A Harp Exhibit at the Museum of Making Music in Carlsbad, California

by Nancy Hurrell

USEUM exhibitions devoted to harps are not very common, and to find one with such a diverse array of instruments with an ancient Egyptian harp as well as a modern electro-harp is especially rare. Each year the Museum of Making Music (MoMM) in Carlsbad, California, selects a particular instrument family for a special exhibition, and 2013 was the year of the harp. The exhibition, The Harp: A Global Story of Man, Music & Medicine, running from March-September 2013, brings together twenty harps from various cultures and periods in a unique pageant of shapes, sizes, and decorative styles. Spanning time and continents, the history of the harp is complex and fascinating. The exhibition presented dynamic stories of harp evolution as shaped by political, economic, and sociological factors.

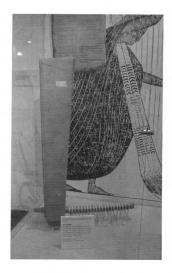
The purpose of the Museum of Making Music, as its name suggests, is to discover the connections between people, instruments and the music they make. Topics explored in the show included the role of the harpist in society, the diverse styles of music played and innovations in harp designs and mechanisms. With the aim of engaging the visitor in a new way, several components of the MoMM exhibit set it apart from more traditional museum displays. From an iPad touch screen, visitors listened to a dazzling array of sound samples representative of the harps on view. In addition to historical harps, museum goers were introduced to modern varieties from the twenty-first century. Also, touching and playing harps was allowed! Not the ones in the display cases, but three interactive harps (two Dusty Strings Celtic harps and a Camac electro-harp)

offered a first time harping experience for literally thousands of people visiting the museum.

As guest curator for the exhibition, I worked closely with the museum team: Carolyn Grant, Executive Director; Jillian Harrington, Associate Director; and David Jepson, Marketing. My job, lasting six months, ranged from assistance with finding harps for the show to collecting sound samples and writing instrument labels. Specialist information was gathered via phone conferences from various experts: Bo Lawergren (ancient harps), Sam Milligan (manufacturing), Alfredo Rolando Ortiz (Latin American harps), Melinda Gardiner (healing harps), Dr. James Makubuya (African harps), Deborah Henson-Conant (jazz and electroharp), and myself (harps in Europe and Ireland). For the latest insights into manufacturing, the team consulted harp builders and companies including Campbell Harps, Rees Harps, Dusty Strings, Lyon & Healy and Camac. In contemplating the vast history of the harp, certain themed areas seemed logically to emerge for organizing the exhibition: Ancient Beginnings, African Harp, Celtic Harp, The Harp in Europe, Latin American Harp, Healing Harps, and Manufacturing.

Ancient Beginnings: Ancient Egyptian Angular Harp by Bill Campbell

It's difficult to imagine the ancient world thousands of years ago, when a hunter first plucked the string of an arched bow. Captivated by its sound, the idea to add more strings eventually transformed the object into a harp. How curious that a weapon became a musical instrument whose resonance is well-known



Ancient Angular Egyptian harp replica by Bill Campbell.



Arched harp with gourd resonator from Zambia (NMM).



The undungu from Cameroon resembles a hunter's bow.



Castle Otway *cláirseach* replica by David Kortier and Clark Irish Harp.



German harp (c.1700) replica by Catherine Campbell.



 18^{th} century French harp by Naderman.



Paraguayan Harp and Arpa criolla (Venezuela).



Wurlitzer Gothic and Lyon & Healy 23 pedal harps.



A visitor plays the interactive Camac electro-harp.



Modern Dusty Strings, Camac Electro-harp and Rees Harpsicle.



"Harps in the City" session led by Kate Loughrey.



MoMM Director Carolyn Grant and curator Nancy Hurrell at the VIP Opening.

for its healing powers! Ancient harps were all open harps without pillars, and were either arched (bowed) or angular, with two pieces of wood joined at an angle. Evidence of a bowed harp from 5,000 years ago has been discovered in Iraq, the former ancient country of Mesopotamia. Around 1900 BC, the first angular harp appeared in Mesopotamia, and by 1000 BC, the angular harp was adapted in Egypt where harps were highly revered, played by both men and women at royal banquets and ceremonies. From Egyptian tomb paintings we have iconography of many forms of harps played, from full-sized standing instruments to small harps balanced and played on the shoulder! Harps migrated across continents, and it is possible that other instruments may have evolved independently in Africa and Asia. Buddhists carried harps across Asia into China, and traders sold them along the Silk Road. Frame harps appeared later. From the eighth century AD, there is iconography of small triangular harps on stone crosses in Scotland and Ireland.

