments (viola pomposa, viola da braccio... ) gives to this quinte an unexpected flexibility. The quinte is maintained by a strap on the neck. The position allows to the left hand a better agility because it doesn’t need to maintain the instrument. This technique allows to play with great ease, it is surprising. Tuned like the other violins (C-G-D-A) the sound is clear, pure and loud. Balanced for the 4th string part. We heard in this instrument a really original sound; neither viola nor cello but successful and coherent. This instrument has a potential beyond early music.
A happy adventure
Fascinated by ancient techniques that give to our craft a subtlety and a variety as for the elaboration of a wine, accustomed to work in partnership with a musician to create his own instrument with his own tone, this work has been for us, instrument-makers from the suburb of Paris, a dreamy adventure: to work with musician friends; to reinvent forgotten instruments; to find their charms and characters; to risk aesthetic and sound choices of a contemporary human, all in order to succeed to show and to hear this ancestor of the viola, with the faith to make a contribution to the revival of these instruments currently condemned to be silent.

To Patrick Cohen Akénine, to the musicians of Les Folies françaises
To Hervé Burckel de Tél, to Jean Duron
We warmly thanks them for their help and faith.

*Quinte de Violon by A. Laulhère, Paris 2007: «Balthazar»*
Les Folies Françoises recreates the 24 Violons du Roy

An ambitious organological project devoted to an international development

Interview with Patrick Cohën-Akénine, violinist and conductor

Why the recreation of the orchestra les 24 Violons du Roy with les Folies françaises?
I would like to manage this project for a long time. When I created les Folies françaises in 2000 my aim was to perform the French baroque repertoire, in particular the tragedies-lyriques by Jean-Baptiste Lully. Our first record, with the soprano Patricia Petibon (Virgin Classics) was devoted to airs from the French baroque era for this reason.
Recreation of this orchestra for me is much more than having the most homogenous timbre: it is a full part of the artistic project I want for les Folies françaises.

What determined you to undertake this project?
When I was reading the major works of French tragedie lyrique, I realized that the five parts of the strings were not valorized enough in actual performances. In spite of the incredible impetus that emerged from the early music movement – works and practice – we still use viola instead of hautes-contre, tailles and quintes de violon to play the inner parts of the French orchestra. This is in use since the 19th century, when publishers and editors decided to replace original keys by a C key as used for viola parts for a more comfortable reading. Then, I asked myself what could be a haute-contre, a taille and a quinte de violon, and I started an organological study. The research carried out by Antoine Laulhière and meeting him was key: thanks to him these instruments will live again.

What will be new in the orchestra with this instruments?
The global sound of the orchestra will be more characteristic and allow us to hear more clearly the skilful counterpoint of the greatest pages from French baroque music of the 17th century (Lully, Marais, Campra, Charpentier, Desmarest etc.). Using a viola is more homogeneous but lacking in definition. The range of each of the five parts is precise and limited, thus it needs a specific instrument for each part to find its own color, its own sound; moreover the woodwinds hardly ever play together with the inner parts (contrary to the dessus de violon colored by flutes and oboe, as the basses de violon by the bassoon).

In spite of the huge work carried out on this repertoire in France for 30 years, and the successful performance of Atys first “rebirth” of the five parts orchestra of Lully performed by les Arts Florissants, not many musicians have seen the potential of the orchestra from Versailles, quite unique. In this recreation, les Folies françaises do not give in to the temptation of a vain historical reconstitution: it is more to develop our own sound and mark our identity in the baroque landscape.
What’s future would you like for this project, in partnership of the Centre de Musique Baroque de Versailles?

Eminently French in its history, this orchestra has the vocation to expand internationally. This orchestra already existed during the first half of the 17th century, but Lully structured it to obtain the best. Maker and defender of the French musical identity, the Surintendant notably forbade to his musicians the use of ‘diminutions’ or ‘passagi’ from Italian heritage, for a clearer harmony.

This rediscovery of the French sound will undoubtedly be a shock for the musical world. But it is a challenge that the Centre de Musique Baroque de Versailles has to meet for his 20th anniversary. Partner of all the great baroque adventures from two decades, the CMBV is the best place to vouch for this first state orchestra, of which all European courts of the Grand Siècle were jealous. I am happy and proud to be the ambassador with the CMBV, of this beautiful project.
A rebirth of the Lully’s orchestra

Jean Duron, musicologist research- Centre de Musique Baroque de Versailles

Atys: already 20 years ago. It was a great first performance in Paris, where William Christie with his orchestra les Arts florissants dared (among other things) Lully’s orchestra. Some works of the Grand Siècle had already been performed before this but, because of ignorance, were performed with a classical orchestra, bad habits, including 2 parts with many violins, divided violas, cellos and a double bass part. More than the use of this last part, which thickens the bass, the bigger default of this arrangement was to give a disproportionate place to the second violins, and to have them play together with the flutes (absolute heresy), with the oboe and sometimes the trumpet. To be absolutely fair, some experiments had been made a few times before, notably by Michel Corboz with his David & Jonathas by Marc-Antoine Charpentier at the Opéra de Lyon and his motets by Desmarest at La Chaise-Dieu.

