## ATCOOPER





Welcome to the first issue of a new At Cooper magazine. We are pleased to bring you stories and images that frame the work of our students, faculty and alumni in a format meant to invite your sustained engagement. We hope you will find that this print magazine successfully complements Cooper's offerings via email newsletters and the web, so that we provide a comprehensive view of the intellectual vitality of the institution and its extended community. We pledge consistent, reliable reporting on Cooper's finances and fundraising, as well as strategic efforts to develop a sustainable return to full-tuition scholarships for all undergraduates.

At the start of each academic year, we all feel the joy and hope of new and returning students, who once again fill our classrooms and studios with their ideas

and aspirations. This year, our students were greeted by several new faculty members, profiled in these pages, each of whom brings range and strength to the academic program at The Cooper Union. When the hires are completed later this year, 10 tenure-track faculty members will have joined the ranks of Cooper's four academic divisions, restoring needed teaching capacity. Even as we plan targeted budget cuts to reduce administrative costs, we are proud to sustain Cooper's investment in our extraordinary faculty. Doing so must remain a priority.

This year will be one of substantive change for The Cooper Union. We look forward to welcoming Laura Sparks as president in January (cooper.edu/about/president/). Laura is a leader in the field of community-focused philanthropy. As executive director of the William Penn Foundation, Laura has led initiatives addressing social and environmental challenges in America's fifth-largest city. Laura is an expert in community development finance. As senior vice president for financial services at Opportunity Finance Network, she helped create responsible financial solutions for individuals vulnerable to predatory lenders and increased investment in underserved urban and rural markets. Later, as the director of development finance initiatives for Citi Community Development and Citi Foundation, Laura supported nonprofits working to revitalize neighborhoods and create access to affordable housing and greater economic opportunity.

As we await Laura's arrival, we are embarking on a year of strategic planning, preparatory to our decennial reaccreditation review and to fundraising that can lend crucial momentum to the return to full-tuition scholarships. We have developed a plan for expenditure reductions to occur in phases over the next three years. Taken together with cuts made during the past two fiscal years, these important steps will substantially reduce Cooper's structural deficit. While I believe that our planning has protected Cooper's academic core, the loss of administrative support will entail sacrifices across the community. I hope we can remain open to changes that are inevitable, with the knowledge that we are helping Cooper establish a platform for its sustainable future, one in keeping with its unique legacy of free tuition.

It has been my honor to serve Cooper as acting president during this important period of transition. I look forward to working with Laura Sparks and with the larger Cooper community to ensure the continuing strength of the institution all of us hold so dear. Together, we have a long tradition and a history of achievement to celebrate. Like our new students, we choose to engage optimistically with Cooper, secure in the knowledge that we can shape its future. The stories in this magazine illustrate this larger narrative.

Bill Mea

September 2016

At Cooper | Vol. XLVI, No. 1, Fall 2016 | Published by the Office of Communications | 30 Cooper Square, New York, NY 10003

Justin Harmon | VP Communications | jharmon@cooper.edu
Andrew Arnold | Managing Editor | aarnold@cooper.edu
Mindy Lang | Creative Director | lang@cooper.edu
Angela Starita | Senior Writer | astarita@cooper.edu
Charlotte Egerton | Alumni Communications Manager | cegerton@cooper.edu
Kim Newman | Media Relations Manager | knewman@cooper.edu

# NEW PERSPECTIVES FRESH ENERGY The new assistant professors (I to r): Leslie Hewitt A'00, Neal (Simon) Kwong CE'09,

Joao Enxuto

## BY ANDREW ARNOLD

he Cooper Union will see an influx of seven new full-time tenure-track faculty members across a variety of disciplines in this academic year, with three more likely to be hired by year's end, reflecting a commitment to its current and future pedagogy not seen in many years. The result will be a 20 percent increase in the corps of full-time faculty.

William Villalongo A'99, Lucy Raven, Neveen Shlayan, Raffaele Bedarida and Diego Malquori

"We are restoring needed teaching capacity across Cooper's four academic divisions," says Bill Mea, acting president and vice president of finance and administration. "Even as we plan targeted budget cuts to reduce administrative costs, we are proud to sustain Cooper's investment in our extraordinary faculty. Doing so must remain a priority."



#### **MEET THE DEAN: NADER TEHRANI**

One year after he began as dean of The Irwin S. Chanin School of Architecture, we discussed how it has been going, what goals he has in mind and why he foresees a wider focus for the school, while embracing its site-specific qualities. For the full interview, see cooper.edu/at-cooper.

## What qualities are you seeking in the new faculty?

The way the positions were defined was broad enough to bring in people from the realm of building technologies, from history and theory, from computation and other areas of representation. Given the profile of the school and where it is now we would be interested in people with a commitment to practice. Practitioners are few and far between among the faculty. We would want individuals who establish a serious commitment to practice, research, pedagogy and service. I understand this is a lot. But this is exactly what an academic practice entails. We are not here merely to teach, but also to contribute culturally on more than one level. The job describes an extraordinary type of person, whether tenured or non-tenured. This is an opportunity to imagine a future generation beyond the time when we are here to oversee its leadership.

## How do you see the School of Architecture in the context of other architecture schools?

Two wonderful things about The Cooper Union are its size and its ability to develop a school of thought, which in the age of the internet is a very hard thing to achieve. But through the design studio, Cooper offers the opportunity for an immersive experience as no other place can. In other words, precisely because the internet allows you to be everywhere all the time, certain sacred spaces become a respite from the digital noise that is out there. So I see this is an opportunity to create a space for research that retains just enough insularity so that students can produce truly inventive forms of knowledge, while at the same time studying the transformations of design culture in the world out there with a mediated eye. It cannot be done in an environment of noise.

This fall, the School of Art welcomes Leslie Hewitt A'00, Lucy Raven and William Villalongo A'99, all practicing artists with teaching experience. Neal (Simon) Kwong CE'09 and Neveen Shlayan are joining the civil and electrical engineering faculties respectively at the Albert Nerken School of Engineering. The Faculty of Humanities and Social Sciences (HSS) welcomes Diego Malquori, a philosopher (and astronomer), as well as Raffaele Bedarida, an art historian. The Irwin S. Chanin School of Architecture anticipates hiring new fulltime tenure-track faculty by the spring semester, and HSS looks to add an economist as its third new hire.

