

GLASS MUSIC W • O • R • L • D

Spring 1999



PRESIDENTIAL NOTES

OUR WEBSITE

Yes, another short note about the website, which is now looking better than ever. We have pictures, news, festival info, sound clips, and much more! Last month Bill Zeitler and Deborah Avery enhanced its look and content tremendously, then recently Jonathan Stuart-Moore applied his wonderful talents to give it a truly refined, very professional quality. If you haven't visited yet, you are in for a big treat. Thank you Bill, Deborah, and Jonathan, for lending your skills and time. The website is tremendous.

www.mindspring.com/~glassmusicintl

Also, for any updates or changes you would like to see, please click the link to the webmaster on the home page.

OUR FESTIVAL

Note in this issue we are asking one last time for festival suggestions from our members, especially regarding opportunities for performers to musically mingle.

Brien Engel, president

Fine Tuning of the Jalatarang's son

by Alain Busser

Who hasn't tried to guess what kind of music members of the "Gay Wine Music" played on their instruments? Maybe someone knows? Here I propose to go a little further into the past, analyzing the "father" of the European musical glasses, whose name I don't know, and which is the "son" of the Jalatarang from northeastern India.

The instrument I speak about seems to have been made of bowls tuned with water, and put in a case. It was apparently very popular in Persia around the 14th century. This empire was full of scientists who wrote books, unfortunately without music scores, but with descriptions of the music. The instrument may have been rubbed with mallets, but was probably more often struck. The music was improvised, with a large variety of rhythms, and monophonic, although I think a drone on the 1st or 5th degree is valuable, especially if it provides a rhythmic reply to the melody. It remains only to tune it if we want to play this kind of "world music" on a Glass Harp.

Sorry for you, Glass Armonica folks; here is the hour of glory for the Glass Harp as it can be fine-tuned and 14th century Persia ignored the equal tuning. Rather, they practiced a tuning where the smallest interval is $1/4$ of one tone, that is 50 cents

see *TUNING*, page 4

New Projects for GMI Members

One important new project is to get members to help track down and document existing Franklin-style Glass Armonicas made before 1820, when builders of the first musical instrument invented in America died out. Some instruments are preserved in museums such as the Corning (NY) Glass Museum, some in private collections. One expert believes there may be only 20 of the old instruments left of the hundreds that were made and played in the sixty-year "hey-day" of the Armonica.

Another project is to preserve the music written specifically for glass instruments. Mozart, Beethoven, Gluck, Donizetti and many other "classical" composers scored for glass instruments. Contemporary composers, too, have discovered the fascinating tonality of the sound of glass. Nearly 200 works for glass have been cataloged and GMI attempts to keep track of historical as well as contemporary glass composers and artists.

Liz Brunelli

GMI HAPPENINGS

by Liz Brunelli

Do hope you-all had "Happy Holidays" during the Winter Season of 1998-1999!

GMI welcomes new GMI member, **Robert Esch**, Alhambra, IL, who claims he was quite convinced by GMW Associate Editor, **Peter Bennett**, Blodgett Mills, NY to join Glass Music International, and take advantage of its benefits. As Rob states on his application, "We met Peter in New Orleans," his winter home during the cold weather where he can be found busking on his glass harp and promoting our organization. Peter made up special GMI flyers to hand out to one and all who stop to listen to him.

Carolinn Skyler, Chelsea, MA has been in demand throughout the holidays to perform on her glass harmonica. Among her gigs, she filled the auditorium to capacity at her performances the last week of December at the Franklin Court Museum, Philadelphia, (so reports Joanne Blacoe of Independence National Historic Park staff). In Boston, MA Carolinn performed at the Old South Meeting House during the First Night Celebrations on New Year's Eve. And, on February 21st, she was

see *HAPPENINGS*, page 5

Franklin Institute Celebrates 175th Anniversary

by Liz Brunelli

The Franklin Institute, Philadelphia, PA is celebrating its 175th Anniversary this year. The Institute was founded in 1824 with monies set aside for this purpose, as stated in the will of Benjamin Franklin, who died in 1790. The Institute houses the original Franklin glass harmonica, one of his numerous inventions.

A new permanent exhibit has been created for the anniversary celebration which tells the story of the Life of Benjamin Franklin. Among the artifacts will be a G. Finkenbeiner, Inc. glass harmonica! It was recently commissioned by the Franklin Institutes. The prototype for this modern glass harmonica was created in 1982 by Gerhard Finkenbeiner, master glassblower and president of GFI located in Waltham, MA. The background music for the exhibit will be provided by the newly released CD by glass harmonicist, William Wilde Zeitler, of Seattle, WA.

