



Engineering Transparency

A Conversation with Naomi Campbell

BY JONATHAN GOODMAN

Naomi Campbell's work fuses the art of science and the science of art. Starting with nature's sculpted forms, she introduces new definitions of the organic and the synthetic through fragmented objects and hybridized systems that follow the concepts and connotations of natural systems. As an interdisciplinary artist, she has also pioneered new directions in three-dimensional stained glass and watercolor. Acting as potent, visually arresting mnemonics, Campbell's installations and sculptures harness the physics of light, space, time, and perception to reveal the insidious effects of human interference in natural processes. Her recent work with a Columbia University neuroscience lab devoted to genetic engineering expands an ongoing investigation into engineered food — particularly rice and corn—the global food crisis, and sustainability. The same intertwined themes formed the core of "Bread and Circuses" (2016), an exhibition that, following Juvenal, sought the true cost behind the distractions of cheap commodities and endless growth. Uniquely positioned to see the complex relations of potential causes and effects, Campbell considers the impact of our actions not only on the natural world, but also on ourselves, exploring fear and loss, power and fragility, within a "scenario almost certain to erupt."

Opposite and above: Edacity, 2017. Metal, stained glass, glass, Mylar, mirror, filament, plastic, video derivatives, and lighting, 2 views of installation.





Jonathan Goodman: How has your upbringing in Canada influenced your work?

Naomi Campbell: I was raised where art, nature, and science were always within reach. I grew up in the Montréal area of Québec, where French was the spoken language and culture took place in a mesh of English and French. My mother added Japanese to that. My father, who was Scottish, thought you could do anything, and he was always thinking in very global terms. An engineer and naval architect, he introduced me to many tools for life and engineering. For him, the world was always within reach and, with it, new ideas. Part of that world was fluid dynamics. As a child, I spent hours trying to understand his writings and interpret the many blueprints drawn up in his office. I did not understand how this impacted me until now, because flow/fluid dynamics is an important part of the underpinnings of my work. My father was multi-tasking and interdisciplinary in his career, exploring the intricacies of fluid dynamics and coming up with designs that are still of global significance. It is this sensibility, as he directed it toward the world, that I find myself exploring in my work.

JG: Your artistic training was very traditional. How did that come about?

NC: My aunt from my father's side of the family left behind a small watercolor palette when she visited Canada from England. That was all it took. Her degree in fine arts was a result of strict English classical training. She influenced my early art education immensely. There have been other professional artists on my father's side of the family over the centuries, and she decided to see that I would carry on that tradition.

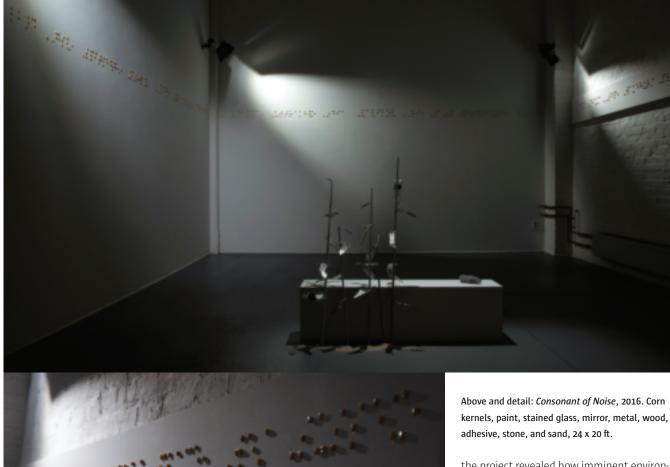
JG: When did you know that you liked sculpture?

NC: My early childhood found me and my cousin hauling large rocks across fields onto the front lawn so I could sculpt them with whatever hammer and chisel I could find lying around. I was five. That, together with my growing collections of biological specimens, kept the garage looking interesting. The collections were sometimes alive, and we usually had to release them before dinner.

JG: When did you know you wanted to become a professional sculptor?

NC: When I first arrived at college, a friend showed me the catalogue from an art university she was considering. I never forgot one of the photographs. It was a black and white image of a young woman with a hammer and chisel in her hands. She was about to carve into a monumental piece of stone that appeared to stretch beyond the limits of the page. In that moment, something seized me, and I knew what I wanted to do with my life. I went on to study both art and science, but I decided after attaining my degree in science that I would concentrate on art. And so, I am at home in the world of science and the world of art. They open up new ways of seeing that enable a creative playfulness in my work.

