

The Space Between Us

for 3-D sensor, Trimpin instruments and strings

David A. Jaffe

PROGRAM NOTE

An unproven theory says that all people on Earth are connected by six degrees of separation. Of equal, if not greater interest is the space between those connections. This piece explores what can be communicated and what must remain unsaid as eight isolated string players embedded in the audience, and one percussionist alone on stage, reach out to one another.

While the violinists, violists and cellists move air through intimate coupling of bows, strings and bodies, the percussionist silently induces electromagnetic waves that elicit reaction in remote robotic xylophones, bells, pianos and chimes.

The piece is a memorial tribute to spatial music pioneer Henry Brant, who referred to space as the Fourth Dimension of Music, after pitch, time and timbre.



David A. Jaffe

A TRIBUTE TO HENRY BRANT

The Space Between Us serves at once as a memorial to Henry Brant, as a celebration of his vision and vivacity, and as a carrying on of the flame of acoustic spatial music to which he dedicated his musical life.

The piece draws upon pre-WWII funky percussion instruments that Brant collected over the years and bequeathed to David A. Jaffe, Brant's protege and close friend. These instruments have been transformed by brilliant sound artist Trimpin especially for this piece, turning them into 21st century robotic sound contraptions that evoke Brant's nuts-and-bolts spirit of adventure and experimentation, combined with a hand-crafted one-of-a-kind aesthetic that harks back to earlier days.

The piece is purely acoustic, with no amplified or speaker-driven sound whatsoever, as Brant so fervently believed was necessary for the health of the human nervous system. At the same time, in his spirit of innovation and experimentation, it draws on interactive computer technology to create a "tele-presence" controller (called the "radio-drum" because the mallets communicate with the surface via radio waves), that maps three-dimensional physical gestures to Trimpin's fantastical remote control percussion and piano instruments, distributed throughout the hall. These are all performed by one player, often in a precise synchronization that would be extremely difficult or impossible with multiple human players in a large space. At the same time, the music moves organically, with parts converging and diverging, reaching out across the space.

Brant believed in the expressivity and virtuosity of improvisation and the radio-drum performer Andrew Schloss, also a student of Brant, epitomizes this approach. The instrument, first designed at Bell Labs as a 3-dimensional mouse, allows the performer six degrees of freedom (3 dimensions with each stick) and fine degree of expressive control, dramatically presented via physical gestures that the audience can clearly connect to the sound being produced. Schloss brings to the piece his varied expertise as an African, Cuban, jazz and classical percussionist to contribute a virtuosic kaleidoscope of stylistic associations.

Similarly, the piece celebrates Brant's "maximalist" approach to musical material. With explicit references to African music, Latin music, bluegrass music, and other styles, these are layered, fractured, fused, and exploded, creating an ecstatic musical sea that surrounds and engulfs the audience, and refracts the heterogeneous, multi-cultural, expansive, and emotionally contradictory nature of modern life.

Jaffe and Trimpin with a Brant/Trimpin xylophone.



Robotic chimes. The cylinders on the side of each chime are electro-magnets that pull a “beater” to strike the chime when directed by the percussionist:

