

Diving for Monkeys



TABLE OF CONTENTS

FEATURES

DEPARTMENTS

AT 365 2
News of public programs and other highlight events at the Graduate Center

ART OF 365 8
Featuring art in the Graduate Center's collection

HONORS 21
Awards, prizes, and other distinctions for faculty and students

FACULTY BOOKS 23
A listing, with brief descriptions, of recently published faculty books

ALUMNI 25
News and reports of where our alumni are and what they are doing

ENVIRONMENT 28
A special section in this issue, focusing on development of the map that identifies the solar energy potential of New York City's one million rooftops

FOLIO is a publication of the Graduate Center of the City University of New York. © 2012.

Visit our website: www.gc.cuny.edu

Send comments and questions to:

FOLIO
Office of Public Affairs and Publications
The Graduate Center
365 Fifth Avenue, New York, NY, 10016

Send letters to the editor by email to:
folio@gc.cuny.edu

Cover: Searching underwater for fossils in the Dominican Republic's Padre Nuestro cave.
Photo: Courtesy of DRSS

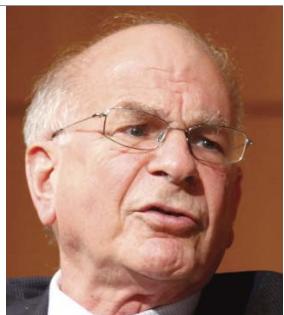
DIVING FOR MONKEYS

9



BEING OF TWO MINDS

13



WHO WILL SAVE OUR SCHOOLS?

17



For most of his career, Professor Alfred (Alfie) Rosenberger, a biological anthropologist at the Graduate Center and Brooklyn College, had searched for traces of extinct primates. Then a scuba diver's blog led him to a pool in a cave in the Dominican Republic. There, divers retrieved the near-pristine remains of a Caribbean monkey extinct for hundreds, possibly thousands, of years, a find that provides valuable clues to the origin of the long-lost monkeys of Hispaniola.

In a challenging exchange of ideas at a Graduate Center "Special Conversation," *New York Times* columnist David Brooks questioned Daniel Kahneman about his book *Thinking, Fast and Slow* and his contention that humans are hard-wired to err. Widely described as "the world's most influential psychologist," Kahneman, whose book describes our two separate thought systems, believes we are ruled by chance far more than we realize and "overconfident in our belief that the world is predictable and understandable."

folio

The Graduate Center | The City University of New York | Spring 2012

WILLIAM P. KELLY
President

IRA MOTHNER
Editor, *Folio*

BARRY DISMAN
Director of Graphic Design

JANE E. TROMBLEY
Executive Director
Communications and Marketing

JENNIE KAUFMAN
Copy Editor
Contributing Writers:
JACKIE GLASTHAL
RACHEL RAMIREZ

DONALD CHERRY
Graphic Designer
ALEX E. IRKIEVSKI
Graphic Designer

JANE E. HOUSE
Director of Publications

ELIZABETH FRASER
Editorial Support

MESSAGE FROM THE PRESIDENT



PHOTO: PETER WADDEGEL

ARC will play a critical role in the evolution of the Graduate Center, wedding our pedagogic mission more firmly to our research aspirations.

As the Graduate Center enters its second half century, we pursue the ambitious new vision mapped in our Strategic Plan. The overarching intent of that blueprint is the enhancement of our research culture. With the launching of the Advanced Research Collaborative (ARC) this fall, the Graduate Center will bring together the extraordinary wealth of research activity taking place across the City University.

ARC flows naturally from the formation, two years ago, of three interdisciplinary committees devoted to the study of religion, science, and globalization—areas whose intersections are pivotal to the understanding of contemporary life. ARC will extend the work of these committees by drawing more heavily on the intellectual resources of CUNY's 7,400-member faculty, by recruiting internationally distinguished scholars to our doctoral programs, by appointing new cohorts of postdoctoral fellows and visiting scholars, and by consolidating the work of the many centers and institutes located at the Graduate Center. The whole, we firmly believe, is greater than the sum of the parts, and we are excited about the synergies this initiative will produce.

ARC's defining feature is the theme-driven cluster within which collaborating scholars approach a topic from a variety of disciplinary perspectives. Sparks fly as different voices engage urgent global concerns; work that emerges from particular disciplinary groundings finds resonance and expanded implication.

The central focus of ARC's fall agenda is inequality, the growing gap between haves and have-nots experienced locally, nationally, and globally. A working group of GC and college-based faculty, doctoral students, postdocs, and affiliated scholars have been preparing the ground throughout the spring semester. Health, housing, and wage disparities are among the themes that have focused their work. Seminars, programs, and a variety of publications will follow throughout the next academic year.

Notably, we will welcome in the fall semester ARC's first Distinguished Visiting Scholar, Richard Wilkinson, a leading British authority on social epidemiology. Dr. Wilkinson is the coauthor of *The Spirit Level*, a seminal work on the social and personal consequences of inequality. His contribution to the work of the ARC committees will reflect the greater global reach of the Graduate Center and its prominence as an international hub of advanced research.

Ideas for future themes abound. Among those under discussion are immigration, digital humanities, and the role of nonstate actors in global change. While ARC's direction may be undetermined, its mandate is clear. ARC will play a critical role in the evolution of the Graduate Center by wedding our pedagogic mission more firmly to our research aspirations. We seek a level of hybridity; we imagine an institution that produces both world-class graduates and globally significant research. This is a new era for the Graduate Center, and we embrace its opportunities with enthusiasm.

A handwritten signature in black ink, appearing to read "William P. Kelly".

William P. Kelly
President
The Graduate Center

Spanning the Spectrum of Biography Today at the Levy Center's Conference

"From the painstakingly footnoted biography to the flourishing medium of graphical biography . . . they're all ways of exploring what is possible to know about men and women, who we are, and where we've been," declared Gary Giddins, executive director of the Leon Levy Center for Biography (LLCB).

Giddins was addressing the center's fourth annual conference, "Varieties of Biography," on

historian does this incrementally, and the novelist more abruptly from his unforgivable but exciting transgressions as he writes his way in and around and under the historian's work, animating it with the words that turn into the flesh and blood of living, feeling people."

From morning to evening, however, the focus was solidly on biography, and the program offered panel discussions covering five broad topics: "Biographies of Men by Women and Women by Men," moderated by 2008 Pulitzer Prize-winning biographer John Matteson (Prof. John Jay, English), deputy director of LLCB; "Biographers of 'The Lost Generation,'" with Nancy Milford, au-

history of American animation, helped establish the biographical comic as a genre. "I wanted to go where no one had gone before," said Deitch.

"The form requires expertise in two mediums, art and writing, which play on each other," declared Redniss, author of *Radioactive: Marie & Pierre Curie: A Tale of Love and Fallout*. "What you say in words you don't have to say in a picture and vice versa . . . the text contains the details and the images communicate those specifics." For Schrag, author of *Awkward and Definition, Potential*, and *Likewise*, chronicles of her time in high school, the balance between playful artwork and serious biographic writing is what makes biographical comics the "ultimate show-don't-tell."

The creative process for these artists/writers is complicated and time-consuming. "I'll usually spend two years just researching and writing my new book," said Redniss. But when the time comes to draw, watching the animations come alive becomes, according to Schrag, "one of the most pleasurable activities in life."

—Rachel Ramírez



Addressing the biographers, novelist E. L. Doctorow spoke of how the historian and the novelist both seek to "deconstruct the aggregate fictions of their societies."

March 29 in Elebash Recital Hall, where a host of contemporary biographers spoke about their subjects. Indeed, the rich promise of the event prompted President Kelly to remark at the opening, "The center's range is extraordinary and sometimes beyond comprehension!"

The promised richness of the conference was realized throughout the daylong event. And, as the conference drew to a close, a towering talent from the field of fiction, E. L. Doctorow, told a packed hall about fiction's relationship to biography, history, and time. "The historian and the novelist both work to deconstruct the aggregate fictions of their societies," he said. "The scholarship of the his-

tor of the bestseller *Zelda*; "Comic and Graphic Arts Biography," which explored this thriving confluence of art and poetry; "Biographers of American Singers," where panelists discussed their biographies of Bing Crosby, Frank Sinatra, Michael Jackson, and Tony Bennett; and "Classical Biography," which brought to light works about Alexander the Great, Nietzsche, and Ovid.

For the discussion on "Comic and Graphic Arts Biography," cartoonist Matt Madden moderated a panel with artist/writers Miriam Katin, Lauren Redniss, Ariel Schrag, and Kim Deitch, a pioneer in "underground commix," whose *Boulevard of Broken Dreams*, a graphic novel documenting the

Azam Ali Touches Hearts with Songs of Loss and Exile

The strong and seductive voice of Iranian-born, Indian-raised Azam Ali filled Elebash Recital Hall on November 22 and tugged at the heartstrings as she conveyed dreamy longing, the grief of exiles, and the joy and sadness of motherhood in her interpretations of traditional and contemporary songs. Often accompanying herself on one of her several frame drums, she cut a striking and commanding figure on stage. The singer opened her heart to the audience, telling of the sadness of her exile from her childhood home of Iran, where she was born in 1970; her experience as a young student in India; the family's move to California in 1985; and her discovery of her vocal talents.

As lead singer with Niyaz, an Iranian acoustic electronic trio, Azam Ali collaborates in creating acoustic electronic music for the twenty-first century. She has also worked with such other artists as the percussionist Mickey Hart and the rock bands System of a Down, Nine Inch Nails, and King Crimson. For the Live@365 concert, she was accompanied by her husband, Loga Ramin Torkian, on the *lafta*, a Turkish lute, and the *kamaan*, a bowed lute; Naser Musa on the oud, a plucked lute; Mathias Kunzli, a percussionist; and Jess Stroup on electric guitar. Stroup was also in charge of programming and the group's acoustic controls.

The event was the last fall concert of Live@365, a new series highlighting the ethnomusicology division of the Graduate Center's doctoral program in music.



ALL PHOTOS: MIKE DIVITO

A striking figure on stage, Azam Ali sings of grief and joy and the sadness of exile.



Naser Musa accompanied her on the oud, the plucked lute of North Africa and the Middle East.



Mathias Kunzli was the group's percussionist.



On the kamaan, a bowed lute, was Ali's husband, Loga Ramin Torkian.

How Photography of the Civil War Era Shaped Public Opinion and Promoted Abolition

Photography is what gives the Civil War such immediacy. And the images that make the conflict so real to us also influenced a contemporary audience. Indeed, much of it appears to have been created for just that purpose—to shape public opinion of the time.

This question of opinion-shaping was at the heart of the Graduate Center's November panel discussion "Is There Anything More to See? Civil War Photography and History," sponsored by the American Social History Project/Center for Media and Learning (ASHP/CML) in collaboration with the Ph.D. Program in History and the Center for the Humanities. As panel moderator Joshua Brown, ASHP/CML executive director, explained, "In the 1850s, the visual media that Americans had at their fingertips increased notably, particularly in the North." The agent of change was the invention of the glass plate negative, for it made possible the reproduction of photographic images, which previously—in daguerreotype, tintype, or ambrotype—could only be produced one at a time.

Photography then, however, was nothing like it is today. All photos of the Civil War era had to be



Reflecting patriotism, pride, and solid middle-class status, this portrait appeared to show a genteel family, with a uniformed father, well-dressed mother, and two young girls—all of them black.

staged. Panelist Martha A. Sandweiss of Princeton University emphasized that, while battle images were widely circulated and played a crucial role in shaping social memory and public opinion of the war, actual battles were never captured on plates. The photography of 150 years ago was a cumbersome enterprise. Anthony Lee of Mount Holyoke College described the huge box cameras of the time and told how photographers had to coat their glass plates with light-sensitive solutions in darkened tents or wagons before the plates could be exposed. "In all, it took a photographer between 30 and 45 minutes to make a single picture."

Of particular interest to historians today are propagandist daguerreotypes, portrait photographs, and *cartes de visite* commissioned by antislavery activists. One striking photo, labeled "Isaac & Rosa, Slave Children from New Orleans," shows a dark-skinned boy standing arm-in-arm with a light-skinned girl, both dressed in traditional middle-class attire. Many such images were created, as Mary Niall Mitchell of the University of New Orleans explained, to "shrink the distance between the enslaved and the free" and thus bolster support for the war and the abolitionist cause.

Deborah Willis, an expert in photography and imaging at NYU's Tisch School of the Arts, showed portrait photographs of black soldiers and workers of the Civil War era meant to convey impressions of patriotism, pride, and solid middle-class status.

Among them was what appeared to be a genteel family portrait of a uniformed father with a well-dressed wife and two young girls—all black—identical in kind to similar portraits of white military families.

Historians should beware of the stories that Civil War-era images purport to tell, warned Anthony Lee. Nineteenth-century photographers often "fashioned pictures" and gave them titles to feed nostalgia for the past. His example was a *carte de visite* showing two young African American boys atop a barrel. The undated photograph was identified as a unique slavery image, until it was discovered that the picture first appeared as a stereoview in 1870 and 1875 with titles warmly referring to the racial order of the antebellum South.

