Museum of Musical Instruments: History of the Collection

The cultural climate which gave rise to the Museum of Musical Instruments was rooted in the exhibitions set up by initiative of the *Unione degli Industriali* between the eighth and ninth decades of the 19th century. The desire to gather together traces of a past closely linked to the context of the city led to the constitution in 1881 of a collection which then converged, after various intermediate stages, on the Conservatorio.

On the wave of the enthusiasm aroused by these initiatives, Natale Gallini (1891-1983), a maestro from Crema, also began during the first decades of the 20th century to collect instruments mainly linked to Lombard history, often dignified with high-sounding attributions. From the purchase, in 1957, of 270 items from Gallini's collection, together with other base-collections already owned by the city administration, making a total of 358 instruments – as shown by the first catalog of the collection, published by Gallini himself in 1958 – the municipal collection was born.
It was placed in Palazzo Morando in Via Sant'Andrea, in 1959 the seat of the Museo di Milano, in view of the strict connection between the items, mostly representative of Milanese or Lombard schools, and the territory.

In 1961 the purchase of a further 150 mainly stringed and keyboard instruments from Gallini led to the transfer from Palazzo Morando to the Castello Sforzesco, a change necessitated both for reasons of space and because the new seat, with its past rich in musical glory on account of the presence of the Cappella Ducale, seemed more suitable for housing a collection which promised to become one of the most important in Italy.
The works were therefore divided between the Sala della Balla, destined chiefly for keyboard instruments, and the adjacent room, where bowed, plucked, wind and ethnographic instruments were displayed in showcases specially designed by the BPR studio. The new setup and the enlargement of the collection led to the publication of a new catalog, by Gallini and his son Franco, in 1963.

In 1997 the catalog was published of all the instruments belonging to the western orchestra (excluding ethnographic instruments, therefore), presenting specialists and music lovers with the result of a series of technical analyses carried out on the instruments and several studies which were pioneering in their methods, to which some of the wall-panels in this room refer.

Unknown maker. Late 18th century-early 19th century serpent. Inv. No. 425

Italian text by Francesca Tasso Translation by Oxford Group

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The Monzino Collection

In 2000 a donation by the Fondazione De Musica named after Antonio Monzino brought to the Museum of Musical Instruments some eighty instruments collected by the Milanese family of instrument makers between the 18th and 20th centuries.

The collection donated to the Castello Sforzesco consists of 79 instruments, with a substantial nucleus of bowed ones and a notable group of guitars and mandolins of various periods and types. For the most part they are produced by the family itself, testifying to this dynasty's activity in the manufacture of musical instruments from 1750 to the present day, and this gives the collection a systematic character which differentiates it from others made up of items bought from time to time according to market availability. Five instruments (two guitars, two mandolins and a violin) form the oldest group of instruments, going back to the baroque age (the 18th century). A group of guitars, including one by Giovan Battista Fabricatore of 1795, testifies instead to the transitional period which revolutionized music and its instruments between the end of the 18th century and the beginning of the 19th. Guitar production is well represented in its entirety by many 19th century examples by the most important Italian makers.
The most substantial group of instruments numerically is that produced from 1906 onwards, the year in which the Casa Monzino made a particular effort in view of the Esposizione Universale di Milano. This group includes all the examples in the collection – guitars, mandolins and bowed instruments – produced by the most famous luthiers who worked for the Casa Monzino, which often trained them in its workshops, creating an authentic school: the Antoniazzi brothers, Erminio Farina, Severino Riva and Innocente Rottola. Some of these built both plucked and bowed instruments. They were joined by a second generation of luthiers, including Ambrogio Sironi, Piero Parravicini and Luigi Galimberti. The guitars and mandolins produced in this period are characterized by their careful construction and refined ornaments: this was the period of greatest splendor for the mandolin and the guitar in all its variants, as shown by the many guitars with bourdons in guitar-lyre and guitar-harp versions and certain instruments such as the *terzetto esposizione*, built more to demonstrate the luthier's skill and to arouse musicians' curiosity than for real concert use.

Two rooms have been reserved for the collection in the museum space. At the express wish of the donor and in line with the Museum's policy of favoring musical awareness through the study of the instruments, one of the two Monzino rooms has been set aside for didactic purposes: here the construction phases of a bowed instrument are illustrated and the various materials employed in instrument making are shown.