A replica of an ancient Egyptian harp by Bill Campbell provided a striking first harp in the exhibition. The angular harp had an elk skin stretched over a soundbox carved from cedar wood, and the string arm was made of maple. With twentyone strings, the harp's ancient tuning is described by Campbell: "Strings were tuned by winding cord-like tails around the arm, and tassels fell as a decorative fringe." The reconstruction was based on two extant Egyptian harps, one in the Louvre (Paris) and the other in the Metropolitan Museum (New York). Historical harpist Tomoko Sugawara re-creates music on a similar angular harp (kugo) by Campbell, and she provided a sound file of an ancient tune from Persia for the exhibit. Tuned in modes, the voice of the harp is mellow and distinct, transporting the listener to the ancient world.

African Harps: Undugu (Cameroon), Adeudeu (Kenya), Arched Harp (Zambia)

The small arched harp from ancient times is still played today all across Africa, each geographical area with its own form of instrument and music. Whereas ancient Egyptian harpists played for royal banquets

and rituals, today's African harpist communicates everyday social and political messages through songs. Only men are expected to play harps in public, and after learning from a master for two years, the harpist is trained in building and repairing harps. Dr. James Makubuya informed us that in Africa, complaints are traditionally solved through music! The Alur people in Uganda use music as the medium for addressing village taboos and social ills. For example, if a fish monger is selling rotten fish, the harpist is sent for to communicate the angry feelings of the villagers. The harpist composes and sings a song telling the fish seller: "Don't sell rotten fish or you will lose your customers!"

Over 150 types of bow harps exist in Africa, and in Uganda alone, there are nine distinct models. While some harps are tuned to the pentatonic scale, others use a seven tone scale, and buzzing strings are common. The buzzing sound is caused by rings of material (banana fibers, lizard skins, etc.) vibrating against the strings. Intricate rhythmic patterns produce complicated textures from these small hand-held instruments. The music is a dialogue between harp and voice, and instrumental sections alternate with sung verses. Primarily a solo instrument, sometimes the harp is also combined with the thumb piano, as heard on a sound sample provided by Makubuya for the exhibition. Harpists have had many roles in Africa, such as the keepers of history and also teaching moral concepts of right and wrong to young people. In Makubuya's recorded track, Bundu, a bow harp accompanies singers in an instructive song poking fun at a lazy girl who never likes to work. She complains she is too sick but suddenly feels better at the first sight of food! In Africa's vibrant living tradition, harp music is not just entertainment. For communication and teaching, it's as important as speech.

Three African harps were displayed at MoMM, and common to all, the sound chambers were each covered with animal skins. The harps, all dating from the twentieth century, were on loan from the National Music Museum (NMM) in Vermillion, South Dakota. Indigenous materials of wood, gourds and shells were used to craft and decorate the instruments. Looking at the *undungu* from Cameroon

with carved oval soundbox and a tree branch for the neck, its connection to the ancient hunter's bow is clearly seen. The harp's five strings suggest a pentatonic tuning. From Kenya, an *adeudeu* had an animal horn for the neck, and the circular ridge around the sound table was decorated with a delicate strand of shells. With a round gourd for a resonator, the example from Zambia had a distinctive neck carved in the form of a person. Stark angular features of the face resemble tribal African masks. Figurative carvings on African harps symbolize deities, and the harp's sound is believed to be the voice of the figure.

Celtic Harp: Castle Otway Cláirseach by David Kortier and Clark Irish Harp by Melville Clark

"This most ancient instrument was brought to us from Ireland where they are excellently made, and in great numbers... they even place it in the arms of the kingdom, and paint it on their public buildings, and stamp it on their coin..."