Top and detail: River (Yangtze), 2015. Rice grains, gilding, pigment, metal, adhesive, wire, filament, and canvas, 113 x 36 x 8 in.



IG: Why have food and water become such important themes in your work?

NC: Food and water are a major part of the international critical forum for numerous world organizations, including the UN and the European Union. Working in the veterinary field familiarized me with agriculture in Canada — one of the largest agricultural producers and exporters today and in the times to come. My work on these subjects, with regard to the global food crisis, is a dialogue on the effects of global climate shifts. River (Yangtze) reflects on constant fluctuations in China's "breadbasket" as it faces new challenges. The sculpture/painting shifts continually in changing air currents. The seeded walls of Consonant of Noise list the major global seed banks and their locations in a silent processional of braille that carves the walls in a cave-like darkness.

I am not only concerned about food. Water is another resource directly connected to sustainability. Conditions maintains a simple line in the air, representing a three-dimensional graph consisting of welded steel "twigs." Creating a varied rhythmic pattern, the twigs illustrate how much water a person in the United States uses on average in a day. I started this piece by thrusting found twigs and branches into the walls of the studio to create a running map that organized itself into its own organic pattern of communication.

JG: Could you talk about your public art projects?

NC: Blackpool (2008), one of my early works, engineered flow dynamics and molecular changes while addressing political transparency. A melting block of striated "sedimentary" ice became a discourse on global warming. Like my later works *Edacity* and *Homeless* myths, Blackpool was interactive; it was placed in an outdoor public space in the middle of Manhattan in the heat of summer. A sterile lab-like podium held a sculpted block of melting ice. This created a miniature hydrologic cycle, wherein the slow metered reading of a melting sculpture was observed. As the black layers of ice melted over a period of two days,

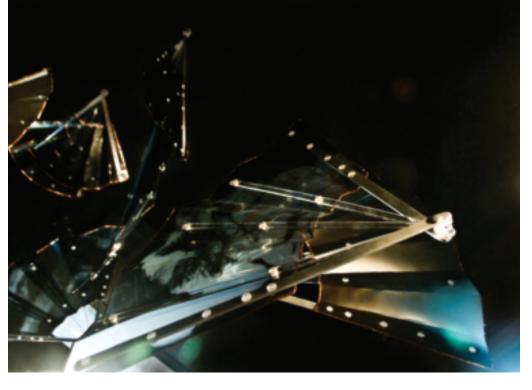
the project revealed how imminent environmental changes would wash away more than just land. The water was carefully meted out and recycled back, refrozen and reconstituted as ice once again.

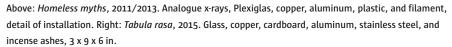
JG: Why has your work become increasingly transparent over the years?

NC: Before 2003, I did not use transparent materials much. Now, transparency seems to be everywhere in my work. The turning point was a permanent, faceted glass project for an above-ground subway station in New York. In 2003, I was awarded a commission for the Bronx Zoo Station by MTA Arts & Design. Glass took central stage in that work, and for the first time, I started thinking about science and art. The fabrication involved a close collaboration with the scientific community at the Bronx Zoo and Conservation Center, as well as with my glass subcontractor Gordon Stained Glass Studios. Over the years it took to complete, not only did I learn to work the glass, but I also recognized the importance of collaborating with the scientific community—as I do now at Columbia University.

JG: There is an ongoing dialogue between the organic and the synthetic in your work. Your recent piece with corn, Edacity, is a particularly interesting example. Could you describe the ideas behind it?







NC: What I like about this immersive piece is that I am sculpting with light and independent motion in an organic manner. That interacts/intersects with the brittle, industrial construction of the corn installation and allows me to alter the viewer's perception. In order to create new "species," engineering of corn is normally done in a controlled greenhouse environment. I inverted this equation, reversing the controlled environment so that it would become the corn plants, which results in an industrial construction of the organic; the plants now consist of glass, steel, and cement. The surrounding air is an integral part of the work. I have described it with gestures of light that seem to be breathing organically off the walls. The resulting effect appears as sculpted air. **IG:** You are pioneering a new relationship between, and role for, painting and sculpture. How? **NC:** I stumbled on this innovation by accident. In the lab at Columbia, I am exposed to the newest explorations in neuroscience, genetic engineering, and the many functions of the brain. Since perception is an ongoing interest in my work. I began looking at the

NC: I stumbled on this innovation by accident. In the lab at Columbia, I am exposed to the newest explorations in neuroscience, genetic engineering, and the many functions of the brain. Since perception is an ongoing interest in my work, I began looking at the merging point of painting and sculpture through working with water, refraction, reflection, and diffusion. This resulted in the invention of a new reality based on changing visual measurements of refraction, reflection, and diffusion. Through this, I hope to take my painting and sculpture to a new level. I see art as a pioneer in the understanding of our future. We are living in a changing world of technology, where we will see a synthesis of the synthetic and the organic. I am glad to be in New York because these important opportunities all happen here, enabling me to experience them firsthand.

