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Artist's Statement: Cellular Automata Series
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My current series of paintings is inspired by a species of computer-generated images known as cellular automata. Used primarily by scientists and engineers as a way of visualizing dynamic processes, cellular automata are generated when sets of rules—often quite simple in nature—are fed into powerful computers and allowed to run through millions of iterations at high speeds, the whole process being enacted visually on the screen. As the process unfolds, the arrays of “cells” (simple black and white squares) morph into dense fields with complex patterns and configurations that cannot have been foreseen by the initial input. Because of these emergent properties—the strange features that appear wholly unpredicted by the rules—and what they reveal about the structure of complexity and chaos, these images are used in the study of systems (biological, ecological, social, etc.).

Although not created with any aesthetic intent, cellular automata can be seen as richly meaningful and visually compelling landscapes. Each one has its own distinct topography, replete with features suggestive of strange worlds inaccessible to our senses. In addition to being drawn to these images as visualizations of the invisible, I am intrigued by their mechanical/digital origin, as their affinity with “computer space”—the “space” where to an ever-increasing degree we are living our lives—adds another layer to their potential meaning.

In working with these images as source material, my intent is to use them as points of departure for the expression of meanings they seem to hold implicitly. As “informational images,” cellular automata are in themselves just aggregates of data, but when imported into the domain of art and interwoven with artistic conventions the information is transformed, becoming multivalent, rich, and suggestive.

My working process is one of observation, abstraction/distillation, and transformation/embodiment. I begin by studying an image that holds particular interest to me and making a set of rough drawings. During the drawing phase of the process I select, omit, distort, and alter the arrangement of key features of the original image, distilling and simplifying as I go. When I am satisfied with one of the drawings, I leave the digital image behind altogether and begin translating the marks on the drawing into paint on canvas. When this is achieved, what results often bears only a dim resemblance to the image I started out with; something of its essence remains visible, but the pixelated quality of the original has been lost to the language of the human hand and its flatness replaced by a more complex, multi-layered pictorial space.

At the work's conceptual core are questions about the relationship between the analog world—the continuous, seemingly-unbroken world we experience with our senses—and the digital world presented to us by computers. Can computer models, with their language of separate, discrete units (pixels, binary numbers, etc.), accurately reflect the real world—or is there a fundamental gap between the digital and the real, the virtual and the actual, that can never be closed? In my paintings, the tensions between the discrete marks that make up the patterns and configurations and the seamless, unbroken ground reflect this concern. The tension is also apparent in the marked difference between what the viewer sees from a distance, which appears to be continuous forms operating against a solid ground, and the clearly distinct, often floating and disconnected shapes that are revealed as the forms' constituents on closer inspection.

Other binary pairs invoked by the work are: randomness/order, movement/stasis, simplicity/complexity, emergence/evanescence, and mechanical/organic. This pervasive tension between opposites is also evident in the series title, as the word “cellular” can denote either the mechanical units of which these scientific images are made or the biological cells of which all living things are composed. Additionally, the word “automata” conjures notions of the kind of lifeless, robotic agents that are directly antithetical to the organic implication of “cellular.”