In some cases the incoming faculty members bring fresh perspectives to fields already taught. Civil engineering has not filled a new tenure-track position in 30 years, according to Professor Jameel Ahmad, chair of the department. In other cases the new faculty members represent whole new fields. In HSS the addition of a philosophy teacher will be a first. At the school of architecture the impact of the future faculty will be "enormous." says Nader Tehrani, the dean of the school [see

sidebar]. "We currently have three full-time faculty. In another era, we had up to eight. Expanding our fulltime faculty will enable us to share broader administrative and intellectual responsibilities."

In an extensive interview, Mike Essl A'96 [see sidebar], acting dean of the School of Art, says, "The new faculty hires were an opportunity to consider how we can shape the future of the school. What's amazing about the artists we hired is that all three of them could teach across disciplines, which really fits with the generalist model we have at the School of Art, where there are no majors."



**LESLIE HEWITT**, for example, creates works that "invite viewers to experience a unique space between photography and sculpture, interrogating notions of perception and perspective," she says. Her interdisciplinary individual art practice includes works consisting of large-scale photographs that rest inside substantial wood frames that she leans against the wall. She also collaborates with others, most recently with renowned cinematographer Bradford Young. Their project Untitled (Structures) from 2012, a two-channel video installation of a series of silent (nonlinear) vignettes filmed across American historical and imagined landscapes, was installed in various national and international art centers. Having taught as a visiting artist in the School of Art, she says of her teaching: "My goals are to continue to strengthen and improve the courses I teach, to collaborate with my colleagues in order to ensure excellence in the School of Art and to work to sustain a meaningful link between Cooper Union and the visual arts as a point of engagement with and in the world."

Leslie Hewitt, Untitled (Perception), Still Life Series, 2013 © Leslie Hewitt, courtesy of the artist and Sikkema Jenkins & Co., New York





Mike Essl shows off his Foundation Building tattoo

#### **MEET THE ACTING DEAN: MIKE ESSL A'96**

We talked about his background, how he ended up as dean of the School of Art and why he thinks it's time to start supporting Cooper Union again. For the full interview see cooper.edu/at-cooper.

#### So how did you end up becoming dean?

I volunteered. The faculty votes on an acting dean. They officially nominated me and voted for me unanimously.

## Why did you volunteer?

It seems like a funny time to be at Cooper Union. A time with a lot of change. And since I instigated some of that change I felt as if I should step up. Sort of like, "You made a mess, now clean it up" [laughs]. I love the place. If a job needs to get done, I am happy to do it.

## What are your plans as dean?

The thing I think is exciting is that the dean has the potential to help heal the art alumni and bring them back in. I can talk to them about what it would take to get them to come back or donate or help. I don't think there has been a push like that from the dean's office before. I think I am uniquely positioned to do that outreach. I've talked to development and said, "Give me a list of disgruntled people. I'll call every one of them." If I'm back in, they have no reason not to be. At least that's the argument I would make. People ask me every day, should I give to Cooper Union? I used to say, "Wait." Now I say, "Yes."

### Anything else you would like to tackle?

We spend a lot of time in admissions with questions about diversity. I have rarely had those conversations happen when we hire professors. I want to talk to people about how we can do better there. Graphic design, for example, is very white. It's unbelievably white. As dean I would like to help make a change there.



**LUCY RAVEN** is similarly multidisciplined in her artistic approach. She works with animation, installation, sculpture and sound. "I'm currently developing a photographic animation about a sound-making mobile made by Alexander Calder," she says. "The mobile was a collaboration with New York School composer Earle Brown and is meant to be played by a percussion quartet. I was able to document a rare, recent live performance of the piece. I'm working with the recorded audio to structure my edit so that the sound determines

the rhythm at which my photographs of the mobile are animated." Unsurprisingly, her teaching will be multivariant as well, she says. "I'm eager to think about new ways to approach the connections among film, video, animation and sound, as well as possible relationships between distinct departments, such as how sculpture and film, or drawing and video, might connect."

WILLIAM VILLALONGO describes his narrative figurative paintings and drawings as "set in a utopian landscape in which nature and people negotiate their form. I employ satire, mythology and fiction to rethink dominant narratives of history. I am concerned with expanding limited representations of the black figurative image in painting." The Painting Lesson, a large work on a wood panel, depicts a group of women painting a central figure who evokes Josephine Baker and her famous banana skirt. But the artists are creating abstract works. Of his goals as teacher he says, "I believe that in an educational environment, goals develop out of dynamic engagement with students, faculty and staff. My personal goal is to share my experience, knowledge and personality within this dynamic and help

produce conversations that bring it strength and complexity."

Among the engineering faculty, **NEAL (SIMON) KWONG** will be the first graduate of the civil engineering program to return as a fulltime faculty member. "Simon brings a much-needed fresh perspective and energy to the department," says Jameel Ahmad, professor and chair of the CE department. "Because of his strong background in structural engineering and earthquake engineering, Simon will contribute to the CE faculty expertise in structural dynamics, resilient infrastructure, applications of probability and statistics, and finite element analyses." Professor Kwong has lately been working to quantify the seismic risk of buildings with less complexity and computational effort. Of his time here, he most looks forward to "the opportunity to give back to the students and the institution, just as they did to me when I studied here as an undergraduate," he says.

Above, top: A still from Lucy Raven's Calder piece Above, bottom: William Villalongo, The Painting Lesson, 2012 **NEVEEN SHLAYAN** joins the electrical engineering faculty as an expert in cyber physical systems, a computational field that weaves together hardware, software and networking. Self-driving vehicles may be the best-known application of such systems. Professor Shlayan has been conducting research in a related discipline. "My current project involves the development and deployment of cost-effective Bluetooth and Wi-Fi sensor networks for anonymous pedestrian detection," she says. "The main objective of this study is to explore the various ways transit rider data can be used and to develop data-driven pedestrian modeling and parameter estimation techniques in order to enhance the performance of public transportation systems." Her plans for teaching seem to mirror her research in smart movement. "Observing students and faculty is an essential step for me in my attempt to become an effective teacher," she says. "I find that teaching is an ongoing journey of learning."

The third group of new faculty will be joining HSS, an addition William Germano, the dean, is "thrilled" about. "RAFFAELE BEDARIDA has taught with us for a couple of years but will now be full-time," he says. "Professor Bedarida is a popular teacher, and with good reason: his enthusiasm and knowledge of 20th-century art carry over beyond the classroom. Bringing him on gives the college the continuous presence of a scholar-teacher committed to the study of modern art, which is critical for our students." Professor Bedarida particularly focuses on art and politics. "I am especially interested in the exchange of contemporary art exhibitions

between countries as a form of cultural diplomacy," he says.
"I like this approach because it is discursive and transnational.