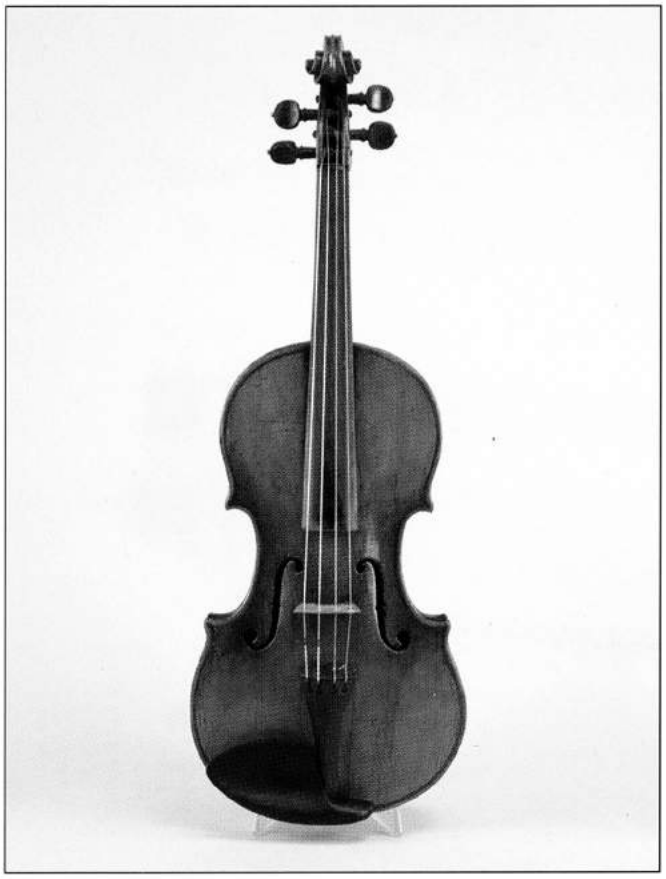
The Monzino donation has therefore increased the presence of Milanese instruments in the Museum, linking the municipal collection even more closely to the local environment. It was, furthermore, an event of the first importance in the history of collecting in this city: frequent complaint is made, in fact, of the exodus of collections of Italian musical instruments, which today constitute an important part of certain major foreign museums, Brussels and Leipzig in particular. The fact that the collection has remained in the city in which it was formed and accumulated over the centuries is an important sign of care and sensibility.

Armando Giulietti. Harp-guitar. Milan, 1938. Inv. No. 758

Italian text by Francesca Tasso Translation by Oxford Group

Violin
ANONYMOUS MAKER CREMONESE SCHOOL, c. 1650

This is undoubtedly the most important violin in the collection of the Castello Sforzesco.
The instrument has a label, printed on paper, stating: "Andreas Guarnerius fecit / Cremone Anno 1630". This is very doubtful.
In reality the maker is not known for certain: he probably came from the school of Nicolò Amati (a school to which belonged, among others, Andrea Guarneri), but documentary and scientific evidence for a more precise identification are lacking. The instrument, as often happens in the case of violins appreciated for their sound and therefore played for several centuries, has undergone several transformations to adapt it to musicians' changing requirements. Many instruments of classical Cremonese instrument-making, in fact, were adapted in Milan in the 19h century, with strengthening of the inside, change of the bass-bar and substitution of the necks in order to resist the tension of the new strings in metal which, unlike the gut ones utilized previously, permitted a greater volume of sound to be obtained.



The soundboard is in two pieces of spruce of excellent quality. The ribs are in *acer campestre*, a common tree in the Po plain and often used in stringed-instrument making during the 18th century; the ribs are beautifully veined (typical striations in the wood giving it a pleasing aesthetic effect). The back is in a single piece of maple, also veined.
The upper part, including the scroll, known as the head, is not the original but comes from an instrument of the Milanese school from the beginning of the 18th century and has the letters PB carved on it.
The linings, not dovetailed, and the blocks (constructional details of the inside of the resonating chamber) are in poplar. These latter are probably replacements.
The original varnish is of high quality: it can be found only in some areas of the back and ribs and has a fine golden orange color.
The violin has been restored on various occasions and by at least three different persons. In particular, the back, which had been attacked by wood-eating insects, has been reinforced with internal pieces in maple. The upper right point of the back has been remade, as has also the nut and the part of the ribs corresponding to the lower block. The soundboard is the part which has undergone the largest number of interventions: the upper left zone has been completely substituted; so has the lower right edge and an internal reinforcement has been applied which covers the entire central part of the soundboard, for the whole of its length. The most recent restoration was carried out in 1989 in the Amighetti laboratory of Cremona.
In the internal part of the soundboard are two writings in pencil: "Repair by Laurent 1921" and "Reparé par Laurent Albert Bruxelles 1921"; there are also two small "A. LAURENT" firemarks on the bass-bar and at the level of the upper eye of the sound-hole.
The instrument, as well as having notable historical and artistic value, is much appreciated by musicians for its truly exceptional tonal qualities.

After the 1989 restoration it has been played in concerts and recordings by famous violinists, including Cusano, Rovighi, Krylov and Pagliani.

Italian text by Valentina Ricetti Translation by Oxford Group

This iniziative was realized thanks to the contribution of the Rotary Club Milano Castle Association - 2040° Rotary International District

MUSEO DEGLI STRUMENTI MUSICALI

CASTELLO SFORZESCO

Comune di Milano

Three key Oboe with a corp-de-rechange **Giovanni Maria Anciuti,** Milan, 1722

Until a few years ago, there were not biographical information about Giovanni Maria Anciuti. In 2008, Cinzia Meroni, assisted by the organologist Francesco Carreras, carried out archive research that gave some essential information.
Thanks to them, we know that Anciuti was born in Forni di Sopra (Udine) and trained probably in Venice, moving then to Milan between 1694 and 1699, where he had his workshop for the rest of his life.
In the context of Venice the musical life was vivid, with many buyers too; nevertheless the manufacturer decided to move to Milan, probably to run away from the strict Venetian guilds.
In Lombardy, his abilities and skills in manufacturing wind instruments and ivory gave him an uncontested reputation.
Nowadays about thirty instruments of the manufacturer are known, mostly oboes. This sample carries the brand name "Anciuti" on its bell and the date "1722" on the middle section, where there is also engraved the symbol of the Lion of St. Mark, the emblem he used during his entire career.
The instrument is octagonal in bore and its design and proportions are extremely refined and elegant. It was purchased in 1997 by the museum, with a corps-de-rechange which allows the intonation of the instrument to be varied on account of its different length compared with the body presently mounted. Its perfection and rarity make it an item of worldwide importance.

