

## ***Perfect Forms***

My sculpture is inspired by Umberto Boccioni's 1913 Futurist work, *Unique Forms of Continuity in Space*. The original Boccioni plaster, much damaged and restored, is in Sao Paulo, Brazil. All the *Unique Forms* bronzes were cast many years after Boccioni's death. They vary widely. Multiple generations have been produced with a range of patinas, polishes, and details. They are often surprisingly crudely finished – all bear evidence of the speed with which Boccioni and his assistants hand-sculpted the plaster model. Bronze casting is a millennia-old process. The rough, hand-hewn character of the *Unique Forms* bronzes stands in inelegant opposition to their advanced conceptual genesis. Boccioni's Modern Man has heretofore been realized with ancient methods in an antique material.

The challenge I set for myself was to transform Boccioni's extremely familiar artwork, a Modernist icon, into something completely new – to bring together form, material, technique, and concept. Employing a state-of-the-art Breuckmann white-light scanner, I began my work by 3D digital scanning one of the *Unique Forms* bronzes. My studio team and I then proceeded to alter every curve, line, and edge of the virtual model. The post-scanning digital 3D sculpting alone took almost 3 years of exacting labor. I believe the cumulative impact of those thousands of subtle changes yields a work simultaneously familiar and fresh. The final alteration was to digitally “flip” my model so that it formally mirrors the Boccioni. *Perfect Forms* is reminiscent of its historical antecedent, yet it is thoroughly re-sculpted, with hyper-refined edges and surfaces, smoothly sweeping curves, the precision of a car body.

A *Perfect Forms* prototype had its public debut in 2013 in “Out of Hand” at the Museum of Arts and Design in New York, exactly 100 years after Boccioni created his 1913 plaster. For its physical realization, I chose mirror-finished 24K gold. In contrast to the traditional bronze casting of the Boccionis, my work was “grown” by an advanced large-format “Viper Pro” SLA machine. The resultant hollow plastic rapid prototype was fitted with an interior stainless steel armature and subsequently filled with resin. The sculpture and its integral CNC-milled solid brass base plate were then plated with nickel and a heavy layer of copper. At each stage of the elaborate, multi-step process, the piece was extensively hand refined. The final step was to coat the work in an appropriately perfect metal, 24K gold.

The sculpture's pedestal / vitrine display assembly was designed to be an integral, permanent accompaniment to the work. It was custom fabricated, by a studio-coordinated team of premier craftspeople, of American walnut, ColorCore laminate, aluminum, and Schott low-iron glass.

*Perfect Forms*' painstakingly polished mirrored surfaces glow in the daylight and scintillate with the movement of viewers around it. The dance of reflections across and around its surfaces renders it ethereal, melting its crisp contours. Light reflected from the sculpture plays across walls, floor, and ceiling. The work both affects and is affected by its environment. Boccioni strove to depict a striding figure, at one with its surroundings and the forces released by its movement. My intention is that *Perfect Forms* radically expand and complete the unification of form, space, and action my Futurist forebear initiated almost exactly a century ago.

*Barry X Ball*