The panel discussion, which can be viewed in its entirety at <http://ashp.cuny.edu/2011/12/featured-items-civil-war-150/>, was the last event in a three-part series titled "Civil War @ 150: Still Hazy After All These Years." Thanks to a grant from the National Endowment for the Humanities (NEH), thirty selected college and university teachers will have an opportunity to learn more about "The Visual Culture of the Civil War" at an NEH Summer Institute at the Graduate Center from July 9 to 20, delving into this burgeoning field of study, examining the ways visual media expressed and shaped Americans' understanding on both sides of the conflict.



Isaac & Rosa, Slave Children from New Orleans.
PHOTOGRAPHED BY KIMBALL, 477 BROADWAY, N. Y.
Ent'd accord'g to act of Congress in the year 1863, by Geo. H.
Hanks, in the Clerk's Office of the U. S. for the So. Dist. of N. Y.

This potent piece of abolitionist propaganda aimed to "shrink the distance" between slaves and the free.

It Can Blow Your Mind to Consider the Awesome Vastness of the Universe

Those suffering from self-importance should hear a talk by physicist Lyman Page and astronomer David Spergel, both of Princeton University, and



David Spergel (left) and Lyman Page carried a rapt audience to the outer reaches of space.

their egos will be undone as they grasp the enormity of space. Such a talk, on the origins and evolution of the universe, was sponsored on February 21 by the Initiative for the Theoretical Science (ITS @ the Graduate Center).

Instilling an enduring sense of awe in this audience member, Page and Spergel used dramatic images to convey some astonishing facts. Although the sun is about 93 million miles away, its light takes about eight minutes to reach Earth. In other words, the sun is about eight light-minutes away.

Most of us know that Earth is part of the Milky Way galaxy. But did most also know that the Milky Way contains 100 billion stars, and its center lies 27,000 light-years away from Earth? That's light-years, not minutes. Can you imagine? And there's much more to contemplate, because there are 10 billion other galaxies in the observable universe.

The observable universe, ah, yes! This was even more mind-blowing. Cosmologists know, said Page, that the universe is roughly 13.7 billion years old. That's how far out we can see, 13.7 billion light-years. Whatever we see happening there was happening 13.7 billion years ago.

"If someone were out there on the edge of the observable universe looking at Earth, they would see what was happening here 13.7 billion years ago.

They would see the microwave background radiation that was once here," said Page.

The public lecture was organized by William Bialek, visiting presidential professor of physics and founder and director of ITS, whose stated goal is "to provide a home for theoretical research in the sciences that cuts across a wide range of subjects but is unified by the search for a mathematical description of the world around us." Some programs

the panelists brought home to the audience the humor, creativity, competitive spirit, and irreverence that so characterized the industry then.

Often invoked was Doyle Dane Bernbach (DDB), now a worldwide marketing communications network, but then a nascent ad agency. Many of its campaigns—from 1959's memorable "Think Small" and "Lemon" print ads for the Volkswagen Beetle to the 1962 slogan "We Try Harder" for Avis—are recognized today as among the most influential in the annals of twentieth-century advertising. Moreover, DDB pioneered the concept of the creative team. Previously, Cracknell noted, "researchers, writers, and artists did not work together, until Bill Bernbach said, 'Let's let them!'"

Among successful competitors of DDB in the 1960s was Ally & Gargano (A&G), which panelist Gargano helped found. Among its blunt, hard-hitting ad campaigns was one for Hertz Rent-a-Car. "For years, Avis has been telling you that Hertz is No. 1," the ads read; "Now we're going to tell you why." Soon after its rollout, Gargano boasted, Avis's DDB-created "We Try Harder" ads were gone.

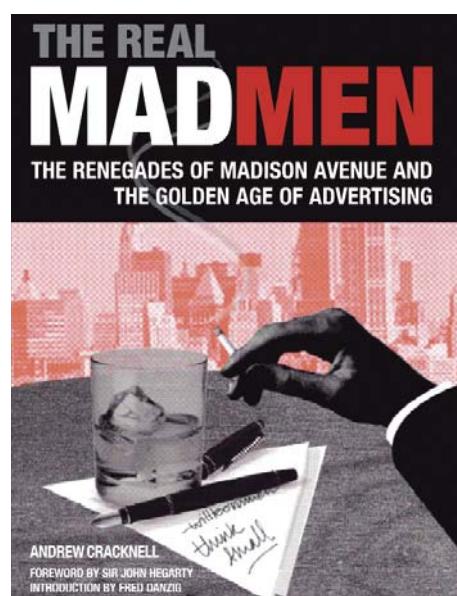
Barbara Lippert, longtime advertising critic for *AdWeek* magazine, agreed with Gargano that advertisements of a half-century ago "stand up a lot better than many of today's ads." But she pointed out the sexism of the times in ads like Procter & Gamble's "Mr. Clean" and Ajax laundry detergent's "stronger than dirt" knight on a white steed, where stereotypical male characters rushed in to save the day. In contrast, memorable female characters included a housewife worried about brewing better coffee and another who drank diet soda to stay slim. It is no wonder, said Lippert, that advertising mogul David Ogilvy had to remind colleagues in his 1963 book *Confessions of an Advertising Man* that "the consumer isn't a moron; she's your wife."

—Jackie Glasthal

How the Real Mad Men Revolutionized Advertising

If the creators of AMC's hit TV series *Mad Men* are to be believed, ad men of the late 1950s and early 1960s were little more than white chain-smoking philanderers, as dedicated to their three-martini lunches as they were to landing new accounts. "Not so," says Andrew Cracknell, author of *The Real Mad Men: The Renegades of Madison Avenue and the Golden Age of Advertising*. What the Emmy and Golden Globe Award-winning TV drama does not fully capture is the creative revolution that was shaking up the industry at that time.

Just weeks before the show's fifth season premiere, Cracknell joined advertising executive Amil Gargano and advertising critic Barbara Lippert at the GC for "The Real Mad Men and the Golden Age of Advertising in NYC," a Gotham Center forum. With video clips, print ads, and anecdotes,



Corporealities: Capturing the Essence of “Embodiment” with an Exhibit of Bodily Art

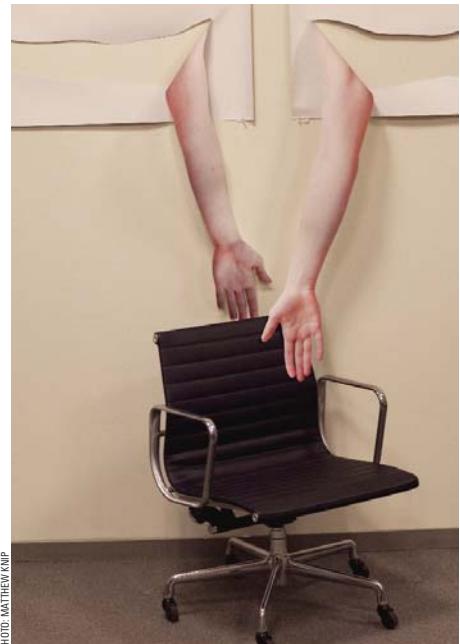
Can art make a cancer tumor beautiful? How about the exaggerated musculature of bodybuilders or a set of disembodied arms?

The answer was an unequivocal “yes” for those who stopped by Suite 5307 of the Graduate Center in the spring to view *Corporealities*, an exhibition of art drawn from or inspired by body parts, body modification, beauty, disease, sexuality, and biological processes. The show was hosted by the Committee for Interdisciplinary Science Studies (CISS), whose theme this past year was embodiment. “We thought an exhibition of art concerning the body would be a perfect fit for the seminar and for science studies more broadly,” said CISS director Jesse Prinz (Dist. Prof., GC, Philosophy).

Prinz explained the concept of “corporealities”: “In the humanities and social sciences, human beings were once regarded as minds or souls, and scholars neglected the role of the physical body in

decision-making and social interaction. In recent years, researchers across a startling range of fields have been studying how the body is used to solve problems, communicate, and define identity. We are not just mental, as Descartes and Plato claimed, but corporeal. Our different ways of being embodied (our ‘corporealities’)—whether male or female, black or white, sick or well—can affect our lives as much as anything inside the head.”

Since CISS seeks to “cross conventional disciplinary divides,” Prinz found particularly satisfying this exhibition by artists “whose interests align with those of seminar participants.” Among these were Leonor Caraballo and Abou Farman, an artist duo whose three-dimensional image of a breast cancer was extracted from an MRI (magnetic resonance imaging) scan and printed out using a rapid prototyping machine (3D printer); Adrienne Klein, codirector of the GC’s Science & the Arts programs, who described her digitally altered NASA image of an astronaut floating untethered in space as “a meditation on mortality”; and Rachel Bernstein, whose “biomass” collages combine cutouts of body parts with other natural elements to create abstract images. “The idea is to get people to like things



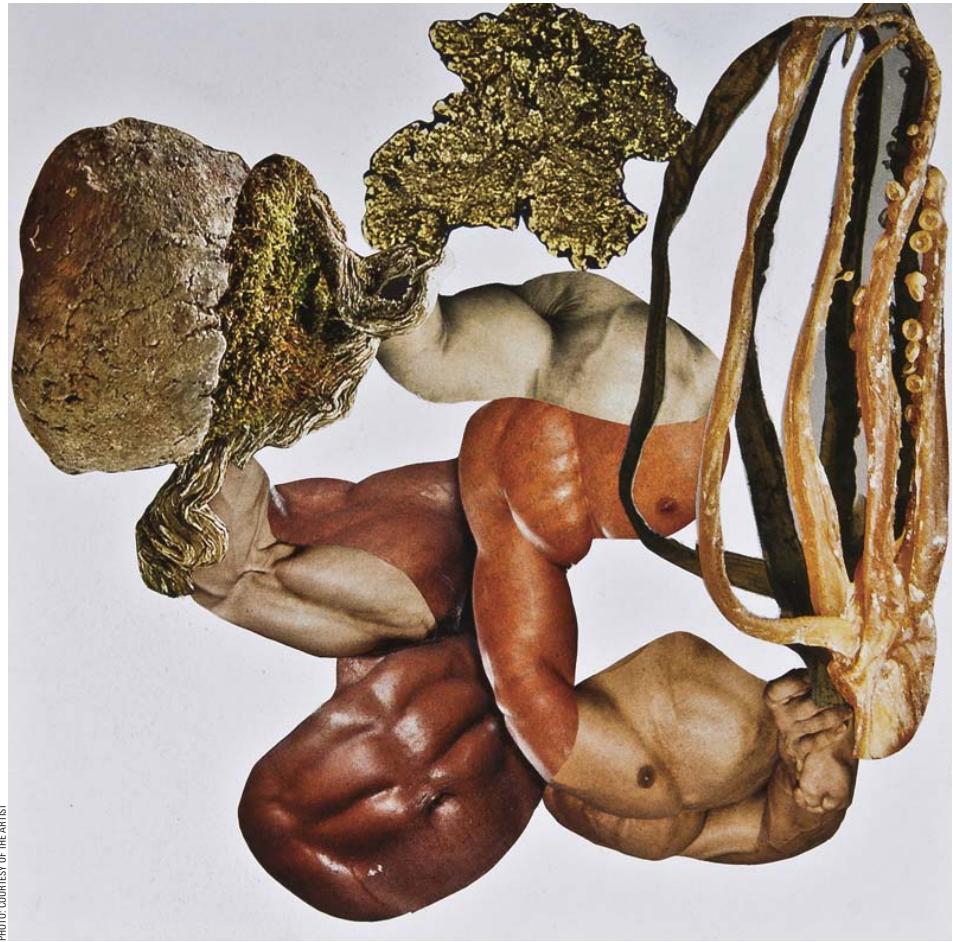
Disembodied Arms by Katarina Riesing

that might normally be uncomfortable; to be drawn in,” she explained.

Prinz, who is grateful for the opportunity to challenge conventional ideas about where art can be located, hopes to continue the tradition, which began with an exhibition of bioart—works that reference biological processes and biomedical research. He encourages other departments to consider transforming their suites and lecture halls into exhibition spaces, too. “Every bare wall deserves good art, and artists have a special gift for provoking thought and stirring up interest,” he said.

For more information on the Committee for Interdisciplinary Science Studies, which is supported by a grant from the Mellon Foundation, see <http://sciencesstudies.gc.cuny.edu/>.

—Jackie Glasthal



Biomass collage, by Rachel Bernstein

PHOTO COURTESY OF THE ARTIST

Celebrating the Brief but Visionary Career of Theatre Artist Reza Abdo

The flamboyant career of Reza Abdo was cut short by AIDS in 1995, when the Iranian-born playwright and director was 32. On December 19, the Graduate Center’s Martin E. Segal Theatre Center paid homage to Abdo with a daylong celebration of his work.

Hailed as a theatrical visionary by the *New York Times*, Abdo was known for innovative large-scale spectacles, such as his multimedia production *Father Was a Peculiar Man*, which featured a cast of fifty performers and was played out across four

blocks of Manhattan's meatpacking district. With Dar A Luz, the young New York- and Los Angeles-based theatre company he formed in 1991, Abdoh created a handful of environmental theatre pieces that left a lasting impression on experimental theatre, earned a commission from Peter Sellars, and found their way to major arts festivals and urban theatre centers, particularly in Europe.



