

# ATCOOPER

SUMMER 2017 THE COOPER UNION FOR THE ADVANCEMENT OF SCIENCE AND ART





It's hard to believe that only seven months have passed since I started at The Cooper Union, and even harder to believe the spring semester has already wrapped. As I write this, the joy of commencement and reunion is still fresh in my mind, as are the many activities from my first semester as part of this community. Before I recap these happenings, I want to thank all of you—alumni, parents, students, faculty, staff, and friends—for your participation and feedback in helping me understand this institution's culture, strengths, and opportunities in a relatively

short time. From my travels around the Northeast, Florida, California, and Texas, and events here in New York City, I have enjoyed spending time with you, hearing stories about your time here, and learning more about your professional and philanthropic lives. After every conversation, I'm deeply impressed by your devotion to The Cooper Union. I am also encouraged to hear the sentiment that our narrative is changing. It's a new day for The Cooper Union—one that is true to Peter Cooper's founding ideals of fueling a superior educational experience, fostering productive public discourse, and advancing the people of The Cooper Union as the makers, doers, thinkers, and leaders that you are.

There have been major changes already since I became president, including some difficult but necessary decisions due to budget cuts and administrative restructuring. We are studying virtually every aspect of our community to move toward a high-performance culture that can deliver excellence not only in academics but across every aspect of our operation. This includes merging multiple complex initiatives, including a presidential transition, Middle States accreditation, the Free Education Committee's work, and the re-envisioning of some of our academic programs into a strategic planning process that is inclusive and collaborative. We are capitalizing on our assets, one of which is the Great Hall—a venue that is essential to The Cooper Union mission. Intrinsic to Peter Cooper's vision for the college was the idea of fostering civic leadership, open dialogue, and engagement for social good. We are programming this historic space with these tenets in mind to attract the broadest audience possible—whether new donors, potential academic partners, or our New York City neighbors. Recent successes include the John Jay Iselin Memorial Lecture by former U.S. Attorney for the Southern District of New York Preet Bharara, which drew over 50 members of the media; a remarkable address by civil rights icon and congressman John Lewis; and last month's Typographics conference with more than 600 attendees, many traveling internationally.

We accomplished a significant volume of activity in one semester, but are just getting started. I look forward, together with you, to advancing this cherished institution in the years to come.

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*On the cover: Victor Moscoso A'57 accepts the Augustus Saint-Gaudens Award at the 2017 CUAA award ceremony on June 2. Photo: Marget Long*

# UNSUNG EXPERTS COOPER TECHS

BY ANGELA STARITA

The students, faculty, and staff of The Cooper Union rely on the assistance of a group of largely unsung experts: lab, studio, and shop technicians. Students benefit from the knowledge and talent of the Cooper faculty as well as the technicians' hands-on guidance in the fields of printing, woodworking, laser cutting, tooling, film, sound, video, photography, computing, casting, and a variety of other skills. Their expertise is not a surprise considering that many of Cooper's techs are highly gifted artists in their own right. We sat down with four of them who are practicing artists to talk about their work both inside and outside The Cooper Union.

## WAYNE ADAMS

Photos: courtesy of the artist



The Wise Man Builds His House Upon a Rock. 2017



At Cooper, anyone with a Macintosh computer knows Wayne Adams, a network administrator and senior academic support specialist who fo-

cus on issues associated with the Apple OS. Formerly a part of the School of Art working almost exclusively with art and architecture students, Adams and his colleagues—Marget Long, Lawrence Mesich, João Enxuto, Dennis Delgado, and Joyce Yu-Jean Lee—are now integrated into the broader IT department and give support to

students, staff, and faculty campus-wide. All the support specialists are gifted artists, which “gives us a familiarity with the goals and projects of the students in all three schools,” Adams says. “On a given day I can be working on anything from AutoCAD to plotters.”

Adams' own art doesn't use computer technology; the Michigan native works primarily as a painter, making abstract images by layering materials—often paper and fake fur—on his canvas and deploying different types of mark-making. He uses tape to make controlled, linear marks and poured paint for a more organic effect. Sometimes he combines these with found religious imagery meant for

children. “My personal background is heavily influenced by the conservative Christian environment that I grew up in,” he says. While this didn’t play a part in his work in the past, he has started to address his upbringing more directly in his art. “I’m interested in how my own doubts and ideas about religion and Christianity have evolved and how they compare to the very quirky and specific Christian environment and culture I grew up in. That is further complicated in the process of making paintings.”

Adams’ artwork explores multiple patterns and materials so they frequently have a tactile quality. One of his exhibitions, *Wayne Adams Is Speaking in Tongues: A Show of Objects and Images Organized by the Unrelenting Voice of Interpretation*, includes, among many other pieces, four large canvases that are part of his *Rift* series—fake fur of varying colors divided by a precisely placed triangle of paint. At the room’s center is a wooden sculpture on wheels vaguely reminiscent of R2D2 in shape. It depicts Jesus sitting on top of a Thomas Kinkadee blanket.

In 2007, Adams created a series of videos, “Armor of God,” in which he sports a cumbersome cardboard-and-foil suit. Looking like a DIY golem—but with a cross on his helmet—he tries to perform basic human physical tasks: walking down a flight of stairs or jumping into a pond. He generally fails. As one person off camera comments, “I think the greatest thing about this suit is that you can’t do anything with it.”

Currently he’s working on several pieces in his studio in the Gowanus section of Brooklyn. Against one wall is a painting with a fluorescent background, dots of spray paint and about half covered with a chevron pattern of tape. He plans to pour paint over the canvas, remove the tape, and then decide what needs to happen next. On another wall is a rough sketch painting of Martin Luther with a white silhouette of the Latin phrase “Sola Scriptura Scriptura Sola,” meaning “only scripture and scripture only.” The phrase summarizes a Christian doctrine, which asserts that the Bible alone provides guidance for the practice of faith. “At the moment I’m stuck with this, visually, but I like the idea of playing with this phrase, which a lot of Christians hold as something of a sacred truth—which I think is problematic.”

His exploration of the religious environment of his youth was in some ways precipitated by the birth of his two daughters. “I’ve started incorporating children’s religious education materials into my own paintings and have found both a more personal connection to the work and something of a deeper and more profound way of addressing religion and belief. I’ve also found a broader community of artists interested in the overlap of Christianity and art. In 2011 I joined the board of the 38-year-old organization Christians in the Visual Arts, where I volunteer as board chair.

“All this is to say that I’ve become quite comfortable talking about religion in context with art—contemporary art specifically. I find there to be rich territory in exploring somewhat strange ideas of doubt and belief through the somewhat strange practice of making paintings, sculptures, and photographs.”

# ZACH POFF



Photos: courtesy of the artist

Radio Silence, installation view. 2009-10



Zach Poff, adjunct professor and technical assistant in film/video, finds exhibiting students' work for the End of Year Show "bittersweet." On the one hand, he wants to showcase the work of the students who took Projects in Sound Art, a course he's taught since 2007. On the other hand, sound art often needs particular environments, ones that sometimes require greater space or context. "Many of the projects were

created as installations," he says. "They're very difficult to include in a group show."