The instrument has had a long musical life, as can be deduced from the yellowing of the internal pipe and by the wear round the holes. Its exterior has perhaps been cleaned too energetically, or even scraped, making the emblems difficult to read.

The keys are unlikely to be original; they show no sign of wear and have engraved decorations of renaissance taste.
It can be deduced from the marks around the joints that these have been removed and replaced many times and probably substituted. In spite of its intense use the instrument is perfect (with just a small plaster repair on a non-functional part), without cracks or chips, something very rare in ivory instruments since this is a difficult material to conserve.

Italian text by Valentina Ricetti

Italian text revision, Graphic reset and Layout, Mariño Giarratana, February 2018

Iniziativa realizzata grazie al contributo dell'Associazione Rotary Club Milano Castello - 2040° Distretto Rotary International

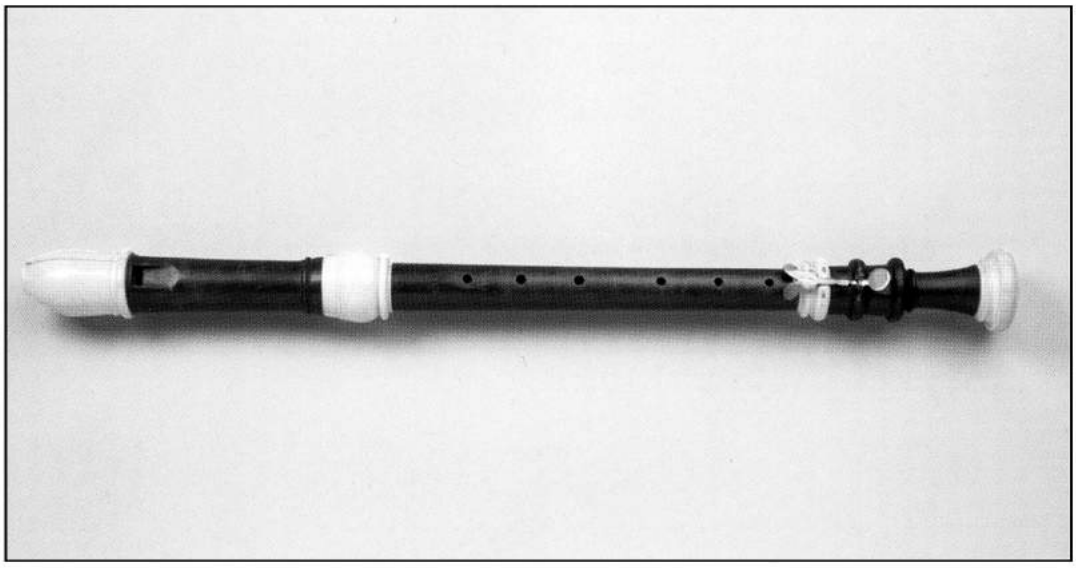
MUSEO DEGLI STRUMENTI MUSICALI

CASTELLO SFORZESCO

Comune di Milano

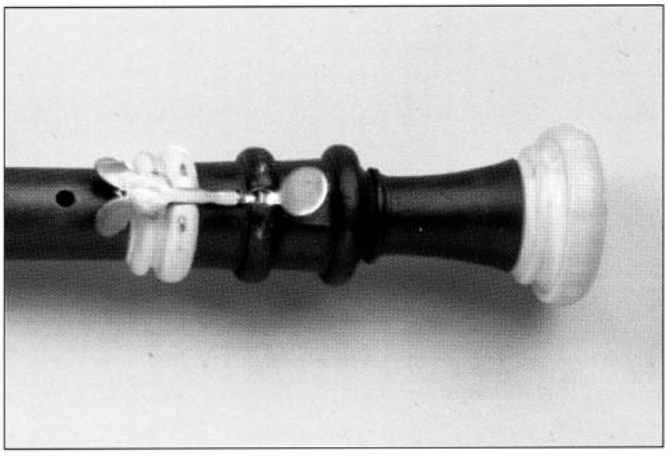
Tenor recorder (3 parts, 1 key)
Pierre Jaillard Bressan
London, 1688-1730

The tenor recorder conserved in the Museum of Musical Instruments, attributed by its emblem to Pierre Jaillard Bressan, is an extraordinary instrument both for its rarity and its construction.
Many instruments by this maker are still conserved, testifying to his intense activity: a soprano recorder, 27 alto recorders, 12 tenor recorders, 13 voice flutes, 6 bass recorders and 3 flutes.
He made his apprenticeship in Bourg and Paris under the name of Pierre Jaillard; subsequently he moved to London where he was active between 1688 and 1730 with the adopted surname of Bressan, derived from his place of origin, Bourg en Bresse.
He was the principal maker of wind instruments in London in his day, as is shown by the numerous examples of his instruments conserved, all excellently made.