> Vincenzo Galilei, Dialogue on Ancient and Modern Music, 1581

In Ireland, harps were prized by the culture for over a thousand years, and in early times clan harpers played for chiefs and kings. The harp in Ireland was not originally a folk instrument, but was associated with the aristocracy, and harp players were given high positions in Gaelic society. In medieval eras, Irish harpers were legendary, known on the Continent for their impressive skills and unusual form of harp, the cláirseach. With a heavy, robust soundbox carved from a hollowed-out log and strung with brass wire strings, the Gaelic harp was quite different from the slender gut strung European harp. In time, Ireland's renowned harp came to symbolize the country itself, and, in 1534, Henry VIII introduced a harp on Irish coins. The powerful symbolism of a royal crown was placed above the harp to signify British rule over Ireland. Two centuries later, a harp emblem was used again, this time as the political logo for the United Irishmen in movements for independence from Britain. Today the official symbol for Ireland is an actual historical

instrument, the iconic Trinity College harp.

The exhibition paid homage to Ireland's national instrument with a handsome cláirseach by David Kortier. An historical replica of the Castle Otway harp from the sixteenth century, the original cláirseach is stored in Trinity College, Dublin. Kortier was granted permission to study the rare Castle Otway harp, and his replica was made in the traditional manner with the soundbox carved from a single log of wood. Incised Celtic designs, similar to those seen in the Book of Kells, decorate the neck, and a characteristic zoomorphic eellike carving fills the outer pillar. The technique of fingernails plucking wire strings creates a particular bell-like sound, and lush layering of tonalities results from long-lasting resonance. Wire-harp specialist Ann Heymann contributed the sound file "Port Ballangowne" by seventeenth-century-Irish composer Ó Catháin. Freely formed phrases combine with the ringing and damping sounds characteristic of the unique cláirseach technique.

By the late eighteenth century, the Gaelic harp had fallen out of favor. Styles of music were changing, and patrons in the Big Houses preferred the new classical art music. Whereas the new chromatic music was not idiomatic to the wirestrung harp, it could be played on the recently developed French pedal harp, with pliable gut strings and fretting mechanisms. Dublin's leading pedal harp maker at the time, John Egan, experimented with new forms of harps and mechanisms and even advertised himself as an inventor. Egan cleverly combined elements of both the Gaelic harp and the pedal harp in a new model, the Portable Irish Harp. This small shamrock covered Irish harp, about three feet in height, had a Gaelic inspired highheaded shape and bowed pillar, but the soundbox had the curved laminated wood construction of a pedal harp. It was gut strung with mechanisms (ring stops or ditals) for playing in different keys, and the repertoire included traditional Irish airs as well as art songs and opera themes. For the exhibition, a track was provided from a recording made by the author on a two-hundred-year-old Egan harp.

Egan's popular Portable Irish Harp design inspired

succeeding generations of harp makers, and it came to be known eventually as the 'Celtic' harp. Versions of Egan's model were produced in the late 1800s by Morley in London and in the early 1900s by American maker Melville Clark. On a trip to Ireland, Clark had purchased two Egan harps, and aboard the ship's passage home, he eagerly drew plans for his Clark Irish Harp. It was successfully produced until the 1950s, and at one time even manufactured by Lyon & Healy. A Celtic harp explosion has continued in America in recent decades with several successful independent makers starting workshops all across the country. A 1900s Clark Irish Harp, from the collection of Gregg Miner, was displayed in the exhibition as the first Celtic harp model made in America.

Harp in Europe: Northern European Harp by Catherine Campbell and Naderman Single-action Pedal Harp (18th century)

"The most beautiful sound the mind of man has ever imagined, and the hand of man has ever manufactured."

Marcel Tournier, French harpist and composer Religious artworks, like paintings and manuscripts, give us clues as to the first types of harps played in Europe. From the ninth century, depictions of simple triangular framed harps are played by either King David or angels. Angels and harps go together it seems, and what started as Christian iconography has continued through the centuries to the present day, ubiquitous on Christmas cards and holiday ornaments. The association of harps with angels may also have something to do with the sound perceived as 'heavenly,' especially the ethereal glissando. Over time, harp shapes evolved, becoming taller and thinner, the pillar often culminating in a pointed finial. Medieval and Renaissance Gothic harps were gut strung and fitted with bray pins on the soundboard causing the strings to buzz loudly (or bray like a donkey), perfect for playing in consorts at court with instruments like crumhorns, sackbuts and recorders.