It also helps historicize and revise dominant art-historical narratives. I have enjoyed the intensity of class discussions with art students on the relevance of key art-historical questions from a contemporary perspective. As a full-time faculty member I would like to extend that conversation outside the classroom and beyond art students."

**DIEGO MALQUORI** arrives as the very first assistant professor with a philosophy degree at HSS, a field he arrived at after getting his first doctorate in astronomy, studying the evolution of galaxies and of the whole universe. "Yet, even at that time of completing my Ph.D., I clearly felt that what is important is not the object of our gaze, but the very attitude of humanity facing that infinite," he says. "Thereafter, thanks to a work on the concept of time—where I explored the difference between 'physical' and 'intuitive' time—I started thinking about the expression of temporality, focusing in particular on contemporary art." He is impressed with The Cooper Union's "strong willingness to create a multidisciplinary environment," he says. "I hope to offer my scientific and humanistic knowledge to cross boundaries and to encourage students' critical thinking. I believe that such a multidisciplinary approach is crucial to discussing many important questions, such as the role of science in our society, the relationship between science and life or the meaning of art in our time."

Center for Italian Modern Art in NY

## DESIGNING SOLUTIONS

BY CHARLOTTE EGERTON



Frank Oudemann

bout a mile northeast of The Cooper Union lies a 21-building housing development bearing a familiar name: Peter Cooper Village. The development opened in 1947 alongside Peter Stuyvesant Village, or "Stuyvesant Town," as an affordable-housing option for veterans. While the development was not without controversy—it was an urban renewal project with early discriminatory policies—Peter Cooper Village and Stuyvesant Town provided over 11,000 affordable apartments on the East Side of Manhattan.

The two developments were sold last October, but not without a historic agreement between the for-profit buyer and the city to preserve 5,000 of the units as affordable for the next two decades. The preservation of parts of Peter Cooper Village and Stuyvesant Town as affordable housing was celebrated by residents and nonresidents alike as a major achievement for a city in the midst of an affordablehousing crisis.

Nationwide, nearly 50 percent of households that pay rent spend more than 30 percent of their income on housing, an amount considered "cost-burdened," according to a 2016 report released by the Joint Center for Housing Studies of Harvard University. In New York City the percentage of cost-burdened renting households is at least 55 percent according to a similar report in 2015. In response to the growing affordable-housing crisis, New York City's mayor, Bill de Blasio, announced his ambitious 10-year housing plan, which he says will produce or preserve 200,000 affordable units in the five boroughs.

Opposite page: The Nehemiah Spring Creek townhouses in East Brooklyn

Below, top: John Clarke Below, bottom: Alexander Gorlin

Right: Rendering of Block 3 Lofts, Roebling Block 3 in Trenton, New Jersey





Clarke Caton Hintz

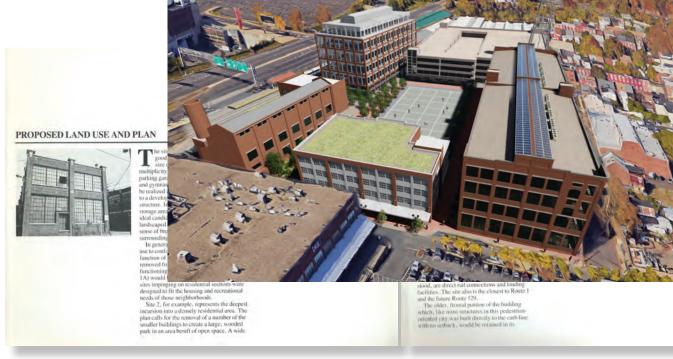


It comes as no surprise that alumni from The Cooper Union have worked to make housing affordable nationwide for years—from architects and planners to real estate developers and community advocates. We reached out to two of them to better understand the challenges and rewards of the work. John Clarke AR'66 and Alexander Gorlin AR'78 both built practices that integrated affordable housing in different ways.

The affordable-housing business isn't easy or glamorous, but for John Clarke it is an important part of the housing market in New Jersey, where he lives and works. As an architect and planner, he pieces together the financial and physical components that make these projects feasible. Alexander Gorlin, whose practice is based in New York City, has worked for years to make striking design and functionality as important for lower-income housing as it is for market-rate housing. Both can pinpoint experiences at Cooper that got them into the field.

Clarke and Gorlin attended what is now The Irwin S. Chanin School of Architecture during the tenure of the school's most formative figure, Dean John Hejduk AR'50. Clarke began as a student prior to Hejduk's arrival as a professor in 1964. "The character of the school changed quite dramatically when Hejduk appeared on the scene," Clarke recalls. "He brought a degree of enthusiasm and intellectual rigor that was really wonderful to experience." Hejduk made connections between architecture and culture, environment and politics, introducing more socially conscious projects in courses. Clarke also credits his housing professor, Lewis Davis, for valuable practical experience through an internship at his firm, Davis Brody Bond. There Clarke worked on a social-housing project called Waterside; this was his first foray into affordable housing.

After receiving his master's degree in urban planning at Columbia University Clarke became the director of planning and development for the city of Trenton, New Jersey in 1973. He quickly learned that his skill set as a planner/architect was



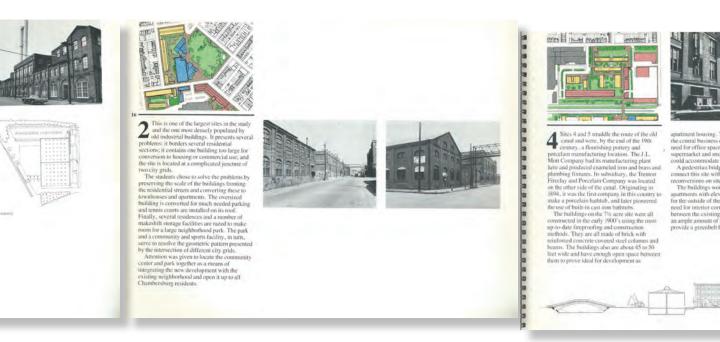
Trenton Industrial Corridor Study; Rendering of Block 3 Lofts, Roebling Block 3

marketable in the state. "In New Jersey, planning is a very particular expertise. The laws and regulations are very complex," he says. "The discipline of planning helps architects have a broader picture of what we're doing."

Clarke continued in public service until 1979, when he left to start his own architecture and planning firm, Clarke Caton Hintz. Headquartered in Trenton, the firm works on a wide array of design and planning projects in urban areas of the state. Clarke is currently an emeritus partner after a long career as the director of architectural operations.

