

Instruments. Bows. Performing Practice. The Orchestra in Beethoven's Day

Special exhibition in the Beethoven-Haus Bonn

3rd September – 13th Dezember 2009

Room 7 (1st floor):

The first part of the special exhibition deals with the orchestra as it was in Beethoven's day. When Beethoven was born, instrumental music had become the most innovative area of contemporary classical music. In addition to the piano and string quartet, it was the orchestra in particular which was reaching an ever wider audience. The young Beethoven grew up with the symphonies of Mozart and the Mannheim School before in 1792 in Vienna he became a pupil of Joseph Haydn, just at the time when Haydn was producing his greatest orchestral masterpieces. Beethoven went on to develop this tradition to such individual perfection that later generations of composers, such as Schumann and Brahms, shied away from writing their own symphonies. The great public interest in music in the late 18th and early 19th centuries led to the rapid development of musical instruments, for their sound now had to fill the large concert halls, in which the growing audiences gathered.

Showcase 1: It is not widely known that the young Beethoven earned his keep playing the viola in the court orchestra in Bonn. When Elector Maximilian Franz established an opera in Bonn in 1789, he provided the orchestra with instruments. In this way Beethoven, who was also employed as organist, had the chance as a member of the orchestra to become acquainted with the latest Viennese operas, among them works by Mozart (*The Abduction from the Seraglio*, *The Marriage of Figaro*, *Don Juan*). As all orchestra musicians of the time, Beethoven used traditional bows, which were not yet fitted with a screw mechanism. The necessary tension was provided by the so-called frog, which was wedged between the hairs and the stick. The bows which are pictured in Leopold Mozart's violin tutor are also bows of this kind with the frog. It is interesting to note that in later editions of Mozart's instructional work clothing was modernised, whereas the bows in the illustrations remained unaltered. Another way in which the tension of the bow could be regulated was by means of a screw mecha-

nism, with which the frog could be fixed in different positions by a metal snare.

Showcase 2: Not all string instruments were equally well suited for use in an orchestra. An orchestra violin was expected to have a stronger and more carrying sound than a violin used in soloistic chamber music. Chamber music instruments such as the one on display here, which was owned by Beethoven, were characterised by their light sound and richness of modulation, which was provided by a strongly arched shape and thinness of the wood. Orchestra violins on the other hand had less of an arched shape and were made of thicker wood. The sound of the instrument was also intensified by the strings, which were made of sheep gut, with only the bottom string wound with silver. For orchestra violins, musicians chose much thicker strings than for chamber music instruments. During Beethoven's lifetime the ideal sound of a violin changed. The once treasured, high-arched instruments typified by those of Jakob Stainer lost much of their popularity in favour of the more robust, shallow arched violins as made by Stradivari. Of the four string quartet instruments which have been on display in the Beethoven House for more than a century (*see display-cabinet in Room 8 on the second floor*) the viola and the violoncello are high arched, whereas the violin, which is attributed to Guarneri, is a more shallow arched instrument. The Italian Amati violin represents a compromise between the two shapes.

Showcase 3: The four types of string instruments were all modernised during the second half of the 19th century, i.e.: they were developed in order to meet the demands of greater sound levels and modified playing techniques. To achieve this they were opened up and fitted inside with larger bass bars and sound posts, elements of construction which serve to disperse the sound waves within the body of the instrument. In addition the original neck was often sawn off and replaced with a longer and more angled neck. In the course of these radical modifications the pegs, bridge and tailpiece were also adapted to suit contemporary fashions, although this had a much smaller influence on the sound and playability as the structural alterations, as is shown by the example of the Viennese viola made by Matthias Thir around 1770. Unfortunately the leftovers from such acts of modernisation were very rarely saved and hardly ever even recorded, because they often show signs of wear and tear.

Their shapes and decorative elements nevertheless allow them to be assigned to a particular era. Since valuable instruments have often gone through several such phases of modernisation, it is very difficult to reconstruct how they looked like in Beethoven's time. In the case of the string quartet instruments it can be proved that when Beethoven died they were in the same condition they had been in the 18th century. Nevertheless during his lifetime minor alterations had been undertaken, for instance a violin neck removed and re-glued at a different angle, as is shown by the example of the Viennese orchestra violin in *Showcase 2* (all instruments and components which did not belong to Beethoven are on loan from the Köpp Collection).

