

TITLE MAGAZINE

Elemental Matters: Artists Imagine Chemistry

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[The Hach Gallery in The Chemical Heritage Foundation](#)

Showing through December 16th

By Em Kettner



Seeking refuge from a sun shower, I ducked into an unassuming, business-like complex on the corner of 3rd and Chestnut Streets. [The Chemical Heritage Foundation](#) (CHF) is Philadelphia's cultural hub of all things chemistry. To celebrate 2011 as the International Year of Chemistry, CHF presents a small group show in its Hach Gallery, entitled *Elemental Matters: Artists Imagine Chemistry*. Seven artists illuminate the symbiotic relationship between art and science, and remind the viewer how both are necessary in conceiving of the unknown. Displaying a range of contemporary practices including traditional printmaking, sound installation, and minimalist sculpture, the work is unified through a consistent effort to show how naming the parts—as the periodic table of elements exemplifies—does not necessarily offer a clearer idea of the whole.

It's fitting that Dove Bradshaw's *Song of Which* (*Evelina kneeling, looking left*) hangs next to the wall text describing the show's collaborative mission. The image, a black and white photograph of a nude woman kneeling behind a sheet printed with the human's chemical makeup embodies the main artery of the show: the listed symbols do not bring that which they describe into clearer focus, but rather add another level of mystery to a familiar form. Bradshaw presents the woman pictured as secondary to the clinical listing of her elemental construct—the informative veil ultimately obscures its subject. The woman peers down through the portal created by the oxygen symbol, and becomes more alien by avoiding the viewer's gaze.

Where Bradshaw uses the elements to describe the human, Jennifer Schmitt uses artists to illustrate each chemical in her large-scale replica of the periodic table. For *The Periodic Table Printmaking Project*, Schmitt enlisted the help of 97 fellow printmakers to provide imagery for each of the 118 known elements. She presents this collaborative effort under glass on six adjoining plinths in the center of the gallery. Theoretically, the piece relates a community of

printmakers to the referenced organization of elements: each artist could use their own skill set to create individualized prints that would contribute to the singular project, just as each unique element, with its specific characteristics, works in harmony with all others to shape our world. Though the effort is visually arresting, I ultimately found the piece a bit juvenile since the print selection favored a uniform cartoony style and obvious illustrations.

Moving past Schmitt's work, I encountered some deceptively simple work by Kevin H. Jones. Jones demonstrates the curiosity characteristic of both artists and scientists, combining different elements to create a more complex whole. He handles the structure and purpose of the periodic table smartly when creating both his Artist Books and *Broadcasting to Unknown Points*. In the former, he works with two systems of cataloguing (the Library of Congress Classification and the periodic table of elements) to find chance connections. Two such occasions occur in the books on Uranium and Helium: the placard states, "Uranium – U for military science in the LCC system – contains documents referencing Einstein as well as images of the atomic bomb and war... The symbol He becomes HE in the LCC system, denoting transportation and communications" and the Helium book pages show a balloon floating against a backdrop of sky. Reading the supplemental information makes clear that no matter how the element nomenclature lines up with the LCC, there exists a point of intersection. The standard museum-archival display, where the books are held behind glass on a pedestal, seemed conventional rather than specific—I would have liked to flip through the pages and see everything the placard described. Without this information, I found the work aesthetically pleasing but at times too convincingly simple; it is easy to view these books as products of the chemical catalog alone. When one finds that they are in fact the product of two overlapping systems, the books become more complex and expand upon the initial science-art dichotomy.

Hanging side-by-side, Jones' two featured works make for an intriguing and contradictory diptych. *Broadcasting to Unknown Points* follows the more cryptic trajectory. He presents a recognizable slab of the periodic table with glowing and enigmatic icons in each square. I spent a long time trying to decode the specific relationships, but became more excited that Jones' goal might be to design an unsolvable riddle. The phosphorus panel even emitted a startling series of beeps when I moved closer to study the forms, as if to warn against my assigning any concrete meaning. So while Jones' book piece reveals the intersections inherent in random combination, *Broadcasting to Unknown Points* suggests the opposite by emphasizing its own disjuncture to envision the unknown.