In a culture so geared toward the visual, finding literal and psychic space to listen is a central challenge to making sound art. Poff himself was initially studying photography and 16 mm filmmaking as a student at an arts high school in Baltimore. He moved toward sound work through his time as a bass player with a band and increasingly exhibiting his photographs with an accompanying soundscape. His critics were frequently flummoxed by his presentations and largely ignored the aural aspect of his art. He sees Cooper students facing fewer challenges, but visual art still has a greater platform than work that engages other senses. That is understandable, he believes. "Most of us appreciate music, so we develop the skills to listen carefully and aesthetically, but our listening is very compartmentalized. We ignore most sounds to cope with a noisy world. In sound art we challenge ourselves to apply our listening skills outside music. Sometimes it can reveal things that are hidden by visual culture."

Poff's *The Sound of The Sound of Music* builds on that idea by taking a "common text"—the 1961 film version of the Rodgers and Hammerstein musical—and rearranging it based on pitch, not narrative. Similarly, for *Video Silence*, he wrote custom software to record very quiet moments from television shows. The program

strings together a one-minute clip that is played on a loop until the system has culled another minute's worth of quiet. Both pieces function as scaffolds that, as Poff puts it, "the world pours itself into." This last point is critical to Poff, who is less interested in creating an artwork that is complete or self-contained than in making a new way to see and hear what already exists

As part of his art practice, Poff teaches and lectures widely about the history of sound art as well as circuit bending, rewiring objects designed for one purpose—say, a Speak & Spell toy—to create unexpected sounds, often in a process that depends upon chance. One such work he created with N. B. Aldrich, *Witnesses: Trikaya*, is made up of a set of chanting boxes, inexpensive electronic devices that repeat Buddhist prayers to aid meditation. They have been wired to monitors showing the 1951 Chinese takeover of Tibet and subsequent uprisings in that country. Initially the boxes are in sync, but almost immediately they produce sounds at different pitches in response to the violence on screen. Ironically, the boxes are manufactured in China. "The work that I do begins with questions as opposed to statements about the world around me. It's important to me that my voice is not the only voice," Poff says. "I consider my work pedagogical but I hope not dogmatic."

## JOE RILEY

Photos: courtesy of the artist



the enigma of: surfing, hydraulics, economics. 2016-17



Joe Riley A'13 no longer takes classes, but as a technician working in the Printmaking & Type Shop, as well in the Sculpture Shop, he sees himself on a continuum, learning more about his

craft and the community all the time. "I think of my work as a technician there not solely as a job, but also as a way to be within the school's framework and an active member of the community. Which is just to say: I love Cooper Union." Currently in the Whitney Independent Study Program, he notes how much of a Cooper education transpires in

the sculpture shop, which he calls "a rich resource for students and one of the most actively used studio facilities in the entire school. Working in there was a formative experience for me as a student and now as a technician. I am glad to

be a part of the critical processes of design, making, and working by hand—all central to Cooper’s pedagogical project.”

Riley, who also co-teaches the metalworking section of Introduction to Techniques, makes sculptures and prints in addition to creating sound installations, often with the intention of reviving an old idea to see it in a new light. “Missing details and faded characters fascinate me,” he writes of his art, “and in following them through my work I’ve picked up parallel histories of itinerant printers and abandoned railroads, Soviet bloc dictators and American soap opera cowboys, protests and pizza pulleys, free education, pirate radios, fake student IDs, and more. I craft material-driven works from such tellings, and with those works comes the hope of confronting political and poetic consciousness.”

He finds that older technologies often have a mythology attached to them. Trains, for instance, are greatly romanticized with myriad associated stories that he views as material for his art practice. His work “teases anecdotes out of stories and toward material form,” as he puts it. He finds that these artifacts—both physical and conceptual—sometimes resonate with current political and cultural circumstances. In 2012, he and Audrey Snyder A’13 designed a rail-riding bicycle that they used to ride abandoned train tracks around the country. Their research led to an exhibition and book entitled *Parallel Cases*.

“As an artist I am drawn to fragments that combine the poetic, political, and practical,” he says. An example is his interest in the half-hitch knot, which he incorporates into his artwork as a commentary on a technology that was used both by the ancient Egyptians on funerary vessels to ferry pharaohs into the afterlife and by NASA, which deployed the knot to tie bundles of cable on the Mars Rover. As he puts it, the half-hitch is “a technological fragment travelling through time and space, across memory and utility.”

While a student at Cooper, Riley was deeply involved in the struggle against charging tuition. He created much art to protest that decision, both print and sculptural work. He says that experience brought a political consciousness to all his art. For instance, *Seed Journey* is a moving and ingenious response to climate change created by Riley, Snyder, and Amy Francheschini, who make up a collective called Futurefarmers. The group designed a boat with a hollowed-out mast and spar fitted to hold seeds collected from the boat’s journey from Oslo to Istanbul. The piece functions as a silo and a library. “The particular seeds being taken on *Seed Journey* have been ‘rescued’ from various locations—from seeds saved during the Siege of Leningrad from the Vavilov Institute Seed Bank to a variety of Finnish Rye rediscovered between two wooden boards of an ancient sauna in Hamar, Norway.” Artists, anthropologists, biologists, bakers, activists, sailors, and farmers will participate in the two-year trip. A sailor who earned his master of yachts 200-ton limited mate certificate in 2012, Riley says the voyage “provides a way to imagine transportation and cultivation over longer, slower periods of time, upholding the bright spots of the mind’s eye over blind spots of the market.”

# JENNIFER WILLIAMS



Courtesy of the artist

Ladders, installation view. 2014

Mario Morgado



In a recent interview, Jennifer Williams A'94 stated matter of factly, “No one knows what photography is anymore.” She is not throwing a polemical bomb; she is making a statement of fact, gleaned from her work as co-head technician and adjunct professor of photography.

Williams’ photographs frequently show what planners call “the street wall”—the facades of buildings along a particular corridor—that she arranges in site-specific collages. Her work as an undergraduate at The Cooper Union, though focused on film and sculpture, was not a far cry from her current practice. “An understanding of those systems [of film and sculpture] is in there. I work with time—it’s very cinematic.”

She points out in her artist’s statement that she has no intention of stopping time with her photography. Instead, she’s interested in controlling the passing of time. “My work engages traditional photographic languages while simultaneously questioning its ‘truth dimension,’ exploiting photography’s ability to represent both what is true and what is false simultaneously.”

While the objectivity of photography has been called into question for years by artists and historians alike, Williams’ work addresses the medium’s unreliability in a particularly physical way: her collages of buildings are often large and arranged in a way that makes them seem three-dimensional. Structures about structures, they are at once a tromp l’oeil of the brick-and-mortar real thing and a wild rendition

of street life, as if a detonated bomb had upended and rearranged the scene. The vividness of the collages is furthered by their very careful placement. A set of her collages was installed at the Queens Museum in the room with the famous model of every building in New York City that was created for the 1964 World's Fair and updated every ten years. Her show, *New York: City of Tomorrow*, includes collages of new skyscrapers extending out from islands of smaller buildings. They appear to be tethered to an older New York but hardly of it.