JG: Who are some of your contemporary influences? How does their work impact you? **NC**: I feel a connection with Gabriel Orozco, as I do with Bruce Nauman and Dan Flavin.

I value the creativity and inventiveness in their work, the kind of playfulness or irreverent whimsicality that often occurs. In my own work, I like transparency and a simple approach—by simple, I mean pure—the desire to sculpt from nothing, forgotten things, unseen things like x-rays, seeds, ashes, a curtain, a broken cup, cardboard boxes. These objects, while very different, are connected to each other by their ability to generate sculpture from nothing. I like Orozco's approach—finding new ways of looking at everyday things, but from a scientific mindset. He chooses the most banal and simplest of materials, things that nobody would consider, and makes them the center of the universe. The cardboard boxes that make up my *Smile of the sun* have a similarity to Flavin. Nauman always pushes the extremes.



JG: Your work also addresses loss and war. What is the basis of this interest?

NC: It is not so much war, but loss and one's sense of the fleeting moments in life. I feel my work is always pushing toward ephemerality through sculpture. *Tabula rasa* is one example. The glass bullet contains incense ashes as the final by-product of life, setting alight and freeing the spiritual body to become a tabula rasa once again. The glass and the ash address the fragility of life and invoke Matsuo Basho's revered haiku: "Summer grasses, all that remains of warriors' dreams."

IG: What is Homeless myths about? **NC:** In early Japan, you were not considered fully clothed unless you carried a folding fan. The sensu or ogi has a strong cultural heritage; such fans were used by both men and women. They were used as a symbol of high social status, as a weapon (made of iron), and as a powerful form of communication or expression in both theater and war. The

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delicate paintings on the fans were often highly valued, and the symbolic imagery was considered important. Normally adorned with particular flora or landscapes as a metaphor for long life, in my installation, the fans ironically reveal photographs of errors that go unnoticed until the viewer looks closely at them.

Homeless myths is about memory and loss. It refers to events in Japan's Fukushima prefecture after the 2011 tsunami disaster, the effects of which are still felt today. Food and water contamination became an issue, as it did in Europe after Chernobyl. This influenced my new body of work concerning food and staples, leading to Edacity.

IG: How did you develop the idea for Homeless myths? **NC:** I was fascinated by the movement of suspended x-rays of spines and soft tissue, which is similar to the movement of an insect's winged membranes. These insect-like forms felt like a part of the Floating World—fragile and ephemeral, caught in a short, dramatic struggle for life. The absence of faces behind the fans echoes the existence of the courtesan as the embodiment of geisha culture—diaphanous like the insect, caught within the transparency of the Floating World. So too, workers at the power plant crossed into another world, where they were forced to remain once the reactors malfunctioned. My work is a manifestation of their existence.

JG: You are currently a guest artist with a Columbia University neuroscience program. Has this experience begun to affect your work?

NC: I have always been drawn to the area of neuroscience concerned with mapping the brain. It continues my ongoing investigation into perception and the role of memory. I am, for now, happy to observe and familiarize myself with the materials and new ways of working in this area of research. I am very curious how this will manifest in my work.

What I like about the new neuroscience complex, adjacent to the Columbia University arts building just north of Morningside Heights, is the education lab for children. Here, children are introduced to the tools of science, gaining an early understanding of the principles of neuroscience. These new minds of the future will be living in a very different world. This means that art, too, will be experienced on a very different platform. **JG:** Where are you going with your work?

NC: I don't know where my work will lead. That is the beauty of it. Science as philosophy always works with questions. The disciplines don't always come up with answers. Our climate, our food, our environment are an adventure, a journey, and my work reflects the uncertainty.

Jonathan Goodman is a writer based in New York.



Above: *The sun perched on my head*, 2017. Metal, glass, and stained glass, 11.5 x 6 x 3 in. The metamorphosis of corn from the "Probe" series. Below: *Praying for rain*, 2017. Glass, stained glass, metal, paper, water, and pigment, 25 x 33 in.