Housing-both from the planning and architectural standpoints-has always been a component of the firm's work. But our neighbors in New Jersey live with a unique housing policy dictated by a 1975 state Supreme Court decision referred to as the Mount Laurel doctrine. The doctrine mandates that each municipality in the state provide a variety of housing types for mixed-income residents. The decision stands today as one of the most well-known policies for prohibiting the use of zoning laws to create discriminatory housing practices and still affects new housing developments in the state. It also keeps Clarke Caton Hintz's planning division in business and his designs creative.

"It's easy to say but incredibly difficult to implement," Clarke says of the logistics of the Mount Laurel doctrine. "In order to make affordable housing in New Jersey, you have to use a mixture of assistance programs." One program Clarke uses with frequency is a historic-preservation tool. "The tax credit that you can get for historic projects is really a key factor in making the finances work for housing," he says. Clarke's firm has implemented countless projects using both state and federal historic-preservation tax incentives. Using these financial incentives makes the project affordable for the developer, but in turn requires Clarke Caton Hintz to adhere, in the restoration, to specific standards set by the secretary of the interior.

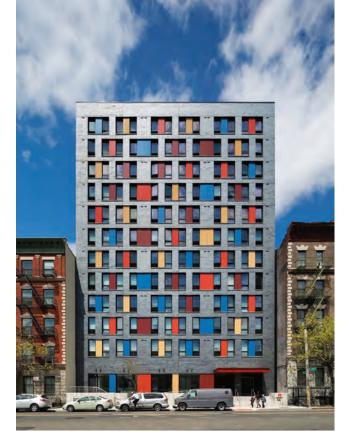


Rather than viewing an existing structure as restrictive, Clarke sees a design freedom that comes with using a historic building for a low- to moderate-income project. One example is the historic John A. Roebling's Sons Company manufacturing complex in Trenton, a longtime project for Clarke. The Roebling factory even has ties with Cooper Union: Peter Cooper enticed John Roebling to build the complex in Trenton alongside his expansive iron mill.

The project, which Clarke starting working on while director of planning and development, involves rehabilitating early-20th-century brick factories alongside New Jersey's Route 129 into a mixed-use development with various housing types. The structure and volume of the Roebling buildings allowed greater creativity in transforming the space into apartments. Since each floor of the building measures 18 feet high, the architects designed duplex units with interior staircases and massive loft windows. The resulting industrial-chic feel and incredible natural light are elements typically out of reach for low- to middle-income residents.

Under the co-instruction of Clarke and faculty members who included Professor Diana Agrest, students designed new uses for the six buildings on the site by drawing on their history. "The goal was for students to learn how to approach urban problems from an architectural perspective, and by doing so, learn to work at different scales," recalls Agrest. Their proposed plan included housing and community services, stating "Many of these new uses can be realized at a cost that would be prohibitive to a developer working with no available structure." Paid for in part by a National Endowment for the Arts grant at the time, the project resulted in a book, still available today.

This type of project reflected the pedagogy of the school when Alexander Gorlin enrolled, right out of high school in 1973. Gorlin also credits Dean Hejduk for teaching him how architecture had a larger scope. "We learned how architecture







Boston Road housing exterior; the wavelike ceiling in the lobby mimics the geology and topography of the original site

could connect to other cultural fields. The program also taught how to use architecture as an instrument to help society," he recalls. A course focused on housing was key. "I think that's when I discovered housing was equally as important to pursue as other types of architecture."

After completing his master's degree at Yale, Gorlin worked for I.M. Pei, then Kohn Pederson Fox. He took the opportunity to found his own firm after his first commission—a house for the then editor of Vogue magazine. With that, Alexander Gorlin Architects quickly grew, developing an extensive portfolio of luxury home designs. While the wealthy clients helped sustain his office, the lessons he learned at Cooper stayed with him. "I thought I should use my talents to help more people," he says. "Architects have an obligation to help society at large, rather than just create form for individual, wealthy people."

In 2000, he took the initiative and set up a meeting with the commissioner of NYC's Department of Housing Preservation and Development, who gave him a list of housing developers to contact for an affordable-housing project.

Gorlin's reputation as a housing designer helped him land a project with the Nehemiah Corporation, which wanted to develop affordable prefabricated housing in Brooklyn. Sixteen years later, Gorlin is still working on the Nehemiah project in the East New York and Brownsville neighborhoods. The project will provide 500 townhouses for first-time homebuyers. As the author of the book *The New* American Townhouse (1999), Gorlin paid special attention to the design of the homes, even though the budget differed greatly from those of his usual clients. "You have to use ingenuity to do housing on a very low budget," Gorlin says. His greatest low-cost design element? Color.





The Brook building exterior; outdoor spaces offer a tranquil place within the urban setting

"Color is a traditional way of distinguishing one house from another," explains Gorlin. The development is named for the biblical figure Nehemiah, a prophet who helped rebuild Jerusalem. Therefore, Gorlin created a color scheme that related to the 12 foundation stones of New Jerusalem. "The colors made it lively along the façade, but it has this second meaning that relates to Nehemiah," Gorlin says. He also convinced the developer to use back-alley parking so the units could become modern interpretations of brownstones where people could meet on the stoops and converse.

Gorlin used significant colors to animate the façade of his Boston Road project as well. It is in the area of Morrisania, the historical name for the South Bronx, named for Declaration of Independence signer Lewis Morris. To represent the area's history, Gorlin used vibrant reds, blues and yellows appropriate to that time period. "I always like to have a narrative story to animate the building," Gorlin says. "These colors are related to context, site and program."

Gorlin has also made a name for himself as a designer of community centers and "supportive housing." Supportive housing has community services on the ground floor, including social services, job placement centers and healthcare. Gorlin's experience with high-end clients helped him visualize these projects. "It's just like on Park Avenue where you have your doctors, psychologists and dentists right downstairs. Supportive housing is a different version of that for people who can't afford these services," he says.

One project in particular is the Brook, a six-story building on Brook Avenue in the Bronx with 190 affordable units for the formerly homeless and people living with HIV/AIDS. Another project in the Bronx, the Boston Road development, has 154 units for formerly homeless residents, many of them seniors. Gorlin says he concentrated on communal spaces in the building's interior layout, providing residents with space to grow as a community. He also applied this concept to existing public housing in New York City by designing a new community center at McKinley Houses in the Bronx.