This instrument, realized in tinted maple and ivory, is of refined turning. Unfortunately the recorder has suffered damage through poor maintenance: in particular, the crack in the mouthpiece was probably caused by an accidental blow. The labium (the sharp edge against which the air from the windway breaks) is splintered, resulting in a higher pitch than the original one. In the head joint (the upper part of the recorder), on the right, a non-leaking crack accompanies almost its entire length; six holes close to it may be due to a clumsy attempt at restoration. The body has a slight lateral crack which begins near the 4th hole and ends at the lower tenon (the point where the pieces of which the instrument is made join); another surface crack is found between the 4th and 6th holes.
The terminal ring of the foot has a glaring crack in the ivory.

The instrument was restored in 1996 by Pietro Sopranzi. During the restoration part of the crack in the mouthpiece was reconstructed and the sealing of the tenons was remade with Irish linen thread.
The lower ring of the foot was replaced in its original position and the silver key was reconstructed on the model of tenor recorder no. 96 of the Museum of Berlin, which has very similar dimensions to the example under examination. In spite of the damage the instrument retains its fascination; although the windway and the labium are compromised, it covers a range of an octave and a sixth with results that, if spoilt by the damage, still achieve an incomparable timbre.



Italian text by Valentina Ricetti Translation by Oxford Group

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MUSEO DEGLI STRUMENTI MUSICALI

CASTELLO SFORZESCO

Comune di Milano

Chitarra battente
MANGO LONGO
Naples, 17th century

This exceptionally well constructed instrument strikes by the refinement of its ornaments, the choice of its materials and the care with which it has been made. The instrument has undergone several transformations. Presently it appears as a *chitarra battente* but its original format was that of a baroque guitar, with five double courses: the soundboard must have been completely flat and the strings anchored to the bridge. The neck was also shortened; the baroque guitar normally had 11-12 frets and the present neck is not long enough to accommodate so many.
The shortening of the neck is also evident from the clumsy dovetailing of the headstock visible on the back of the neck itself. These transformations are not unusual in musical instruments, which are often modified over the centuries to meet musicians' changing tastes.

The maker's signature is carved onto the peghead: Mango Longo fecit in Napoli. Mango Longo was not Neapolitan, however, but one of the many German instrument makers who moved to Italy to work, some of whom reached levels of real excellence. Mango Longo is the Italianization of the name of Magnus Lang, a luthier who possibly came from Füssen in Bavaria and who made guitars and mandolins in Naples in the 17th century.

The present bridge is not the original: it is similarly shaped to the bridges of Lombard mandolins and is glued onto the soundboard.
The rose, gilded, is realized in parchment and several slender layers of wood placed one upon the other, with some tiny metal birds inlaid in pins.
Decorations in mother-of-pearl and black plaster are inlaid on the soundboard. The entire profile of the soundboard is edged with details in ivory, dark wood and fillets, creating a play of contrasting colors.
The ribs are formed of strips of wood, perhaps rosewood, alternating with others composed of tiny pieces of wood and ivory (or bone) placed in lozenge form; threads run between each of these.
At the lower end are presently fixed the small ivory pins to which the strings are attached.
Close to the inner curves of the sides are the usual holes, now closed with plaster, typical of the *chitarra battente*.
The back is arched, as often with guitars of this period, consisting of alternating ribs in wood (the same as used for the sides) and ivory.
The fingerboard is composed of ivory plates engraved with details in mother-of-pearl, depicting a crown with the cabalistic numbers 7 : 4 : 9 and a lyre-player.
Figures of animals, as well as the maker's name, are engraved on the peghead. The pegs with irregular-shaped heads are in bone.

Italian text by Valentina Ricetti Translation by Oxford Group

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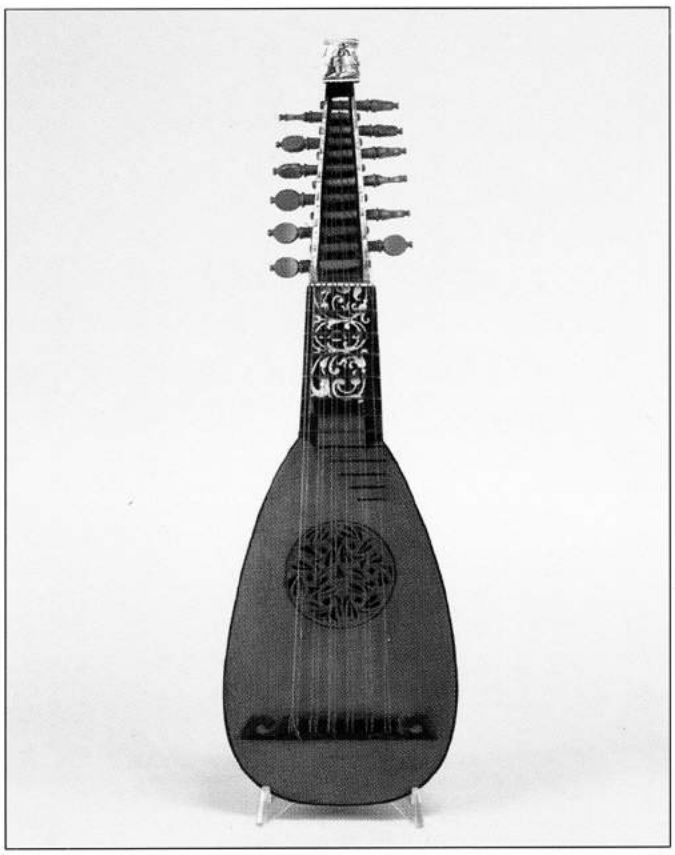
Milanese mandolins

