



With this site-specific installation, their most ambitious to date, Benjamin Ball and Gaston Nogues of the innovative Los Angeles–based architectural design and fabrication firm Ball-Nogues Studio expand their interest in creating experimental built environments. Integrating complex digital computation and mechanization with traditional handcraft production techniques, *Feathered Edge: A New Installation by Ball-Nogues Studio* explores the team’s desire to alter a space with fluid architectural forms that require a minimal use of material. In their practice, the interpretation of architectural space is achieved through a complex consideration of concept, materiality, technology, and resources. They develop sophisticated digital technology in order to utilize unusual materials and re-think architectural methodologies. Crucial to their process is how fabrication itself informs the final outcome; as they explained, “we aim to make physical spaces that result from experiments, that are investigations into new methods of fabrication, and that are informed by the sensations produced by the resulting forms...the properties, limitations, and economic scenarios associated with a particular material guide a structure’s ultimate form, while we develop methods to extend the intertwined boundaries of a material’s aesthetics, physical potential, and lifecycle.”

*Feathered Edge* comprises over 21 miles of twine that has been dyed, cut, and then suspended from a mesh scrim installed in the double-height skylight space of the MOCA Pacific Design Center gallery. With the aid of the “Insta-llator 1 with the Variable-Information Atomizing Module,” a machine designed and manufactured by the studio especially for this installation, areas of twine were saturated with solvent-based inks, created by a chemist for this project, using four digitally controlled airbrushes. The twine was then cut to varying lengths. Using specialized parametric software developed by working closely with a software programmer, the studio generated a map that was printed onto the scrim to establish the proper locations and lengths of the twine in the space. Each piece was attached to the scrim, knotted by hand in a technique similar to that used to make latch-hook rugs. The weight of the twine creates a complex system of overlapping catenary curves on which cyan, magenta, yellow, and black spherical sections are “printed in three dimensions.” Ball and Nogues think of these curving linear formations as a vapor that floats and hovers in the gallery space, the antithesis of defined spatial boundaries and enclosures.

The software uses mathematical parameters, the manipulation of which yields nearly infinite design configurations. While the environment is defined by the string formations, it is also constructed from the negative space found within the array of catenaries, which allows sight to extend into and throughout the structure. The gallery is activated by people, movement, and light, creating a continually changing spatial experience. As Ball and Nogues explained, “computers are great at quickly processing large amounts of information, then generating data used for fabrication. They can’t yet produce fully assembled works of architecture. At best they can produce highly accurate components and spatial mappings or systems. This is where hand craft comes in. We use our hands and our knowledge of material as a filter for the digital possibilities and to achieve the final ‘built’ environment; in effect, we use the prowess of the computer to push the limits of the hand.”

*Feathered Edge* is the third in a series of projects Ball and Nogues refer to as “Suspensions.” *Unseen Current* (2008), exhibited at Extension Gallery for Architecture, Chicago, featured 2,500 suspended string catenaries, and *Echoes Converge*, exhibited at the 11th International Architecture Biennale, Venice, in 2008, used string to create intricate patterns inspired by the baroque ceilings of the city’s buildings. These softly structural, open-air spaces encouraged social interaction, enveloping rather than obstructing viewers.

Both graduates of the Southern California Institute of Architecture and trained as architects, Ball and Nogues’s educational background led them to challenge the customary way of thinking of space as defined by solid forms. They are interested in environments that are not clearly delineated and in architecture as a medium that blurs and softens rather than divides a space. Ball-Nogues Studio’s past projects include *Copper Droopscape* (2008), an installation for the Coachella Valley Music and Arts Festival; the competition-winning *Liquid Sky* installation for P.S. 1 Contemporary Art Center’s Young Architects Program (2007); the exhibition *Rip Curl Canyon* for Rice Gallery, Houston (2007); a commissioned environment for MOCA’s *Skin + Bones: Parallel Practices in Fashion and Architecture* Opening Night Fête (2006); and *Maximilian’s Schell* at Materials & Applications in Los Angeles’s Silver Lake neighborhood (2005). Current projects include a wildlife observation pavilion in Upstate New York, as well as art projects for the City of Santa Monica, the County of Los Angeles, and Mercy Housing, San Francisco. Forthcoming exhibitions include *Contemplating the Void*, a group exhibition at the Solomon R. Guggenheim Museum, New York, and an installation at the Indianapolis Museum of Art.

—MOCA Curatorial Assistant Christine Robinson