Reading from Abdoh's work was actor Juliana Francis-Kelly, a founding member of Dar A Luz.

The Segal Center's program, cocurated by executive director and director of programs Dr. Frank Hentschker and critic Helen Shaw of *Time Out New York*, included screenings of *The Law of Remains* (1992), *Tight Right White* (1993), and *Quotations From a Ruined City* (1994); readings of play selections by Dar A Luz company members; a filmed tribute by actor Alan Mandell; and discussions of Abdoh's creative process, aesthetic, cultural kin, and legacy. Among the participants were a score of theatre scholars and practitioners, including Abdoh's former collaborators Elinor Fuchs and James Leverett, both of Yale University and both Graduate Center alumni; American directors Richard Foreman, Caden Manson, and Jim Findlay; curator/critic Marc Arthur; curator/dramaturg Norman Frisch; Daniel Mufson, author of *Reza Abdoh* (PAJ Books, 1999); video designer Tal Yarden; and Dar A Luz actors Juliana Francis-Kelly, Peter Jacobs, Tom Pearl, and Tony Torn.

The Martin E. Segal Theatre Center (MESTC) is a nonprofit center for theatre, dance, and film affiliated with the Ph.D. Program in Theatre at the Graduate Center.

Charles Rosen Tells Why Modernist Music Is Hard to Hear and Hard to Play, but Worth the Effort

Pianist and writer Charles Rosen is a great champion of modernist music. Yet he also acknowledges that, like the truth, it is not always easy to hear. Much easier to take in, however, was Rosen's explanation as to why that is, which he offered to the crowd gathered in Elebash Recital Hall on April 18 for his talk, aptly titled "The Challenges of Modernist Music."

Rosen, recent recipient of a National Humanities Medal for his "rare ability to join artistry to the history of culture and ideas," proved richly deserving of this presidential accolade.

Seated at the piano, he used excerpts of works by Mozart, Beethoven, Brahms, Stravinsky, and others to trace the evolution of modernist music's distinctive atonal sounds and what Arnold Schoenberg famously dubbed an "Emancipation of the Dissonance"—music by such composers as Elliott Carter, Ned Rorem, Milton Babbitt, Dmitri Shostakovich, and Iannis Xenakis. This dissonance, which reflects "the artist's decision to abandon any idealization of material," said Rosen, can lead to hostility in a listener, not unlike that experienced by critics of James Joyce's *Ulysses* or Edgar Degas's paintings of women doing laundry and ironing. As to the reason for this hostility, Rosen had a simple explanation. "Most people who want to tell you the truth are quite disagreeable," he quipped.

In modernist music, it's not only the score, but also the circumstances of a particular concert that can arouse strong feelings, Rosen continued. "Music depends on getting really good performances, and good performances of modernist works are actually very rare," he contended, adding that removing oneself from an objectionable concert is not as easy as putting down a book or averting one's gaze from a distasteful painting. Moreover, he argued, "If you're at a concert listening to music that you do not understand and sitting next to somebody who obviously seems to un-



At the piano, Rosen demonstrated the origins of modernist music's distinctive sound.

derstand it and love it, you feel like an idiot."

Daniel J. Wakin, culture reporter for the *New York Times*, joined Rosen for a discussion after the presentation. The captivated audience members were clearly not among those put off by the disagreeable truth. Rather, the event was so well attended that a simulcast was set up in another GC room to accommodate the overflow audience.

Presented by the Barry S. Brook Center for Music Research and Documentation, the event was the first in a series of Lloyd Old and Constance Old lectures focusing on "21st-Century Music in Society." For more information about the series and its upcoming events, see <http://brookcenter.gc.cuny.edu/projects/21st-century-music-in-society/>.

—Jackie Glasthal



He was joined for a postlecture talk by Daniel J. Wakin of the New York Times.

ART OF 365



PHOTO: RICHARD ACORN

John Ferren, whose painting *The Skaian Gate* is part of the Graduate Center's permanent collection, was a prominent member of the group of American abstract artists working in Paris in the 1930s. But, as the catalogue for the Graduate Center's 1979 retrospective exhibition of his work explains, "he never relied on a style long enough to become stereotyped." He was instead "committed to intuition and spontaneity," drawing from Taoism and Zen Buddhism concepts of insight and chance that influenced his art.

A teacher as well as an artist, Ferren, who returned to the United States before World War II, taught at the Brooklyn Museum School, Cooper Union, and Queens College.

John Ferren, American artist (1905–1970)
The Skaian Gate, 1958
Oil on canvas, 72.5 x 66 inches

DIVING FOR MONKEYS

By Michael Anderson

**From deep in the pools of Caribbean caves,
GC anthropologists retrieve the remains of a long-extinct primate and other prize fossils**

For much of his academic career, Professor Alfred (Alfie) Rosenberger has been scouring parts of South America for traces of long-lost primates. But it was surfing the net that led to the discovery of the near-pristine remains of a Caribbean monkey extinct for hundreds and possibly thousands of years.

A biological anthropologist at the Graduate Center and Brooklyn

College, Rosenberger happened across a blog by scuba diver Walter Pickel, describing the fossil he and his partners had discovered underwater in a Dominican Republic cave. Rosenberger found the description startling. “On the mainland, monkeys are still an important part of the tropical forest,” he says. “But in the Caribbean they have long gone extinct. Now they are known only from a handful of fos-

carries Tupperware containers to hold the fossils, and trails a mesh bag for raising them to the surface. DRSS divers, working with GC anthropologists, are the official dive team of the Museo del Hombre Dominicano.



ALL PHOTOS COURTESY OF DRSS

sils." The blog excited him; its surprisingly sophisticated description clearly identified the fossil as that of a primate. "Few fossils had been discovered in Hispaniola. That meant the likelihood of finding something important was very high."

In October 2009, financed by an emergency grant from the CUNY faculty union's Professional Staff Congress, Rosenberger and Siobhan Cooke, then a Ph.D. candidate at the Graduate Center studying Caribbean primates, met up with Pickel and his diving partner Curt Bowen, as well as Rosenberger's collaborating colleague Dr. Renato Rimoli from the Museo del Hombre Dominicano and the Universidad Autónoma de Santo Domingo, at Parque del Este, a wildlife preserve in the eastern Dominican Republic. As conscientious divers, Pickel and Bowen had not disturbed the bones they had earlier found. Now, they were to bring them up for the scientists.

"Paleontologists love surprises," Rosenberger says, but he was in no way prepared for the moment when his partners emerged twenty minutes later from the Cueva La Jeringa. Resting in a Tupperware container Rosenberger had given them were nearly two dozen skull fragments—soon recognized as only the second specimen ever found of the species known as *Antillothrix bernensis*. The first had been discovered in 1977 by Rimoli himself.

"We're used to working with a limited amount of material," Rosenberger says. "Mammal paleontologists are normally delighted when they find just a tooth." Professor Rimoli's 1977 find, for example,

Fossils from the Dominican caves, says Rosenberger, "give us a window on the great biodiversity of Hispaniola before the recent extinctions."

was just three teeth. Subsequent dives by Pickel and Bowen brought up a forearm, thigh, vertebrae and ribs. "Paleontologists are not used to getting complete pieces," Rosenberger says. "What the divers found were nearly pristine remains, the most complete skull, dentition, and partial skeleton of any monkey ever found in the Caribbean."

From the fragments the divers brought to the surface, Rosenberger has reconstructed a complete skull, which measures about two inches. He surmises that the monkey weighed about two pounds and stood roughly a foot high, "about the size of a small cat." For further study, precise images and three-dimensional models of the skull were created using laser digitalization, a technique, according to Rosenberger, at which the biological anthropology program at the Graduate Center excels.

The remains provide clues to when this line of monkeys arrived in the Caribbean, which is the site of the world's highest rate of extinction, having lost nearly 90 percent of its mammals over the past ten thousand years. "We're pretty sure that the arrival of these animals, or their ancestors, occurred well over ten million years ago," Rosenberger says. "If you compare the dental remains of our monkey to other fossils that we know of, we see strong similarities with Patagonian fossils that are around fifteen million years old." The findings support the hypothesis that monkeys of Hispaniola, Cuba, and Jamaica (all now extinct) did not descend from a single common ancestor, but rather from primates that somehow traveled from South America, partly over water, and were stranded by geologic changes. "Thanks to a bit of underwater excavation, we now know more than ever before about what *Antillothrix bernensis* looked like and to whom it is related," Rosenberger says. "This gives us a window on the biodiversity of Hispaniola before the recent extinctions." The data from these findings will be used for papers to be presented this summer at an international conference in Cancun, Mexico, by Rosenberger and no fewer than five CUNY graduate students or recently minted Ph.D.s.

The original site has yielded additional treasures: "a cache of the tiniest, most fragile sorts of fossils—thin finger bones of bats, jaws of mice-sized rodents, mandibles of a shrewlike mammal that would fit rather well on the head of a pin. I'm totally overwhelmed by the value of this material," says Rosenberger. Since that initial find three years ago, he has returned repeatedly to the Dominican Republic, where underwater caves are a treasure trove of specimens. Bones captured naturally at these sites are less prone to the breakage and erosion common to fossils discovered on or in the ground. "This is a new thing," Rosenberger says. "The world is full of water-filled caves, and some will harbor fossil remains entirely new to science."

Rosenberger's ongoing research is funded by the National Geographic Society/Waitt Foundation, which has produced stunning video records of the divers' excavation of a skeleton and skull of an ex-



Cristian Pittaro, of the DRSS team, prepares to bring to the surface the thigh and arm bones of a ground sloth. Long extinct, the ground sloth was once the largest mammal in Hispaniola.



Shown here (above), as it was first displayed in a scientific publication, is the reconstructed skull of the monkey *Antillothrix bernensis*. Rosenberger's team is now at work on a three-dimensional image of the animal's brain, showing grooves and ridges that define the brain's functional areas as they had been imprinted on the inside of the braincase.

Beside the block and tackle used to lift heavy objects up from the cave floor (left), Rosenberger and GC Ph.D. Siobhan Cooke peer down the shaft that leads into what is actually named Oleg's Bat House Cave.

Suited up for exploration of the Bat House Cave pool (below), Pittaro descends one of the ladders leading down nearly thirty feet to the water.



tinct crocodile. (The video may be accessed at: <http://news.national-geographic.com/news/2011/09/pictures/110927-crocodile-fossils-found-underwater-cave/>.) That particular discovery taxed Rosenberger's ingenuity in finding containers to protect fragile specimens as they were salvaged. He had scoured local markets for Tupperware containers, which he lined with damp towels to secure the divers' first discoveries. For the crocodile head, much too large for Tupperware, Rosenberger hurried to a nearby supermarket to buy the biggest beer cooler in town. The precious specimens are now dried and stored in cell phone boxes, jewelry boxes, glass vials, and prescription pill bottles.

Part of the fun, he says, has been such improvisations. On one trip, he and his wife arranged five hundred bat skulls on their hotel beds and coated them with combinations of nail polish and hair spray to

