



Ben Franklin's Glass Harmonica: The Beautiful Musical Invention With a Dangerous Reputation

Franklin's innovative glass instrument produced enchanting sounds but had a sinister reputation for allegedly causing madness in musicians and listeners.

Benjamin Franklin—the American polymath, scientist, inventor, statesman, and author—was also a musician and composer. Franklin enjoyed singing, played many instruments, including guitar, harp, and viola da gamba, and had strong opinions about music. Consider his criticism the great Baroque composers of his age:

The Pleasure Artists feel in hearing much of that compos'd in the modern Taste, is not the natural Pleasure arising from Melody or Harmony of Sounds, but of the same kind with the Pleasure we feel on seeing the surprizing Feats of Tumblers and Rope Dancers, who execute difficult Things.

Or...

The reigning taste seems to be quite out of nature, or rather the reverse of nature.'

Such opinions did not form in a void. In the fall of 1727 Franklin and a group of friends founded the Junto Club, also known as the Leather Apron Club. Franklin proposed that the group be formed of “ingenious men—a physician, a mathematician, a geographer, a natural philosopher, a botanist, a chemist, and a mechanician (engineer)”. The twelve members thus were tradesmen and artisans who met Friday evenings to discuss issues of morals, politics or natural philosophy. The club was reformed as The American Philosophical Society in 1743. The Society is still active today. It is the oldest continuously running scholarly press in USA, publishing books and articles from all fields of study.

Franklin’s broad interests carried over into the Junto Club, and, of course, music was among them. In Franklin’s letters he mentions composing ballads and songs for the Junto Club on the occasion of their annual meeting. We also know Thomas Jefferson and Benjamin Franklin made music together, Jefferson on his violin with Franklin accompanying on his guitar. From his correspondence we know during his trips to England and continental Europe, Franklin displayed keen interest in music and musical instruments of all types.

In one letter, Thomas Jefferson mentions a “pretty little instrument” Franklin carried around with him, a form of crystallophone with bars of glass. It is likely this little instrument gave Franklin the idea to invent most dangerous instrument in the history of music: the glass harmonica.

Franklin aimed to create an instrument that produced charming tones. After research and experimentation, he worked with London glassblower Charles James to produce a series of bowl-shaped glasses to build the new instrument, formed of tuned glass bowls that rotate on a common shaft, played by touching the spinning glass with wet fingers. Franklin’s glass harmonica had its world premiere in early 1762, played by Marianne Davies (1744-1818), an accomplished harpichordist and the sister of classical soprano Cecilia Davies. The sisters toured in concerts, performing in Dublin (1763), London, and on the Continent where the

two became acquainted with the Mozart family. Beethoven also composed music for the instrument. Davies corresponded regularly with Benjamin Franklin, communicating to him her failing health, and her desire to be able to play the instrument again before her death.

Franklin wrote from London to his friend Giambatista Beccaria in Turin, Italy, in 1762 about his musical instrument:



The advantages of this instrument are, that its tones are incomparably sweet beyond those of any other; that they may be swelled and softened at pleasure by stronger or weaker pressures of the finger, and continued to any length; and that the instrument, being well tuned, never again wants tuning. In honour of your musical language, I have borrowed from it the name of this instrument, calling it the Armonica. ¹

The instrument's popularity did not last far beyond the 18th century. Perhaps popularity declined due to the inability to amplify the volume so as not to be drowned out by other instruments. Some claim the decline was due rumors that using the instrument caused both musicians and their listeners to go mad. This story gave a brainstorm to Gaetano Donizetti to write one of the most extraordinary scenes in Opera, the mad scene in Lucia di Lammermoor when Lucia is reported to have killed her fiancé in a fit of insanity. The cabaletta “Spargi d'amaro

¹ <http://www.americanmusicpreservation.com/BenjaminFranklinGlassArmonica.htm>

pianto” and the more lyrical “Il dolce suono” from the mad scene (Act 3, Scene 2) were originally scored for glass harmonica and soprano.

It is a matter of conjecture how pervasive was the belief that the glass harmonica caused madness. All commonly cited examples of this rumor seem to be German, if not confined to Vienna. One example of alleged effects from playing the glass harmonica was noted by German musicologist Johann Friedrich Rochlitz in the *Allgemeine musikalische Zeitung*:

Glass harmonica excessively stimulates the nerves, plunges the player into a nagging depression and hence into a dark and melancholy mood, that is an apt method for slow self-annihilation.

- If you are suffering from any nervous disorder you should not play it.
- If you are not yet ill you should not play it excessively.
- If you are feeling melancholy you should not play it or else play uplifting pieces.²

It’s still a big mystery whether the glass harmonica is dangerous. So try this experiment. Listen yourself. See if you go mad. Find the YouTube video of master of the Glass Harmonica, Thomas Bloch, soprano Albina Shagimutova and LA Opera Music Director James Conlon rehearsing the iconic Mad Scene from Lucia di Lammermoor. Pay attention and you’ll hear the peculiar sound of glass harmonica. Let’s hope you don’t start hearing voices!

² Cope, Kevin L. (30 September 2004). [1650–1850: ideas, aesthetics, and inquiries in the early modern era](#). AMS Press. p. 149. ISBN 978-0-404-64410-9. Retrieved 5 April 2011.