Today at Cooper, urban issues continue to play a major role in both undergraduate and graduate architecture education. A specialty of the master's program is urban studies. "Housing certainly is one of the subjects within that context," Agrest says. Both Clarke and Gorlin understand the challenges to entering the field of affordable housing, but hope the next generation of architects will pursue such projects. "As an architect, when you become a specialist in something you tend not to expand what you're doing," Gorlin says. "Everyone should do more but you have to seek it. It doesn't come to you."

## ONCOOPE



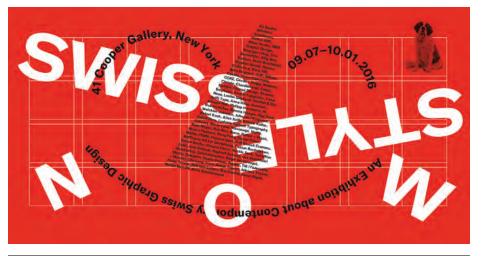


## **INCOMING 2016**

MEET NINE OF THE NEWEST
MEMBERS OF THE COOPER
STUDENT BODY AND FIND OUT
HOW THEY GOT HERE

### COOPER TO COOPER

THE SECOND IN A VIDEO SERIES FOCUSING ON INTERDISCIPLINARY CONVERSATIONS. SEE "TOY TALK" ON THE USE OF TOYS AS TOOLS IN BOTH ARCHITECTURE AND ENGINEERING





### **CLASS NOTES**

JOSHUA PINES EE'78 ELEVATED TO FELLOW BY THE SOCIETY OF MOTION PICTURE AND TELEVISION ENGINEERS

## INSIDE SWISS STYLE NOW

A TALK WITH THE CURATORS OF A GRAPHIC DESIGN EXHIBITION IN 41 COOPER GALLERY



## MY SUMMER IN MEXICO CITY

A COLLABORATION BETWEEN THE MEXICAN ARTS ORGANIZATION SOMA AND THE SCHOOL OF ART GAVE SEVEN STUDENTS A 10-DAY DIVE INTO THE LOCAL ARTS SCENE THERE



## WHO SHOT SPORTS

GAIL BUCKLAND TALKS ABOUT CURATING AN EXHIBITION OF SPORTS PHOTOGRAPHY AT THE BROOKLYN MUSEUM

## ROTEDU



## THE CONSTITUTION TODAY

AKHIL REED AMAR ON HIS FREE 10-SESSION COURSE RUNNING WEEKLY THROUGH NOVEMBER IN THE GREAT HALL

## /AT-COOPER/FALL-2016



#### THE IRWIN S. CHANIN SCHOOL OF ARCHITECTURE

M.ARCH II 2016: A PHOTO ESSAY OF THE 2015-16 ADVANCED DESIGN STUDIO GRADUATE THESIS WORK



## WOUND: MENDING TIME AND ATTENTION

CONCEIVED AND DESIGNED BY CAROLINE WOOLARD A'07, THE EXHIBITION AND STUDY CENTER ARE OPEN THROUGH NOVEMBER 11



## WINDOWS ON THE BOWERY INVENTION FA

COOPER STUDENTS AND STAFF DESIGNED 64 POSTERS HUNG ALONG THE THOROUGHFARE, REVEALING ITS HISTORY

## **INVENTION FACTORY 2016**

THE FOURTH ANNUAL INCUBATOR FOR STUDENT INVENTIONS RESULTED IN A TREMOR-REDUCING SPOON TAKING TOP PRIZE

## BATHROOM CONFIDENTIAL







Newly designed restroom signs noting plumbing, not gender

ast spring, The Cooper Union made national news when it became the first college in the country to remove gendered signs from all of its bathrooms. Acting President William Mea made the announcement in a collegewide email that laid out why it was important to make this change, noting Cooper's tradition of innovation. "We have always been ahead of our time and we must continue being leaders on issues of social justice."

Bill Mea's decision came after extensive conversation with students who objected to the school's bathroom signs, deeming them hostile to transgender people and anyone who doesn't identify with binary gender categories. A group of about 50 students-cis- and transgender-had been working to change the bathroom signs for two years. Rio Sofia, now a senior in the School of Art, pointed out that violence against transgender people, particularly those who are black, Latino or indigenous, is rampant. Cooper's de-gendered bathrooms are a simple way to minimize, if only slightly, the sorts of hazards transgender students face on a daily basis.

Ellen Lupton A'85, co-author of The Bathroom, the Kitchen and the Aesthetics of Waste with her husband, J. Abbott Miller A'85, isn't surprised that the very practical concern of bathroom access has become a vehicle for a larger discussion about transgender equality. She says that bathrooms have frequently been the locus of human rights struggles. "Historians have shown that providing public bathrooms to women in the late 19th century and early 20th century was a big part of the women's rights movement, because women couldn't go to work or move about freely in society if they didn't have access to toilets," Lupton says. "Access to public toilets was also important to the struggle for African-American civil rights."

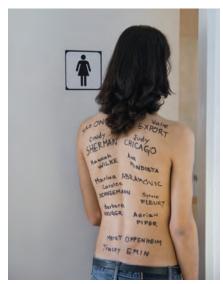
Cooper announced the gender-neutral designation of a few single-occupancy bathrooms in 2014 after the Office of Student Affairs was approached by a group of students who submitted a proposal for such facilities.



"Neutrality relies on the logic that
there are two poles defining gender:
male and female, masculine and feminine.
It relies on a lot of gender essentialism
and erases the experiences of people
who are nonbinary or intersex, as well as
non-Western and indigenous people
whose relationships to gender may be
constructed differently."
—Rio Sofia, student activist



Just over a year later, a major exhibition opened in the 41 Cooper Gallery. Called Bring Your Own Body, it presented work from transgender artists and archives. "Over a month of trans-centered public events, the inadequacies of the restroom policies were thrown into even sharper relief," Stamatina Gregory, the exhibition



Effv Beth. Una nueva artista necesita usar el baño (A new artist needs to use the bathroom), 2011, photograph from Bring Your Own Body, exhibition at The Cooper Union, fall 2015

co-organizer and associate dean of the School of Art, says. "Students' handmade printed and laminated signs would disappear overnight, and by the end of the show, we'd hurriedly tape up sheets of notebook paper reading 'Bathroom' so as not to alienate our audiences. Thankfully, Cooper students are no strangers to direct action."