The rest of Bradshaw's work peppers a corner of the gallery space: several more photos from her element-human series show figures tattooed with their chemical components; a strange portrait titled *Self-Interest* comprised of fifty-nine glass Pyrex flasks containing the trace amounts of elements that make up the human body; and what I initially thought a particularly muted piece, *Waterstone*, in which a block of limestone sits on the floor beneath a glass water vessel suspended from the ceiling with clear wire. The water beads up and drops from a funnel onto the center of the stone, gradually burrowing through the surface. I am tempted to relate it to water-torture, but the process seems to hold some poetic unity as its goal—the water slowly wearing away the stone ultimately dissolves it into its particulate, ethereal form, which only then may be carried off by the water.

Waterstone seems to act as a sister piece to Wolfgang Laib's *Milk Stone*, which is housed in Washington DC's Phillips collection. Laib's work combines similar materials to different effect: a solid white marble block with a shallow, man-made recess carved into the top is filled everyday with fresh milk. One is perhaps reminded of the sealing process when working with plaster, in

which a milk bath is administered to strengthen the porous material. In the case of Laib's stone, the milk serves to optically fill in the recess and create the illusion of a fully solid form—marble is comprised of recrystallized calcium carbonate, so the addition of the liquid calcium to the stone's cavity acts as a conceptually unifying agent. While Laib's piece needs daily "mothering" to achieve that implied oneness, Bradshaw trusts the self-fulfilling processes of time and contrasting elements to complete her work. On a larger scale, the work evokes the distant memory of the Colorado River cutting through land to form the Grand Canyon.

I realized then that the whole room was full of what seemed to be the soundtrack for *Waterstone*—or even, parsing the word, the "waters-tone." The slow process of water dripping on stone is a fitting physical manifestation of Susan Alexjander's eerie chemical vibrato, *Elements in Descending Order of Creation From Collapsing Stars (Synthesizer Sound)*. Each element on the periodic table emits a unique vibration out of the range of human hearing. Alexjander used a computer to adjust pitches and compose a sort of primordial hymn. The notes descend in a hypnotic minor scale and puddle up, overlapping each other in low frequency hums, like an even-tempered chorus of crickets and frogs around a moonlit pond. I found myself adjusting my pace accordingly, walking in time with the beat around the exhibition. The music activates certain pieces, like the *Waterstone*, and this rippling effect extends to Rebecca Kamen's work.

Kamen has two related constellations of work in the show: a grouping of stacked Mylar and fiberglass tubing sculptures on a floor plinth, and six Mylar-fiberglass constructions unfolding as they creep up the wall. From above, the objects on the floor plinth appear to be stacked and frozen ripples. Viewed from the side, the varying shape and size of each layer is curiously distinct. The placard reveals that Kamen worked from particular electron orbital paths to construct element-specific structures. The wall pieces articulate unfolded constructions of combined elements—the largest of which floats a bit above my eyelevel: Platonic Solid: Water.

Overall, I found the materiality of the works somewhat flimsy. The fiberglass rods seem intended to restrain or contrast with the lightness of the paper, but are not convincingly sturdy. I appreciated the use of frosted Mylar to convey the frozen quality of the orbital, and the faint glow of the gallery light through the translucent layers was lovely. Neither the floor nor wall groupings really transcended their material definition, but both were incredibly in tune with Alexjander's song. Despite some qualms with Kamen's construction, I still thought she, Bradshaw, and Alexjander comprised the strongest curatorial grouping in the show.

In a sense, *Elemental Matters* successfully dethrones the periodic table: one sees that cataloguing elements doesn't really make them more familiar, and naming the parts doesn't always reveal the whole. Jones highlights the mystery in his labyrinthine wall piece and considers the unknown a part of the finished work; Bradshaw combines the recognizable forms of stone and water, yet only implies the ultimate form the piece will take. The artists here embrace those spaces still left for the "unknown elements," and leave me feeling confidently mystified. Outside, I imagined Alexjander's composition multiplied a thousand times over. The rain pounding away at the pavement, I wondered at the ocean of tones I'd never be able to hear. It seems true that artists are needed to imagine chemistry into being—without these encrypted visual and audible riddles, we might forget how little we know.

Tags: [Dove Bradshaw](#), [Elemental Matters: Artists Imagine Chemistry](#), [Em Kettner](#), [Jennifer Schmitt](#), [Kevin H. Jones](#), [Rebecca Kamen](#), [Susan Alexjander](#), [The Chemical Heritage Foundation](#), [The Hach Gallery](#)