Mandolins were widespread from the beginning of the 18th century and survived the great transformations of the 19th century. The mandolin continued to be used, unlike other types of instruments which disappeared, not least thanks to certain modifications: the delicate and fragile structure of the Milanese mandolin with gut strings was notably strengthened, in fact.
The instruments by Giuseppe and Carlo Fixer and that by Presbler belong to Milanese mandolin-type and are certainly the most important and beautiful of those in the Castello Sforzesco collection.

Milanese mandolin (six-course)
GIUSEPPE AND CARLO FIXER
MILAN, 1759

The Fixer brothers are to be considered among the best builders of Milanese mandolins of their period and belong to the great group of luthiers of German origin who established themselves in cities all over Italy from the Renaissance onwards.
The instrument is completely original, with the exception of a few minor details.
The bridge, of larger size than those usually found on mandolins of the time, was probably substituted at a later date, as often happened with this typology of instruments, to increase its adhering surface.



Later additions are also the seven brass frets on the fingerboard: these instruments were originally mounted with tied frets in catgut.
Residues of a fracture appear on the back of the neck, the repairing of which provoked a shortening of the neck. This latter, however, was never detached or substituted, as is shown by the large forged nail which was used in pre-19th century mandolins to unite the neck and chest.
A label is present inside: *Giuseppe e Carlo Fixer, fabbricatori di istrumenti in Milano vicino alla Balla 1759*. The soundboard is in a single piece of spruce with rather narrow veining on the side of the treble, progressively enlarging towards the bass. The rose is composed of four alternating layers of wood and parchment. The shell is composed of thirteen ribs in wood which is difficult to identify, perhaps maple, interlaced with dark fillets; the glued seams are strengthened inside by strips of manuscript paper.
The fingerboard and the peghead are inlaid in ebony and bone; on the plaque at the tip of the peghead is reproduced a human figure engaged in carrying a sack. This figure perhaps has some connection with the Balla district, mentioned in the label, which was in the past destined for the transport of goods.

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MUSEO DEGLI STRUMENTI MUSICALI

CASTELLO SFORZESCO

Comune di Milano

Harpsichord
Pascal Taskin, Paris, mid 18th century
1788 (revalement)

This harpsichord has a complex history, with a series of interventions lasting to our own days. It is commonly considered to be the work of Pascal Taskin but the original structure, which seems a few decades older, is generally assigned to François Etienne Blanchet.

The instrument has several inscriptions. On the panel of the wrest plank the phrase "FAIT PAR PASCAL TASKIN A PARIS" has been impressed.

Inside the case on the bentside a label has been glued on with the following phrase: "Ratifié par (in pen) PASCAL TASKIN, Facteur de Clavecins & Garde des Instrumens de Musique du Roi, Eleve et Successeur de M. BLANCHET, rue de la Verrerie, vis-à-vis S. Merry".

Pascal Taskin (1723-1793) was one of the most important Parisian builders in the second half of the 18th century. An apprentice of François Etienne Blanchet, a few months after the death of the latter he married his widow, took over the master's activity and later became maker and custodian of the instruments of King Louis XV.

This instrument belongs to the last period of the harpsichord's existence, when it reached its maximum size, robustness of construction and expressiveness: it is provided, in fact, with various stops which, in the absence of the possibility to play *piano* and *forte* on the harpsichord (this would be possible only with the advent of the pianoforte), varied its timbre, attempting in this way to provide it with greater expressive potential.

If the rose in gilt lead alloy with the initials A.R. and a seated angel playing the harp is authentic, as it seems, it was probably removed from an instrument by Andreas Ruckers, datable between 1636 and 1654. The entire instrument effectively seems to have been built with the intention of imitating a harpsichord of the Flemish school from the preceding century: for example, the soundboard is ably decorated in an archaic style with floral subjects typical of the Flemish style, but it is lacking in features peculiar to the 17th century.

In the sector of the upper notes traces can be seen of a *ravalement*, that is to say an enlargement which was commonly carried out in the 18th century on older instruments to increase their range, in conformity with new musical requirements.

The decoration of this sector is evidently by a different hand from that which painted the rest of the board.

Two bridges are glued onto the soundboard: one for the strings of the 8-foot stops, the other for those of the 4-foot stops (the 4-foot stop has strings half the length of those of the 8-foot stop and so plays an octave higher).

Both bridges have portions added to their ends for the *ravalement.*

The panel of the wrest plank (the block of wood in which are fixed the tuning pins) has decorations which are different from those of the soundboard; the style is that of the painter who worked for Taskin in his last period of activity.

The original range was F0 - F5.

The writings in pen on the jackrail indicate the names of the various stops with which the harpsichord is provided: two 8-foot stops, one 4-foot and a *peau de buffle* stop which gave the instrument a special timbre.