The new exhibit will be open to the public on Friday, March 4, 1999.

GMI Philadelphia 2000 Festival Update

by Liz Brunelli & Lynn Dye

Our Festival Committee is in the final stages of working out the details for the musical portions of our festival. The GMI officers have received "feedback" from several GMI members and would like to give everyone one last opportunity to respond before finalizing the schedule.

A few of our members have requested for times to be set aside when people can play music together. After all, how many of us have the opportunity to play or hear "glass chamber music?" If anyone is interested in being involved in locating, providing, or arranging chamber music for glass instruments, please contact one of the GMI officers to volunteer. There would also need to be a rehearsal conductor(s).

Many of our members perform on other instruments or sing, in addition to being glass music enthusiasts. At least one performer is interested in chamber pieces with other instruments. If you are interested in performing on your other instrument or voice, and would be willing to bring your other instrument to Philadelphia, please let us know ASAP. We are also checking to see which facilities will have pianos available.

Another suggestion which has been made is to allow more time for members to socialize and talk informally about glass music. Since we are so few and far between, most of us don't have an opportunity to meet and visit with the rest of our membership in person. The opportunity to share ideas is really one of the most important reasons for attending the festival.

At this time, we are requesting that anyone who is able and willing to help with the following festival jobs contact Brien Engel:

Publicity - assist with preparation of news materials

Registration - assist in manning registration desk at the Ritz Carlton Hotel

Audio - assist Audio Director with set-up and dismantling of audio and electronic equipment as necessary

Please be sure to respond with your suggestions and ideas.
Thanks!

The Glass Armonica and the “Room of the Phantasmagoria”

by Bill Zeitler

In 1798, during the French Revolution, a Belgian inventor, physicist, and student of optics named Etienne-Gaspard Robertson (1763-1837) presented what he called the first “Phantasmagoria” at the Pavillion de l’Echiquier in Paris. Robertson, whose long and unusual career reflects the excitement and instability of his epoch, was both a brilliant eccentric and a tireless self-promoter. He came first to public notice in 1796 when he proposed to the Directoire a scheme for burning up the British fleet with a gigantic assemblage of mirrors designed to concentrate the sun’s rays on a distant object until it caught fire. He was best known, however, as a balloonist, setting an altitude record in Hamburg in 1803. He later accompanied the Russian ambassador to China, where he demonstrated ballooning technique in the 1820’s.

Robertson had been fascinated in his youth with a device known as the “magic lantern,” attributed to Athanasius Kircher (1601-1680), whose methods ranged from the traditionally scholastic to the boldly experimental - he once had himself lowered into the crater of Vesuvius to observe its features soon after an eruption. Kircher’s device, from which our modern slide and movie projectors derive, consisted of a lantern containing a candle and a concave mirror. A tube with a lens at each end was fitted into an opening in the side of the lantern, while a groove in the middle of the tube held a small image painted on glass.

Robertson recognized the uncanny illusionistic potential of the new device and exploited the magic lantern’s pseudo-necromantic power with his usual flamboyance. He began producing elaborate and bizarre spectacles in the crypt of an abandoned Capuchin convent near Paris. There, amid ancient tombs and effigies, Robertson found the perfect setting for his optical specter-show -- a kind of sepulchral theater, suffused with gloom, cut off from the surrounding city streets, and pervaded by (as he put it) the silent aura of the “the mysteries of Isis.” Typically at seven o’clock in the evening spectators would enter through the main rooms of the convent, where they were entertained with a preliminary show of optical illusions, panorama scenes, and scientific oddities. After passing through the “Gallery of the Invisible Woman” (a ventriloquist and speaking-tube display orchestrated by one of Robertson’s assistants), one descended at last to the “Room of the Phantasmagoria.” There the single, sputtering candle was

extinguished, and muffled sounds of wind and thunder (produced by “the lugubrious sounds of a gong”) filled the crypt. Robertson then began a somber, incoherent speech on death, immortality, and the unsettling power of superstition and fear to create terrifying illusions. He asked the audience to imagine the feelings of an ancient Egyptian maiden attempting to raise, through necromancy, the ghost of her dead lover. At last, when the mood of terror and apprehension had been raised to a feverish pitch, the specter-show itself began. One by one, out of the darkness, mysterious luminous shapes -- some seemingly close enough to touch -- began to surge and flit over the heads of the spectators.

Many of his effects were achieved by doubling two glass slides in the tube of the magic lantern over one another in a quick, deft manner, such as “The Three Graces, turning into skeletons.” Ghostly vignettes followed one another in a crazy, rapid succession. Each image bore some supernatural, exotic, or morbid association. Scenes included “The Nightmare,” “Macbeth and the Ghost of Banquo,” “A Witches’ Sabbath,” “The Witch of Endor,” “The Head of Medusa,” “A Gravedigger,” and “The Opening of Pandora’s Box.”