As a technician and instructor at Cooper, she's noticed a sea change over this past year: "Now first-year students know nothing about film and film cameras. Film did so much work for you." She explains that different film brands and speeds had different qualities—Kodak Portra 400, say, for accurate rendering of skin tone, or Fuji Reala 100 for its fine grain, low contrast, and high saturation. Today, photographers shoot digitally and then process later to get the desired effects, an added step not needed with the right film.

As a resident of the Lower East Side for more than 20 years, Williams witnessed an enormous transformation of the neighborhood. She keeps a blog of photographs of the apartment where she lived, which, like her other work, is a form of analyzing space but on a smaller, more personal scale ([thisdwelling.com](http://thisdwelling.com)).

The volatile quality of her work isn't an accident: Williams considers the remarkable and unrelenting forces of New York real estate as powerful, and potentially dangerous, as any physical explosion. She is, of course, well aware of the debates around gentrification and office construction-booms, but she wants her photography to provoke more than the usual arguments: "Whatever you think New York City is, this is what it is. Visualizing a neighborhood's present state highlights the forces behind new building construction and questions how public spaces are being organized." ●



Joe Riley leads a woodworking workshop. All of Cooper's technicians work closely with students to teach the specifics of their craft.

# COMMENCEMENT 2017



President Sparks



Rachel Warren, chair of the Board of Trustees, with Sacha Pfeiffer, journalist and commencement speaker

## SENIOR SNAPSHOTS

### PEDRAM SAZESH A'17

Pedram Sazesh



The interest in art began for Pedram Sazesh A'17 while growing up in Toronto as the son of Iranian immigrants who owned a store that sold Persian rugs and antiques. "Early on I knew I wanted to do art," he says. "My parents were very supportive of that interest."

The Cooper Union was not on Pedram's radar until he accepted a scholarship to attend the Nova Scotia College of Art and Design (NSCAD). But after hearing about a friend's exchange study at Cooper, he applied, sight unseen. He had never even been to the U.S. For him, coming to Cooper's School of Art was a revelation. "I remember right away I really enjoyed such a challenging educational environment."

Pedram's practice is rooted in painting but is informed by a research component. "In Canada, especially at NSCAD, they are really into 1970s-style conceptual art. But at the time I was also interested in painting. When I got to Cooper these seemed like separate things, but then they began talking to each other in ways that were really meaningful to me. It allowed me to be devoted to a studio practice while also being socially minded."

His senior presentation, *Negative Horizon* (at right), was a culmination of everything he had explored in his time at the school. It was based in research on the island of Kish off the coast of Iran in the Persian Gulf. "This island had an interesting history of urban planning and utopic design," says Pedram, who received the prestigious Jacques and Natasha Gelman Award this year. He visited the island in the summer of 2015, taking photos and sketching. "Those drawings and images developed into making collaged paintings. They came from borrowing a lot of printmaking processes."



Pedram says his experience as part of the last class of full-scholarship students played a profound role in his art practice and experience at Cooper. "During my first year at Cooper there were a lot of protests against charging tuition. Having a free education under Cooper's old mission made me feel that I have an obligation to really think critically about what I was doing in the studio and how it was connected to the school and in a larger scope, politically and socially. This way of thinking still exists in my practice as I leave Cooper."

This summer Pedram has been accepted to the Skowhegan School of Painting & Sculpture, a nine-week residency program for emerging visual artists, located in Skowhegan, Maine. "After that I plan to have a studio and make work in New York," he says. "Cooper has really shaped my values. Free education sets up a community where everyone is valued equally. Conversation and collaboration have been key to the Cooper experience. My ambition is to apply that ideal to my practice and my life going forward."

Commencement 2017 took place on May 23, with Pulitzer Prize-winning journalist Sacha Pfeiffer delivering the commencement address. Family and friends visited from near and far for the ceremony, which included talks by President Laura Sparks and student speaker Maya Krtic. In addition to student prize winners, three alumni were awarded presidential citations: Bruce Degan A'66, Nina Tandon EE'01, and the late Diane H. Lewis AR'76. We extend our deepest congratulations to the class of 2017 and look forward to their accomplishments as Cooper alumni.



Sheikh Faiyaz Jaffer gave the invocation



Maya Krtic gave the student address



Merrill Elam accepted a Presidential Citation on behalf of professor Diane Lewis AR'76



Bruce Degan A'66 received a Presidential Citation



Nina Tandon EE'01 also received a Presidential Citation

Photos: João Enxuto

## ANDREW KEANE CE'17

Gabriel Rodriguez-Fuller, A'17



Andrew Keane CE'17 arrived at The Cooper Union from Wayne, a town in northern New Jersey. His knowledge of the engineering school stemmed from his older sister, Valerie, who graduated from the School of Art in 2011. But for him, a talent for math and science met with a

different creative interest. "I had a teacher who was a graduate of the architecture program at UVA. He ran a computer-aided design class. That was where I really got interested in architecture," Andrew says. "He told me that if he could go back and do it a different way he would have gotten a degree in engineering first, and then studied architecture. So I took his advice, and in line with my interest in architecture and the built world, I pursued civil engineering."

Andrew's twin interests synch well with the civil engineering program's senior "capstone" project, which requires small groups to identify a site in New York City and propose a constructed building that meets a need there. "We wanted to propose a different type of structure than is commonly done. Because of the course requirements the nature of the projects tends to be residential and fit into tight lots. We found a lot that is pretty big in Astoria. Then you imagine a structural system and you put that into an analysis program with different types of loads, whether it be from wind or seismic forces. From there you design a structure. So we designed a low building, kind of campus style, as a community recreation center."

Along with the capstone project, Andrew has also been involved in ongoing research by professor Joseph Cataldo on the green roof of the Jacob K. Javits Center (right). They've



David Sundberg/Esto

been studying heat retention and water runoff/retention using a duplicated section of the Javits green roof, along with a control "black roof," in the basement of 41 Cooper Square. During one part of the research they simulated rain at varied temperatures and took pictures using a thermal camera. "You can see the temperature on the green roof is significantly lower and its response to thermal stimuli is more muted than that of a control roof."

After graduating Andrew will be moving in with his sister and begin work at Guy Nordenson and Associates, a structural engineering firm on the West Side. "Anyone who comes to Cooper for four years thinks about problems differently. More creatively. More methodically," Andrew says. One thing he says he will be tackling: designing, along with his sister, his own bed frame in the new apartment.



Mike Essl, acting dean  
of the School of Art

Akash Godbole AR'17



**STEPHANIE RESTREPO AR'17**

Months before the presidential election, Stephanie Restrepo AR'17 knew that she wanted to research walls, those architectural elements that have gotten so much press in recent days. “We think of walls as dividers, but I wanted to find out if there

was some way I could use a wall to integrate spaces,” she says. Born in Colombia and raised in Miami, Stephanie learned about the school from one of her teachers at Design and Architecture Senior High School. When she gained admission, she immediately accepted, though she’d never visited New York or the school.