The gender-neutral designation was then expanded to several more single-occupancy bathrooms. At that point official signage became an issue. Mindy Lang A'82, Cooper's creative director, was called on to create new signs for the de-gendered single-occupancy bathrooms. She did some research on images used to signify a "unisex" washroom, and discovered that they were miserably lacking. One, for instance, shows a lone figure split vertically to indicate a half woman/half man (the former indicated by the telltale A-line skirt). She found such solutions insulting, so she settled on a sign that simply

showed a toilet with the label "GENDER-NEUTRAL RESTROOM."

Two months later, administrators organized a meeting in The Great Hall open to the entire student body to discuss concerns of the transgender community at Cooper. "The event was in response to the Joint Student Council passing a resolution asking for all restrooms to be de-gendered and then some students pushing back,' Chris Chamberlin, dean of students, says. "We brought in facilitators to help the students and campus learn about trans issues and help come up with a common language and frame the issues that the community was tackling."

Bill Mea sent out a schoolwide email a few days after the December 2015 meeting, in which he noted that while some people on campus had been thinking about bathroom accessibility for years, for others the questions were new ones. He proposed that the school maintain the all-gender single-occupancy facilities as well as the male and female bathroom designations. But these last would, as he put it, "include signage noting that the restroom is open to anyone who feels that the use of that restroom matches their gender identity and also noting the location of private all-gender restrooms in that building." He made a point of asking students to contact him to voice their opinions about his proposition.

But student activists felt this was a half measure that still didn't address the essential issue of needlessly applying gender considerations to a public facility. They decided to pull down the existing signs, replacing them with ones of their own marked simply, "Bathroom:)" or "De-gendered." Sarah Schmitt, now a senior in the School of Art, told The Guardian in 2016 that the Cooper administration had hesitated to change bathroom signs, arguing that the signs alone wouldn't change

## "We brought in facilitators to help the students and campus learn about trans issues and help come up with a common language and frame the issues that the community was tackling."

## -Chris Chamberlain, dean of students

how other bathroom users would treat transgender students. "And what we said was, it doesn't really matter if it changes right away. The icon on the bathroom is no longer validating that policing."

Instead of immediately reacting to the student-improvised signage, Bill Mea left it in place to gauge how the community reacted. What the administration discovered was that few people were uncomfortable with the change, with most choosing to use the same bathrooms they always had.

In March 2016, Mea decided that his initial response—to create universal access only for single-occupancy facilities—was a "compromise" he found to be "increasingly difficult to reconcile with what I believe to be right and just." So he declared that all of the school's bathrooms would remove gender language.

It was back to the drawing board for Mindy Lang. This time around, she says, she had a better sense of why students objected to the expression "gender neutral": it assumed that gender mattered at all. For the new signs, she expanded her research and saw that even the most progressive institutions included the word "gender" in their signs. Instead, she opted for signage that simply described the contents of the room—stalls and urinals, stalls only, or single-occupancy restrooms.

Rio Sofia is pleased with the new signs because they don't impose anyone's idea of what gender should or shouldn't be. "Neutrality relies on the logic that there are two poles defining gender: male and female, masculine and feminine," she says. "It relies on a lot of gender essentialism and erases the experiences of people who are nonbinary or intersex, as well as non-Western and indigenous people whose relationships to gender may be constructed differently." Sofia believes that the idea of a "unisex" bathroom, while often well intended, depends on the same notions of gender as male and female ones.

While the students, faculty and staff had been blasé about the change, the international media took notice with features about Cooper's facilities in *The Chronicle of Higher Education* and *The Guardian*, and especially on various internet discussion spaces such as Reddit.

Meanwhile, the rest of the world started catching up to The Cooper Union. In March 2016 Mayor Bill de Blasio ordered that all city-run gendered public bathrooms guarantee access consistent with an individual's own gender identity. In May, President Obama ordered that all public school bathrooms also guarantee access according to gender self-identity. Then in June a New York City bill was passed requiring all single-occupancy bathrooms in all public spaces, including privately owned businesses such as bars and restaurants, remove gender-specific signage.



Poster from a recent New York City ad campaign to explain the new law regarding access to bathrooms

AT COOPER | FALL 2016 17

## ASTOR ALIVE!

The city's Department of Design and Construction has mostly completed its renovation of the Astor Place/Cooper Square area, three years after preconstruction work began. While some landscaping had yet to be completed, the neighborhood celebrated with a two-day street festival in September. The changes brought to Cooper's unofficial campus include a redesigned park south of the Foundation Building with multiple entrances to promote pedestrian flow. Traffic has also been reconfigured to create a wide car-free plaza along the western side of Cooper Square between East Fifth Street and East Sixth Street. Astor Place has been given a similar treatment with more space for those on foot, including tables and chairs. Visitors will now be able to spin The Alamo, Tony Rosenthal's famous cube sculpture, without crossing traffic to a pedestrian island.





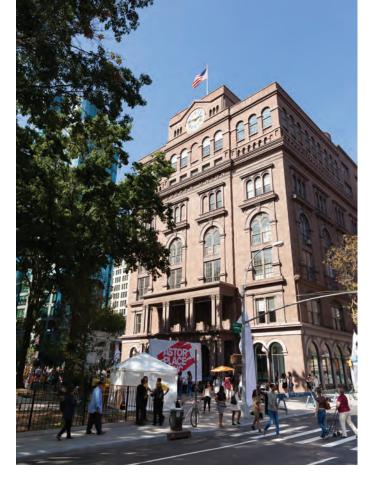


Eating lunch in the new Astor Place Above left: Poco a Poco, The Cooper Union's chamber orchestra, performs





A colonnade window display pays homage to the "cube" sculpture



The steel bridge team demonstrates its prize-winning skills





















# \_EGITIMATE MUTANTS BY ANGELA STARITA

he projects sound fantastical: urban beehives collecting microbes to be genetically sequenced and rendered for an exhibition at the Venice Architecture Biennale; a mobile application that monitors every move of the user in order to connect two strangers on earth for 20 days; an open-source system for education that blurs the lines between science and art.

But these are all real ventures designed by Cooper Union graduates in various roles at the MIT Media Lab, in Cambridge, Massachusetts. To Professor Kevin Slavin A'95, it comes as no surprise that he, Kim Holleman A'95 and Devora Najjar ChE'16 found their way there, taking on projects that defy traditional categories of academic research; "the Media Lab looks to attract mutants that live between art, engineering, design and science," he says. "Cooper Union produces some of those mutants."