A system of knee-operated levers (added later) placed below the instrument permits the stops to be taken in and out.

The two keyboards are modern (1985), as are the jacks, the lid and the rail which stops the jacks.

Italian text by Valentina Ricetti Translation by Oxford Group

Graphic review, by Mario Giarratana, May 2018

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Spinetta traversa
Francesco Birger, Milan, 1735

The instrument is signed with black ink on gold background on the nameboard over the keyboard: F. B. F. / Mediolani 1735. The initials can probably refer to Carlo Francesco Birger, a "cembalaro tedesco" (German harpsichord maker) mentioned in a document in the Historical Archives of the Borromeo family (Isola Bella), who probably moved to Milan to work and whose information are actually unknown.

The keyboard and the style of the decoration of this instrument are similar to those of an octave spinet by Giovanni Domenico Birger (in the Museo degli Strumenti Musicali in Rome), an artisan working in the mid of 18th century. There is the possibility of a family relation between the two manufacturers, but nowadays the studies have not confirmed it.

The instrument reveals foreign influences, as was common in the Milanese 18th century style, shown by the French features of the spinet and the Flemish ones of the keyboard. The sides, in conifer wood, are painted externally in black, edged by a series of gilded reliefs with lilied scrolls, and have a series of mouldings, also gilded, on their upper borders.

The outside of the lid is painted in black with gilded edges in relief like those of the spines; inside there is a painting, also bordered by gilded reliefs, portraying Apollo crowned on winged Fame, followed by the Muses and with two cupids at his sides. The inside of the part which covers the keyboard is decorated, instead, with floral garlands.

The soundboard, composed of three beams of fir-wood, is decorated in tempera with floral subjects and figures which seem to recall the characters of the Commedia dell'Arte. Unfortunately, the state of conservation of the painting is such that the subjects portrayed can scarcely be made out.

Fifty rectangular mortises, edged by tiny battens in chestnut, are inlaid in the soundboard, serving as upper guides for the jacks. Beside the mortises are numbers in pen, presumably not original.

On the soundboard, at the level of the wrest plank, a non-original strip of cypress has been glued on, perhaps placed to hide previous holes for the tuning-pins. The two bridges are not original: that on the soundboard, doubly inflected, was added during a restoration made in 1969. Two fragments of the original bridge are conserved; it was well-made with traces of gilding.

Traces are present on the soundboard of the gluing of the original bridges, in different positions from the present ones.

The rose on the soundboard, of pressed and engraved paper, is so clumsily made as to suggest it is not the original, unlike the lily-shaped elements surrounding it (for the most part lost) which seem to be the work of another hand entirely.

The spinet has a single 8-foot register (8 feet refers to the length of the vibrating string) and a keyboard of 45 notes with a range of C1/E1 – C5 (short octave).

The white keys are covered with strips of ivory; the black keys are in fruit-wood dyed black, covered with strips of rosewood.

41 jacks have come to us, of which ten are modern; the others seem to have been saved from various other instruments. It is not possible to establish whether any of them actually belong to the instrument under examination. The jackrail is modern.

Italian text edited by Valentina Ricetti

Review of the italian text, Graphic reset and Layout, Mario Giarratana, February 2018

This iniziative was realized thanks to the contribution of the Rotary Club Milano Castle Association - 2040° Rotary International District

MUSEO DEGLI STRUMENTI MUSICALI

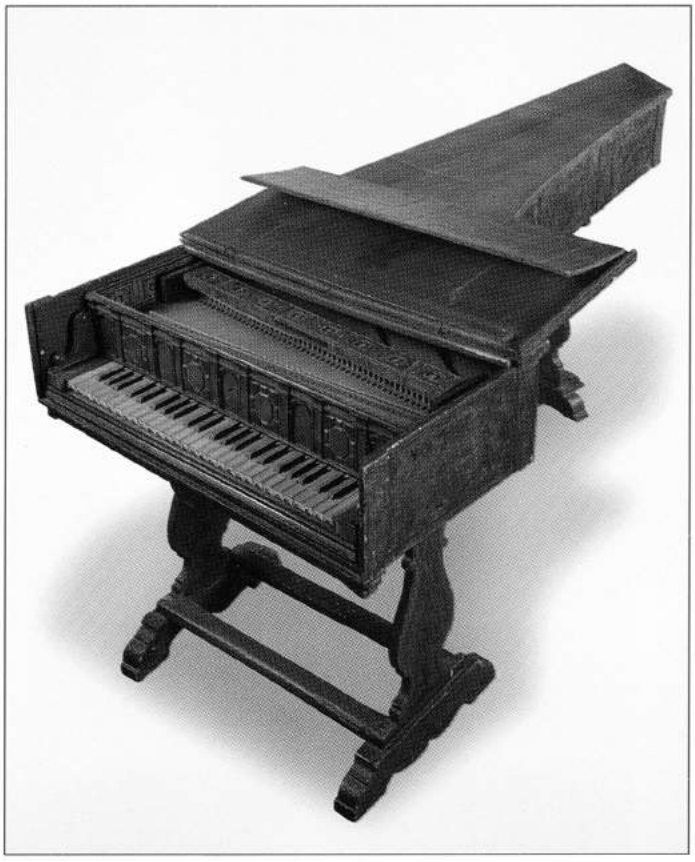
CASTELLO SFORZESCO

Comune di Milano

Harpsichord
Anonymous maker
Venice, end16th century

This harpsichord provides a precious testimony of the 16th century Italian school: it is an excellently made instrument, in fact, in a good state of conservation, which, although it has been subjected to a few transformations, has not had its original structure excessively compromised.

