

Dr Anton Hasell
Australian Bell Pty Ltd
ABN: 52 082 757 337
1743 Heathcote Rd
Mia Mia
Victoria 3444 www.ausbell.com.au
hasell@westnet.com.au
03 54 255581
0409235977



11th June 2015

Royal Society of Victoria Technology Chime

I would like to propose an installation of harmonic bells in the triangular space. These bells are a revolutionary design for the most musical bell yet invented, their design being only possible through the use of digital design tools including Finite Element Analysis, 3D printing (used as foundry patterns), modern casting technology and developments in metallurgy. They are one of the fruits from the science and technology of our age, just as bell founding has historically been a watermark of the technical and scientific advancement of every age and civilization before our time, given the precision required to tune musical frequencies from these (sometime, extremely large) cast vibrating forms.

The C major octave of 8 harmonic bells, rung manually, encourages members of the community to create gentle and sonorous musical performance on site, either singularly or in groups. This interactivity and participatory experience brings individuals in the community together to share their own creativity and to appreciate the creative imaginations of their fellow citizens.

In 2001 Australian Bell designed and created a major harmonic bell carillon for the City of Melbourne (www.federationbells.com.au) using sophisticated computer software to invent and cast nine new, never heard before, musical bell designs, bell designs only possible with the advent of recent 3D digital design tools and accurate, modern casting technology and materials.

The major invention from this project was a **harmonic bell design** that, for the first time, allows a bell to sound with unprecedented clarity of pitch. This bell design makes up most of the 39 bells in the Carillon and Australian Bell holds a US Patent on its invention. This research work on bell design in urban space is receiving international interest at this time.

Recently, Australian Bell has been commissioned by the Long Now Foundation to design, cast and tune a newly invented bell designed especially for the visionary, and scientifically significant 10,000 year clock project that is under construction and to be installed inside a mountain in Texas (www.longnow.org). Linking the Royal Society of Victoria with this amazing project through advanced and technologically sophisticated bell research is a wonderful aspect of this proposal.

This "Science meets Art" vision for the site can include bronze statues atop each bell of the major scientists on whose shoulders we stand. This might include Pythagorus, Galileo, Newton, Darwin, and Hawking amongst the pantheon of great scientific minds. A musical instrument, such as a chime of bells, depends on the different pitch of each bell to create

musical expression. A chime of bells speaks to this harmony of diverse parts, like ideas and theories brought into ever finer resolution when shared and debated, with now and then new compositions, much like the shifting of paradigms, finding favour. There is a vital, indeed essential, linkage between 'Science and the Arts' at play in this set of 8 Harmonic bells within the triangular space in Melbourne.

INSTALLATION

The chime is tuned to a C major Octave of eight harmonic bronze bells, each on its own stainless steel post set at a height of 160cm above the ground. The bells are arranged in an elliptical circle that will be designed to suit the site. Each bell will have a nylon clapper suspended within the bell hung from the central stainless steel post. People can manually use the clapper to gently ring the bell. The bells are designed to not be at all loud, but to be rich in their tone and pure in their pitch.

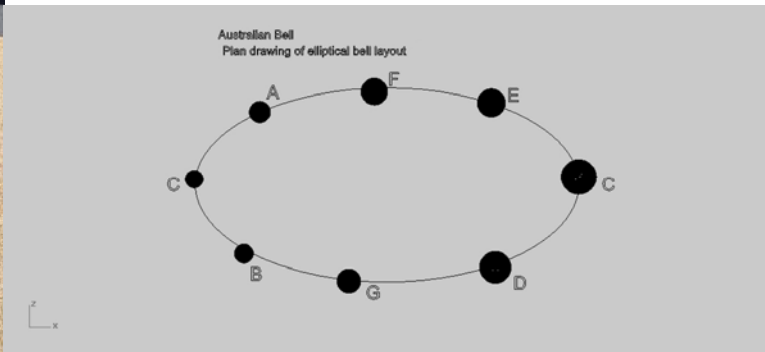
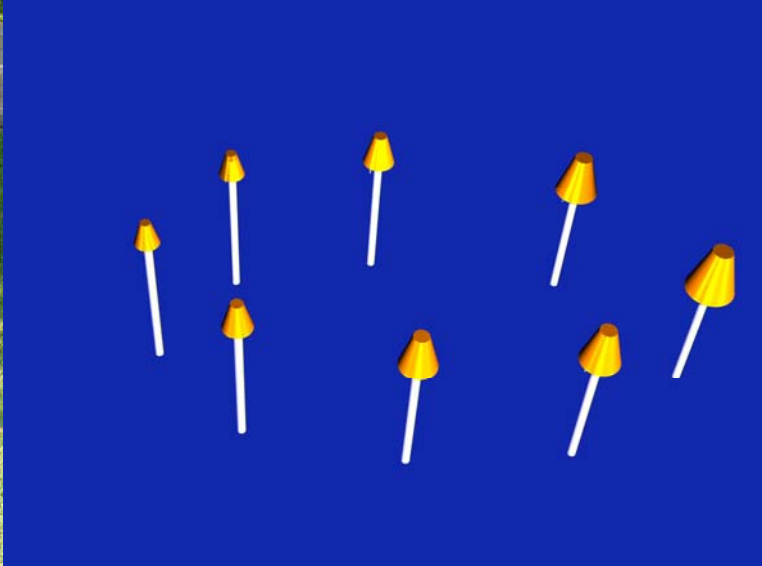
A bronze cap fitted to the top of each bell can serve as a base to a bronze figure from the history of scientific endeavour. First amongst these will be Pythagoras who worked out the mathematics of the musical scale.

The bells generate gentle and sonorous musical chiming. They stand in open invitation of being played, thereby offering accessibility and participation to individuals and groups of people ready to be spontaneous or to play arranged compositions. Being musically harmonic, they are in natural tune to string or woodwind instruments and invite ensemble performance within the field of bells. This kind of public creative interactivity is important in contemporary Public-space Artworks, where every visit to the site will entail a fresh experience through the generation of new compositions and melodies.

Australian Bell has successfully complete other chime installations, including the 'HMS Beagle Ship Bell Chime' in Darwin in 2009 in celebration of Charles Darwin's 200th birthday, and the 'Cowes Harmony Bells' at Philip Island in 2012. I include pictures of these bells and some computer renders of a possible elliptical arrangement for the chime.

I hope this proposal interests the selection Panel for the Royal Society of Victoria, and a further discussion on the size, number and placement of the Royal Society Chime on the site, and therefor the budget required to realize this proposal, might be undertaken.

yours truly, Anton Hasell.



Harmonic bell on stainless steel post with manual clapper and nylon striker (one of the 4 bells of the Cowes Harmony Bells Installation at Philip Island).

sculpture sizes

153mm



163mm



175mm



186mm



211mm



217mm



241mm



268mm