As music became more chromatic, harpists used

a technique of pinching the string at the top, against the neck (like fretting strings on a guitar) for playing accidentals. In the exhibit, an elegant replica of a German harp (c. 1700) by historical harp maker Catherine Campbell represented the slender form of the early European harp. With a shallow rectangular soundbox, the harp's soundboard had decorative clusters of perforations for sound holes. Like the original instrument in the Boston Museum of Fine Arts, sculpted ridges on the neck allowed for easy pinching of the strings by the harpist. The audio example, provided by the author, demonstrated the surprisingly rich, full sound of the Campbell replica resonating from its relatively small sound chamber.

In the late 1600s, fretting mechanisms in the form of metal hooks were added to the necks of some German harps. When turned, the hook stopped the string, raising the pitch a semi-tone for chromatics in the music. Instrument makers began to experiment with ways to connect the hooks to pedals, to free the left hand for playing when an accidental was needed. By 1720, the first pedal harp was invented, generally credited to Jacob Hochbrucker (c.1673-1763) in Bavaria, and a box or base was added to the bottom of the harp to house the pedals. By the 1770s, the center of pedal harp production had shifted to Paris, possibly due to the arrival of the new French queen, Marie-Antoinette, who was a harpist. From this time, playing the harp rose to new heights of fashion in aristocratic circles. Highly decorative instruments were associated with elegance, and the majority of harpists were female. It became a status symbol to play the harp, and teachers, harp makers and harpist composers converged on Paris to fill the demands.

A gem in the collection on view, courtesy of Rebecca Foreman, was an eighteenth century pedal harp by Jean-Henri Naderman, harp maker to Marie Antoinette. Harp decoration in this period was so exquisite that the instruments themselves became works of art. Instruments were carved, painted and gilded in the rococo style similar to the furniture. Delicately hand-painted on the soundboard are floral wreaths and bouquets of roses. The carved decoration on the pillar is a typical scroll-top design with swags and gilded. Instead of u-shaped hooks, the French harps had *crochets*, similar to crochet

hooks, and the mechanism was single-action, with strings tuned to E-flat major. The style of music with *alberti* bass, scale-wise passages and ornaments has a sublime gossamer quality when played on the French harp with its clear bright *timbre*, similar to the harpsichord. London harpist Danielle Perrett provided an historically accurate sound sample for the exhibition, recorded on a single-action harp. A movement from a sonata composed by F.J. Naderman, the harp maker's son, expressed the dramatic sentimentality of the period.

The next wave of pedal harp developments came from French maker Sébastien Erard in the 1790s with his fourchette mechanism (forks on discs) and conical neo-classical column, reminiscent of a classical Greek pillar. Following the French Revolution, harp decoration needed a fresh look, one disassociated with royalty. In 1810, Erard introduced his 'Grecian' model, decorated with robed figures reflecting the independent cultures of ancient Greece and Rome. The harp was doubleaction, with the addition of an extra row of pedal slots. Now the harp could play in every key, and flat, natural and sharp was obtainable on every string. Towards the end of the nineteenth century, harps became sturdier, and with extended soundboards came increased resonance. The pedal harp was used as a solo instrument and, increasingly, in opera and symphony orchestras. Composers such as Wagner and Tchaikovsky, among many others, scored harp parts in their works. Later composers like Debussy and Ravel used the harp's distinctive tone colors in chamber and orchestral settings, drawing on arpeggios, harmonics and glissandi.

Latin American Harp: Arpa cusqueña (Peru), Veracruz Harp(Mexico), Arpa criolla (Venezuela) and Paraguayan Harp

"A harp can be as dangerous as a sword in the right hands."