Her thesis project, *El Muro de Neblina* (at right), was inspired by the late Lebbeus Woods’ exploration of walls. She set out to find out if a wall could act as a way to bring people together instead of imposing separation. After researching dozens of walls around the world, Stephanie concentrated on one that sits on a mountain ridge in Lima, Peru, that when seen from an aerial view starkly divides an upper-class area, known as Las Casuarinas, from an impoverished one, Pamplona Alta. “I was interested in it not only because there is such a blatant difference between the two sides, but also because the wall is redundant—the two areas are already divided by topography.”

The wall Stephanie designed for the site addresses both physical and metaphoric needs of the community. Constructed of mesh, the wall takes advantage of the area’s climate by collecting water from humidity. Known as fog harvesters, such walls have been used since antiquity to collect condensation and reserve water. In Stephanie’s plan, the water droplets attach to the mesh wall and make their way via gravity into



underground cisterns, where water is collected and distributed throughout the community. The wall undulates in the landscape so at certain points

it acts more like water infrastructure and at other points transforms into public space where residents from Pamplona Alta can gather.

In part, Stephanie’s interest in socially conscious work stems from her time at Cooper. A freshman in the fall of 2012, she and her classmates witnessed and participated in the protests to keep Cooper tuition-free. “It was a valuable lesson in activism. Our students are vocal, and I appreciate that. I am a student who could never have gone to Cooper if I’d had to pay tuition. There are so many high school students who want to go to school and have what it takes to succeed but cannot afford it.”

Currently an intern with WeWork, a workspace-design firm, she has not yet decided her next move after Cooper. She knows, however, that she would like to work for a nonprofit agency to use design in ways that improve life for the under-represented. “MASS Design Group spoke at Cooper,” she says, referring to a Boston-based firm, “about partnering with government agencies. They taught people to be master masons. They are thinking about the role of the architect once the architect is gone. That really appeals to me.”



Photos: João Enxuto; Island Photography

## YEEHO SONG ME'17

Gabriel Rodriguez-Fuller, A17



One of the older graduates of the engineering class of 2017 was Yeeho Song ME'17. He took two years off after his sophomore year to return to Korea, where he is from (Mokpo, specifically), in order to perform his required military service. During the time he spent in the mountains as a member of the Special Forces, his mechanical engineering focus naturally sought out solutions to problems encountered in the field. One of them became the source of research that has earned him his first published paper and an invitation to the 2017 International Conference on Robotics and Automation in Singapore this summer to present his work.

Yeeho wanted to pursue an undergraduate degree in the United States, where, he says, the aeronautics industry, which he found most interesting, is better developed than in South Korea. "Most of my relatives are engineers. It's part of my background. And I was always interested in things that fly or move fast, like trains." His advisor recommended The Cooper Union, so he applied early decision. Since arriving, his interests have pivoted...a bit. Lately he has taken a greater interest in what happens when things get dropped out of flying airplanes.

"I served mostly in the mountains, where you can't easily get vehicle support if you are behind enemy lines," Yeeho says. "This is because the vehicles have to be air-dropped, which means essentially crashing them into the ground at 20 km per hour or faster. Therefore, they require a lot of packing material, which, unless properly hidden, may give away your presence. So, I thought it would be interesting to study quadrupeds, four-legged robots, because a) they may work in adverse



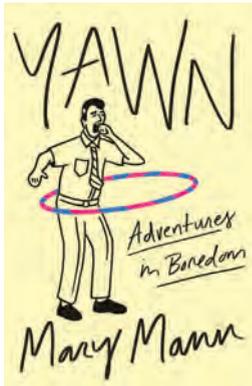
terrain better than wheeled vehicles and b) their legs may be used for impact attenuation, eliminating the need for such packaging materials."

So Yeeho created an independent study in his junior year to develop a scale model of a walking quadruped robot (above) that could better sustain impacts from being dropped. "I had to scale it down to 20 cm tall from one meter so I could do the drops here at school. I cannot just go around dropping a 100 kg robot every time. The issue when you are dropping stuff is that the mechanical requirements to survive a drop are totally different from just making it walk. So the point of my paper is how you can adapt the design to survive a landing without making it tremendously expensive or huge." After presenting his paper, Yeeho will attend the Robotics Institute at Carnegie Mellon University to study for a master's degree. ●

# ON COOPE

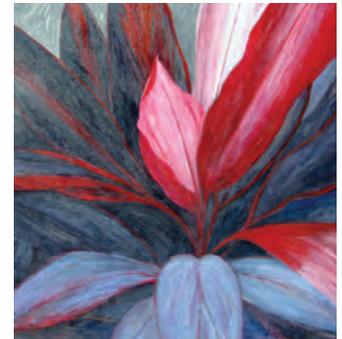


**PAUL TAOGNA**  
AR'93  
DESIGNING HOMES  
FOR WILDLIFE AT  
THE BRONX ZOO



## FROM CLAY AND CANS TO SUN-DAPPLED PAVILION

A TEAM THAT INCLUDES PROFESSOR POWELL DRAPER AND MAX DOWD AR'16 HAS WON THE ANNUAL CITY OF DREAMS PAVILION COMPETITION



## NEVER BORING

MARY MANN, A WRITING ASSOCIATE AT THE CENTER FOR WRITING, TALKS ABOUT HER FIRST BOOK, *YAWN*

## CLASS NOTES

ANN HOSFELD A'62  
RETROSPECTIVE  
OPENING SEPTEMBER 1



## IN MEMORIAM

PROFESSOR DIANE H. LEWIS AR'76,  
LONG-SERVING SCHOOL OF  
ARCHITECTURE FACULTY MEMBER  
AND WORLD-RENOWNED ARCHITECT

ADRIAN BURTON JOVANOVIC BSE'89,  
CO-FOUNDER OF THE COMMITTEE  
TO SAVE COOPER UNION AND MEMBER  
OF COOPER'S BOARD OF TRUSTEES

LEO S. KAPLAN, PROFESSOR  
EMERITUS OF SOCIAL AND  
BEHAVIORAL SCIENCES, WHO  
TAUGHT GENERATIONS OF  
COOPER UNION STUDENTS

