Fig. 1: Soo Sunny Park and Spencer Topel, Capturing Resonance, 2011
Courtesy of the artists
In their first project together, sculptor Soo Sunny Park and composer Spencer Topel transformed deCordova’s Window Gallery into a space for reflection and interaction. As part of the ongoing PLATFORM series, which invites artists to create work that responds to deCordova’s unique indoor and outdoor spaces, Park and Topel composed a site-specific and responsive architectonic installation that continually shifts and transforms in relation to perspective, time, and presence.

Capturing Resonance is installed in a tall, narrow architectural space that links the Museum’s second and third floors and is dominated by a 16-foot window. (Fig. 1) Hanging from the third floor ceiling, the sculpture appears overhead as a series of webbed, undulating, biomorphic forms, overwhelming visitors’ fields of vision as they enter the gallery. Each unit is made from a section of chain link fencing whose joints have been brazed to hold a wave-like form. Thousands of iridescent Plexiglas pieces stud the welded chain link, transmitting, reflecting, and refracting the natural and artificial light into the gallery and back onto the structure itself, transforming the space into a glittering sun prism.

As visitors proceed through the gallery, motion sensors in the space respond by activating speakers and bass exciters interwoven throughout the sculpture. The speakers project a blended compilation of whispering chords, soft tonal washes, and elongated instrumental sounds in a continuous and ever-changing composition that animates the sculpture. Fusing light and sound waves in a structure evoking ocean waves and other environmental processes, Park and Topel capture the dynamic interactions among light, sound, and human presence in Capturing Resonance.

Many terms are used to describe the type of art that fills rooms, moves, makes sound, and not only encourages but requires visitor participation—installation art, site-specific art, kinetic art, sound art, sound sculpture, and interactive art, to name a few. Park and Topel seem to bridge all of these apt descriptors in a work that merges sculpture and music, light and sound, object and space, drawing and performance, and interior and exterior spaces. This convergence starts to make sense when considering the history of the installation and its collaborative process. Park and Topel are both Dartmouth
College Professors—Park is an Associate Professor of Studio Art while Topel is a Visiting Faculty member in both the Music Department and the Digital Musics program. By fusing their two disciplines, sculpture and musical composition, Park and Topel create a space where different traditions, materials, and expectations coalesce to create new forms of resonance.

Topel is a classically trained violinist and contemporary composer whose music is characterized by innovative modes of sound processing that utilize and extend musical tradition. Drawing from Bach to electronic influences like video game soundtracks and digital art by Japanese composer Ryoji Ikeda, Topel creates genre-defying compositions. Trained as a sculptor, Park is best known for using quotidian building supplies such as insulation, dry wall, and mesh screens to create experiential installations that rely on repetition and the interplay of light and materials to sublime effect. Park’s earlier works like Fractal Immersion (2007), and SSVT Vapor Slide (2007) (Fig. 2)—the precursor to Capturing Resonance—are meticulously crafted and labor-intensive installations that catapult webs of geometric forms into cascading organic sets. Like Capturing Resonance, these works highlight Park’s interest in the rhythmic patterning of commonplace materials to create a psychological and visceral space. However it is their scale—room-filling installations ranging from 30 to 40 feet long that can only be experienced through bodily movement—that draws Park into conversation with contemporary sculptors like Tara Donovan and Alyson Shotz, whose accumulation installations similarly dazzle audiences through material expanse. Each of these artists creates environments that surround the viewer and require physical navigation, similar to Ryoji Ikeda’s sensorial installations (Fig. 3), but through the addition of light, sound, and movement in Capturing Resonance, Park and Topel enact a temporal and perceptual play.

Throughout her career, Park has discussed her interest in liminal or interstitial spaces. Derived from its Latin root, limen, liminal means threshold, or the space between two planes, and was first used in psychological texts to describe transient states of consciousness. Interstitial is a word often used in the sciences to describe a gap between forms, and is most commonly used to
Fig. 2: Soo Sunny Park, SSVT Vapor Slide, 2007
brazed chain link fence, plastic cups, paper
clips, river rocks, cotton strings, iron oxide, latex
paint, artificial light, daylight, 9'10” x 23’ x 42’
Courtesy of the Artist
describe the space between cells. In thinking about these terms in relation to her work, she explains, “I associate liminal with displacement. Maybe two things exist at once or someone is caught in the middle between two states. For me, liminal is the space between the physical and mental worlds—straddling both sides of a divide.” Park’s installations activate the space between to consider transient physical, conceptual, and psychological states.

The Window Gallery is a physically liminal, interstitial space. It is a space for movement and transition: between floors, and between the elevator and stairwell. As such, the visual experience of Capturing Resonance is an exercise in embodied looking. Since it cannot be observed in toto inside the gallery, visitors become physically encompassed by the forms as they enter the space. “I chose the space for its unconventional viewing parameter,” explains Park, “while in the interior of the window space, the work can not be observed with distance, rather the viewer will be physically immersed.” Since conception, Capturing Resonance was designed to be experienced from two perspectives—seen from outside the Museum as a glittering drawing in space framed by the gallery window, and from the inside as an immersive prism. In this way, Park and Topel enter into a broader philosophical discussion about looking.