Only recently has it been discovered that in addition to the four string quartet instruments on display, Beethoven possessed an additional violin and a second violoncello. This second violoncello, which is privately owned and on public display for the very first time since 1927 (*see display-cabinet*), was put through repeated phases of modernisation. In the first phase the instrument was reduced in size, whereby the edges of the large-format violoncello were sawn off to bring the instrument down to the standard dimensions as determined by Stradivari. Opinions differed in Beethoven's day with regard to the right procedure and ideal dimensions. Sometimes cellos with a smaller body were also subjected to acts of reconstruction, for instance, as described above, the neck was replaced, which can be seen on the remains of a violoncello made by Thomas Kennedy (London, around 1820). On the other hand Beethoven's violoncello displayed opposite still has the same neck as it had then, because at a very early date it was fitted with a special mechanism, by means of which the angle of the neck could be adjusted. This mechanism was invented in 1823 by the Viennese violin and guitar maker Johann Georg Staufer.

Display-cabinet: Of all orchestra instruments in Beethoven's time the wind instruments were subjected to the greatest changes. 18th century woodwind instruments were normally made of indigenous woods such as boxwood or sycamore and had holes similar to a recorder, and just a few keys. In order to achieve a more sophisticated intonation, the instruments were fitted with more keys, which enabled the musician to open and close holes which were further apart. Similarly important changes were made to trumpets and horns, which traditionally could only play notes of a natural

harmonic series and that in only one key. In order to play different keys, the musician had to change the instruments crooks, so that they were only rarely used as a solo instrument. The attempt to give the trumpet more freedom in its range saw at first the largely unsuccessful development of the keyed trumpet, but then finally valves were invented, with which extensions in the tube could be opened or closed. However, when the development of brass instruments finally enabled them to play the full chromatic range and made them entirely suitable for solo roles, Beethoven had already passed away.

Showcase 4: The most innovative developments in the field of string instruments in Beethoven's lifetime were made with regard to bows. With the introduction around 1800 of the industrial production of bow screws, traditional bows with their clip-in frogs gradually lost popularity and orchestra musicians could afford bows with a screw mechanism. And the bow sticks were no longer convex in shape, but rather concave (bent inwards towards the hair). German bows had a tip which swung to both sides. Around 1790, François Tourte developed in Paris the modern bow with its characteristic "pike's head", which he perfected around 1815 by adding metal parts. His type of bow was quickly taken up by bowmakers in London, as is shown by the exhibit from the workshop of John Dodd, made around 1810. During Beethoven's lifetime however, this type of bow was rejected in Vienna, although it is not known which type was used in the city. Since in Beethoven's lifetime it was primarily a financial question whether bows with metal parts were used or not, orchestra musicians tended generally to use bows without metal. Also, orchestra bows were heavier than those used by soloists, whose virtuosity required lighter bows.

Showcase 5: Developments in the construction of instruments meant not only that wind instruments, in addition to their traditional functions, could be used as solo instruments, but they also led to other instruments becoming more independent. Beethoven systematically separated the double-bass parts and deployed the contrabasses independently of the violoncellos for timbre and expression. This became possible when the Vienna orchestras began to use the lower-tuned four-string bass in addition to the traditional five-string instrument. Other contrabass instruments were additionally introduced into the orchestra, such as the contrabassoon and various forerunners of the tuba. The trombone,

which had traditionally only been used in sacral music, now took its place in the orchestra, and for higher harmonies the piccolo flute was introduced. Beethoven used all these instruments simultaneously in the final movement of his 5th Symphony. Beethoven's use of the kettledrum as a solo instrument is also worthy of mention, and particularly distinctive in the solo cadence of the piano version of his violin concerto op. 61, the autograph manuscript score of which is on display here. The Viennese kettledrums, which date back to around 1830, are on loan from the Buchta Collection.

