A Strange Thing Happens when You Live With a Work of Art

Kartik Chandra | 2024 Vera List Prize for Writing on the Visual Arts

Harold Edgerton, "Mrs. May Rogers Webster and her Hummingbirds" (1936)

As I type this essay, I am sitting in my bed next to an original print of Harold Edgerton's 1936 photograph of Mrs. May Rogers Webster. The print is on loan to my bedroom from the MIT List Arts Center, by way of the List's unimaginably generous Student Lending Art Program. I am to return the piece later this month—and I will—but before I do, I would like to say just a few words about it.

Let me start with some introductions. Mrs. Webster was an American naturalist who had a knack for attracting and training hummingbirds. Harold "Doc" Edgerton was an MIT professor who invented a method of *stroboscopic photography*, by which a well-timed flash of light could be used to capture photographs of fast-moving objects. Edgerton's stroboscope could take photographs with an exposure time of 1/100,000th of a second: brief enough that even the fluttering wings of a hummingbird—which are blurry little haloes to the naked eye—could be captured sharply with his camera. In this way, Edgerton's pictures make visible that which is invisible in plain sight. They hold the changing world still in their dark, photochemical amber.

Théodore Géricault, "The Epsom Derby" (1837)

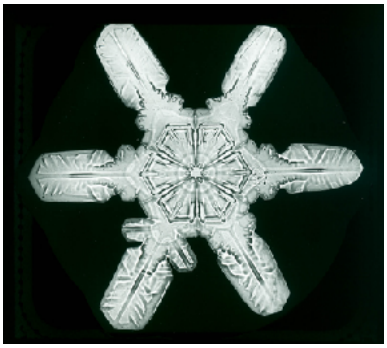
Edgerton's photograph of Mrs. Webster is nothing short of enchanted for me. I have only had the privilege of living with it for a few months—but I have contemplated and studied it ever since my undergraduate days at Stanford University. Since then, over the past almost-decade, the photograph has informed nearly everything I have accomplished, pursued, revered, or loved in my life.

It is because of Edgerton and Mrs. Webster, for example, that I first came to learn the story of the photographer Eadweard Muybridge, who in 1878 took the first-ever photograph of a galloping horse. As it happens, Muybridge took this photograph just a few yards' distance from where I lived at Stanford. Every morning I would leave my dorm room and pass by a commemorative plaque on my way to class.

Eadweard Muybridge, "The Horse in Motion" (1878)

The story, as told on the plaque, goes like this: Leland Stanford, the founder of Stanford University, once made a bet with a friend about whether a galloping horse ever has all four hooves in the air at once. This was at the time an open question: no one *quite* knew what a galloping horse looked like. Of course, people had watched a horses gallop for centuries, but a horse's legs simply move too fast for the human visual system to process what exactly is going on. Old paintings, such as "The Epsom Derby" by Théodore Géricault, show horses spreading their legs gloriously while airborne. But is that what the painters saw, or what they thought they saw? Muybridge's photograph showed that the painters were right—almost. In the second and third photographs of the top row, you can see that the horse is indeed airborne. But its legs are scrunched tight under its body rather than spread wide as Géricault painted. Who could have known?

After graduating from Stanford, I came to MIT and embarked on a PhD in the Visual Computing group at the Computer Science and Artificial Intelligence Laboratory (CSAIL). I moved to Cambridge and fell in love with the city. That winter—my first in a snowy climate since my childhood—I learned how to marvel at snowflakes. The New England crystals would vanish ephemeral as soon as they landed on my warm hands. Did I really



Wilson Bentley, Snowflake image #1168, courtesy University of Wisconsin-Madison Libraries

Figure from Robert Hooke, *Micrographia* (1665)

know what a snowflake looked like, then? Or was it the horses' legs all over again? One night at the library I learned about Wilson "Snowflake" Bentley (1865-1931), an American meteorologist who invented a clever technique for photographing snowflakes before they melted away forever. Bentley was the Edgerton of his time: seeing for the first time what time hides in plain sight. I compared Bentley's photographs of snowflakes to Robert Hooke's drawings of snowflakes in his book *Micrographia* (1665) — and saw what Bentley saw that Hooke in his century simply never could.