The philosophy and science of looking is central to the study of art history. Since the development of linear perspective during the Renaissance, perspective has served not only as a device for structuring pictures, but also as an analogy for human perception. In this model, the viewer is conceived as a single and unmoving eye, gazing into the canvas. The viewer as disembodied eye was brought into question, most notably, and most relevant to this essay, by French philosopher, Maurice Merleau-Ponty in the 1950s. Coming up against the art historical giants of Modernism, Roger Fry and Clement Greenberg who advocated for a purely optical mode of viewing, Merleau-Ponty proposed that we come to know ourselves, and the world around us, in relation to our own bodies. In his thinking about phenomenology, he proposed that the physical body is the basis of perception, and that meaning and truth bound up in physical reality can only be experienced through the
senses. In this, the body, not the mind, is the interface between consciousness and the world of objects and materials.³

Across the Atlantic, American artists like Allan Kaprow were investigating similar ideas of bodily looking. In his 1961 project, Yard, Kaprow filled the walled-in backyard of the Martha Jackson Gallery in New York with car tires and objects wrapped in black tarpaper. (Fig. 4) Visitors were invited to climb on the tires and move around the objects—to experience the sculptural installation with all their bodily senses—touch, sight, smell, and maybe even taste. He called such works “environments” that blurred the boundary between art and life. Art was no longer elevated on a pedestal or displayed in a white cube, instead it became something to be tromped through, sat on, and physically experienced. While the roots of installation art reach back to the late 1930s (with the Surrealist interest in creating a psychologically loaded space),⁴ Kaprow’s sensorial environments aimed to “provide a visceral interruption into everyday consciousness for the sake of its growth.”⁵ In a sense, Kaprow proposed art as experience.

Capturing Resonance continues this lineage as a site-specific installation made of common materials that not only invites, but requires embodied viewing. Built into the architecture of the space, the installation engulfs deCordova visitors in a web of visual and sonic reflections. Kaprow’s spatial installations, like Park and Topel’s Capturing Resonance, are designed for temporal experiences that inevitably change with each viewing. In optical and sonic forms, Park and Topel consider how perception changes with perspective.

The use of the acrylic Plexiglas—called Acrylite®Radiant—in Capturing Resonance is an extension of this interest in perceptual and spatial play. The Radiant itself is clear, but it appears to change color and value when seen at an angle. Not unlike butterfly wings or peacock feathers, the acrylic filters the light spectrum differently depending on the viewing angle—transmitting certain wavelengths of light while reflecting others. Of course, the sculpture’s shifting chromaticity is also dramatically affected by the height and path of the sun as the rays stream in through the window. Depending on the season and the time of day, rainbow-hued shadows fill the gallery, shifting from crisp representations of the structure to
abstract color washes. It becomes a type of seasonal sun dial, recording time abstractly through color. Through Capturing Resonance Park merges the obdurateness of the chain link with the impermanence of sun light to probe the void between abstract and representational form, color and whiteness, inside and outside, materiality and transience. She crafts a liminal space within a liminal space, using shifting light as both a sculptural material and a metaphor for transient psychological states.

While the Plexi squares capture and translate light waves from the gallery window, Topel's musical composition similarly utilizes light and movement as data for translation. The sensors installed throughout the gallery communicate motion as data to the computer run algorithm that drives the digital composition and activates the speakers and bass exciters. As a result, a visitor's perceptual experience of the installation differs depending on the number of people in the space, as well as their location.

In correspondence with the physical activity in the gallery the composition shifts accordingly, not just in volume but also in frequency (from the lowest audible and physical frequencies to the highest), thus activating different speakers throughout the gallery. Topel explains, “In this way, the sound ‘space’ mirrors the physical space.” The bass exciters that connect the sculpture to the walls respond to the low frequencies in the composition and vibrate, shaking the overall form and transforming Capturing Resonance into a shimmering, kinetic installation. Beneath the quaking sculpture, visitors experience a heightened consciousness of body, space, and environment as the sculpture rumbles against the wall as if reacting to some seismic shift.