Edmond Lemaître is the first researcher who established in the mid 70s the principle of the ‘orchestre à la française’ (French orchestra). Using ancient sources, principally from the opera during the reign of Louis XIV, he demonstrates that there is no double bass until 1700, and much more, that the second part of the orchestra is devoted to a first viola part, with fewer players and with a different tone, the “haute-contre de violon”. Strings are divided into only 1 part for the violins (dessus de violon), 3 parts for the viola (hautes-contre, tailles and quintes de violon) each one with a different size, all accompanied by a low part devoted to the basses de violon, a bigger instrument than the cello and tuning 1 pitch lower.

This change was important for the volume, the tone, the balance between the parts, and much more, it allowed to define, indirectly, a new function for the winds: grouped all together (first and second) on the first part devoted to the violins they give it a new brilliance. The sound architecture, its proportions have been redefined to play a tone never heard before, instead of a new reading of the counterpoint and the harmony. Because finding the role of this second part (attributed to the haute-contre de violon) wasn’t a simple change of instrument: it was a new distribution of the function. And I would like to explain it. This part was played brilliantly: with many instruments (half of the violins), much treble and together with the winds. It was a sort of twin of the singing part devoted to the first violins. But, as we should now understand, this part has not been written like this. Moreover, usually the part needed to be played on the lower string, sometimes lower than the possibility of a violin: musicians of the 20th century couldn’t think anything else than a mistake of the copy. Then they “corrected” it, after laughing (see the first fugue of the first chorus from the Quam dilecta by Rameau).

When Atys was performed with violas playing the second part, everything changed. The violins, all together, united, doubled in forces and with all winds added in a unison; we could imagine easily how new was the glow from this part of the architecture. As for the haute-contre, with fewer players but with a thicker tone, the part re-integrated the role that it normally should never have lost, near the tailles and the quintes de violons, these 3 parts more devoted to coloring the bass part, and adding a unique tone, usually with an emotive density, giving off a beautiful specific harmonic spectrum.
The *Atys* performed by William Christie was an important step in rediscovering the tone of the French orchestra. And this performance met with success, even if the quality of the tragedy and the performers was an important factor. I think it is also thanks to the new colors this orchestra reveals.

Today, 20 years after, the project of rebuilding these instruments as we think they were is a new step in rediscovering the tone of the French orchestra. Because, if this orchestra “à la française” was first demonstrated, then experimented, the instruments themselves were a question: *Atys* was performed with violas, assembled for early music, but of a classical conception.

In the 70s, Edmond Lemaître had already clearly defined the problem concerning these instruments, and had already given the size. Unfortunately, and for many reasons, the experimentation hadn’t succeed (excepted concerning the *basses de violon*): because of money, because of time, because of models too, there aren’t any French untransformed violas from this period which could help us to rebuild these *hautes-contre, tailles* and *quintes de violon*.

After *Atys*, this orchestral music “à la française” met with success from the musicians and the public. The necessity to rebuild the instruments was more and more evident and some famous artists tried to do it, unfortunately unsuccessfully. It wasn’t time. Now, a particular conjunction is favorable to this realization, led by personal conviction: Patrick Cohén-Akénine who knows so well this French music, which allowed him to conceptualize and to hear sufficiently clearly this tone; on the other hand the instrument maker Antoine Laulhière who, thanks to his personal experience and much more his acknowledgement of ancient technique, could imagine the instruments corresponding to this vanished tone. Their meeting, their long discussions made everything possible with the support of the national music school of Orsay and the Centre de Musique Baroque de Versailles.

Rebuilding an instrument of the time, without any model, could seems a hazardous adventure. We agreed, but we were not starting from scratch. In the case of a complete instrumental family, as the bowed strings, risks are reduced. The basses, and much more the treble parts are already known, and the inner instruments could be deducted to a large degree from them. Moreover, some descriptions of the instruments have been found in old books; and we have few instruments, modified (shortened), the analysis of which allows us precious information. But rebuilding ancient violas is not only matter of measures.