The MIT Media Lab, which opened in 1985, acts as both a research facility and a degree-granting institute. Rooted in using technology to positively affect how we live, it has been behind many advances across a spectrum of industries and disciplines. Products that incorporate aspects of Media Lab research include the e-ink used in the Amazon Kindle, MPEG-4 Structured Audio, Seat Sentry sensors for airbags, optigenetics, BiOM—a lower-leg system for amputees—and the Guitar Hero video game series, among dozens of others.

The Media Lab currently consists of 27 research groups, including Playful Systems, founded and led by Kevin Slavin, who is also an assistant professor of media arts and sciences at MIT. The goal of Playful Systems is to build narratives, games and stories to make complex systems visible, as opposed to reinforcing the unseen networks (financial, technological and even ecological systems) that gird much of our world. As the group's website puts it, "Playful systems embrace complexity rather than conceal it, and seek to delight, not disappear."

Above: A phylogenetic visualization of material collected from a hive in Brooklyn, made by Devora Najjar ChE'16



He uses the example of Pokémon Go to describe how digital and physical worlds are fully enmeshed in 2016. In the wildly popular mobile game, you must travel to physical destinations in order to capture and battle digital monsters through an app on your phone. It draws on 20 years of research in location-based games, a field in which Slavin is a pioneer. "To design or deploy something along those lines, you wouldn't go to architecture school and you wouldn't go to a game-design practice. The action is in the spaces between them," Professor Slavin says. But for Slavin, games are not the ends in themselves: he believes that the lens of play instigates curiosity about the underlying structure of any system, such as neurology or electronic networks.

Among the projects researched in Slavin's lab, several themes reoccur: the mediation of time by technology; the relationship between the physical and the digital; and ways to reveal our cities and people around us. In the prototype for the game "Case and Molly" (created with Greg Borenstein), one player moves through physical space using a smartphone while the other experiences her point of view using a virtual-reality headset and transmits pieces of information to help her navigate her way. "Tools for Super-Human Time Perception," a project of Slavin's student Che-Wei Wang, suggests that if a diminished sense of time indicates a brain disorder, tools designed to increase time perception could reverse that condition. Slavin's lab has collaborated with other research groups as varied as the Weill Cornell Center for Physiology and Biophysics and the MIT Dalai Lama Center for Ethics and Transformative Values.

For "Holobiont Urbanism: Revealing the Microbiological World of Cities," Slavin and his research assistant Miguel Perez pioneered the technique and practice of sequencing urban metagenomic data from genetic material gleaned from beehives in Sydney, Venice and Brooklyn. Devora Najjar, a recently graduated chemical engineer, joined the project while still a Cooper Union senior in 2015, playing a crucial role in its success.







Najjar met Slavin when she served as The Cooper Union's first student representative to the board of trustees, where Kevin Slavin serves as an alumni trustee and vice chair of the board. "Devora is the kind of legitimate mutant we need," he says, by way of complimenting her enormous intellectual curiosity, which spans several disciplines. He suggested to her that she join the Holobiant Urbanism project team. Her work extracting and sequencing the DNA of beehive biomes culminated with an exhibition in the 2016 Venice Biennale in which Slavin's team created urban microbiological landscapes. The exhibition included a functioning beehive at the Palazzo Mora, along with visualizations of the data the bees were providing.

Najjar decided to pursue graduate studies at the Media Lab, applying to Professor Kevin Esvelt's Sculpting Evolution Group, where she'll work on a project that proposes using genetic modification to control Lyme disease. Mice, the primary "reservoir" of the bacterium causing the disease in the Northeast (passing it on to ticks that then bite humans) would be genetically immunized against the disease. The experiment will be rigorously tested in a controlled environment, and then, if successful, brought to Nantucket. The group met with residents of Nantucket, where 40 percent of the population has suffered from the disease, to gauge public interest and concern.

"We are trying to create projects that are very community-oriented and consensusdriven with a focus on education and engagement with parties who are going to be affected by these projects," Najjar says. "We're trying to open up the conversation that genetic modification isn't an evil thing, it's a tool that can be used for good or for bad."

What is particularly fascinating for Najjar is the notion of a "gene drive," a mechanism that secures the heritability of a genetic modification, making the impact of that alteration greater in the ecosystem. "This is the first time ever that we have













Above, from I to r: Devora Najjar ChE'16; installation shot of exhibition at Palazzo Mora for the Venice Biennale; a visualization of the microbial data mapped back on the city of Venice; materials beehives collected by Najjar

Right: Kevin Slavin A'95 giving a TED talk in July 2011

the possibility of modifying wild populations. With other techniques, the genetic edit effectively fades away due to decreased fitness," she says. Professor Esvelt's lab is also working on ways to control the number of generations in which modifications continue and how to reverse or end those alterations.

Kim Holleman also works with the Media Lab, as a research affiliate in the Social Computing Group, dedicated to "creating sociotechnical systems that shape our urban environments." Holleman's art forcefully advocates for making the natural world an integral part of education and people's daily lives, city dwellers included: "What I do is design with

Below, from I to r: Kim Holleman A'95; Trailer Park parked on a city street; interior of Snowdrop Montessori School in Cambridge, Massachusetts; interior of Trailer Park



Besides his lab's projects, Slavin has been instrumental in the creation of the Journal of Design and Science, a new publication that, like so many inventions that come from the Media Lab, not only offers new content but radically alters the structure of how content is received. Writers contribute articles to the journal, but their work does not undergo the traditional peer review that has been the hallmark of academic publishing. Instead, readers may directly update, respond to or argue with an article via its online interface. Slavin, who with Neri Oxman is the founding and contributing editor, points out that the current system for vetting academic scholarship encourages "all kinds of terrible, perverse incentives, from pursuing research that an editor is interested in to finding positive results, whether they exist or not," he says. "There are so many things that are broken—it's easy to see the existing channels of knowledge transfer and the question is: can you do it differently? If we were designing knowledge exchange from scratch in 2016, would we build the systems of gatekeeping we see today? Definitely not."



## A NEW TRAILER PARK **HITS THE STREETS**

Kim Holleman, who is the only member of the Media Lab who is a research affiliate with more than one group, has built a second version of Trailer Park, teaming with Madwell Inc., a branding and research firm that has particular interest in environmentally conscious projects. "I've been given an opportunity and the funding to build a brand-new mobile park, having been exposed to the new technologies and interior architecture I've been designing and interacting with at the Media Lab," she says. Built in a warehouse in Bushwick, Trailer Park v2 (above and below) is a smarter, more agile street-legal park with edibles, which will debut in New York in October. It will provide outreach projects for children, teaching them about growing their own food and demonstrating the connection between the environment and healthy food options. Trailer Park v2 was on view at the World Maker Faire at the New York Hall of Science, Corona, Queens, on October 1 and 2, 2016.



nature, such that when you enter one of my spaces, you feel as if you are transported into a new kind of natural surrounding, fused with architectural and interior design features—all of which coincide and harmonize to create a living, breathing immersive environment," she says.

