Whitney

Light is, perhaps, the most important thing on earth – without it, we could not survive. It is one of nature's great enigmas, particles that behave like waves. And light, with its dual nature, is inextricably tied to human perception.

In his book Time and the Art of Living, Robert Grudin describes one of the dual mysteries of light – how it changes in our perception – even within the context of a single moment of observation: "Early mornings or late afternoons in the country offer wonderful dualities of light. You can look downlight (away from the sun) and see the placid outlines of nature, smooth, distinct, and flattened into repose. The old light bouncing back at you organizes the landscape and gives every view the aspect of something specially prepared. You can look up-light for the startling revolutions of brightness and shadow, leaves filled with exuberant orange radiance, glimpses of unspecified golden promise. So in the same moment, there are two seasons, and you can glance back and forth at visions deeply suggestive of past and future."

One memory about my fascination with light often comes to mind – the time I interviewed and viewed the "Light Dance" work of Seth Riskin, who, today, also happens to be the manager of the MIT Museum Studio and Compton Gallery. Riskin's work can only be described as a synthesis of light, movement and architecture. He attaches lights to his arms, legs, joints, head, as many body parts as he can manage. Then he moves like a dancer, playing with the possibilities of movement and space, choreographing with light.

In a recent interview about the "Vision in Neuroscience and Art" course he teaches with colleagues at MIT, Riskin described how he imagined this new art form to explore the nature of light, questions like: What is light? Is it objective or subjective? How do humans relate to light?

Riskin: "Imagine one light instrument mounted on each limb. These instruments cast specific light effects. There's no other light in the space; the only light is coming from my body. In this case, there are four white-light circles that reach from my body to the boundaries of the room. Those circles would change in size, shape and speed, depending on the changing relationship between my body and the architecture. You see my body in silhouette, but what you see foremost are these light forms. They're very much descriptive of space and time measures."

Light Dance turns out to be a dance of architecture – inward and external. Riskin: "People experience this environment as a fluid architecture of light that is expressive, because it's coming from the body, yet it's not exactly of the body. It's a dance of architecture. It's a dance of light. But I think the really significant thing is that the boundaries between body, light, architecture, space, and time, as we perceive them, dissolve. This is the revelation of the artwork."

It is no accident that Riskin's art form explores the issue of inner and external boundaries and shared space as a further extension of his life as an identical twin. The Riskin brothers were both national champions in the parallel bars. Light Dance is both an exploration of the shared space of twins and the shared space of architecture, space and light. (Hence, my double fascination, as I am also an identical twin.)

Riskin: "To see essentially a clone of myself performing was to experience the movement from within and without at once. This raised significant questions about the limits of the self-experience, the boundary between subjective and objective realities, and so forth. I think it's fundamentally why I wanted to advance my art in this way, to transcend the limits of my body with light and share the twin experience of expressive movement with others."

The science of the equinox is a balance of day and night, a dance at the borders of deep contrast. Likewise, in another way, equity in science is also, about borders and territories, about striking a gender balance that encourages as many girls as possible to pursue science, technology, engineering and mathematics (STEM). But STEAM – adding Art to the equation – enriches the experience even more, as Riskin's science-art form expresses so aptly.

Each November and March, the MIT Museum hosts a "Girls Day," celebrating women in science, technology, engineering and math (STEM) fields by reaching out to girls who are drawn to the numerical side of the curriculum. Visitors explore, create and investigate with scientists from local universities through hands-on activities, informal talks and demonstrations. The event is recommended for those ages 10 and older.

This year – March Girls Day is set for 11 a.m. to 4 p.m. Saturday at the MIT Museum, Cambridge. The day's theme is Architecture. Through augmented reality, visitors can explore the canals of Amsterdam, take the "Urban Futures Challenge," have an opportunity to participate in "Stitch n' Sketch" and more.

Career Talks, happening from 11 a.m. to noon. will feature Hari Priya, Associate with Howeler & Yoon Architecture, and Rania Ghosen, Associate Professor of Architecture and Urbanism at MIT. There will hands-on activities from noon to 4 p.m., and an engineering challenge, 3-4 p.m.

Sponsors for Girls Day include: Acentech; Boston NOMA, Boston Society of Architects, girl Uninterrupted; GUND Partnership; Isgenuity; Merrimack College; MIT Digital Structures Lab; MIT Senseable Cities Lab; MIT Society of Women Engineerings; MIT Women in Aero/Astro and Suffolk Construction.

If you have a scientifically-minded or mathematical girl in your house, I would not only recommend this MIT experience but also a book for girls 10 and up: Women in Science – 50 Fearless Pioneers Who Changed the World written and illustrated by Rachel Ignotofsky. The author uses illustration equally with text to make the lives of female scientists come alive.

Take in the light – and Happy Spring. As Eileen Granfors wrote: "Something in the air this morning made me feel like flying." But Rilke captures it: "Spring has returned. The earth is like a child that knows poems."