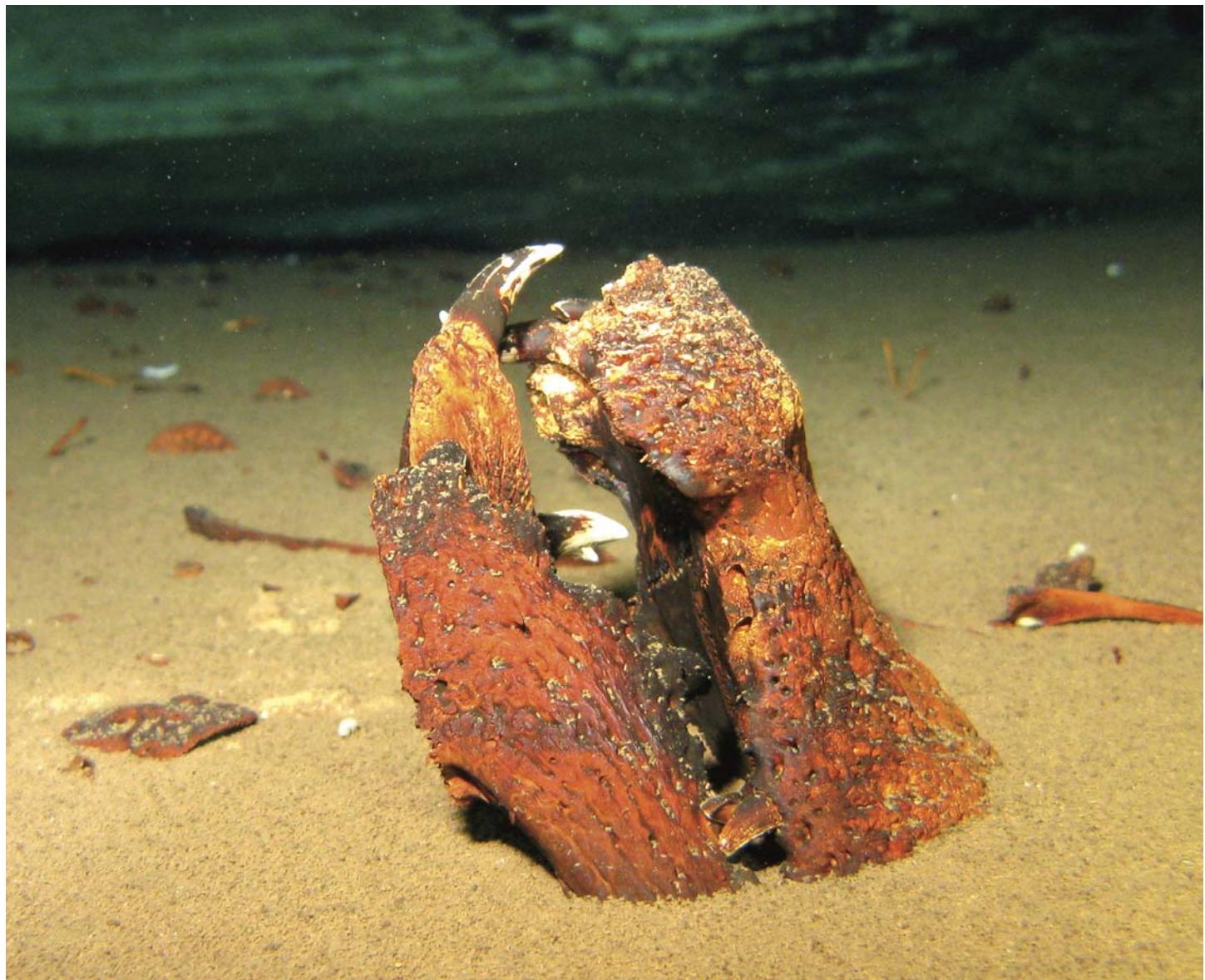
Fearsome indeed was the prize find in Oleg's Bat House Cave. Showing its snout above the sandy surface was the complete skull of the extinct Cuban crocodile, the first specimen of the species to be found on the island of

keep the fragile bones from flaking away to unidentifiable lumps of nothingness. Damp toilet paper, he says, has been especially useful in securing specimens.

To carry on the project, a new and larger international team has been assembled, with experts in the various groups of animals the divers have uncovered—primates, shrews, bats, sloths, rodents, birds, reptiles, and amphibians. Rosenberger, who received his Ph.D. from the Graduate Center in 1979, continues to focus on South and Central American monkeys—an interest, he says, that dates from the fascination he felt during childhood visits to the Monkey House at the Bronx Zoo, which was recently closed.

"This find has opened up a whole new world of opportunities to find fossils. I'm sure that it'll be a large part of what I'll be doing over the next ten years."

Hispaniola. It took block and tackle (shown on page 11) to lift the skull, in its water-laden beer cooler, up to the surface, once it had been freed from the cave floor.



BEING OF TWO MINDS

David Brooks talks with psychologist Daniel Kahneman about why humans are prone to error

To err is not only human, it's unavoidable. That discovery won psychologist Daniel Kahneman a Nobel Prize and laid low the long-held conviction of economists that we humans are pretty much ruled by reason.

For more on how we think—and why our judgment is frequently flawed—Kahneman, a Princeton professor, widely described as “the world’s most influential psychologist,” has written *Thinking, Fast and Slow*—one of the *New York Times* ten best books of 2011. Last November, he shared the stage of the Graduate Center’s Proshansky Auditorium with *New York Times* columnist David Brooks for a high-profile public program, billed as “A Special Conversation.”

Getting the conversation under way, Brooks focused on the work that brought Kahneman and his longtime collaborator Amos Tversky to prominence and earned Kahneman the 2002 Nobel Prize in economics (which he would have shared with Tversky had his partner not died in 1996). Brooks asked if it was right to say that before Kahneman and Tversky there had been general agreement about how people think, but that their studies had changed this perception. They were, he said, “the cutting edge of a vast ocean of research that has given us a different picture of cognition.”



The nature of the two-track mind prompted a spirited exchange between Kahneman (left) and Brooks.

“Prior to the work Amos and I did,” Kahneman agreed, “the conception was that errors of judgment typically arise from emotions. It’s not that people felt everybody is rational all the time. But they believed people are basically reasonable, and when they make errors, those errors are motivated. We proposed a different view of errors of judgment.” What they proposed was that errors, far from being aberrant, “are the products of normal thinking.”

Rejecting *Homo economicus*

“Your work,” said Brooks, “showed that we’re shot through with biases. . . . We are not as rational as we think we are,” and he noted the distinction now being drawn between *Homo*

economicus, the “rational man” of economic theory, and “the way we really are.”

Kahneman added that this distinction between *Homo economicus* and actual humans is being taken seriously by a number of economists and has led to creation of the subfield of behavioral economics. He took issue, however, with Brooks’s suggestion that most social scientists had bought into the *Homo economicus* concept. “Psychology in general did not adopt the rational model,” he said. Neither, he added, did sociology or anthropology. “It was really economics and, to a large

ALL PHOTOS: MIKE DIVITO

extent, political science. Within those disciplines, there was this idea of a perfectly rational individual—not all-knowing—but completely consistent in his or her beliefs and preferences. That was *Homo economicus*.”

Kahneman’s work with Tversky was influenced early on by an economist’s paper that began with the statement, “The agent of economic theory is rational, selfish, and his tastes do not change.” This struck Kahneman as singularly wrongheaded. “To psychologists,” he has said, “it’s self-evident that people are neither fully rational nor completely selfish, and that their tastes are anything but stable.”

Thought Systems 1 and 2

When the discussion turned to Kahneman’s latest book and the two-track mentality it describes, Brooks asked for a “shorthand” characterization of the two ways of thinking—fast and slow—that the author has labeled System 1 and System 2.

“There are really two ways that thoughts come to mind,” Kahneman began. “If I say, two plus two, something comes to your mind. But if I say seventeen times twenty four, nothing comes to mind, or at least no number comes to your mind. So the distinction between those two ways of thinking is really obvious.” The thoughts of fast-thinking System 1, as he describes them, come to mind automatically. We’re passive. The thoughts come to us, and we needn’t be conscious of them in order to act on them. As an example, he noted those times “when we brake suddenly, in response to a threat on the road. Then,” he continued, “there are thoughts that we produce—that we are the authors of—and come to us with a distinct sense of urgency. What I call System 2 is this system that pays attention . . . that requires attention in order to function. It does self-control. It does computations. It does things that demand mental work.”

When Brooks characterized System 2 as “basically pretty rational,” while System 1 “is always screwing around, leading to biases,” Kahneman objected, and he rejected the notion of writers who have compared his System 2 to Mr. Spock and System 1 to Homer Simpson. “I really don’t accept that System 1 is stupid and System 2 is smart. System 1 is extremely smart,” he declared, making clear that the things we do automatically, without conscious thought, include everything we do with skill. “All of us are enormously skilled at many things,” he said, and cited driving a car, picking up social cues, and, “at the highest levels of functioning that is automatic, what we call intuition and creativity.”

“The question,” said Kahneman, “is where and under what condi-



To fast-thinking System 1, thoughts come automatically, while slow-thinking System 2 does things that demand work and must pay attention.

but in the basement below it.

When a firefighter senses danger intuitively, Kahneman explained, “without knowing how he knows,” it is System 1 responding to a cue by drawing on stored memory. This is recognition and it is no more mysterious, he writes, than “how we immediately know how a person we see enter a room is our friend Peter.”

Trusting in System 1 can, of course, have a substantial downside. In Kahneman’s formulation, “Most of what you think and do originates in your System 1, but System 2 takes over when things get difficult, and normally has the last word.” System 1 operates at full speed all the time, while System 2 is generally in low gear. Problems arise because System 1 is impulsive and trouble-prone and, says Kahneman, “neglects ambiguity, suppresses doubt, and is biased to believe and confirm.” This means System 2 must gear up and come to the rescue when it detects an error is about to be made.

For such a fail-safe system to work efficiently, System 2 must pay attention, and Kahneman’s book admits that we have only “a limited budget of attention.” So, although the interaction of Systems 1 and 2 generally functions fairly well, it is still prone to error, since, as Brooks observed, “System 2 is a little lazy,” and as Kahneman warns, “System 1 can’t be turned off.”

Demonstrating Why We Err

Commenting on the experiments that distinguish the work of Kahneman and Tversky, Brooks noted, “When I read psychologists from

tions you should trust your intuition.” He believes intuition can be safely trusted “if you are operating in a world that is sufficiently regular to be predictable. That is certainly true of chess players, but it’s also true of firefighters, it’s true of anesthesiologists, and it’s true of people interacting with their spouse.”

There are times (as an example in *Thinking, Fast and Slow* makes clear) when failing to trust the intuitive judgments of an expert can have drastic consequences. In the book, Kahneman quotes psychologist Gary Klein’s story of a firefighting team battling a kitchen blaze, when the commander suddenly found himself shouting, “Let’s get out of here,” without realizing why he was saying it. The team cleared the room just before the floor collapsed. Only when they were safe did the commander realize that the unusual silence in the kitchen and unusual heat of his ears signaled to him that something was amiss. As it turned out, the heart of the fire had not been in the kitchen

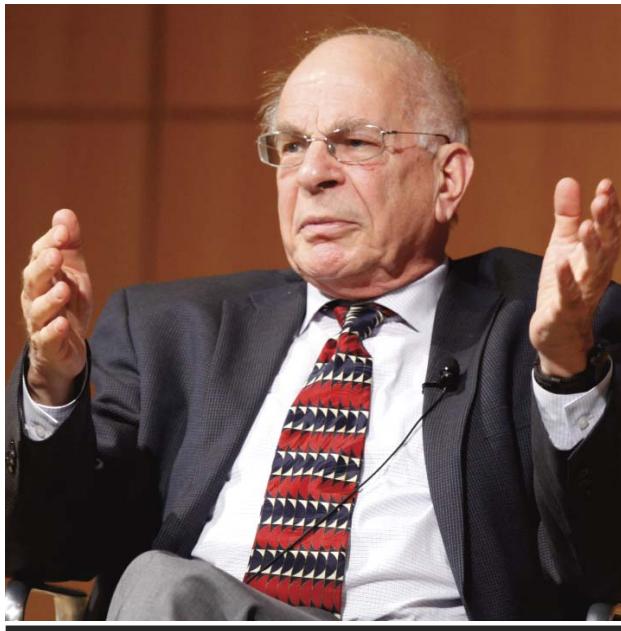
the fifties and sixties, I often think, they are really smart, but they are just guessing, whereas you guys actually did experiments. How novel was that?"

Kahneman assured him that psychology was already an experimental science at that time, "so that's not where we innovated. I think what was novel was that we used single questions, rather than complicated experiments. We made up very specific questions that sometimes can be posed in a sentence." As an example he told of one experiment in which subjects were told about Steve, who had been selected at random from a population and described as "a meek soul with a passion for detail." The subjects were then asked if Steve was more likely to be a librarian or a farmer. "Everyone," said Kahneman, "has the immediate intuition that he is much more likely to be a librarian than a farmer. And yet," he explained, "if you think statistically, there are twenty times as many male farmers as there are male librarians, so he is probably a farmer."

"That was the style of what we did," he said. They employed what he called "the psychology of single questions," where each question makes a point and the point is readily recognized. So, when Brooks later asked how Tversky and he were able to communicate the substance of their work to economists, Kahneman credited this to the persuasive power of the "single question" examples they used.

In the 1974 article, published in the journal *Science*, that summarized their research, they included, as inserts, examples of their experiments, the Steve experiment among them. "And what happened, that we did not really anticipate, was that people from other disciplines, including philosophers and economists, read it and knew 'I'm prone to that error,' or 'I share that intuition.' That made all the difference. So if we had written exactly the same content . . . but without that appeal to the reader's intuition, very little would have happened. . . . Our impact on other disciplines was really conditional on that decision, largely accidental, on how we presented our results."

"People could understand the concept you were getting across because they felt it," said Brooks, and Kahneman agreed. "They actually believed it," and that, he pointed out, made it possible to overcome "the enormous resistance of people to thinking that what they learn about psychology applies to them. 'Maybe it applies to other people, but not to me.'"



"If a store mentions there is a maximum of twelve items, that no one can buy more than twelve of this good, then people will be pushed to buy twelve . . . because of the influence of that number. We tend to exaggerate the importance of any number that's in our head."

When Kahneman then explained that the errors he and Tversky studied were errors they found in themselves, Brooks said, "One of the many delightful parts of your book is how it shows the pattern of illusions and biases some people have," and he urged the psychologist to describe some of his favorites.

The Focusing Illusion

"I like the focusing illusion a lot. This is a very simple idea," Kahneman said, and the example he gave was thinking about how happy the people in California are. "By and large, people greatly exaggerate how happy Californians are, and the reason is that, when you think of California, you are drawing a contrast, and the obvious contrast is going to be climate. They have a more desirable climate." So, when California comes to mind, he declared, "That's the one thing you are thinking about. If they have a better climate, you immediately jump to a conclusion. This is the way System 1 works—it jumps to the conclusion that Californians must be happier. In fact, climate is not all that important in happiness."