George R.R. Martin, A Storm of Swords

In the sixteenth century, Spanish missionaries, colonists and conquistadores believed their mission was to bring civilization and religion to the New

World. Amidst the military invasion and religious conversion, the harp was introduced to a culture that not only embraced it but made it their own. The Spaniards brought harps with them to the New World, and the instrument was eventually transformed into the Paraguayan harp. The Spanish harp, the arpa de dos órdenes or 'harp of two orders,' had two rows of strings crossing in the middle: a diatonic row (white notes on the keyboard) and a chromatic row (black notes). The soundbox was proportionally large, with a back of seven staves joined together, and an extremely wide base to amplify the bass notes. The native people of Latin America began to make their own harps, adopting the large soundboxes but simplifying the construction to have only a single row of strings. In Spain, harps had been the main instruments played at the royal courts and great cathedrals, for the harp sound was louder than guitars and small keyboards, the other prominent instruments of the time. Some surviving Spanish harps are decorated with royal crests, revealing the high status of the instruments.

The Spanish harp of kings and church ultimately was transformed in Latin America to become a folk instrument played by the masses. Here the harps are carved and painted with common indigenous flowers and birds. Whereas the Spanish harp died out in its country of origin, the Latin American harp became a national instrument, is taught in schools and played in harp choirs! In spite of its large soundbox, the harps are surprisingly lightweight, and harpists take their instruments everywhere, from playing for peasants dancing in the streets to lonely cowboys singing on the plains. The music has its roots in the popular dance music of Spain, with fiery syncopated rhythms. Soundfiles from Paraguayan harp master Alfredo Rolando Ortiz gave the visitor a taste of the exciting multiple rhythms in Latin American music. With lively melodies, each hand seems to miraculously produce totally independent rhythmic lines. With arpeggios, short glisses and tremolo (nail moves quickly back and forth on a string), harp sounds express the love of waterfalls, rivers, and flowers as well as the emotions of love and pain.

Harps exhibited included an arpa cusqueña from

Peru with ornamental carvings of the local animals: a snake and a Cock-of-the-rock hen, the national bird of Peru. On loan from the Musical Instruments Museum (MIM) in Phoenix, Arizona, the harp has an interesting half-pear shaped soundbox, traditional on Peruvian harps. A Mexican harp from Veracruz was loaned courtesy of the Folk Music Center Museum, Claremont, CA. On this instrument from Paracho (1985), the turned pillar was formed like a rope and culminated in a carved rosette in a traditional folk style. In Mexico, the Veracruz harp, or *arpa jarocha*, is often played in *conjuntos* (folk groups) with guitars. The right hand improvises arpeggios while the left hand plucks syncopated bass notes.

The harp is the national instrument of Paraguay, and is played in literally hundreds of ensembles. On a Paraguayan harp, courtesy of Geri Afshari, the soundbox was embellished with impressive leaf carvings on a black background. The most popular type of harp played in Venezuela and Colombia is the *arpa llanera* or *arpa criolla* (harp of the plains). The tall harp from the collection of Alfredo Rolando Ortiz, had a slender soundbox and on the neck, the strings were tied to two rows of tuning pegs, instead of just one. The harpist, usually a man, stands while playing. The four Latin American harps exemplify diverse and colorful cultures where harp playing continues to thrive.

The Healing Harp: Dusty Strings Ravenna

"Music is the principle that unites body, soul, and spirit."

Boethius, 6th century

In 2700 BC, ancient mystics in Mesopotamia played harps for births, funerals and lunar eclipses. Cultural myths for centuries have portrayed the harp sound as having "special powers." It has long been known that the long-lasting resonance and the personal touch on the strings create an atmosphere of serenity. Once believed as mystical, now scientific studies prove harp music eases pain and suffering. Today live music is present in hospital rooms, and harpists are now members of the medical team.

Harps and other instruments are regularly used for pain control, relaxation and health restoration. Decades of research show that music can help premature infants gain weight, stroke victims regain speech and psychiatric patients manage depression. Several harp therapy courses for accreditation are now available to harpists. Composers are creating therapeutic music for cardiac patients, with rhythms matching breathing patterns and heartbeats. Harpists are working with manufacturers and medical professionals in a growing profession. Responding to the need for therapeutic harps, companies like Dusty Strings are producing small portable harps that can be easily transported around a hospital, like the Ravenna model on view.