A perfect example is her 2006-12 work Trailer Park. made of a 1984 Coachman Travel Trailer with the interior converted into a mobile park fitted with brick pavers, a tiny pond and planting beds filled with grasses and perennials. Skylights are cut into the roof. Holleman chose not to cover them with glass so that, like any outdoor space, rain and snow are part of the mix. It has no doors, so it is accessible 24 hours a day. Visitors can sit among the plants, rest or gaze at the tiny fish in the pond. Holleman parks the trailer at different sites and leaves it there for days at a time. In 2012, the trailer was parked outside 41 Cooper Square during the exhibition Rites of Passage. On that occasion, Holleman gave a TEDx talk in the Frederick P. Rose Auditorium in which she described a note she found in the Trailer Park guest book: one Alex wrote, "If every neighborhood had one of these, crime would go down." That remark was particularly meaningful to Holleman, who created the project to underscore the need for natural space and the degree to which we tend to ignore that necessity.

Holleman's work came to the attention of Professor Sep Kamvar, who leads the Social Computing Group at the Media Lab. "He was looking for an interior architect for a new kind of school," she says of their meeting. "Sep had followed my work and wanted his vision for schools to contain and evoke the living natural world," she adds. The Media Lab gave her what she calls "the perfect opportunity to create interdisciplinary work in service of a very important goal."

Holleman designs and builds the schools in the Wildflower Montessori Network, an open-source blueprint for creating schools that build on the ideas of the renowned Italian educator, who argued that tactility and making were essential to real learning. Holleman designs interiors "for children driven by passion to learn and interact with everyone and everything around them on multiple levels at once." She's careful to construct

interiors filled with natural elements as well as LEED-standard ones, a skill she gained by taking courses offered by Cooper's continuing education department, earning a certificate in green construction. "Every single choice is natural or 'green,'" she says.

She thinks her time at Cooper made the transition to the Media Lab a natural one: "The ability to be aggressively interdisciplinary, as well as quirky but smart, has really only been helpful at places like Cooper Union and MIT Media Lab, where doing unique, complicated projects is the norm."

Kevin Slavin sees a similar thread between the work of Cooper and that of the Media Lab. As a trustee, Slavin would like to see more opportunities for students to study in the liminal spaces outside discrete subject areas. "Most people at Cooper recognize that there's an opportunity

that's unique, one that's not been taken advantage of in the past: interactions among the three schools. But it requires a certain vision and leadership that we haven't seen yet," he says.

But Holleman thinks that Cooper has that sort of integration already: "I truly feel the perfect balance of art, architecture and engineering at Cooper Union—and having to contemplate that relationship while at Cooper Union has helped me understand the greater connection among fields and the exciting places where more than two or three or four fields overlap. That is the most exciting thing of all to me—to make work in an area where most people would say, 'Well, that's not really possible.' That is what people used to say about joining wet nature with dry architecture, but I've been finding new and exciting applications for just that for many years now."

## SUPPORT.COOPERDOTEDU



### • LIFETIME GIVING SOCIETIES RECOGNITION WALL

The Cooper Union's Lifetime Giving Societies recognize the school's most generous donors: the Peter Cooper Heritage Society (\$1 million+); the Sarah Bedell Cooper Society (\$500,000-\$999,999); the Abram S. Hewitt Society (\$250,000-\$499,999); and the Sarah Amelia Hewitt Society (\$100,000—\$249,000). On Wednesday, September 14, members of these societies were honored at a celebration unveiling a new wall in 41 Cooper Square bearing their names.

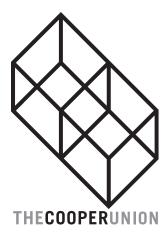
#### SUE FERGUSON GUSSOW SCHOLARSHIP

Michael Samuelian, Anik Pearson and Elizabeth Graziolo, all AR'95, are working to raise an endowed scholarship named in honor of Sue Ferguson Gussow A'56, professor emerita, who has taught drawing at The Cooper Union for over 40 years. They recently announced they are nearly halfway toward their \$100,000 goal.

#### REUNION GIVING

Reunion Weekend 2016 was an occasion to celebrate and an opportunity for classes to give back to Cooper. All milestone classes ('66, '71, '76, '81, '86, '91, '96, '01, '06, '11) contributed more this year than in the previous fiscal year. The class of 1966, celebrating its 50th reunion, raised \$243,478, surpassing its previous class annual fundraising of around \$100,000. If you are a member of the class of '67, '72, '77, '82, '87, '92, '97, '02, '07 or '12, we hope you save the date for Reunion Weekend 2017, June 2-4.

To learn more about how you can support The Cooper Union, visit support.cooper.edu.



THE COOPER UNION FOR THE ADVANCEMENT OF SCIENCE AND ART COOPER SQUARE NEW YORK, NY 10003

## THE CONSTITUTION

The Cooper Union Department of Continuing Education and Public Programs presents a free, public course on the Constitution taught by Yale Law School professor Akhil Reed Amar. The 10-session course takes place in The Great Hall on most Mondays through November from 6:30 to 7:30 pm. In case you cannot see them in person, each lecture will be made available online approximately two weeks later. See cooper.edu/constitution-today for details.

The course will be based on Professor Amar's forthcoming book,

The Constitution Today: Timeless Lessons for the Issues of Our Era

(Basic Books). In it he considers the biggest and most bitterly contested debates of the last two decades and provides a passionate handbook for thinking constitutionally about today's headlines. Subjects are as follows:

The Presidency: A Return to Dynasty?

The Vice Presidency: Nothing But Maybe Everything

The Congress: How to Fix a Broken Branch The Judiciary: Who Judges the Judges? Criminal Procedure: From O.J. to DNA

Citizens Dis-United: Race, Guns, Gays and More

Constitutional Anniversaries: Remembering to Remember

Bill Clinton's Drama: His Partisan Impeachment George W. Bush's Drama: His Un-Popular Election Barack Obama's Drama: His Signature Statute

Akhil Reed Amar is the Sterling Professor of Law and Political Science at Yale University. He is the author of several books, including *America's Unwritten Constitution*, and the winner of awards from both the American Bar Association and the Federalist Society.