"Whatever you think about in your life," he explained, "you are going to exaggerate its importance, and there is nothing you can do about it. If you ask people how much pleasure they get from their car, they answer a slightly different question. They answer the question of how much pleasure do I get from my car when I'm thinking about my car. But most of the time they drive their car they are not thinking about it. They are thinking about other things. They are getting no pleasure from their car. So, that's the focusing illusion. And it's important because I think it's a source of many mistakes that people make in thinking about their life and how their life could be different."

The Anchoring Effect

When Brooks asked about a wheel of fortune the team had rigged for one experiment, Kahneman explained, "We wanted to show the effect that we called anchoring, that when you make people think about a particular number it has an influence on the guesses that they make. But we wanted to make sure that the number we put in people's mind was completely uninformative and that they would know that it was uninformative. So we rigged a wheel of chance so it would stop, I think, either at ten or at sixty-five, and it was a wheel with a hundred numbers on it."

After the wheel was spun and subjects wrote down the number that came up—either ten or sixty-five—they were questioned and asked to guess what percentage of UN members were African nations. According to Kahneman, the number they had seen on the wheel strongly influenced their estimates. The average estimate of African UN members by people who saw ten on the wheel was 25 percent. The average for those who saw sixty-five was 45 percent. “And,” Kahneman repeated, “they knew the number they saw on the wheel was worthless.”

For an everyday example of anchoring he gave Brooks this: “If a store mentions that there is a maximum of twelve items, that no one can buy more than twelve of this good, then people will be pushed to buy twelve. They will buy more . . . because of the influence of that number. We will tend to exaggerate the importance of any number that’s in our head.”

The Planning Fallacy

A story Kahneman told illustrates with stunning clarity how we are led astray not only by information we lack, but by information we have as well. “It was quite a long time ago,” he began. “I was living in Israel, and I became curious about the possibility of developing a curriculum for judging and decision-making for high schools. I assembled a team, and we worked for about a year, trying to move forward on that and actually did quite well. And we were meeting every Friday, and one day it occurred to me to run an exercise in forecasting on the group. So I asked, ‘How long will it take us to complete the work, to have a draft that we’ll hand in to the Ministry of Education?’” Not wanting the team members to influence each other, he asked them to write their answer on a slip of paper. “When we looked at the distribution of responses, they were all between a year and a half and two and a half years.

“One member of the team was the dean of Hebrew University’s School of Education, an expert on curriculum development and groups like ours. So, it occurred to me to ask him how many groups he knew who had done what we were doing—develop a curriculum from nothing, in a new subject. He said he knew quite a few. So I asked him if he knew them in enough detail so that he could locate them in the same place we were . . . and he said he could. And then I asked him what happened to them.” According to Kahneman, the dean was “genuinely surprised” by the question. What he said was, “You know, not all of them succeeded, about maybe 40 percent completely failed. They never did complete the book.”

“Now that,” said Kahneman, “was a thought that had never occurred to us—that we might fail. And so then I asked him about those



who did complete it. How long did it take them? And he said he couldn’t think of anyone who did it in less than seven years, and no one persevered for more than ten. Then, in desperation, I asked how we compared to the other teams in terms of our resources, and he said that we were below average.

“Now, the instructive part of that story was that he had all of that information in his head—all of that.” But the answer the dean had given to the question—what he had written on his slip of paper—was two years! “So, clearly,” Kahneman said, “there was no connection with what he had learned. He had not drawn the inference that it is terribly, terribly difficult to write a new curriculum. He just knew that as a fact, but he hadn’t used it. And this is very common, this reluctance to infer the particular from the general.”

Loss Aversion

It was Kahneman and Tversky’s Prospect Theory, showing how people make decisions based on the possibility of gains or losses, for which Kahneman received the Nobel Prize. Their experiments demonstrated that, in general, people are more likely to make choices that reduce risk than ones that enhance the likelihood of gain. Brooks noted a memorable example of this loss aversion in *Thinking, Fast and Slow*. “Somebody did a study of the PGA Tour,” he recalled, “and showed that golfers, when putting for par, are more accurate from all distances than when putting for birdie, because they fear the bogie more than they desire the birdie, which is loss aversion.”

Summing Up

Brooks brought their conversation to a close by noting how often he now hears the language of Kahneman’s concepts from businessmen and politicians he interviews. “I actually think,” he said, “there has been a cognitive revolution. . . . I think there has been a gradual but really important shift and a sophistication in how people think about their own thinking, and I think that’s not a small thing.”

What the audience was most likely to take away from the event, however, was an exchange that occurred earlier in the evening, when Brooks told Kahneman, “Clearly you are not one who thinks that we are fully in control of our lives.”

To this, the psychologist responded, “What you are asking is how much control we have over our destiny, and we have much less than we think and that’s a theme in the book. There is more luck. We are overconfident in our beliefs about the world, and we are overconfident in our belief that the world is predictable and understandable, and that is a profound source of errors of different kinds.”

—ISM

WHO WILL SAVE OUR SCHOOLS?

AN INTERVIEW WITH MICHAEL B. FABRICANT

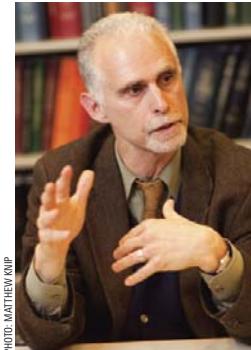


PHOTO: MATTHEW KUPP

Is there indeed a “crisis” in American education, and, if so, how can it be overcome? Folio asked these questions of Michael B. Fabricant (Prof., Hunter, Social Welfare), whose book Organizing for Educational Justice tells how one Bronx community was able to bring needed reforms to its public schools.

Let’s start with whether or not there’s a “crisis” in education.

First of all, let’s understand that the language of crisis is really manufactured, and manufactured crises can open the door to various kinds of shock policies—policies we wouldn’t consider were it not for the threatened crisis.

If that’s the case, then what are the “shock policies” of the school crisis?

I’d say they are the doctrine of school choice and the proliferation of charter schools.

Whether the crisis is real or manufactured, isn’t it true that our students come off poorly compared with students from the rest of the industrialized world?

The United States does rank very low internationally. That’s true. But when you tease out some of the numbers, based on class and race, our scores move up rapidly.

No question that students in the poorest communities of color have serious problems with reading and math. But does that same problem exist when you look at students higher up the economic ladder? No, it doesn’t. The latest PISA (Program of International Standards Assessment) study ranks U.S. students in the highest income brackets second in science and first in reading.

Do class and income have that much influence on academic performance?

A recent *New York Times* editorial pointed out that class now has an even greater impact on achievement standards than race does. But that part of the conversation was left out of the policy discourse when the administration’s Race to the Top program was being put forward. The argument became, “No excuses. We’re simply going to make this work on the basis of resources already available. And we’re not going to consider strategic investments in poorer communities to increase their capacity to cope with standardized tests.”

It’s not unfair to say, “Let’s measure reading and math.” But if you

do, then what kind of investment will you make to enable schools in the poorest communities to compete?

Do we really know what kind of investment to make? Will putting more money in the schools translate into higher test scores?

We know what works. There is no magic to this. North Carolina, Connecticut, and New Jersey all made investments—in training teachers and supporting them in the workplace. Some investment was made in ratios—class size—and in leadership development for principals and assistant principals. The results were substantial academic improvements in all three of those states.

In the absence of additional resources, what is supposed to change outcomes in the poorest performing schools, which we can assume are also the most poorly funded?

Not necessarily the most poorly funded schools, but the most needful, because they have the most learning-challenged students.

Putting strategic investment off-limits raises the question of what we can do instead. Policy makers, politicians, and foundations have responded with an ideological solution—freedom of choice. However, this freedom is market-defined, for policy makers simply assume that market-driven reform, when applied to a public good, will produce efficient and productive results. They are trusting the market to solve the problem, creating competition and giving parents an alternative to public schools. They are, in effect, allowing ideology to drive social policy. And what they put forth as the primary solution to what ails public education is an exit strategy, a way to move children out of the public schools.

One of the most powerful engines for this market-driven reform is charter schools. They will solve these problems through innovation—that’s the presumption—and in ways that public schools cannot.

Isn’t that what the charters were created to do—to innovate? These are publicly funded private schools that have the freedom to experiment because they aren’t bound by the constraints of the public school bureaucracies or union contracts.

That was true in the beginning, and the first experiments in Minnesota were supported by the labor movement. Everyone knew there were problems in public education, and the AFT (American Federation of Teachers) was eager to promote efforts to solve those problems. The AFT wanted to see if schools outside the system could produce change for poorer-performing students, and then whatever was learned through the charter experience would be disseminated across the public school system.

Now, over time, several things happened. Most significantly, the

Minnesota movement became the default choice of a right wing that had failed to promote school vouchers—the use of education vouchers that would allow parents to buy education from private and parochial schools as well as from the public schools. Since they couldn't sell the voucher concept, they promoted charters as an alternative "exit option," another means of shrinking public education.

Their goal then was to outsource education—to privatize it?

Yes, this was an effort to position the charters to replace public education—not an effort to improve the public schools through the stimulant of innovation. It was already clear by then that the charters weren't disseminating whatever it was they learned to the public schools. Of course many would argue that there wasn't an enormous amount of innovation to disseminate.

What, if anything, were the charter schools learning?

A number of experts have indicated that the most important innovation of charter schools was essentially self-evident. You extend the learning day, and you extend the learning week, and you actually produce better results.

So, the charters were producing better results?

Some were, and the charters came to be defined by those exemplars. But, on aggregate, this hasn't proven to be the case. The study by Stanford's Center for Research on Education Outcomes found that only 17 percent of charters are more effective than public schools, while 37 percent are less effective, and 46 percent are about the same. So, ten to fifteen years into the experiment, public schools continue to outperform charters.

What makes this surprising is the substantial advantage the charters have over the publics. They admit far fewer learning-disabled students and fewer students for whom English is a second language. We know that poor test-takers are pushed out—systematically in some schools—and the publics must take back those low performers.

You're saying charters aren't a source of innovation. They aren't doing as good a job as public schools, and they are draining dollars from the public system. So why do they have such widespread support?

What happened, over time, was the coming together of a powerful coalition to advance the agenda of the charter movement. There were hedge fund folks and politicians and many in the media who just simply believed in the ideology of choice and the market. But there were also opportunities for capitalization of the public education market. That's six hundred billion dollars of resources, and many entrepreneurs saw a chance to go after those public dollars. Not only do you now have for-profit charter schools, but growing markets for testing and for educational technology as well.

The Stanford study found that only 17 percent of charters are more effective than public schools, while more than twice as many are less effective than public schools.

That may be true, but it doesn't explain the breadth of support for charter schools from community leaders and politicians across the ideological spectrum, by strong centrists, progressives, and philanthropists. So, what's in it for the President? What's in it for the big foundations?

I think that, for Obama and many of the hedge fund folks, there is a genuine desire to reform public education. I think their approach is wrongheaded. But some part of it comes from a belief that if you seed an education reform effort with incentives for charter schools, evaluation of teachers, and standardized testing, you will—in some magical way—improve public education.

What's in it for the foundations? Well, for Bill Gates, as a technology entrepreneur, there's the presumption that quantitative forms of accountability—such as evaluating instructor contribution by test scores—will promote a different way of teaching. This kind of technical problem-solving largely ignores the context of education in urban areas where there's a 50 percent turnover of public school teachers every six years. There is plainly something about the working conditions in those schools that's driving teachers out. And if you want to improve public schools, you've got to be able to hold onto your good teachers, because all the data indicate that continuity of experience and expertise accounts mightily for the difference one can make in the classroom.

So, it strikes me that such policy direction is shortsighted. If you want to hold onto experienced teachers, you must deal with accountability on an ongoing basis that relates accountability to context issues. Otherwise, you are going to continue to drive teachers out of the field, especially in the poorest communities of color. Then, what you are left with is Teach for America, college grads who are bright but inexperienced coming in for two years and then leaving. That is no way to build a competent, effective teaching force.

Let's talk, if we can, about the alternatives to charter school.

If we're talking about schools that innovate, that have shown they can improve student performance, there certainly are alternatives. Enormous changes are occurring in places like Philadelphia and Oakland, California. And there have been innovations that produce real differences in outcome here in New York, such as Debbie Meier's small-high schools movement. But we don't hear about them; we only hear about what's happening outside the public sector, and it's assumed that you can't scale up public sector innovations effectively.

Then there's the innovation you write about in Organizing for Educational Justice.

That was an experiment in the Mount Eden section and nearby parts of the South Bronx that brought real changes to the ten schools there and set a template for school reform throughout the city. These schools had been some of the worst performers in New York City. Over time, class size had grown. Although per capita investment had risen over a thirty-five-year period, it hadn't kept pace with grow-

ing challenges to learning in those schools. And here's where I would criticize the unions. They didn't incentivize the movement of the most experienced and able teachers into the poorest communities.