In the realm of digital music, this living composition can be understood as a stylistic blend of data sonification, data bending, chance, and algorithmic design. Data sonification is the process of translating a non-musical event into music. One of the leading innovators in the field of computer music composition is Charles Dodge whose Earth’s Magnetic Field (1970) mapped magnetic field data to musical sounds. Data bending is a more recent advance in the field, and furthers data sonification by translating a digital program, file, or image into sound. Topel builds on both these musical modes by modifying an algorithm—a dissonant counterpoint algorithm—to include elements of chance (sensor input). He explains that the musical states continually morph “using a statistical feedback method that favors random selection of an event that has not most-recently occurred.” (Fig. 5). In this way, the sounds seem familiar to visitors who spend time in the gallery, but are continually re-mixed in response to the ever-changing variables of the site. As a viewer advances through the installation, the music moves with and around the body in a type of interactive dance.
By filtering the impermanent and non-physical conditions of the site—light and movement—through sculptural and aural forms, the artists complicate and compound concepts of liminality. They create a “pass-through place” to consider the space between the abstract and the real, the physical and the ideal, the temporary and the infinite, the body and the mind. It is in this dematerialized and perceptually confusing space that Capturing Resonance asks you to look, and then think about looking.

– Lexi Lee Sullivan, Assistant Curator

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2. Soo Sunny Park, Capturing Resonance project proposal, June 2009.
4. The 1938 International Surrealist Exhibition is oft-cited as the precursor for installation art. Produced by the infamous provocateur, artist Marcel Duchamp, the exhibition took place in Paris’ Galerie des Beaux-Arts and was transformed into a theatrically lit art display set underneath a canopy of 1,200 dirty coal sacks. Viewers entered a loaded Freudian dream space, described by Georges Hugnet as “a platform for departure for the visitor’s unconscious association.” George Hugnet, “L’exposition internationale du surrealism en 1938,” Preuves, no. 91, 1938, in Claire Bishop, Installation Art (New York: Routledge, 2005).
7. Topel explains “the statistical feedback model used in Capturing Resonance came from conversations with Professor Larry Polansky about composer and music theorist, James Tenney’s use of a dissonant counterpoint algorithm. Unlike this system, however, I was interested in combining probabilities from two discrete sources. I further altered this algorithm modifying Bayes Theorem by including a set of priors for each state that was conditional on the sensor input.” For additional information see https://sites.google.com/site/capturingresonance and L. Polansky, A. Barnett, and M. Winter, “A few more words about James Tenney: dissonant counterpoint and statistical feedback.” Journal of Mathematics and Music. vol 5. no. 2, 2011. Taylor & Francis. p. 63-82. http://www.tandfonline.com/doi/abs/10.1080/17459737.2011.614732#preview.
ABOUT THE ARTISTS

Soo Sunny Park was born in 1975 in Seoul, Korea. She currently lives in Hanover, NH and is an Associate Professor of Studio Art at Dartmouth College. Park received a B.F.A. from Columbus College of Art and Design in Columbus, Ohio and an M.F.A Cranbrook Academy of Art in Bloomfield Hills, Michigan. She is a recipient of a Joan Mitchell M.F.A. Grant, the 19th Annual Michigan Fine Arts Competition Grand Prize, The Helen Foster Barnett Prize from The National Academy Museum, New York, NY (2008), and The Rockefeller Foundation Bellagio Center Fellowship (2010).

Recent solo shows include Soo Sunny Park, Jaffre-Friede Gallery, Dartmouth College, Hanover, NH; Fractal Immersion, Reeves Contemporary, Chelsea, NY; Bio-Structure: Metro-Geo, Kranzberg Exhibition, Laumeier Sculpture Park, St. Louis, MO. Group exhibitions include Fabrications, Great River Arts, The Newport Mills, Newport, NH; 183rd Annual: An Invitational Exhibition of Contemporary American Art, National Academy Museum, NYC; 2007 Invitational Show, American Academy of Arts and Letters, NYC; Joan Mitchell Foundation, CUE Art Foundation, NYC.

Spencer Topel was born 1979 in Denver, CO. He currently lives in Hanover, NH and is a Visiting Faculty member of Dartmouth College, serving in both the Department of Music and the Digital Musics program. Topel received a B.M. and M.M. from Juilliard School in Music Composition and is currently a candidate for the Doctor of Musical Arts degree at Cornell University. He is a recipient of a Diploma di Merito from the Accademia Musicale Chigiana, a 2009 award for best composition from the American Modern Ensemble, Juilliard’s Palmer Dixon Prize for best composition, and additional awards from BMI, ASCAP.

His music has recently appeared on concert programs in major venues such as Issue Project Room, Brooklyn NY, Orchestra Hall, Minnesota with the Minnesota Orchestra, the Chiesa di Sana Caterina Treviso in Venice, Italy, the Aspen Music Festival, Chigiana Festival in Siena, Italy, Alice Tully and Weill Concert Halls in New York, NY and in Tokyo City Opera Hall.
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Installation photography by Peter Harris, Boston.

PROGRAMMING
PLATFORM Discussion Series, Saturday, February 4, 2 pm

Join exhibiting artists Soo Sunny Park and Spencer Topel as they discuss the creation of their first collaborative work, Capturing Resonance. The conversation will investigate the development process of their individual compositions and how they are interwoven to form a holistic experience, as well as how they took to the challenge to create a transcendent work of art that encompasses such a unique gallery space.
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