# ROOTEDU

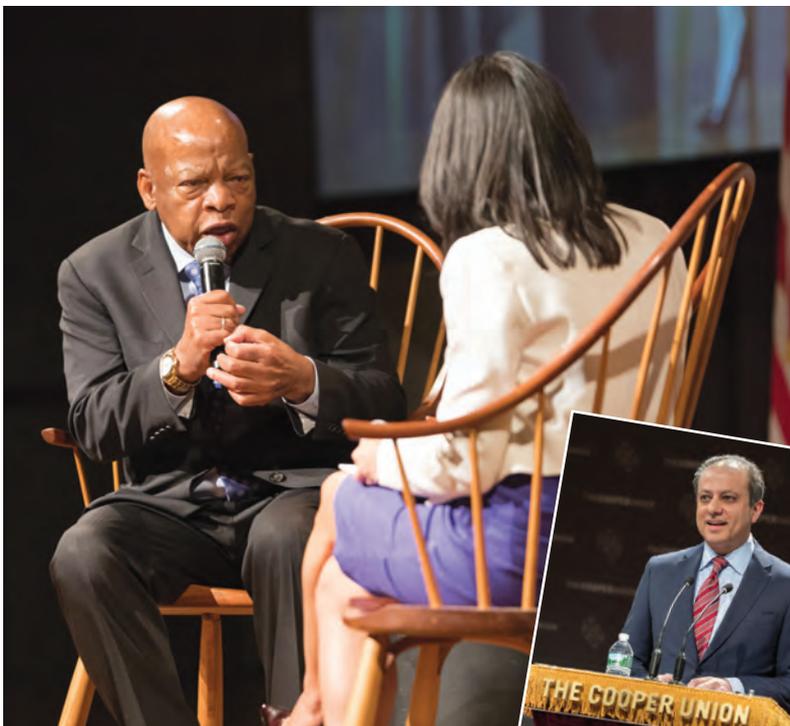


**THIS CAR IS NO LEMON**  
POWERED BY CHEMICAL REACTION, THE "LEMON-AID" CAR TAKES STUDENTS TO A NATIONAL COMPETITION

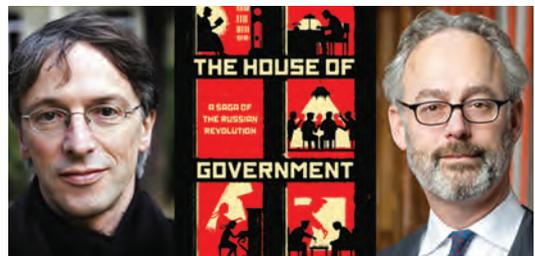
**/AT-COOPER/SUMMER17**



**TYPOGRAPHICS 2017**  
THE 11-DAY "FESTIVAL FOR PEOPLE WHO LOVE TYPE" IN PICTURES



**IN THE GREAT HALL**  
WATCH WHAT CIVIL RIGHTS ACTIVIST REP. JOHN LEWIS (D-GA) AND FORMER U.S. ATTORNEY PREET BHARARA TOLD GREAT HALL AUDIENCES



**IN CONVERSATION**  
HISTORIAN YURI SLEZKINE TALKS WITH NOVELIST AMOR TOWLES IN A FREE EVENT ON SEPTEMBER 12 IN THE GREAT HALL



**BUILDING A BETTER BRIDGE**  
THE COOPER UNION STEEL BRIDGE TEAM PLACED FIRST IN THE METROPOLITAN REGIONAL COMPETITION

# PIONEERING WOMEN



Society of Women Engineers/Walter P. Reuther Library, Wayne State University

**BY CHARLOTTE EGERTON**

**O**n May 27, 1950, a group of women engineers and engineering students traveled from New York, Philadelphia, Boston, and Washington, D.C., to Ringwood, New Jersey. They were off to the first national meeting of the Society of Women Engineers (SWE), hosted at Cooper Union's Green Camp retreat. More than 60 members and 30 guests attended the two-day meeting, which is considered the founding event for the now 35,000-member professional society. Since this occasion, SWE has empowered women to succeed and advance in engineering fields across the country. The Cooper Union has retained strong ties to SWE to this day.

According to the American Society of Mechanical Engineers, approximately 18 percent of students and 14 percent of professionals in all engineering fields are female. For this minority in the classroom and workforce, an organization such as SWE provides resources and benefits unique for women in various stages of their education and careers. While there is still room for closing the present-day gender gap, improvement since the era of SWE's founding has been made. A survey conducted in 1919 showed there were only 139 known women engineering or architecture students in U.S. history. Women did fill engineering jobs during the labor shortage of World War II, but this short-term trend did not change the industry, much less the public's perception that this was a masculine profession.

In the late 1940s, small groups of trailblazing women met on college campuses and in Northeastern cities, laying the groundwork for a larger organization to support females in the engineering and architecture professions, who at the time



Professor Melody Baglione (c) is the current adviser of SWE. Opposite: Inaugural SWE meeting attendees at Green Camp

Marget Long

made up less than one percent of those fields. “These different groups were vaguely aware of each other, but operated completely independently of each other,” says Troy Eller English, the archivist of the SWE collection, housed at Wayne State University.

Here in New York City, women gathered from City College, Pratt, and Cooper Union, among others. One participant was Mary Blade, professor of mechanical engineering at Cooper. Blade was the only female full-time faculty member in the engineering school at the time of her appointment in 1946; she remained on the faculty until 1978.

In 1949, the separately operating districts decided to unify as a national organization for both students and working engineers. “Each of us had a voice on our own, but we realized the more people came together, the more we could do,” recalls Elizabeth Reiman Simons ChE’50. Simons was the only female chemical engineer in her class at Cooper. She remembers always being able to talk to Blade and admiring her as someone truly making it in her field.

With the help of Blade, the SWE members secured space for their first meeting at Green Camp. In addition to Blade, seven members from The Cooper Union attended, including four who served on the convention-organizing committee: Ruth Bowden Gardner CE’50, Phyllis Hicks ChE’52, Evelyn Jetter EE’50, and Simons. That year, Bowden, Jetter, and Simons were the only three women engineers to graduate from Cooper. Numerous other Cooper Union faculty and administrators attended as guests.



Elizabeth Reiman Simons was the only woman in her chemical engineering class

Cable, 1950

Participants enjoyed a rural retreat with time to socialize and meet fellow female engineers. There was also professional development. A panel discussion, “Open Your Own Door to an Engineering Career,” preceded an address by Clara Savage Littledale, then editor of *Parents Magazine*: “Being a Woman as Well as an Engineer.”

This was a primary topic of concern for many attendees. Ms. Simons, who would go on to receive her Ph.D. in chemistry at Yale University and teach at Harvard Medical School for 14 years and then at Boston University for 40 years, struggled with the balance of professional and personal life, as did women in any career. Because it was difficult to find her own female role models, she has spent much of her life as a mentor.

The opportunity to share experiences and receive support from women in similar positions in 1950 was the greatest takeaway from the weekend. Official business was also conducted, including setting membership standards and electing Beatrice Hicks, who would become the first woman engineer hired by Western Electric, as president for the coming year.

More than six decades later, this weekend country retreat holds a significant place in history. While various districts of SWE predated this 1950 meeting—even the convention program referred to the meeting as the “second annual” one—the SWE board later decided that the Green Camp convention was in fact the founding of the organization.