The Mount Eden area schools were not producing for many different reasons. But to lay that all on the schools and say they've got to do as well as the schools in wealthy communities and produce the same outcomes without any strategic investments is magical thinking of the worst kind.

As I understand it, what occurred in that Bronx community began with the organization of parents?

And that has enormous implications, because building a grassroots parents-led campaign in that area means you are going to have many challenges creating cohesion. Parents are working two, three jobs and managing families, often without a partner.

Nevertheless, in this community, parents and community-based organizations (CBOs) came together through NYU's Institute for Education and Social Policy (IESP) and created a platform for change. A number of factors contributed to the success of the campaign—foundation support, the active role of ISEP, and engagement of community leaders—but good old basic community organizing was a pivotal component, and it put a substantial cohort of parents in each of the schools. They promoted an ambitious agenda. It featured “lead teachers” as a basis for adding experience and stability to the faculties.

What made the introduction of lead teachers such a critical element?

These are master teachers, who come in at a higher salary. They are chosen because they are more expert, more experienced, and have been selected by parents, the administration, and the union. And the basic part of their job is to mentor other teachers, because the poorest communities are churning teachers—young teachers who barely last for more than a few years—and this kind of turnover is not a recipe for deepening expertise in the classroom.

You just mentioned that the union was part of the process. How important was that?

It was critical. There had been deep cleavage between the union in New York—the United Federation of Teachers (UFT)—and poorer communities of color ever since the Ocean Hill–Brownsville confrontation over community control in Brooklyn in the late sixties.

That relationship had to be repaired because unions and parents share much common ground. Teachers want to improve working conditions and parents want to improve their children's learning conditions. So the UFT came in on the question of lead teachers because they saw this as a way of building expertise in the failing schools, building a bridge of cooperation and collaboration in the poorest communities, and also building a career ladder for teachers. So lead

A number of factors contributed to the success of the campaign that brought change to the Mount Eden schools, but good old basic community organization was a pivotal component.

teachers became a part of the UFT's agenda.

Once the UFT joined with community-based organizations and parents, this built momentum, and the campaign was able to put a lot of pressure on the Department of Education (DOE), which was predisposed to favor the lead teacher proposal. After a long campaign, they finally agreed to make the necessary investment.

How did the reforms work out?

Thirty-six lead teachers were hired for these schools and, within a year and a half, the test scores in those schools improved substantially. When DOE saw those scores, they wanted to scale this project up citywide. Only, they tried to do it without any parent participation. They didn't realize that a large part of what produced the success of those ten schools was parent involvement, not only in the hiring but in the schools themselves. This kind of parental ownership and teacher support, exemplified by the lead teacher reform, is a large part of what is needed as a corrective to the charter school movement.

Is this “corrective to the charter school movement,” which was achieved in the Mount Eden community, is that happening elsewhere in the country?

Right now there are unions, the AFT among them, working with CBOs in a number of cities trying to build partnerships on a platform of reform and strategic investment. Whether they will be successful, given the strength of other agendas, is an open question.

Has the success of those schools in the Mount Eden community been sustained?

For the first couple of years, there were substantial spikes in test scores. But I haven't tracked what has happened subsequently. So I can't tell you if parents remained involved or have been encouraged to stay involved or if other complementary reforms have been put in place.

But what I said at the beginning was that we know what will produce change: strategic investment in classroom ratios, teacher and principal development, pedagogical innovation that teaches critical thinking and writing. Parental involvement and ways of promoting parental involvement are essential. It will take campaigns that evolve from the grassroots, from CBOs, and from unions if we are to see the kind of parental involvement and redistribution of resources into the poorest communities, without which effective reform cannot be built.

Organizing for Educational Justice tells the story of how parent involvement can be built and sustained in the poorest communities of color. Perhaps most importantly, it tells how that involvement can be translated into an organized campaign with the power needed to leverage additional resources.

—ISM

Some cautionary thoughts on education and privatization from Michelle Fine

This spring Michael Fabricant and Michelle Fine (Dist. Prof., GC, Psychology, Urban Education) published Charter Schools and the Corporate Makeover of Public Education, noting in the Introduction their intent to “track the history of charters from social justice alternatives to a campaign to dismantle and decentralize public education.” Here (lightly edited) is some of what Professor Fine told Folio about public education and charter schools.



On race, class, and education

There has long been a debate about whether public schools are actually designed to reproduce existing class and race inequities or if they are designed to reduce existing inequities. I would say “yes” to both. Mostly, low-income students attend underresourced schools, where they are often overtested and overpoliced; many end up with little more than they began with and feeling not very smart. Wealthier students, and a selective sample of highly motivated low-income youth, have the opportunity to attend better resourced schools and typically enjoy a range of privately funded supports.

New York City has some of the best and some of the worst schools. But we have always had stratified schools. Our top high schools have had selective admissions and cater to a relatively privileged group, while our neighborhood high schools have too often been what are now called “dropout factories.”

On school choice in New York

In the late 1980s, educators like Deborah Meier and community leaders in the city’s small-schools movement argued that low-income children deserved high-quality schools and maybe those shouldn’t be overdetermined by zip code. Framed around the concept of controlled choice, the plan was to provide a range of schools that would facilitate racial/ethnic integration and encourage various ways of teaching and learning.

By the early 1990s, the Annenberg and Gates Foundations “discovered” the small-schools movement. Mayor Bloomberg joined the small-schools campaign and, with philanthropic and government support, small schools were mass-produced across the city, rarely with any community or educator input and certainly no youth input. These sweet, precious home-grown collaborations morphed into an externally imposed commodity. At that point the equity commitment that encouraged students to choose wherever they wanted to learn was lost. Now, only the top students actually get to choose. The truth is that schools have the choice now, while so many of the neediest children don’t.

On the evolution of charter schools

They started as social justice public schools within the public sector to serve children who weren’t being well served by the existing system. So, there were charter schools for youth in foster care or for

English-language learners. But that era of charter schools was short-lived. Soon thereafter, charter schools were swept up in a corporate campaign to dismantle public education, strip equity concerns from the public sector, undermine labor and educators, and sever the precarious links of schools to local communities. And now we have a corporate model of chartering, which is moving into neighborhoods, closing down schools, and reopening them for different kids, reclaiming public school space for selective groups of young people.

On the charter school movement

I’d say there are three or four currents inside this movement—not all compatible.

- One is a strong libertarian strain that just says, “Enough of the public sector monopoly, enough of government telling us what to do. We need autonomy.”
- A second comes particularly from communities of color that have said, “You have not served us well. The public sector has systematically miseducated our children and is not caring for their well-being.”
- A third is now the corporate networks and philanthropic networks, where there are back-office expenses and where the CEOs, publishing companies, and real estate entrepreneurs are making a lot of money.
- Mike [Fabricant] and others have argued as well that, as our global markets disappear, corporations have moved in domestically to capitalize public sector services. We’ve seen it in health care, we’ve seen it in housing, we’re seeing it in prisons, and now we’re seeing it in education.

On the politics of privatization and the public sector

While some argue that we must cut public sector costs, certain budget items are suspiciously immune from cuts. We see no massive reductions in military spending, criminal justice, prison construction, or even in school-based testing. In fact, we are witnessing a proliferation of costs for “accountability” and policing of schools. Privatization has allowed a strategic reallocation of dollars from sites of development, like K-through-12 schooling and public higher education, to the military, to prisons, to sustained tax cuts for elites and corporations, and to a massive testing and school security industrial complex.

Privatization of education is not only a financial realignment, it is an ideological realignment as well. It means the death of believing in equity and equal opportunity. By corporatizing education, we are removing one of the last foundational pieces of public entitlement—not just for individuals but for the democratic fabric—for that which holds us together. Libraries? Branch libraries are gone. What’s left? Highways and juries, and prisons and the military. Public housing is a mere shadow of itself and public parks are an endangered sector.

But if we don’t have a rich public sector, if we don’t have a rich public education sector, we can’t still call ourselves a democracy. There is far too much at stake.

Elected to the National Academy of Science

William Bialek, visiting presidential professor of physics and founder and director of the Initiative for the Theoretical Sciences (ITS @ The Graduate Center), has been elected to the prestigious National Academy of Science, one of the highest honors that can be accorded a U.S. scientist or engineer. In addition to his work at the Graduate Center, Bialek serves as John Archibald Wheeler/Battelle Professor in Physics, and as a member of the multidisciplinary Lewis-



PHOTO: SHIRIN SAMMAN

Sigler Institute of Integrative Genomics at Princeton University. He has been a key figure in the emergence of biophysics as a subdiscipline within physics, and in bringing the quantitative traditions of physics to bear on a broad range of phenomena in biology. Bialek's influential research has addressed problems from the dynamics of individual biological molecules to the decisions made by single cells in a developing embryo to the "code" that the brain uses in representing information about the world around us. A persistent theme in Bialek's work is the remarkable efficiency and precision of life's basic mechanisms, which often approach the limits set by basic physical principles.

Mimi Abramovitz (Prof., Hunter, Social Welfare), Bertha Capen Reynolds Professor of Social Policy and Social Welfare, delivered two keynote addresses in March, one at the Annual Field Educator's Symposium and the other at the Annual Meeting of the Pennsylvania Association of Undergraduate Social Work Education.

Zaghoul Ahmed (Asst. Prof., Staten Island, Physical Therapy) is one of only five research scientists to receive the 2011 NYC BioAccelerate Award.

Richard Alba (Dist. Prof., GC, Sociology), along with Joseph Pereira, director of CUNY Data Service, prepared "The Progress and Pitfalls of Diversity on Wall Street," a report released by the GC's Center for Urban Research that focuses on the influx of minorities and women working on Wall Street. The findings were published in the *New York Times*, the *Huffington Post*, and the *Wall Street Journal*.

Leslie Anne Anderson (Doctoral student, Art History) won a 2012–13 Fulbright grant to Denmark.

Peter Beinart (Assoc. Prof., CUNY School of Journalism, Political Science) published an op-ed in the *New York Times* in March titled "To Save Israel, Boycott the Settlements." Beinart, senior political writer for the *Daily Beast*, is integral to the GC's public program "Perspectives: Conversations on Policy and Place with Peter Beinart."

Robert Bittman (Dist. Prof., Queens, Biochemistry, Chemistry) provided the keynote speech on "Synthetic Sphingolipids as Immunoregulatory Agents" at the 2011 Southeast Regional Lipid Conference in Cashiers, North Carolina.

Randolph L. Braham (Dist. Prof. Emer., City, Political Science), director of the Rosenthal Institute for

was awarded his second commission for a new composition from the Serge Koussevitzky Music Foundation at the Library of Congress.

Raymond Erickson (Prof. Emer., Queens, Music), who served on the faculty of Juilliard's new historical performance program in spring 2012, gave the keynote speech, "Bach's St. Matthew Passion in History," in April at the 80th Annual Baldwin-Wallace College Bach Festival.

Michelle Fine (Dist. Prof., GC, Psychology, Urban Education, Liberal Studies) won the New York State United Teachers (NYSUT) Journalism Award for "Reclaiming Public Institutions, Our Best Hope for a Vibrant Democracy" at the 2012 NYSUT Journalism Competition.

Mauricio A. Font (Prof., Queens, Sociology), director of the Bildner Center for Western Hemisphere Studies, gave an interview to Fox News on Pope Benedict XVI's visit to Cuba.

David A. Gerstner's (Prof., Staten Island, Theatre) book *Queer Pollen: White Seduction, Black Male Homosexuality, and the Cinematic* (University of Illinois Press, 2011) was selected for a 2012 *Choice* Outstanding Academic Title.

David Harvey (Dist. Prof., GC, Anthropology, Earth and Environmental Sciences, History) was elected an Honorary Fellow of St. John's College, Cambridge.

Sylvia Kahan (Prof., Staten Island, Music) served as keynote speaker for the Chamber Music Society's 2012 Winter Festival at Lincoln Center.

Andrea Khalil (Asst. Prof., Queens, French, Middle Eastern Studies) has been selected as a 2012–13 Fulbright Scholar in Tunisia.

Mahesh K. Lakshman (Prof., City, Chemistry) coauthored an article on nucleosides, the fundamental building blocks of all genetic material, which was featured on the inside cover of *Angewandte Chemie International Edition* (November 25, 2011). The article is also listed under "Wiley Hot Topics: C-H Activation."

Barbara Dobbs Mackenzie (Adj. Asst. Prof., GC, Music), director of the Barry S. Brook Center for Music Research and Documentation and editor-in-chief of *Répertoire International de Littérature Musicale* (RILM), has been elected president of NFAIS (National Feder-



PHOTO: MICHAEL D'UITO

David Del Tredici (Dist. Prof., City, Music), a Pulitzer Prize-winning composer, was honored with two productions celebrating his 75th birthday in March, one at Symphony Space and the other at Galapagos Art Space, where his burlesque opera "Haddock's Eyes" was presented.

Jason Eckardt (Assoc. Prof., Brooklyn, Music), co-founder and executive director of Ensemble 21,

Two GC Professors Awarded Guggenheim Fellowships

Two members of the Graduate Center doctoral faculty have been awarded 2012 John Simon Guggenheim Memorial Foundation Fellowships.

