

# THE HARP

Contemporary organology differentiates between the harp, a plucked instrument with the strings running perpendicular to the soundboard, and the lyre, with the strings and soundboard parallel to one another. One major difference between both instruments and the lute and guitar is that each string on the harp and the lyre generally only represents one individual note: there is no fretboard and the strings are not shortened with the fingers.

Since the Middle Ages the harp has not only been considered the instrument of King David and the bards, but also of nature spirits. All of these meanings likely stem from a number of related historical foundations: namely from a time in which music, and especially string music, was the task of the clergy, even the Gods. There were remnants in pagan polytheism in the folk religion of nature spirits. The introduction of harp-playing nature spirits (e.g. nymphs, Tritones) and bards was revived in operas, paintings and literature as of the 18<sup>th</sup> century. This was the period when the harp – traditionally an instrument for solos, small ensembles and vocal accompaniment – gradually became a component of the orchestra. The decoration of newer harps is sometimes reminiscent of their religious importance (»Gothic model« by Erard), but also their appearance in the old Orient.

The oldest evidence of the existence of harps comes from the 3<sup>rd</sup> century B.C., from Sumer and Egypt. Some harps predating Christ were even as tall as a standing person; on the other hand, much smaller harps are still created to this day, such as for Irish folk music. The Egyptian harps did not have a closed »frame«, which is now unavoidable given the powerful pull of the strings. The various parts of the frame are the neck with the tuning pegs, the soundboard running downward, where the bottom ends of the strings are fastened, and the column between the end of the neck and the lower end of the soundboard.

As the harp held its ground through the European Middle Ages, the demands of music and the possibilities of the instrument diverged wildly toward the end of the era: Harp strings became »diatonically« tuned, which means five whole tone steps and two half tone steps appeared in an octave. Yet the composers required more and more semitones at any point of the scale. This led to the development of »chromatic« harps already in the 16<sup>th</sup> century: Each note of the semi tone scale had its own string. The strings were located behind each other or next to each other in rows of two or three. The three-row format is still found in the Welsh

triple harp in Wales; Händel's harp concerto was written for it. The two outer rows each create (to ease fingering) the same diatonic scale, whereas the inner row enhances this note sequence with the chromatic scale. Chromatic harps of this sort are difficult to play and relatively large. In Tyrol in the 17<sup>th</sup> century adjustable, mainly U-shaped hooks (»hook harp«) were added to the neck of the diatonic harp for this reason. If these levers are manually adjusted, these helpful frets section off a string so that it sounds a semitone higher.



Welsh Triple Harp, Johan Richards, Llanrwst (Wales), 1745/1755, cat. no. 719 © MIM, photo: Knud Petersen





Luise Nordmann, the »Harfenjule« of Berlin, A. Krüger, etching, around 1900

Irish folk harps still have such hooks to this day. To relieve the hands from retuning while playing, Georg (?) Hochbrucker invented the pedal harp in Donauwörth around 1720: Heavy wires run from pedals through the column to the levers to similar attachments, such as »crutches«, which are pulled up to the neck when the pedal is pressed, acting as frets for the strings. However, rotating has become generally accepted. Each holds two rods which, when the wheel is turned by the pedal, press against the respective string on both sides. The lower rod works as a fret. The upper rod ensures that the string does not pull away from the »fret« during heavy plucking, which would create a clanking sound. With the introduction of the pedals came another crucial innovation: Each pedal not only truncates one string, instead the octaves are all the more coupled. If you assume, that the instrument was tuned in E-flat-major, which was widely spread in the 18<sup>th</sup> century, the correlating pedal then simultaneously alters every A-flat to A, another pedal alters every E-flat to E, another every B-flat to B and so on. Thusly the strings could build up the scales for B-flat-major, F-major, C-major, up till E-major because seven pedals generally were applied in art-music. Of course it would have been possible to pedal in another order.

Today's more common »double action harp«, invented in 1810 by Sébastien Erard in Paris, allows for even greater harmonic and melodic flexibility. In the up-

per pedal-position only the upper fork mechanism takes effect, the string is altered by a semitone upwards. In the lower pedal position both fork mechanisms take effect, the alteration now being a whole tone upwards. With the temperament ascending by using the pedals, the basic temperament was C-flat-major and the »final« temperament (two semitones or one whole tone upwards) was C-sharp-major. One of the advantages of the double action is that the same note can be achieved on two different strings: This makes, e.g., an E also available as F-flat on the adjacent string, and rapid note repetition is possible. The average number of strings on the modern »concert harp« is 47; the material is largely gut (wrapped in steel for the bass), and synthetics. F strings are blue, C strings are red.

As the development of the harp with regard to the repertoire of notes was completed with the double pedal (a chromatic harp with crossed strings by Gustave Lyon in Paris has not gained acceptance), so has the sound been largely enhanced since the early 19<sup>th</sup> century, both by thicker strings and an enlargement of the soundboard. In folk music, on the other hand, older constructs and deviating shapes are customary; hook harps and pedal-less harps are still played in South America, plucked by the fingernails as opposed to the fingertips.

The hook harp was played by the renowned »Harfenjule« (whose real name was Luise Nordmann), who sang songs and accompanied her own music in the backyards of the Berlin working-class quarters around 1900. It was there she had vociferous competition: The organ grinder. To her, he was an »artless so-and-so«. Ms. Nordmann was blind in her youth, but after an operation she was able to see everything as through a light fog with one eye. In 1969 the master stonemason Franz Merk donated a gravestone to her in the churchyard of the Luther congregation of Berlin-Lankwitz where she had been buried in a pauper's grave in 1911.