On the jackrail, written in gilt pigment, we read: VIDUS TRASUNTINUS F. MDLXXI/CONCENTU LAETANTUR EO SUPER ASTRA LOCIT. The authenticity of this inscription is doubtful because the Venetian builder usually signed himself Viti de Trasuntinis or Vito de Trasuntinis; no other instrument, among those which have come down to us, is signed Vidus Trasuntinis, as is the present harpsichord. Furthermore the letter F following the name (an abbreviation of Fecit) is not present in any example signed by Trasuntinis surviving today.
However, the attribution to the late 16th century Venetian school, suggested by its typological features, from the shape of the keywell scrolls at the sides of the keyboard and certain constructional details, is also corroborated by a study of the molding.
The profile of the mouldings that run along the entire perimeter of the instrument, in fact, is a potential indicator of the builder, in the sense that each craftsman possessed his own instruments for shaping the frames. In this case the mouldings of the harpsichord reveal profiles characteristic of the exponents of this school. In particular, the resemblance should be noted to the frames of the instruments by Giovanni Celestini, whose activity in Venice is documented from 1583 to 1610.



The instrument, in conformity with Italian instrument-building tradition, has a very light structure with slender spines, a soundboard of cypress and a very refined manufacture: it has complex and carefully-studied decorative cabinet-work with false round arches, pilasters, octagonal shapes and oval medallions, each containing an element of quadrilobed ivory, crowned by a molded ebony frame. It should be noted that this element and its molded frame, if divided in half, are identical to the arches on the arcades of the keys; it is evident, therefore, that they were made at the same time.
The dimensions of the keyboard (shown in the display-case opposite) which has come down to us do not fit the space in the case and it is therefore not considered to be original; it probably derives from another historical instrument. The keyboard now present in the instrument was built and inserted, as were the jacks, in 1993 to make the harpsichord playable on the occasion of a performance by Gustav Leonhardt (Castello Sforzesco, 27th November 1994) and a recording (Fabio Bonizzoni, *Andrea Gabrieli – Pass'e mezzo e altre musiche per tastiera*, Stradivarius, 1997).
The jacks which originally came down to us (also held separately, with the keyboard) are of four different types, evidently made at different times; it is almost impossible to find an old instrument with its original jacks, since these are removable items which wear out and are therefore subject to repairs and substitutions.
The rose inserted in the soundboard, in two layers of gilded parchment, is not original, while the cypress collar around it is original.
The instrument is kept in a beautiful outer case covered in burin-worked leather; the lid has a flap and frontispiece. The leather covering is painted with spiral tendrils, in gold and black on a red background.

Italian text by Valentina Ricetti Translation by Oxford Group

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Double virginals
Ioannes Ruckers, Antwerp, c.1600

Among builders of keyboard instruments, the Flemish school was from the late 16th century one of the most important, especially for the contribution of the Ruckers family, the most famous in Antwerp. The Ruckers family built a large number of instruments which were much appreciated for their aesthetic and tonal qualities and which for this reason remained in

use, often transformed and adapted, until the end of the 18th century, when the first pianofortes with hammers displaced plucked-string keyboard instruments.
The widespread use of this type of instrument in middle-class houses is testified by their frequent depiction in Flemish painting.
The Ruckers' activity is documented from 1581 to 1680. Ioannes was the name of both the eldest member of the family and of his eldest son (1578-1643); to this latter is attributed the virginals conserved at the Castello Sforzesco and signed, in pen, IOANNES RUQUERS ME FECIT; the initials HR (Hans Ruckers) appear on the metal roses of the soundboards of both instruments, the larger one and the piccolo.
This instrument belongs to the typology called "mother and child" for the reason that one virginals contains another smaller one inside it; this latter, having strings of half the length (4 feet) compared with the larger instrument (8 feet), plays an octave higher. Among double Ruckers virginals which have been conserved, that on display is the only one in the world which has the "child" instrument incorporated to the right of the keyboard.
The double instrument permitted various uses: just one of the virginals could be played, or they could both be played by two musicians. But even a single musician could play them contemporaneously by means of an ingenious device: the two instruments were placed one over the other in such a way as to interlock the smaller one in the frame of the other. This permitted the jack of the lower instrument to raise that of the "child" instrument at the moment it received the impulse from the key.

Worthy of note is also the painting which decorates the inside of the lid: from left to right there is a succession of scenes with different subjects; in the center, underneath the *berceau*, the principal motif consists of a pictorial game with a musical quotation: around a table laden with food a lady is playing a virginals on the lid of which is painted in its turn a musical subject. The tiny virginals played by the lady seems, among other things, to be decorated with the same paper printed with repeating patterns as was in use with Flemish painters.
The exterior of the case has been almost entirely deprived of its painting. Only the spine still shows the original painting, executed in imitation of green marble.
The soundboards are painted in tempera with fresh and linear flowers in delicate tints mingled with imaginative blue arabesques.