In this and many other ways, the "invisible moment" slowly became an obsession of mine, and I could not help but connect my graduate research to this obsession. I must live a charmed life: at the time, my advisor held the Harold E. Edgerton Professorship in the Department of Electrical Engineering and Computer Science. During my first couple of years in graduate school, then, I worked on modeling how the human mind pieces together the motion of a dynamic scene from a photographer's static snapshot. I designed an algorithm, compared its output to responses from human subjects, and published a paper on the results.

For a month or so after I published that paper, I felt like I had finally gotten to the bottom of Mrs. Webster's hummingbirds—internalized mathematically and morally the lesson the photograph has to offer, which is that to the human visual system, moments can be invisible even in plain sight. In a way, I suspect I was in fact exactly right about that conclusion, at least for the twenty-one-year-old thinker I was at the time. Time goes by too fast when you are in your twenties and trying to make your schooling matter. I worried a lot about my graduate education those first few months, whether it would mean anything at all or if it was passing me by invisibly like the flutter of a hummingbird-wing. Mr. Edgerton and Mrs. Webster served me well as patron saints of the fleeting, and I would like to believe that I have kept my eyes open wide wide wide throughout.

Harold Edgerton, "Gussie Moran's Serve" (1935)

But it has gotten harder and harder since then. I am halfway through my PhD now, and I am lost in a swarm of hummingbirds: which is to say, I am utterly confused by the hurly-burly of MIT's frenzied research environment. I came to graduate school expecting a vast, monastic expanse of time to think deeply about simple things. What I found instead was that once you are in the thick of it, the pace of research becomes weekly if not hourly—a firehose of talks, preprints, meetings, deadlines, lectures, emails, calls, Tweets—years worth of time shattered into a hundred thousand tiny invisible pieces. At times, presence itself becomes overwhelming. My instinct is no longer to open my eyes wide, it is to close them tight and hide.

So it does not embarrass me to admit that as I lifted Mrs. Webster off the gallery wall at the List Arts Center last fall, I noticed for the first time in my life that *her* eyes aren't really open either—or if they are, it's little more than a knowing sliver. I was shaken by that gentle, timeless dignity, her stillness next to the buzzing birds around her. As much as any hummingbird-wing, Mr. Edgerton also captured Mrs. Webster's grace with his stroboscopic camera—not to hold it still (how could he, moving for once so much faster than his subject?), but rather to mark it, frame it, memorialize it. This photograph is not of Gussie Moran's serve—captured by Edgerton just one year earlier—or of Wes Fesler's kick, or of any feat of athleticism or dance that might require a stroboscope to capture on film. It is in fact exactly the opposite. If anything, it is Mrs. Webster who held Mr. Edgerton still that day in 1936. Is it crazy to admire that? What would it be like to be Mrs. Webster, the eye of the hurricane, aware of, yes, but never consumed by the turbulence around her? And— is that a meaningful way to orient around your graduate research? Timeless over timeliness; getting to the bottom of things instead of—in the words of Donald Knuth—staying on top of them?

A strange thing happens when you live with a work of art. It grows familiar, but not before growing unfamiliar. No longer do I consider Mr. Edgerton and Mrs. Webster patron saints of the fleeting; in a few short months, I have promoted them to archangels of endurance. The photograph that once stood for seeing motion in stillness now stands for seeing stillness in motion. The graduate student obsessed with beholding the moment has learned at last to bear the expanse of time.

In a week or so I will pull Mrs. Webster off my wall and walk her enormous frame from my apartment back to the List Arts Center. I will return her to the List with gratitude and with heartbreak. A staff member at the gallery will greet me: he will perform a routine inspection, checking to make sure that Mrs. Webster is in the same condition as she was in this past September. She will be. But I won't.