Sue Hoadley, harpist and Certified Music Practitioner, describes the therapeutic music process: "The harp creates musical openings where the listener may travel to places of light, introspection and even childlike delight." Her recording of therapeutic harp music uses harmonies and rhythm in a different way, flowing in an unhurried and natural pattern, just as one breathes in and out.

Modern Commercial Harps: Lyon & Healy 23, Wurlitzer Gothic, Camac Electro-harp, and Rees Harpsicle

Harp companies today offer something for everyone, with harps made in a stunning variety of sizes and colors. Pedal harps are larger than ever before with a big and bold sound. In 1889, the Lyon & Healy factory produced their first harps in Chicago, and the Lyon & Healy model 23, like the one on display, became the standard bearer for harp making in the first half of the twentieth century. The Rudolph Wurlitzer business, which began by selling music boxes in the 1880s, made pedal harps in 1909, producing over a thousand harps until 1935 when production ceased. The golden Gothic model on view had a cathedral-like capital and was decorated with angel musicians. In addition to the concert hall, the harp is still the mainstay of weddings and parties.

Today harpists are also playing new small harps. William and Pamela Rees noticed the market's need for small, lightweight, easily affordable harps.

They designed the Harpsicle weighing just four pounds! It fits in an airline overhead compartment and comes in a variety of bright colors. A new breed of harpists, from therapeutic musicians to middle school students to retirees looking for a new pursuit, are drawn to the Harpsicle, making it the company's fastest growing model. Pop artist Deborah Henson-Conant dreamed of a harp light enough to strap on her shoulders but powerful enough to wow her audiences. Working with the French company Camac for fifteen years, finally an eleven pound harp made of carbon fiber, with thirty-two strings and levers was invented. With a small pick-up on every string to produce an evenly amplified sound, this electric lever harp is loud enough for concerts in Carnegie Hall. Today the Camac DHC Light, named for Deborah Henson-Conant, is one of most popular harp models in the world.

Celtic harps made today have easy-to-use levers and responsive carbon fiber strings for playing fast jigs and reels. Lightweight harps are transported to music festivals and harp ensembles springing up all across the country. Harpist-composers are writing new music for the Celtic harp, as heard on an original track from Harper Tasche in the exhibit. In the realms of early music, the choice of historical replicas for historically accurate performances has never been greater. Antique pedal harps are being restored, where possible, and harpists now can more closely experience period music as it originally sounded.

"Harps in The City"

The Museum of Making Music is a division of the NAMM Foundation (National Association of Music Merchants), a nonprofit organization supporting makers of instruments and community based music learning programs. An exciting outreach program, "Harps in the City," brought hand-painted Harpsicles to different parts of Carlsbad, each harp uniquely decorated by a local artist. To fulfill the music-making component of the project, fun educational

sessions were held at the museum for students to play harps! Led by harp teacher Kate Loughrey, children from the Carlsbad Boys & Girls Clubs learned simple pieces on brightly colored beginner-friendly Harpsicles. The sessions culminated in performances for seniors at local retirement centers.

In connection with the exhibit, MoMM also presented a series of harp concerts at the museum, with the opening program in March by Yolanda Kondonassis. The concert series featured an impressive roster of performers playing different styles of harp music: Alfredo Rolando Ortiz, Paraguayan harp; James Makubuya, African harp; Grainne Hambly and William Jackson, Irish and Scottish harps; and Deborah Henson-Conant, jazz harp. With 30,000 visitors coming through the museum annually, *The Harp* was a tremendous way to introduce our instrument and its global story to a wide audience.

ABOUT THE AUTHOR:

Nancy Hurrell promotes her passion for historical harps through concerts, lectures and workshops across the US, Canada, England and Ireland. A consultant at Boston's Museum of Fine Arts, she presents lectures at conferences and museums including the Metropolitan Museum of Art (New York) and the Royal Irish Academy (Dublin, Ireland), and her articles are published in the Grove Dictionary of Musical Instruments, History Ireland magazine, American Harp Journal, and Historical Harp Society Bulletin. Nancy was guest curator for the exhibit described in the article above. Her latest CD is The Egan Irish Harp, and she has published five books of harp arrangements. www.HurrellHarp.com