



Doug Bosch, *Arc Lucerna*, 2022, copper, steel, malachite, wood, glass, 4" x 15" x 12"

Doug Bosch: **Apparati**

Apparati is a word I made up. It amuses me because it sounds at once Italian, Latin, and real, as it reasonably seems related to the word "apparatus." As this body of work is inspired by several significant Italian scientists and Italian museums of science, they deserve reference in the title. Invoking Latin, the language of scientific nomenclature, aims to position these artistic works within the field of science, lending a breath of truthfulness to the sculptures that are artificially posing as scientific gadgets.

The allure of science, with its promise of intrinsic value and incontestable benefit, captures our imagination such that we can be looking at an old scientific apparatus or instrument and admire its beauty without even knowing what it does. Within this framework, a scientific instrument suggests a use while it also enchants us. Sometimes it is the vague suggestion of utility that is most stimulating to the eye, more so than an

actual knowledge of its purpose or scientific relevance. My sculptural creations position the viewer so that they can envision a scientific understanding of them while they also simply enjoy looking at them.

Borrowing from antique scientific instruments, whose aged patina harkens back to a time that is not our own, imbues my own artistic formations with a sense of realism. Our unfamiliarity with old science invites us to daydream about their meaning and entices us to admire them purely for aesthetic pleasure. I don't wish to duplicate them. To make mere replicas would fall short. Instead, engineering a fictional composition of quasi-familiar scientific components places the viewer in the front row of an imaginary demonstration theater, like those so popular at the Royal Institution. Once there, viewers are prompted to reconcile the make-believe with the plausible.

For a long time I have been studying these antique instruments with their beautiful ornament and specialized, intricate craftsmanship. I am stirred and taken by them, and I want to bring you along. It is fully immersive for me in the studio when I am examining these laboratory fragments from a bygone era, especially when my everyday seems so occupied by the digital. The digital world is intangible and feels ephemeral. By contrast the 18th and 19th centuries witnessed a proliferation of scientific discovery led by those with a restless and inquisitive spirit. The instruments devised by these pioneers, sometimes valued in the scientific community only until rendered obsolete by a superior discovery, are today a physical by-product of those experiments. How wonderful it is that the remnants of this fruitful epoch, these devices and instruments having now become detritus, are so tangible and analog.

By directly referencing key scientists and their contributions I am injecting relatable authenticity into my creations as I look to animate the stuff of dry science textbooks. Several sculptures pay deliberate homage to the electromagnetic experiments conducted by the French scientist André-Marie Ampère or the Italian scientist Leopold Nobili. Another collection of sculptures draws directly from the earliest battery designs, the pile battery invented by Alessandro Volta and the trough battery invented by William Cruickshank. Innovations by the British scientist Michael Faraday, such as coils, cages, and fields, are featured throughout many of my works. In the end, many of my inventions would look right at home sitting alongside their true-life counterparts.

My sculptures set out to forge a connection between the contemporary art practice and the great age of scientific discovery. This is where I play. As a process it is visually and intellectually spellbinding to study these real historical objects, teasing from them shape, color, patina and ornament in order to charge my fictionalized constructions with an air of believability and a connection to the past. The color red, for example, has a notable significance. Beginning in the 18th century, cadmium red, whether in the form of paint or velvet, appears frequently in the vast scientific archive. Red signaled a practical safety warning as well as a useful focal point for the audience. Red wires, red needles and red surfaces were used to mark the location of an electrical event or an electrical path. It was also used to direct the audience's gaze to where the "astounding" theater would unfold.

Amplifying, exaggerating and distorting the look of these historical references, I decontextualize them beyond their working, original, scientific state, thereby to argue that the ambiance of early science has a captivating visual charm. The viewer will find an indirect nod to coils, conductors, magnets, insulators, electrodes, galvanometers, arc lamps, Leyden jars, hygrometers, and much more. Toying with the tradition of how scientific artifacts are displayed in museums, I have placed the sculptures on raised plinths and under the care of a glass



Doug Bosch, *Galvanometers*, detail, 2022, carbon, wire, brass, ingot, felt, wood, 12" x 25" x 11"



Yellow Piles (after Hygrometer), 2022, beeswax, paper, brass, wood, 24" x 12" x 4"

case, intimating a fragile purpose while also framing them as objets d'art.

In *Apparati*, art and science softly collide and an enigma emerges. Wires appear to be electrical, but are not connected to a power source. Archive tags have inventory numbers that aren't connected to a collection. Copper rods coated in powder seem poised to be ignited but will never be lit. A looped coil seems to hum with an electric vibration, but only in the mind of the admirer. By referencing early-age science to crossbreed with my sculptures, I have played with innuendo to bring the stuff of hard science into the arena of art.

At the intersection of art and science is a place where faith meets conviction, where expressiveness interlaces with understanding, where figment abuts actuality. Here in *Apparati*, the creative exploration of art-making mixes with the ingenuity of scientific experimentation and the viewer is summoned to ponder and delight in it.

— Doug Bosch

Front Cover: Doug Bosch, *Galvanometers*, 2022, carbon, wire, brass, ingot, felt, wood, 12" x 25" x 11"