The Cooper Union’s relationship with SWE remains strong; it’s one of the largest student groups on campus, with well over 100 members. When professor Andrea Newmark arrived at Cooper in 1987, she was the only female faculty member in the engineering school. She became the faculty advisor for SWE and has stayed



Margot Long

Sara Wong speaks to prospective students at a Women in Engineering event

***“I saw potential in the SWE events and how much members could grow professionally and personally; I became president of SWE to grow myself and Cooper SWE together.”***

**—Sara Wong ChE’17, Past President, SWE**

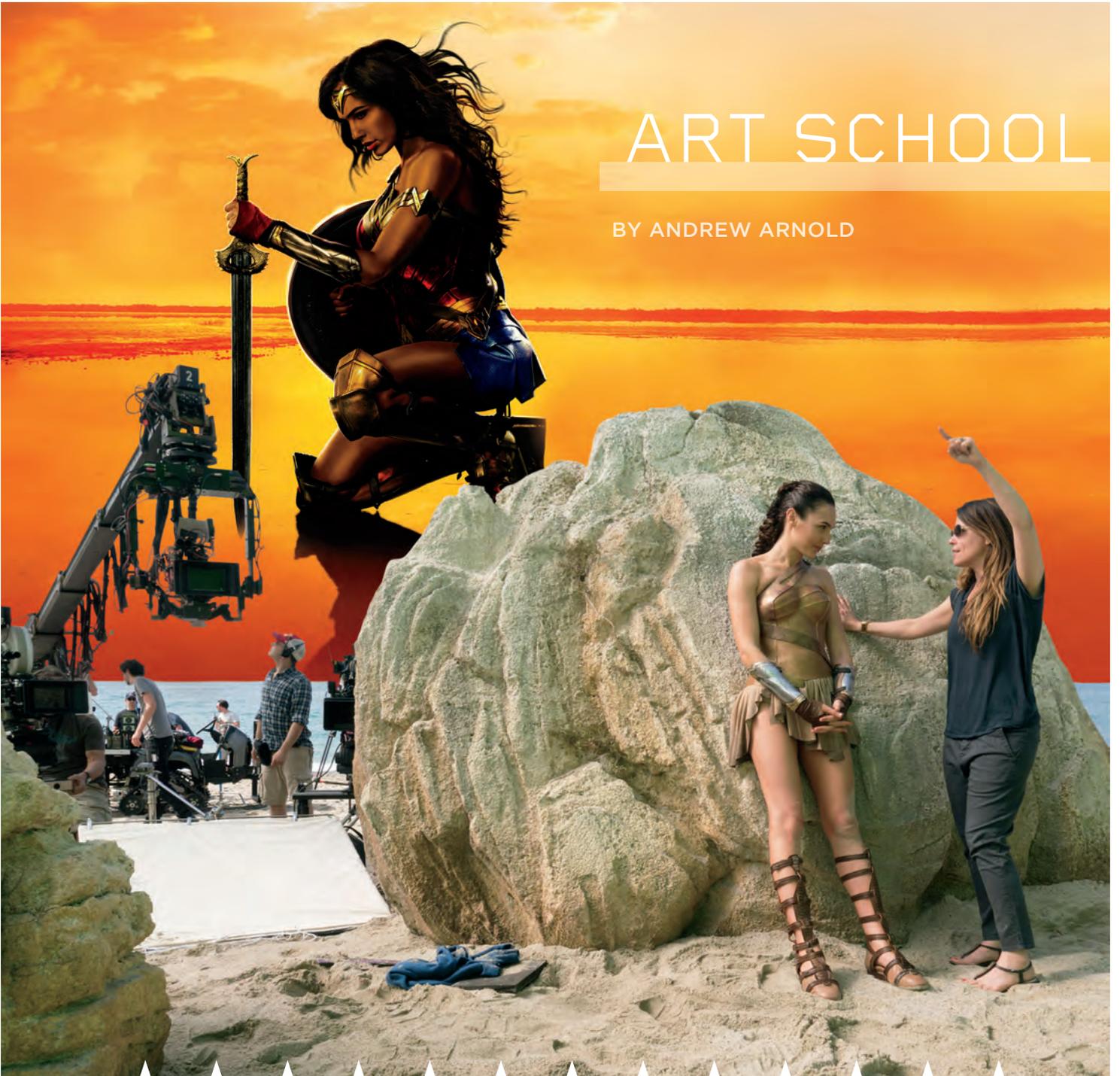
involved since, even after passing the reins to professor Melody Baglione. “I encourage young students to get involved with SWE because females make up only about 20 to 25 percent of our student body,” Newmark says. “It helps to have a supportive network of other young women around to get you through some of the more difficult times.”

The Cooper chapter hosts networking and professional development events throughout the year, as well as an annual community outreach project called Kids in Engineering. It was after this event during her junior year that past Cooper chapter president Sara Wong ChE’17 decided she wanted to take on a leadership role in the organization. “I enjoyed seeing the children’s energy and excitement for STEM activities,” she says. “I saw potential in the SWE events and how much members could grow professionally and personally; I became president of SWE to grow myself and Cooper SWE together.”

Wong finished her presidential term and graduated in May with a degree in chemical engineering. She plans to pursue her graduate degree in the field at U.C. Berkeley this fall. While the structured events and programs have long been useful for SWE members on all campuses, Wong sought to encourage informal discussions among members about what it is like to be a female engineer at Cooper. “Previously there hadn’t been a place where female engineering students could congregate and discuss any issues they had encountered,” she says. “The plan is that these talks and discussions will include faculty later on, and I’m excited to see their future.” This environment of support is also what the early members of SWE were looking for 60 years ago. The challenges for female engineers have changed over the years, but the advice Simons offers still rings true for any student concerned about balance. “You make it work for you, not for what you think the custom ought to be.” ●

# ART SCHOOL

BY ANDREW ARNOLD



The blockbuster superhero movie *Wonder Woman* likely did not escape your notice, due to its omnipresent advertising, its critical accolades, and its popularity. Set in World War I and starring Gal Gadot as the comic book-based Amazonian princess, and Chris Pine as Steve Trevor, the character's longtime love interest, it has grossed nearly \$725M worldwide as of this writing. But one aspect of the film may be unknown to you: it was directed by Patty Jenkins, a 1993 graduate of the School of Art. Not NYU. Not UCLA. She graduated from The Cooper Union. She is "hugely grateful" and has "massive affection" for her training here, she says. So much so that she took the time seven days before the opening of the movie to talk with the magazine of her alma mater.

# SUPERHERO **PATTY JENKINS A'93**

*How did you come to The Cooper Union?*

There are some people who want to become directors from a young age. In retrospect, I never did. All the trappings were around it, but I was incredibly drawn to the arts of all kinds. Even though I was interested in music and drama, I wasn't interested in being a musician or a playwright. But I did love photography and painting. So I focused all my energy on that. I went to a high school [in Kansas] with an excellent arts program and the teacher knew a lot about art school. The brass ring was perceived to be Cooper.

*What was your practice while you were here?*

I got into Cooper for painting and photography but it was in my first year that I took an experimental film course. At the time, Cooper had two programs. It had experimental film taught by Bob Breer and it had a very early video animation program. I enrolled in both and that was it. My head exploded. The second I sat down putting pictures to music, it was the most authentic relationship I had ever had to art. I was like, "I can't stop doing this. I have to figure this out." I then became an independent film studies student for the next three years.

*Your graduation year was singled out as a watershed in the New Museum exhibition, 1993: Experimental Jet Set, Trash and No Star, which featured the Cooper Union art collective, Art Club 2000. What was the atmosphere of the School of Art at the time?*

It was the opposite of where I was, even though I admired it. It was all about irony, side jokes, and very "meta" conceptual art. My work was all about big emotional things. Even in my paintings there were always narratives and some sort of drama.

Photos: Courtesy of Warner Brothers Studios



*How does your experience at The Cooper Union inform your work?*

It informs it tremendously. Often I have been faced with choices to do things in this industry that I am glad I didn't do even though they seemed like good choices at the time because they would have made me a quote-unquote "big director." But I thought, "I didn't come here to be a big director. I don't care about being a director. I'm here to make the pieces of art that I am interested in." As a result, I have had a very intimate relationship with the work that I've done. I don't care about being a director at all. It's a necessary step to get the piece of artwork that I want. If I am successful at being a director, that's great, but that's not why I'm doing it.