Dagmar Herzog, Daniel Rose Faculty Scholar and professor of history at the Graduate Center, was awarded a Guggenheim for a trans-Atlantic research project on the European and American histories of psychoanalysis, trauma, and desire. It is titled

"With History in Mind: Psychoanalysis in a Postwar World." Appointed to the Graduate Center in August 2005, Herzog

conducts transnational and comparative research on how religion and secularization have affected social and political developments in modern Europe. An expert on the histories of Nazism and the Holocaust and their aftermath, she gives particular attention in her research to methodological innovations in critical source analysis and in gender and sexuality studies. She is the author of *Sexuality in Europe: A Twentieth-Century History, Sex in Crisis: The New Sexual Revolution and the Future of American Politics, Sex after Fascism: Memory and Morality in Twentieth-Century Germany*, and *Intimacy and Exclusion: Religious Politics in Pre-Revolutionary Baden*. She has edited six anthologies, including *Brutality and Desire: War and Sexuality in Europe's Twentieth Century and Lessons and Legacies VII: The Holocaust in International Perspective*, and has published in more than twenty journals and edited volumes. Herzog earned her B.A. at Duke University and her M.A. and Ph.D. at Brown University. She was a Mellon Faculty Fellow at Harvard and a member of the Institute for Advanced Study, Princeton.

ation of Advanced Information Services), a member organization of which RILM, the world's most comprehensive music bibliography, is a part.

Nancy K. Miller (Dist. Prof., GC, Comparative Literature, English, French) won the 2012 Jewish Journal Book Prize in recognition of her family memoir *What They Saved: Pieces of a Jewish Past* (University of Nebraska Press, 2011).

Janet E. Poppdeck (Prof., Hunter, Sociology, Public Health) was among ten winners of a 2011 James Beard Foundation Inaugural Leadership Award,

Joan Richardson, professor of English, comparative literature, liberal studies, and American studies and executive officer of the M.A. Program in Liberal Studies, was awarded a Guggenheim for her project titled "Images, Shadows of Divine Things," a secular, spiritual autobiography, an experiment in hybrid form. She joined the faculty in 1987. Author of a two-volume biography of the poet Wallace Stevens, she coedited, with Frank Kermode, *Wallace Stevens: Collected Poetry and Prose*. Her study *A Natural History of Pragmatism: The Fact of Feeling from Jonathan Edwards to Gertrude Stein*, published by Cambridge University Press in 2007, was nominated for the 2011 Grawemeyer Award in Religion. She is currently at work completing another volume for Cambridge, "Pragmatism and American Culture." Her essays and interviews on such topics as Stevens, Ralph Waldo Emerson, William James, poetry, pragmatism, and the HBO series *Deadwood* have appeared in, among others, the *Wallace Stevens Journal*, *Raritan*, *Configurations*, the *Hopkins Review*, and *Bookforum*, and as chapters in edited volumes. Her awards include a Woodrow Wilson Fellowship and a Senior Fellowship from the National Endowment for the Humanities. Richardson's work reflects an abiding interest in the ways that philosophy, natural history, and science intersect with literature. Having grown up bilingual and having learned to read and write Demotic Greek before learning those skills in English, she has always been deeply preoccupied with the nature of language itself. Being "in Greek" remains an essential aspect of her experience and informs her Guggenheim project.

which recognizes visionaries in the business, government, and education sectors responsible for creating a healthier and more sustainable food world.

David S. Reynolds (Dist. Prof., GC, English) published two op-eds this winter, one in the *New York Times* and the other in the *Daily News*: "Why Evangelicals Don't Like Mormons" and "Rick Santorum, Learn Your History," respectively.

Kathleen E. Saavik Ford (Assist. Prof., BMCC, Physics), an astronomer who analyzes supermassive black holes, was featured in *Clarion* (March 2012) for

her work at CUNY and the American Museum of Natural History, where she serves as research associate.

Pamela Sheingorn (Prof. Emer., Baruch, History, Theatre) was honored for her contributions to medieval studies by Elina Gertsman, assistant professor of medieval art at Case Western Reserve University, and Jill Stevenson, assistant professor of theatre arts at Marymount Manhattan College. Gertsman

and Stevenson dedicated their book *Threshold of Medieval Visual Culture: Liminal Spaces* (Boydell Press, 2012) to her.

Judith Stein (Prof., City, History), along with her class, was filmed on March 27 by C-Span for broadcast in its American history series. The subject of the class was a discussion of Stein's book *Pivotal Decade: How the United States Traded Factories for Finance in the Seventies* (Yale University Press, 2010).

Deborah Tolman (Prof., Hunter, Psychology) was among three people honored on April 24 at Scenarios USA's "Real Deal Awards and Gala" on April 24. The national nonprofit organization uses writing and filmmaking to foster youth leadership and advocacy and self-expression in students across the country.

Margaret Wallace (Assoc. Prof., John Jay, Biochemistry, Criminal Justice) received the 2011 Applied Research and Development in Forensic Science Award from the National Institute of Justice for her proposal titled "Development of an Immuno-Magnetic Procedure for the Separation of Spermatozoa from Vaginal Epithelial Cells." This one-year, \$196,720 grant will fund her research to enhance the efficiency of crime laboratories by reducing the time required for the analysis of sexual assault swabs.

Jock Young (Dist. Prof., GC, Criminal Justice, Sociology) has been awarded the 2012 Award for Outstanding Contribution to Criminology from the British Society of Criminology (BSC).

Dr. Loraine Gelsthorpe, professor of criminology at the University of Cambridge and BSC president, wrote: "We would simply like to acknowledge your outstanding achievements in the field of criminology, which have been—and continue to be—remarkable . . . you have made a huge contribution to critical thinking in the field of criminology. . . . Generations of scholars have been prompted to think anew."



Jock Young

FACULTY BOOKS

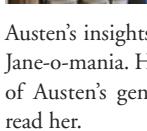
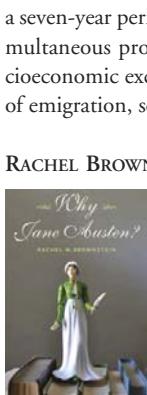
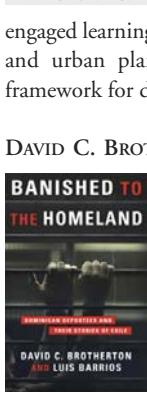
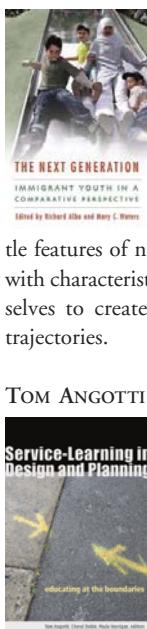
All members of the doctoral faculty are invited to contact pubaff@gc.cuny.edu with information about their books once final proofs have been submitted. More complete descriptions and links for purchase may be viewed at <http://www.gc.cuny.edu/Faculty/GC-Faculty-Publications>.

RICHARD ALBA (Dist. Prof., GC, Sociology) and Mary Walters, eds., *The Next Generation: Immigrant Youth in a Comparative Perspective* (NYU Press, 2011). Top scholars explore how the integration of immigrants in the United States and Western Europe affects the generations that come after. Subtle features of national and local contexts interact with characteristics of the immigrant groups themselves to create variations in second-generation trajectories.

TOM ANGOTTI (Prof., Hunter, Earth and Environmental Sciences), Cheryl Doble, and Paula Horrigan, eds., *Service-Learning in Design and Planning: Educating at the Boundaries* (New Village Press, 2011). This collection of case studies critically explores the current practice of community-engaged learning in architecture, landscape design, and urban planning and forms a pedagogical framework for design educators.

DAVID C. BROTHERTON (Assoc. Prof., John Jay, Criminal Justice, Sociology, Urban Education) and **LUIS BARRIOS** (Prof., John Jay, Psychology), *Banished to the Homeland: Dominican Deportees and Their Stories of Exile* (Columbia University Press, 2011). Following thousands of deportees over a seven-year period, the authors conclude that a simultaneous process of cultural inclusion and socioeconomic exclusion best explains the trajectory of emigration, settlement, and rejection.

RACHEL BROWNSTEIN (Prof., Brooklyn, English, Liberal Studies), *Why Jane Austen?* (Columbia University Press, 2011). The author considers constructions of Jane Austen as a heroine, moralist, satirist, romantic, woman, and author and the changing notions of these categories, finding echoes of Austen's insights and techniques in contemporary Jane-o-mania. Her discussion of the distinctiveness of Austen's genius clarifies the reasons why we read her.



RAQUEL CHANG-RODRÍGUEZ (Dist. Prof., City, Hispanic and Luso-Brazilian Literatures and Languages) and **MALVA E. FILER** (Prof., Brooklyn, Hispanic and Luso-Brazilian Literatures and Languages), eds., *Voces de Hispanoamérica: Antología literaria* (4th ed., Heinle/Cengage Learning, 2012). The fourth edition features revised essays, new selections from Cortázar, García Márquez, and Vargas Llosa, and several new authors.

RODRICK A. COLVIN (Assoc. Prof., John Jay, Criminal Justice), *Gay and Lesbian Cops: Diversity and Effective Policing* (Lynne Rienner, 2012). Integrating quantitative and qualitative research, Colvin assesses the impact of lesbian and gay police officers on law enforcement in the United States and the UK and looks at the policies that enable a diverse work environment.

BRIGITTE S. CYPRESS (Asst. Prof., Lehman, Nursing Science), *The Lived ICU Experiences of Nurses, Patients and Family Members: A Phenomenological Study of Critically Ill Patients, their Families and Nurses* (Lambert Academic Publishing, 2011). The author explored the mutual influence among patients, family members, and nurses during a critical illness experience, often a time of emotional turmoil and role conflict in families.

MARIO DIGANGI (Prof., Lehman, English), *Sexual Types: Embodiment, Agency, and Dramatic Character from Shakespeare to Shirley* (University of Pennsylvania Press, 2011). Building on feminist and queer scholarship, the text shows how sexual types on the early modern stage—such as the sodomite, the tribade (a woman-loving woman), the narcissistic courtier, the citizen wife, the bawd, and the court favorite—function as sites of ideological contradiction.

MICHAEL FABRICANT (Prof., Hunter, Social Welfare) and **MICHELLE FINE** (Dist. Prof., GC, Psychology, Urban Education), *Charter Schools and the Corporate Makeover of Public Education* (Teachers College Press, 2012). The authors systematically explore the gap between the promise and the performance of charter schools and offer alternative images of transforming public education to serve all children.

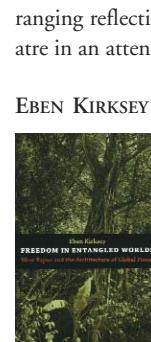
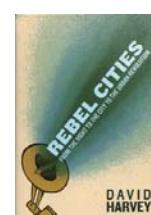
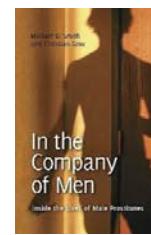
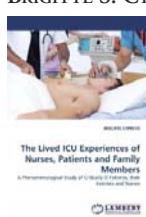
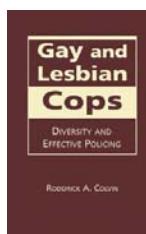
MATTHEW K. GOLD (Asst. Prof., NYCCT, Liberal Studies), ed., *Debates in the Digital Humanities* (University of Minnesota Press, 2012). This collection of essays delineates the current state of the digital humanities and envisions potential futures and challenges. Subjects range from the struggles to define the field to the prospects for new forms of scholarship to its institutional ramifications, including critiques of its lack of attention to diversity.

Michael D. Smith and **CHRISTIAN GROV** (Asst. Prof., Brooklyn, Public Health), *In the Company of Men: Inside the Lives of Male Prostitutes* (Praeger, 2011). Through numerous interviews with a group of men working for an Internet male escort agency, this in-depth account sheds light on the hidden world of such escorts, their customers, and the niche they inhabit in modern American society.

DAVID HARVEY (Dist. Prof., GC, Anthropology, Earth and Environmental Sciences, History), *Rebel Cities: From the Right to the City to the Urban Revolution* (Verso, 2012). Placing the city at the heart of both capital and class struggles, Harvey asks how cities might be reorganized in more socially just and ecologically sane ways—and how they can become the focus for anticapitalist resistance.

JONATHAN KALB (Prof., Hunter, Theatre), *Great Lengths: Seven Works of Marathon Theater* (University of Michigan Press, 2011). Kalb examines seven monumental plays and looks at how their extreme length helps them accomplish extraordinarily ambitious aims. The book also features wide-ranging reflections on the enduring power of theatre in an attention-challenged era.

EBEN KIRKSEY (Mellon Fellow, visiting assistant professor at the GC), *Freedom in Entangled Worlds: West Papua and the Architecture of Global Power* (Duke University Press, 2012). Kirksey blends ethnographic research with indigenous parables, historical accounts, and narratives of his own experiences in West Papua as a student and a researcher to tell this story of the Indonesian province's struggle for freedom.



