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Spherical Harmonics @ Boston Sculptors Gallery

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Kim Bernard's exhibition at the Boston Sculptor's Gallery, Spherical Harmonics, is a simple ode to the beauty inherent in science. Each of her six wall-mounted pieces is a literal representation of the atomic orbitals of a hydrogen atom: the shapes that graph the probabilities of where an electron might be found at any moment depending on the current state of the atom. These configurations show beautiful symmetries and fluid shapes, and in this essentially two-dimensional form, deceptive simplicity. The shapes of the orbitals on the walls of the gallery are formed by hundreds of tiny red and black clay balls arranged in patterns of varying density, pinned in a tangible sort of pointillism. Each individual ceramic ball casts several shadows upon the sparse white wall deepening the piece's reach, and hearkening back to the elliptical shapes present in scientific graphs of electron orbitals.

Bernard based her art off of three-dimensional probability graphs informed by quantum mechanics and the behavior of subatomic particles discovered by a fortuitous Google search. Bernard's stumble across the quantum behavior that spawned Spherical Harmonics has an important corollary: as she was not well versed in quantum mechanics the concept of atomic orbitals is also not a familiar one to many of her viewers. While high school chemistry classes may touch on the subject, it is not heavily taught, and is a relatively new addition to the scientific canon. To a viewer who has no background in science Bernard's installation is no less balanced or intriguing but those who are familiar with the three-dimensional representations of the orbitals may find her interpretations all the more curious. In fact, the foreign nature of Bernard's inspiration to members of the artistic community mirrors the distance a scientist may feel from art installations in the abstract.

The walls of the gallery are lined with Hydrogen Atomic Orbitals 1 – 6 but Bernard also spins away from the concept of orbitals with Wave Line, suspended in the center of the room. Wave Line consists of 100 steel balls hanging in a row, similar to a Newton's Cradle, the common physics-based trinket. This sculpture is meant to be played with; Wave Line begs to be touched, swung from side to side, sending ripples down its length. Though it too is composed of spherical pieces, unlike the wall-mounted art, Wave Line is interactive and full of energy. It also evokes scientific principles: the wave-particle duality of light in particular comes to mind. Put simply, this concept paradoxically states that light acts both as a particle that we casually know as the photon, or as a wave, familiar as a beam of energy. Again, Bernard winks at weighty scientific tenets, but her art should be no less accessible without any background in the field. Spherical Harmonics breaks down barriers between art and science drawing together viewers at the intersection of seemingly disparate disciplines. The simplicity of Wave Line and the Hydrogen Atomic Orbitals Series is refreshing in both form and content: an effortless collection of minuscule concepts made tangible and larger-than-life bringing concepts that might seem sterile or removed from the art world into the literal reach of visitors to the Boston Sculptor's Gallery.

GET THERE: Red Line to Broadway.

SEE IT: On view through June 22nd.

MORE INFO: <http://www.bostonsculptors.com>

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