*How do you bring your artistic mark to a film that so many people are so heavily invested in, either financially or through their relationship to the history of the main character?*

I brought my mark to it because of this: I do believe sometimes in the commerciality of art. So my aspiration was to make a beautiful film that would also fulfill all the things that would also work for them. That's how these movies work. My aspiration was probably more grandly commercial than theirs ever could have been. Because I wasn't wanting to just make a new installment of something. I wanted to make the greatest superhero movie of all time that is commercial and makes you laugh and makes you cry, etc., etc. There's nothing easy about it. But it ends up being easy in a way to make it a very intimate piece of artwork, because your aspiration is even bigger than theirs.

*If you could bring a sequence of Wonder Woman to a crit, what would you bring and why?*

I would probably bring her walking up through no man's land through her dancing with Steve in the village they help liberate. (I would cut all the action in the middle of her going through the town.) Because no man's land is the one extreme and the dancing is the other end of the grand story I am trying to reach. Great romance and great action, but that action having a character-driven point of view.



Courtesy of Warner Brothers Studios

Connie Nielsen, playing Queen Hippolyta, speaks with Patty Jenkins on set

*What would have been the feedback, do you think?*

I would probably have gotten the same feedback I always got back then, which was discomfort at the revelation of any honest emotion. Because that was what was going on. It was all about laughing and winking and joking.

*How do you feel about your time at Cooper?*

I have a massive affection for The Cooper Union. A huge affection. Because even despite what I just said, that was more about the tone of the art world at the time. Some of which I appreciate. But the tone of the art world was very “too cool for school.” And I remember thinking to myself, “Wow, it’s been a long time since we’ve had a war, if this is what we’re doing with our time. Who’s trying to do anything that matters or is sincere here?” It was the tone of the art world that I was very turned off by. But The Cooper Union was not teaching that. It was teaching fortitude of vision in a kind of brutal way sometimes. But I am deeply grateful for it. And I have deep affection for it. Because the truth is I think I honed my understanding of how serious your point of view and intentions need to be. And how well executed they need to be. And what good execution is. That all started there. So it is a huge gift to have been equipped with the training of an artist. Because that’s what it requires: training. You have to learn the trade of being an artist. And Cooper did that for me, tremendously. Such an inspiration.

*You cite 1978’s Superman as a key inspiration—you saw it at age seven—but that film was rated PG. Wonder Woman is PG-13. Were you thinking about today’s seven- and eight-year-olds?*

I think about it all the time. We live in a day and age where all the superhero movies have been PG-13 and not for kids at all. I actually went out of my way, within the context I am in—we are already set during World War I and the target audience for DC films was already very adult—but I went way out of my way to not be graphic. There is hinted sexuality. But that’s true of *Superman* as well. It’s actually a very adult film, *Superman*. There’s death and there’s talking about underwear. People getting buried under dirt. So I took my cues from *Superman*. Every parent has to choose for themselves. But tons of eight- and nine-year-olds have seen it and not blinked. I was always hoping I could move it as close to 13 as possible, because I knew that they would want to see it. But that was the world I came into.

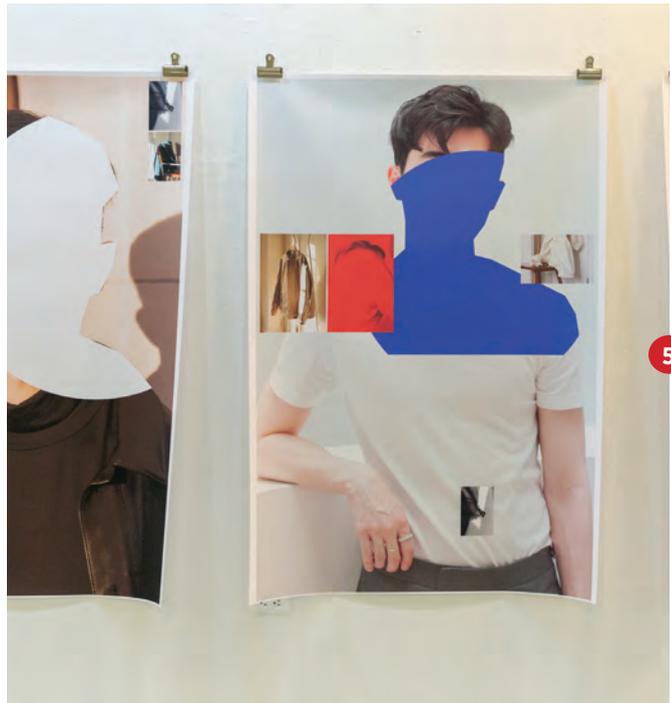
*The cultural context of the film’s release shifted dramatically with the outcome of the presidential election. Did it play a role in the shaping of the film?*

It’s funny, when I went into making the film, obviously, I am super-aware that I am the first woman director of a major superhero release and this character hasn’t been filmed for a long time. But my artistic approach to this movie was definitely to tune all that out. The great victory is to say

*continued on page 24*

# END OF YEAR SHOW '17

The annual student showcase ran from May 22 to June 10. Below is a sampling of the exceptional work presented by students from all three schools.



1. Yelena Khajekian A19
2. Eric Mendoza-Conner EE'18  
engaging with the project "Anima,"  
a computer cursor controlled by  
brainwaves
3. Victory in the annual  
Robot Sumo contest
4. George Rayson A'17
5. Christian Martin A'18
6. Thesis studio
7. Seung Won (Sally) Na and  
Sanjeen Menon show off "Project  
Kutembea," prostheses designed  
for the poor of developing nations
8. Mateo Nava A'17
9. Danil Ashtev A'17 (left)
10. Design III: Fall studio
11. Thesis studio
12. Irie Jasnowski A'17

Note that, per tradition, works from the School of Art are identified only by author and works from The Irwin S. Chanin School of Architecture are identified by studio.



8



Photos: João Enxurto



9



10



11



12

**Patty Jenkins continued from page 21**

that this is not a “female” superhero. It’s a superhero, and you think about the fact that she’s a woman secondarily. And a victory for me too is I hope I will get to be just a director and not always be leading as a woman. That everything I do speaks for all women. It’s so limiting and slightly insulting. As if it’s literally because of my gender that I direct the way I direct, not as an individual. So that was how I approached it, but then as I am coming out into the world it’s shocking. God, we are standing at the center of a real issue.

*Wonder Woman has been the focus of some gender-related internet kerfuffles. Feminists noted her lack of armpit hair as oppressively inauthentic, while a certain male demographic objected to a few “women-only” screenings of the film. What’s been your reaction?*

My mom was a big feminist and it was a big topic of conversation in our house and one that I tried to tune out and leave behind with the idea that I was moving into a future where those things were accomplished. And I felt very confident going into the world, and luckily I benefited from it so that I felt anything was possible for me. But it is shocking to me that all these years later, it’s still such a big issue. I thought we were further along than this.