Robertson concluded his “Room of the Phantasmagoria” with the following narrative:

“I have shown you the most occult things natural philosophy has to offer, effects that seemed supernatural to the ages of credulity, but now see the only real horror -- see what is in store for all of you, what each of you will become one day: remember the phantasmagoria.”

And with that, he relit the torch in the crypt, suddenly illuminating the skeleton of a young woman on a pedestal.

All of this was accompanied by unearthly music emanating from an unseen -- (what else would be remotely equal to the task!) -- glass armonica!

(Adapted from “The Female Thermometer,” Terry Castle)

Glass Music International, Inc.

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Tuning *from page 1*

(remember one octave is 1200 cents). But, one never has two notes in the same scale separated by less than 1/2 tone.

Safi ad Din'Abd al Mu'min, an author from the 13th century, gave a theoretical division in five modes, which I give here in cents (for tuning via a synthesizer) and in notes (name of the nearest note in equal tuning), and the frequency of the A in this scale (in Hertz):

1) Mahur:

in cents:

0	204	408	498	702	906	1110
C	D	E	F	G	A	B

A in Hertz:

440	441	442	439	441	442	443
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In the above example, 702 cents from C is the frequency G would have in a chromatic scale where the A was 441 Hz instead of 440.

This is the Persian version of the diatonic scale (Ionian mode); the E can also be tuned at 384 cents instead of 408 (436 Hz instead of 442); then one approaches the just intonation.

2) Homayun:

in cents:

0	180	408	498	702	882	996
C	D	E	F	G	A	A#

A in Hertz:

440	435	442	439	441	435	439
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3) Shur:

in cents:

0	180	294	498	702	792	996
C	D	D#	F	G	G#	A#

A in Hertz:

440	435	438	439	441	438	439
-----	-----	-----	-----	-----	-----	-----

This mode is supposed to express tenderness.

4) Segah:

in cents:

0	180	384	498	702	882	1086
C	D	E	F	G	A	B

A in Hertz:

440	435	436	439	441	435	436
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This mode is supposed to express sadness. Its name reminds me of the name of a dance which is very popular in the Mascareignes archipel. Is this a coincidence?

5) Tchahargah:

in cents:

0	180	408	498	702	882	1110
C	D	E	F	G	A	A#

A in Hertz:

440	435	442	439	441	435	443
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This mode is near the Javan Pelog where average measures give: 0 150 420 540 690 930 1080. It is then like an oriental version of the mixolydian scale.

In the 18th century Encyclopedie, the French author Diderot gave about Persia a tuning with tetrachords, for a two octave range, comprising the following notes, in cents:

0	250	400	500	750	800	900	1000	1250
1300	1450	1500	1600	1700	1950	2000		
2100	2200	2400.						

This all seems to come from what Greeks knew as "enharmonic tuning" which, in cents, would be (for one octave):

0	400	450	500	700	1100	1150	1200.
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This can be mixed with the chromatic mode, for example, giving:

0	400	450	500	700	1000	1100	1200 or:
0	300	400	500	700	1100	1150	1200.

Well, isn't that quite a domain to be explored? The melody can seem at least strange to a western ear, but, with rhythmic variations, it can be indeed very interesting, and, paradoxically, new!

References:

[Encyclopedia Universalis](#), article "modes"

[L'Encyclopedie](#), Diderot, 1759 (2 years before...)

[Electronic Musician](#) @ 1988, articles by Wendy Carlos

Happenings *from page 2*

a special guest performer on the glass harmonica at historic Old Deerfield Village, MA where she was received with acclaim.

Brien Engel, GMI President, again performed at the libraries & schools in Albuquerque, NM on his glass harp during the months of December and January.

In reading through the Glass Art Society 29th Annual Conference Program recently, I noticed that one of the newer members of GMI, **Elizabeth Mears** of Windy Hill Glass Works, Fairfax Station, VA, will be giving a "flame-working" demonstration entitled "Masks, Skulls, Ancestors, Sculpting at the Flame" on Saturday morning, May 1st, at the University of Tampa. The conference is being held in Tampa, FL this year from April 29-May 2, 1999.

Barbara & Bill Meikle of "Ben Franklin Alive," Arlington, MA, informs us that on the return North from their annual trip to Florida, they stopped for a day to visit Old Salem, an 18th century Moravian Village in Winston-Salem, NC. One of the historical interpreters expressed an interest in learning more about the glass harmonica and the upcoming GMI International Music Festival in Philadelphia, PA (of course we followed through with the info).