Showcase 6: In Beethoven's time the lay-out of an orchestra was very different from today. The 18th century practice of splitting the string and wind instruments into separate blocks was still common, as was the tradition of positioning the strings standing next to one another, as opposed to sitting behind one another. This was in part due to the construction of the music stands, which were made of long boards on which three or four parts could be spread out side by side. Even when the orchestra was particularly large, this tradition was upheld, as can be seen from the orchestra positioning plan of the Vienna amateur music societies, even when here space restrictions meant that several rows of music stands (each for 5-6 musicians side-by-side) had to be set up behind one another. It is also worthy of note that the choir always stood in front of the orchestra. In theatres, which had small orchestras made up of professional musicians, the separation of the blocks and the line-up of the strings were also maintained. Since the musicians in Viennese theatres were visible to the audience, they were not allowed to sit during a performance (with the exception of the cellists), as can be seen in a lithograph from 1821 of the Kärntner Theatre. The conductor stood in the middle facing the stage and with his back to the orchestra.

Showcase 7: When Beethoven was alive, the ability to improvise was considered a characteristic trait of a professional musician. When learning the instrument, fluency was acquired more through improvising with fingering exercises than with practising études. A flexible treatment of the score was perfectly normal for musicians in those days, but in an orchestra, when a number of musicians were playing the same music, this freedom to improvise had to be severely constrained, and so playing in an orchestra was considered a special exercise, as can be seen from the violin tutor of the

violin virtuoso and orchestra leader Louis Spohr of 1833. Nevertheless orchestra musicians in Beethoven's time continued to improvise, particularly when they had to play a solo. Whereas with the string instruments this remained a privilege of the principal musicians, the wind soloists could more or less do as they pleased, although the composer had the right to intervene. This improvisation was of course not documented in the score and can only be guessed at through comments such as "over the top". If the composer was not personally present, the leader of the orchestra would take charge. In Vienna, this was traditionally the first violinist, who while playing his instrument and occasionally stamping his foot, would conduct the orchestra with his bow. A conductor as we know him today, silent and swinging his baton, was still unusual in orchestral music, although in Beethoven's lifetime this modern development was beginning to gain favour outside Vienna. Beethoven's conducting instructions on the score of "Meeres Stille und Glückliche Fahrt" op. 112 were innovative. They demand that the range of movement should be directly proportional to the required volume and that the conductor himself should make no sound. It was normal at the time that the first violinist, today called the concert master, took over conducting duties. These duties are described in an article in a leading German literature magazine. Even when a composer such as Beethoven or Haydn was present, he would not actively intervene in the music, but rather "preside" at the piano and finally accept the applause as his own.

The second part of the special exhibition deals with the development of piano-making and piano-playing during Beethoven's lifetime. In those days the piano was not only a solo and chamber music instrument, but was also used in the orchestra during performances of choral works.

When Beethoven was a young man, no real difference was made between the many types of keyboard instrument. The "old" instruments such as the harpsichord and the clavichord, whose strings were plucked with a quill or struck with a tangent, were still in common use and were only gradually being ousted by the pianoforte, invented around 1700, in which the strings were struck by small hammers. This type of instrument, which made a variation of volume possible just by varying the force with which the keys were pressed, was quickly developed between 1770 and 1827. A light instrument with a relatively thin sound and a range of

five octaves was turned into a solidly built, powerful instrument with a range of up to 6½ octaves, which had enough power to fill the large concert halls being used due to the ever increasing interest in music of the middle classes. As an outstanding pianist and composer of works for piano, Beethoven personally played a very important role in the development of the instrument. Piano-makers sought direct and stimulating contact with leading pianists and tried to fulfil their wishes.

Vitrine 8: Contemporary reports about the 12 year old or 20 year old Beethoven vouch for his extraordinary talent as a pianist. His very personal way of treating the piano enabled him to produce unimagined sounds. He was considered an unequalled improviser. Only 1½ years before his death an unknown admirer wrote in one of the deaf maestro's conversation notebooks that it was his greatest wish on earth "to hear you, my God on earth, fantasising again soon". In Bonn the young, aspiring court musician and composer had access to the most modern and best pianofortes. An instrument maker who had migrated from South Germany also made combination instruments and even a piano which could record on paper all notes played on it. The piano tutor of Daniel Gottlob Türk lists in its introductory chapter numerous special forms of pianoforte which had been created in an age keen on experimentation.