It is also a matter, from the point of view of instrument making itself, or researching and respecting ancient techniques for the treatment of the wood which allow us to be as near as we can to the original sound of these instruments. Antoine Laulhière and Giovanna Chitto have made every effort for a long time to built their instruments with a process frequently used at the time, which was created to keep the wood from going bad. This process was particularly used for naval construction but traces of this treatment have been found on some ancient violins. They mineralize the external layout of the wood by painting with a mineral active scale coat of primer bringing about the hardening of the wood and the varnish applied on it. This process widely contribute to the tone of the instrument.
Back to the violas, at last it is the music itself, and of course the music especially written for them, which allow us to get a good idea of what composers want from these instruments.

Each of the 3 violas must have its own tone, different from the 2 others. The music composed for each one, in a precise and short range, has its own character. Patrick Cohën-Akénine thinks that the range used - and the different registers - is a specific French character: it didn’t exist with the same consistency in other European music where violas are used in a wide range. That is probably why they have been designed with different sizes; even if they have the same tuning they have to sound distinct one from the other one. As soon as we clearly see this autonomy of the register, we could think of balancing it. This is the craft of the instrument maker; each of the 3 violas must give the best in the range adapted: the *haute-contre de violon* with the 2 upper strings (A-D), the *tailles de violon* with the 2 inner strings (D-G) and the *quintes de violon* with the 2 lower strings (G-C). The scores composed by Lully and his contemporaries are clear for this and favored a particular register; and sometimes they used a different disposition, as crossing the parts, to obtain extraordinary effects. The keys used for each parts, C1 for the higher viola part, C2 for the medium part and at last C3 for the lower part underline this concept of a precise range and mood for each instrument.

Finally, to rebuild instruments such as these, a large part is unquestionably arbitrary, even if it is done with a perfect acknowledgement of the context. It is thanks to the feeling of what tone is wanted (or imagined), to the instrument itself, but also the instrument together with the others (the entire part, all the 3 parts with the 12 violas and with the whole orchestra), that we could find something satisfactory. After, all depending on the taste and the genius of those involved in the project: if the basic design of the instrument is not impossible to make, on the other hand there is a lot to do for the bridge, the strings and the bow.

The Centre de Musique Baroque de Versailles widely encourages this kind of reasoning, as soon as it is based on objective facts: this is the case concerning instrument making and other kinds of projects. Performing early music is in this kind of reasoning: each ornament, each tempo, each affect... as it is for the pronunciation of Latin with the French accent spoken at the time. Of course it is the research on the music itself that is of primary concern. There are many works incomplete where the inner parts of the orchestra are missing, the ones devoted to the different violas. To restore them it is necessary, here again, to find the best models (the works of the composer which are complete), treatises for composition written at the time: but the final restoration is a question of intuition.

Jean Duron in the violin makers’s atelier
About press and news:

**Le Monde**

La renaissance des 24 Violons du Roi-Soleil

Il n’y a pas que Jeff Koons pour étonner au château de Versailles. Le Centre de musique baroque vient d’y faire revivre l’orchestre du Roi-Soleil, les fameux Vingt-Quatre Violons du Roy dans la galerie des Glaces, L’Ours et le Polichiné en bois polychrome de Koons en sont restés pantois. Tant comme le public, qui a découvert le 16 octobre une sonorité inédite dans plusieurs ballets de Lully, sous la direction du violoniste Patrick Cohén-Akenine à la tête de son ensemble bien-nommé, Les Folies françaises.

Initiateur de ce projet ambitieux, Patrick Cohén-Akenine souhaitait depuis longtemps restituer la musique des XVII et XVIII siècles dans sa singularité, en récrant les instruments, aujourd’hui disparus, qui composaient l’orchestre l’adolesce – unique au monde et admis de toute l’Europe.

Résultat époustouflant

De ces cinq violons (du plus aigu au plus grave : des cous, hauteur, taille, quarte et basse) ne restaient dans les musées que les deux extrêmes. Il a donc fallu réinventer les trois intermédiaires d’après des traités d’époque. C’est au luthier Antoine Lalurhère, assistant de Giovanna Chitto de Brescia, qu’a été confiée la fabrication des douze instruments commandés par le Centre de musique baroque de Versailles.

« La différence de la lutherie italienne, qui cherchait une sonorité ronde et homogène, la lutherie française préfère une caractérisation plus marquée, plus rugueuse ou plus brillante. » Antoine Lalurhère a donc travaillé d’après les techniques anciennes de minéralisation du bois par le vernis. A l’oreille comme à l’œil, le résultat est époustouflant. Au point que de toutes les Grandes Journées Lully de cet automne (les dernières seront les 18 octobre, 15 et 29 novembre), celles des Vingt-Quatre Violons marquent un véritable tournant dans l’interprétation de la musique baroque française.

Marie-Aude Roux
Reconstitution of les XXIV Violons du Roy

More on our Web site:

www.violino.fr

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