*Your father was a Vietnam War veteran. Wonder Woman has a World War I setting. Did your father’s experience inform the movie?*

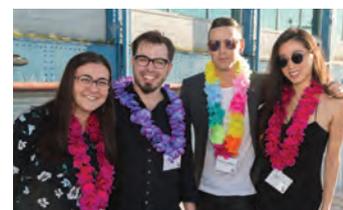
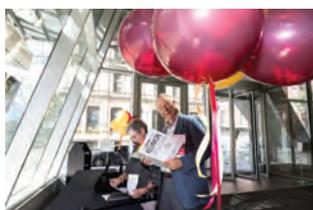
It informs Steve Trevor’s character completely. My father became a fighter pilot because of his very clean, idealistic ambitions to save the world based on what he grew up seeing during World War II. Then my father ended up strafing villagers in Vietnam and having a lot of complex feelings about, “How did I become the bad guy?” So I think that was subtext in Steve Trevor, someone who has been around the block enough to know that they are not quite sure they believe anymore that you can really make a difference, you just have to try. I liked colliding that jaded, human experience with Wonder Woman’s naïve hopefulness. They both change each other. She learns from him that the world is much more complicated and he learns from her that you can still be a hero and save the day. My father was a big influence in that way.

*There is a sequence early in the film where the young Diana learns the history of the Amazons through what looks like an Old Masters painting that becomes animated. How did you visualize that?*

That was the hardest thing I had to do in the whole movie, in a way. This is very related to my Cooper Union years. When I started to approach how I was going to tell that sequence I loved the idea of this painting coming to life. But then, what is that painting going to look like? I know way too much. I have a huge pet peeve. The art in movies drives me crazy sometimes. It was a huge challenge thinking, “How am I going to make the painting in the first place and how am I going to find the right people to work on it?” There is an animation studio in Poland called Platige that had animated a painting, *Battle of Grunwald*. So I found them. Then I needed to find the painter. I found him in Canada, this young artist named Raphael Ochoa. A brilliant artist who also works digitally sometimes. He has an extremely strong understanding of Renaissance lighting. The painting is so vast that I had to get a bunch of other artists under him at the Aaron Sims Company. It was an incredible undertaking. It was all digital. That was the trick. A lot of people worked two years straight. It was one of the last things I approved. ●

# REUNION WEEKEND 2017

CELEBRATING THE CLASSES OF '57, '62, '67, '72, '77, '82, '87, '92, '97, '02, '07, '12

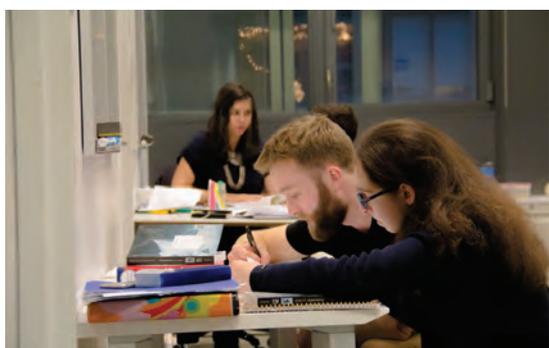


Photos: João Enxuto; Marget Long

We were thrilled to welcome nearly 350 alumni and guests back to The Cooper Union June 2–4 for Reunion Weekend 2017. From the CUAAs awards ceremony on Friday night to Saturday’s engaging talks by Peter Michaelian CE’02, Mike Essl A’96 and President Laura Sparks to back-to-class sessions, a perfect sunset cruise and farewell brunch, the activities did not disappoint. We hope Reunion 2017 was a fantastic opportunity for attendees to relive their days at Cooper while learning more about where the school stands today and its plans for moving forward.

We are seeking alumni celebrating a milestone reunion next summer to volunteer! If you are interested, please email [reunion@cooper.edu](mailto:reunion@cooper.edu) or call 212.353.4164.

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Gabriel Rodriguez-Fuller

### CENTER FOR WRITING

When Kit Nicholls, director of the Center for Writing, first started working at The Cooper Union as a writing associate he was a doctoral candidate at NYU. It was an ideal part-time job with flexible hours and valuable experience working with students. Fast-forward 11 years and Nicholls is now at the helm of the center, which works with students on all types of reading, writing, and speech topics.

“When you’re teaching somebody how to write, particularly in a writing center environment, what you’re really doing is getting down to the core of how people learn and produce new ideas,” he says. “That’s really our focus here—yes, we want our students to

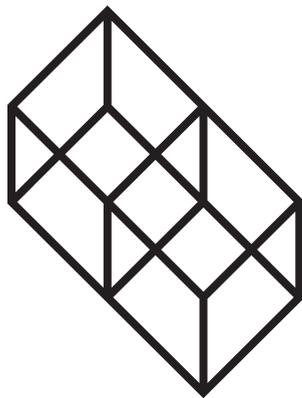
write beautiful sentences and cohesive essays—but to get there, you have to have really good ideas.”

The center is as busy as ever. The most popular offerings are ongoing meetings where students are paired with writing associates and commit to weekly appointments. All writing associates are experienced classroom instructors, with advanced degrees and a special interest in writing pedagogy. Last year, there was a 60-student waitlist for these meetings. About 20 percent of Cooper’s student body takes advantage of the Center for Writing’s resources weekly, resulting in up to 160 hours of meetings per week.

The center also can accommodate walk-ins, but values the relationship formed between the student and the associate. “Each associate figures out what the student needs during the hour meeting, but also, what is the next skill that the student needs? We are working on trying to help the student gain long-term improvement in his or her intellectual ability,” Nicholls says.

The center also started a Writing Fellows Program, which provides a writing associate who works exclusively with one particular school. As writing for art, architecture, and engineering varies greatly, the ability to offer focused assistance is particularly advantageous at Cooper. The fellow is immersed in the writing opportunities and challenges of that specific school, working closely with the faculty to create writing workshops and programming for students. The center is looking for funding to expand this program.

To learn more about how you can support the Center for Writing, or other fundraising initiatives at The Cooper Union, visit [support.cooper.edu](http://support.cooper.edu).



**THECOOPERUNION**

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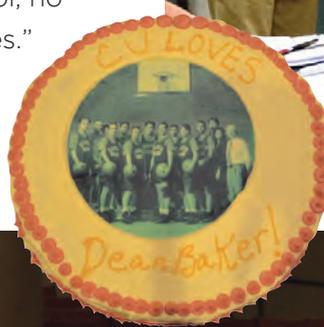
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Dean Baker wrapped up his 51-year career at The Cooper Union with a retirement celebration in the Great Hall on June 22. More than 250 scholar-athletes, colleagues, and friends of Baker attended, toasting to the one who taught them, "No gyms, no courts, no fields, no pool, no horses, no time...no excuses."



Photos: David Minder, Alex Lee

Far right: Guests signed a commemorative poster with Dean Baker's motto



NO GYMS,  
NO COURTS,  
NO FIELDS,  
NO HORSES,  
NO TIME,  
NO EXCUSES



President Laura Sparks and Dean Baker

Far left: Raymond Falci ME'86 with Dean Baker  
Left: Janet Moy and Dean Baker