The **Stuart-Moore** Chronicle 1998, tells the tale "Mom & Son: Two Moments of Glory" among its other interesting family news highlights during the past year. Moment #1 was when they appeared on PBS, February 18, 1998, playing "Maria" from West Side Story on their glasses. Moment #2 was at the Duke University Chapel Service of Worship on Sunday, December 27, 1998, where they performed four selections for the Prelude and, as the anthem, Ann's arrangement of "He Shall Feed His Flock" from Handel's Messiah. Congratulations to father John on his interactive software tutorials in neurophysiology to be published this year.

William Wilde Zeitler, Seattle, WA performed with the Seattle Philharmonic Orchestra at a special holiday event on December 6, 1998. He performed his own arrangement of the English Folk Song "Greensleeves." By public acclaim he was invited to return in the near future. He is composing a new work for glass harmonica and orchestra.

A clipping has been sent to us from the New York Post, dated December 7, 1998 by GMI member, **Cecilia Brauer**, Merrick, NY in which she was given a write-up about her CD "The Angelic Sounds of Christmas." The columnist claims "the

tones she creates are otherworldly and beautiful." Quite an honor! She tells us also she has been busy playing the glass harmonica part of the opera, "Lucia di Lammermoor" with the Metropolitan Opera Orchestra for over a dozen performances, including it being broadcast on the Texaco radio program on Saturday, January 16th. She also reports that again she played Christmas carols on the glass harmonica in the Met foyer during the pre-performance on Christmas Eve.

From Tokyo, Japan, we had a communication in which **Lisa Honda, Chief Secretary of Yoshimoto, Kogyo, Co., Ltd.** thanked GMI for sending them a copy of the Glass Music World, Fall 1998 issue which had featured the article about the "glass carp" musical instrument invented by the **Tosa** brothers, **President Masamichi** and **Vice-President Nobumichi**. She reports they were greatly pleased to read it. Ms. Honda also tells us that their company will be featuring the Tosas in their overseas debut of "Meiwa Denki," the Tosa brothers' professional name.

Our thoughts and prayers are with **Kyle Rehme**, son of **Norman & Carol Rehme**, Loveland, CO. Kyle was seriously injured in an automobile accident early this year while riding his bicycle in Los

Angeles, CA. His father Norm (first president and co-founder of GMI) reports that their son is recovering with the personal attention of his mother, Carol, who has been in California with Kyle since January 7th. We wish Kyle a speedy recovery. Cards & notes can be sent to: 2503 Logan Dr., Loveland, CO 80538.

Thomas Bloch of France reports that his tour of Spain was a huge success. Between January 15 and February 24, 1999, he performed with the "*Brussels Virtuos*" in 20 concerts; 18,000 people saw the glass harmonica. The newspaper critiques were all excellent and the Spanish National Television diffused large extracts of their concerts in Madrid and Barcelona (30 minutes). Another tour will be scheduled for the future!

Please continue sending in your GMI Happenings! News about GMI member activities and glass music is a very important part of the newsletter. If we don't hear from you, we have nothing to print -- so send a postcard or pick up the phone!



Thomas Bloch during his tour of Spain



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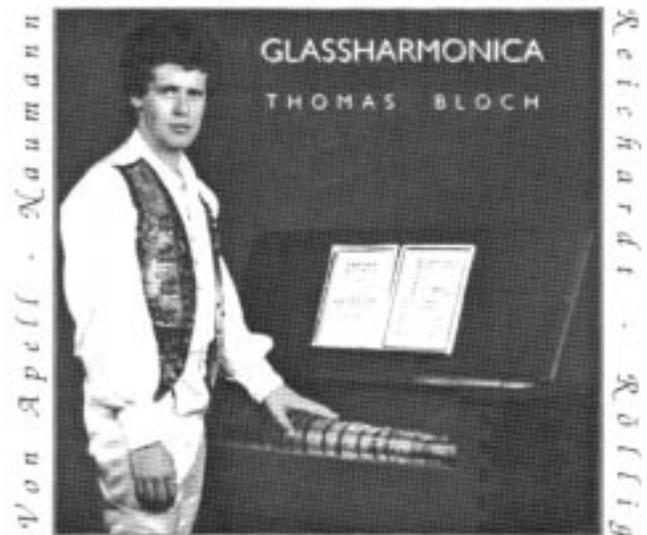
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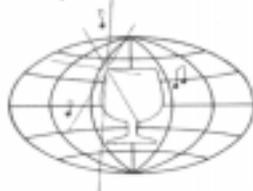
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