In the Beethoven House there are several valuable pianofortes. In *Room 8 on the 2nd Floor* stand two instruments side by side as they did in Beethoven's last apartment – to the right the pianoforte which Beethoven borrowed 15 months before his death from Conrad Graf. For the deaf composer Graf had placed a construction like a "curved sound board of soft, thin wood" above the fingerboard and mechanisms, a kind of "soundcatcher" similar to a prompter's box. It was supposed to convey the soundwaves to Beethoven's ears in greater concentration. On the left is an English pianoforte made by Thomas Broadwood, identical to the instrument which the owner of that most prolific of all piano manufactories gave to the composer in 1817. It is in virtually original condition.

Room 12 on the Ground Floor at the end of the tour:

Showcase 1: Parallel to piano making there were also great developments in piano music and playing techniques. Piano tutors were very popular. They were normally intended for

self-teaching. Conventional teaching books hardly got beyond pure playing technique and general bass tuition, the more modern ones dealt mainly with expression. The “Attempt at the true way of playing the piano” by Johann Sebastian Bach’s second son Carl Philipp Emanuel was the most important piano tutor in the second half of the 18th century and of course Beethoven had a copy. In 1826 Beethoven gave a copy of the piano tutor by his fellow composer and sporadic publisher Muzio Clementi to his 13 year old friend Gerhard von Breuning (see the portrait on the wall of him as an old man), as is proved by the attached letter. Clementi’s text book was a practical piano tutor, based on numerous practical exercises and almost completely foregoing theoretical teaching. This applies also to Friedrich Starke’s Viennese Pianoforte Tutor, in which 5 bagatelles written by Beethoven were first published.

At the end of the room stands a cabinet piano made by the London piano maker Thomas Broadwood around 1820. Beethoven’s close friend Franz Gerhard Wegeler owned such an instrument, which was perfect for music-making at home.

Showcase 2: One of Vienna’s best piano teachers at that time was Johann Andreas Streicher, the husband of piano maker Nannette Streicher. Beethoven was on friendly terms with both of them and got regularly lent instruments from their workshops. In two letters written to Streicher in 1796 Beethoven remarked, surprisingly for us today, that he considered the method of playing piano to be the most uncultivated of all instruments. Pianists ought to appreciate that one can “make a piano sing, if only you are able to feel”. The borrowed instrument had “indeed turned out admirably [...] every other person would try hard to keep it in his possession and I [...] would be lying if I were not to tell you that I think it is too good for me, and why? Because it robs me of the freedom of creating my own sound”. Beethoven regularly picked out pianos for his friends or acquaintances. His own signature on the sheet of paper was meant to be cut out and attached to the piano in a prominent place. Johann Andreas Streicher produced a brochure for the instruments made in his own workshop. It deals not so much with tuning and maintenance as with the sounds produced by the new generation of pianofortes and the demands made on playing technique. And so his “Short Notes” belong in the category of theoretical piano tutors. Both Nannette and Johann

Andreas Streicher composed music, something which only a few of the more than 100 piano makers in Vienna could claim. Their son Johann Baptist, who visited Bonn in 1821 in the course of a business and educational trip, was able later to extend the workshop (see the lithographs on the wall).

Showcase 3: Joseph Wölfl (see the portrait on the wall), a pupil of both Haydn and Mozart, was one of the best pianists of the time. He once even took part in a competition against Beethoven. His sonata on display here was published as volume 12 of a „Suite du Répertoire des Clavecinistes“ brought out by the Zurich publisher Naegeli. Beethoven was prominently featured in this series with the first edition of his piano sonatas op. 31.

A comparable series with exacting music for piano was brought out by the Viennese publisher Steiner with the title “Museum of Piano Music”. The first issue contained the Sonata in A major op. 101, the first piano sonata which reflected the consummation of Beethoven’s late style. He dedicated it to the best performer of his piano music: Dorothea von Ertmann. As the original manuscript and accompanying letter show, the composer wanted the new low notes, which were only available on the most modern instruments, to be marked with their corresponding tone letter to make them easier to read. In another letter he reflects on the correct German word for pianoforte, settling finally for “Hammerklavier”.

In the auditorium you can see the two most popular types of pianoforte of the time, side by side: a double-strung square piano made by the Wiesbaden piano and organ maker Johann Andreas Mahr jun. in 1802 and a triple-strung grand piano made by Conrad Graf in 1824.

Kai Köpp/M.L.

Beethoven-Haus Bonn
Bonngasse 20
D-53111 Bonn
www.beethoven-haus-bonn.de



Signet with initials “LvB” on Beethovens Violoncello, possibly Milano 1735