Graphic reset, by Mario Giarratana

Italian text by Valentina Ricetti Translation by Oxford Group

This iniziative was realized thanks to the contribution of the Rotary Club Milano Castle Association - 2040° Rotary International District

MUSEO DEGLI STRUMENTI MUSICALI

CASTELLO SFORZESCO

Comune di Milano

Studio di Fonologia Musicale RAI di Milano
recording and reproducing sound in the 20th century

With the termination of the Second World War there arose a desire to rebuild, not merely the material life shattered by the bombs but, even more pressingly, the intellectual life stultified by the dictatorship. This caused a host of initiatives to ruffle the cultural scene of Milan.

In 1946 Toscanini conducted the reopening concert of the Teatro alla Scala, in 1947 Giorgio Strehler and Paolo Grassi founded the Piccolo Teatro, in 1955 the Piccola Scala was inaugurated: gradually there was born a movement of artists embracing all the arts, based on shared ideals, on curiosity towards new experimental theatrical and musical techniques and on the wish to discover alternative ways of involving the public and producing a performance.

It was in this spirit that Luciano Berio and Bruno Maderna proposed to the directors of RAI [Italian Radio and Television National Network] that a musical experimentation centre should be opened based on the new electronic technologies: they were soon joined by Umberto Eco and Roberto Leydi who offered their contribution in the field of linguistic analysis, phonetics and ethnomusicology.

The *Studio di Fonologia Musicale di Milano della RAI* [RAI Milan Studio of Musical Phonology], designed by the physicist Alfredo Lietti, was officially created in June 1955 by the musicians Luciano Berio and Bruno Maderna and remained active until 28 February 1983, when the technician Marino Zuccheri retired.

The Studio had two principal aims: the experimental production of electronic music and the creation of musical backgrounds and soundtracks for radio and television.

At the beginning the equipment available consisted solely of a few tape-recorders, record-players with speed changers, some filters, an oscillator and the Ondes Martenot. The following year saw a leap ahead with the construction of the mythical nine oscillators and with the voice of Cathy Berberian considered as the *tenth oscillator*: Berio created with her, among other things, *Thema* – (Homage to Joyce) and *Visage*.

Among the musicians who worked in or attended the Studio may be mentioned, among the Italians, Berio, Maderna, Nono, Castiglioni, Clementi, Donatoni, Gentilucci, Manzoni, Marinuzzi Jr., Paccagnini, Sciarrino, Sinopoli, Togni and Vlad. Foreign guests included Cage and Pousseur.

Among the first electronic musical compositions, *Mutazioni* by Luciano Berio and *Continuo* and *Notturno* by Bruno Maderna were outstanding, while the most notable soundtracks and backgrounds for radio and television productions were *La Loira, Peter Pan, La fanciulla di neve, L'uccellino azzurro* (with music by L. Berio); *Macbeth, L'augellin Belverde*, the *Cavallo di Troia, L'altro mondo ovvero Gli stati e imperi del Sole e della Luna* (with music by B. Maderna).

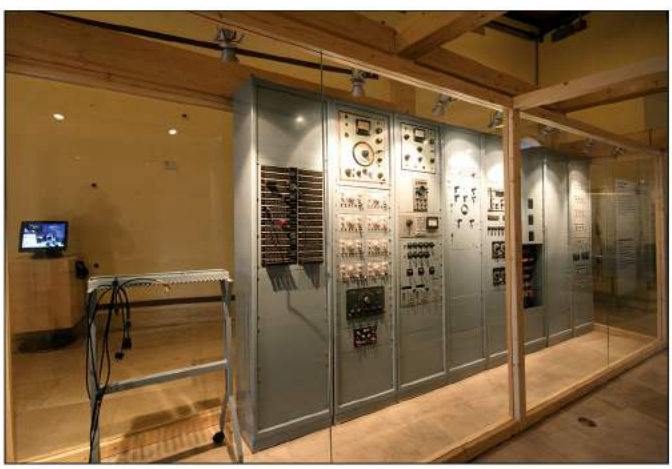
Also recorded and/or elaborated in the Studio di Fonologia were the programmes entered for the Prix Italia (the international award for the best radio/television products), while Mario Migliardi, in particular, created new techniques and special effects for light music.

No fewer than six Prix Italia awards went to the Fonologia for works such as *Attraverso lo specchio* (Castiglioni, 1961), *Il dio di oro* (Paccagnini, 1964), *Johann Sebastian* (Negri, 1967), *Giochi di fanciulli* (Liberovici, 1970), Ages (Maderna, 1972), *Diario Imaginario* (Berio, 1975).

Other collaborators with the Fonologia included the distinguished writers Sermonti, Quasimodo and Eco, as well as the directors Bachelli, Pressburger and Puecher. Worthy of note is the collaboration with the Piccolo Teatro for which the Fonologia, in the compositions of Fiorenzo Carpi, made its contribution by creating incidental music for the more innovative productions.

Since the locations of the machines changed innumerable times over the years, the present reconstruction, based on photos and film clips, recreates the equipment as it appeared after 1968. Many of the items were nevertheless already present in the original setup.

Exhibited in the room is equipment for generating, transforming and combining sound, for recording, reproduction and listening.



Text by Maria Maddalena Novati Translation: Oxford Group

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