FACULTY BOOKS

JOHN KLEINIG (Prof., John Jay, Criminal Justice, Philosophy), Peter Mameli, Séumas Miller, Douglas Salane, and Adina Schwartz, *Security and Privacy: Global Standards for Ethical Identity Management in Contemporary Liberal Democratic States* (ANU E Press, 2012).

The book addresses the challenge to establish an acceptable and sustainable equilibrium between security and privacy in the context of transnational crime and global terrorism.

LAWRENCE KOBILINSKY (Prof., John Jay, Biochemistry, Criminal Justice), ed., *Forensic Chemistry Handbook* (John Wiley & Sons, 2011).

This handbook provides a clear, concise discussion of the state of the art on subjects such as serology, DNA/molecular biology, explosives and ballistics, toxicology, pharmacology, instrumental analysis, arson investigation, and other types of chemical residue analysis.

Danielle Sapse and LAWRENCE KOBILINSKY (Prof., John Jay, Biochemistry, Criminal Justice), eds., *Forensic Science Advances and Their Application in the Judiciary System* (CRC Press, 2011).

The text examines, from both scientific and legal perspectives, how new forensic techniques are currently being applied or have the potential to be applied in judicial proceedings.

WAYNE KOESTENBAUM (Dist. Prof., GC, English), *The Anatomy of Harpo Marx* (University of California Press, 2012).

The author focuses on Harpo's chief and yet heretofore unexplored attribute—his profound and contradictory corporeality—moving from insightful analysis to cultural critique to autobiographical musing, and provides Harpo with a host of odd bedfellows, including Walter Benjamin and Barbra Streisand.

SAUL Kripke (Dist. Prof., GC, Philosophy), *Philosophical Troubles: Collected Papers, Volume 1* (Oxford University Press, 2011).

The first of a series of volumes, this presents a mixture of published and unpublished articles from various stages of Kripke's storied career and ranges over epistemology,



linguistics, pragmatics, philosophy of language, history of analytic philosophy, theory of truth, and metaphysics.

NANCY K. MILLER (Dist. Prof., GC, Comparative

Literature, English, French), *What They Saved: Pieces of a Jewish Past* (University of Nebraska Press, 2011). Intrigued by an unexplained collection of artifacts passed down from her father, the author traces her family tree back to Eastern Europe and begins to come to terms with "the bittersweet legacy of the third generation." Winner of the 2012 Jewish Journal Book Prize.

RICARDO OTHEGUY (Prof., GC, Hispanic and

Luso-Brazilian Literatures and Languages, Linguistics, Urban Education) and Ana Celia Zentella, *Spanish in New York: Language Contact, Dialectal Levelling, and Structural Continuity* (Oxford University Press, 2012). This sociolinguistic analysis

compares the Spanish of New Yorkers born in Latin America with that of those born in New York City.

STACEY PLICHTA (Prof., Hunter, Public Health) and ELIZABETH KELVIN (Asst. Prof., Hunter, Public Health), *Munro's Statistical Methods for Health Care Research*, 6th ed. (Lippincott Williams & Wilkins, 2012).

The sixth edition provides students with a solid foundation for understanding data analysis and specific statistical techniques, focusing on the most current statistical methods in today's health care literature.

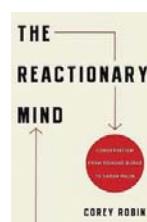
JEREMY R. PORTER (Asst. Prof., Brooklyn, Criminal Justice, Sociology), and Frank M. Howell, *Geographical Sociology: Theoretical Foundations and Methodological Applications in the Sociology of Location* (Springer, 2012).

The book examines such spatial concepts as containment, proximity, and adjacency in relation to such methodological tools as hierarchical linear models, point pattern analysis, and spatial regression.

DIANA REISS (Prof., Hunter, Psychology), *The Dolphin in the Mirror: Exploring Dolphin Minds and Saving Dolphin Lives* (Houghton Mifflin Harcourt, 2011). Reiss discusses dolphins' sonar ca-

pabilities, their sophisticated playfulness, their emotional intelligence, and their ability to bond with other species. Her most famous experiments used a mirror to prove that dolphins are self-aware and even self-conscious.

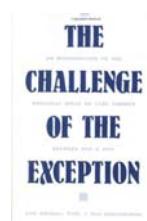
COREY ROBIN (Assoc. Prof., Brooklyn, Political



Science), *The Reactionary Mind: Conservatism from Edmund Burke to Sarah Palin* (Oxford University Press, 2011). This book argues that despite their various positions on the state and markets, all right-wing ideologies are historical improvisations on a theme:

the felt experience of having power, seeing it threatened, and trying to win it back.

GEORGE SCHWAB (Prof. Emer., History), *The*



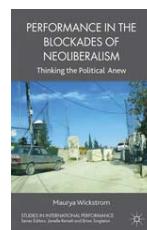
Challenge of the Exception: An Introduction to the Political Ideas of Carl Schmitt Between 1921 and 1936, 2nd ed. (Greenwood, 1989). Newly translated into Chinese, this book clearly articulates the influential Carl Schmitt's key concepts and

relates their centrality to politics and the state; to the political theory of liberalism, democracy, and authoritarianism; and to international relations.

Gail Kligman and KATHERINE VERDERY (Dist.

Prof., GC, Anthropology), *Peasants under Siege: The Collectivization of Romanian Agriculture, 1949–1962* (Princeton University Press, 2011). The authors shed new light on agricultural collectivization in the Soviet era and the far-reaching social engineering process that ensued, as villages that were organized around kinship and status hierarchies were transformed into segments of large bureaucratic organizations.

MAURYA WICKSTROM (Assoc. Prof., Staten Island,



Theatre), *Performance in the Blockades of Neoliberalism: Thinking the Political Anew* (Palgrave Macmillan, 2012). Ranging from refugee camps in Palestine to halting sites of the Irish Travellers in search of a new politics practiced through performance, the author argues that we must not overlook the ways in which neoliberalism, specifically, shrinks our imaginations of what life might be.

Emelise F. Aleandri (Theatre, 1984), an expert in Italian American theatre and culture, has been working on a number of books that have been or are shortly to be published. The Italian version of her popular book on Manhattan's Italian immigrant neighborhood, *Little Italy* (Arcadia, 2002), will be rereleased under the title *La Piccola Italia* (Arcadia, 2012). The book focuses on the first phase of immigrants to Lower Manhattan in the early 1800s. Her encyclopedic book *Italian-American Immigrant Theatre of New York City 1746–1899* (Edwin Mellen Press, 2006) continues to be published as a series of volumes. And forthcoming is Aleandri's *Mulberry Street*, which spans the history of building, people, and events associated with the street, from the time of the Native Americans to the more recent influx of Asians from Worth Street to Bleecker Street.



Svetlana Bochman (English, 2005) recently published two book chapters, titled "Detecting Technocratic Holmes in the BBC's 'Sherlock' Adaptation" and "Investigating Victorian Propriety in Money Matters in 'Sherlock,'" in *Sherlock Holmes in the 21st Century* (McFarland, 2012). Among her other publications are "I Will Marry You If I Must": Mercenary Marriage in Jane Austen's "The Three Sisters," in the *Atrium: A Journal of Academic Community Voices* (October 2011), an issue in which she is also interviewed; and "The Importance of Being Married: Lady Bracknell as Marriage Market Mammá in Oscar Wilde's *The Importance of Being Earnest*," in *Alizés: Revue Angliciste de la Réunion* (December 2011).

Jennifer Danby (Theatre, 2004) received a rave review from *Theatreonline.com* for her mid-March performance in the one-woman show *Vivien Leigh: The Last Press Conference* at the Alexander Technique Center for Performance in New York. The show was directed by Austin Pendleton and produced by Danby's theatre company Mississippi Mud Productions.

Christopher P. Iannini (English, 2004) published *Fatal Revolutions: Natural History, West Indian Slavery, and the Routes of American Literature* (University of North Carolina Press, 2012). Drawing on letters, illustrations, engravings, and neglected manuscripts, the book focuses on two dramatic transformations in the eighteenth-century Atlantic world: the emergence and growth of the Caribbean plantation system and the rise of natural science.

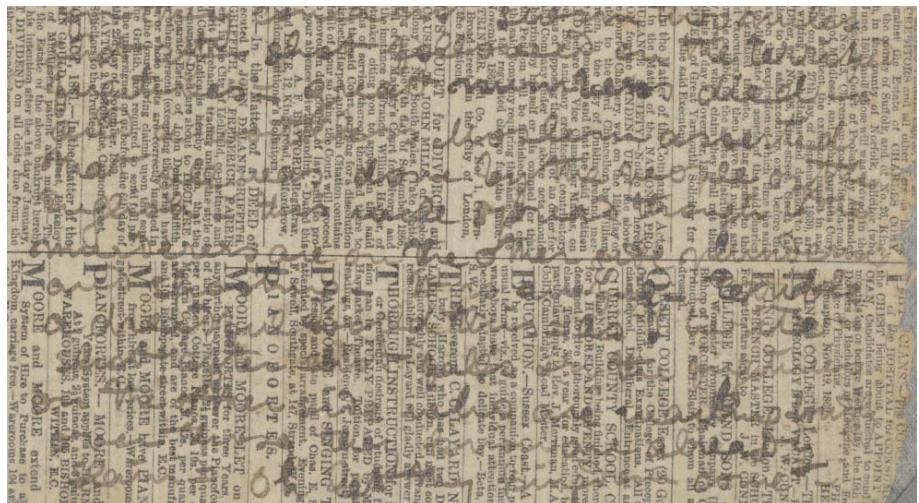


GC Alum Deciphers David Livingstone's 1871 African Diary

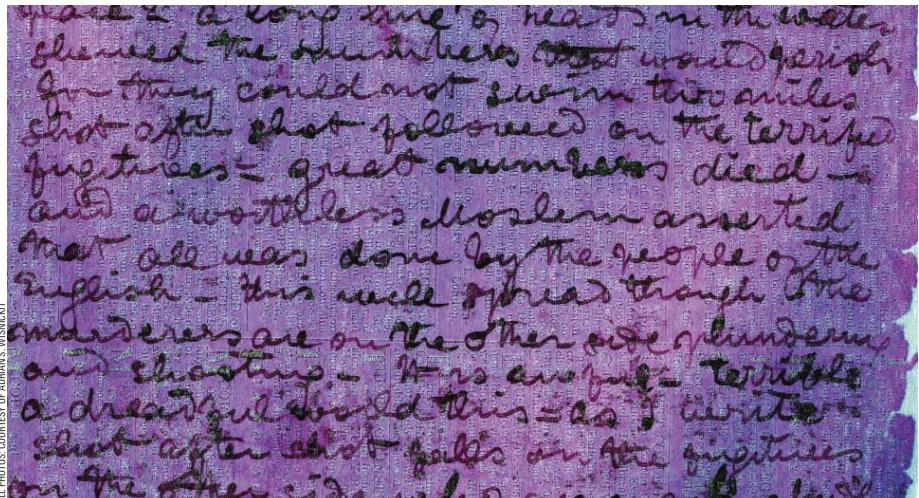


Adrian S. Wisnicki (English, 2003), assistant professor of nineteenth-century British literature and codirector of the Center for Digital Humanities and Culture at Indiana University of Pennsylvania, heads a team that rescued from obscurity an 1871 field diary by Scottish missionary, abolitionist, and explorer David Livingstone. Using spectral imaging technology, the team was able to decipher Livingstone's now-faded red ink, made from the seeds of a local

berry, on the fragile 140-year-old newspaper, the only kind of paper he had at hand. Livingstone recorded events as they were happening, said Wisnicki, including the horrifying and bewildering massacre of Africans by Arab slave traders, an account that "is very rough, very chaotic." Wisnicki located the diary, which had been miscatalogued, at the David Livingstone Center in Scotland in 2009. His project to decipher, analyze, and publish the diary has been the subject of a BBC television report and articles in the *Washington Post* and the *New York Times*. While Wisnicki continues to analyze the diary, he and his colleagues have ensured that the full text and complementary materials are available worldwide as a free resource on the Internet. *Livingstone's 1871 Field Diary: A Multispectral Critical Edition* and the Livingstone Spectral Image Archive are hosted by UCLA's library, <http://livingstone.library.ucla.edu/>.



Spectral analysis made it possible to read the faded red ink on 140-year-old newsprint (above).



Arta Lucescu-Boutcher (French, 1998) published an article on Charles Baudelaire's "Fleurs du Mal" titled "Une Reflexion sur le Mal" in the February-March issue of *Société d'études Benjamin Fondane*.

Mauricio Molina (Music, 2006) was awarded the 2010 Nicholas Besseraboff Prize by the American Musical Instrument Society (AMIS) for *Frame Drums in the Medieval Iberian Peninsula* (Edition Reichenberger, 2010). The prize is given to the most distinguished book-length work in English on the design, history, and use of musical instruments. Molina is now living in Barcelona. He serves as a professor of medieval music theory and performance practice at the Conservatory of Girona and lecturer in the M.A. programs in musicology and performance practice at the Universitat Autònoma de Barcelona and Escola Superior de Música de Catalunya (ESMUC), and is a faculty member of the IES Abroad Barcelona, where he teaches Spanish music folklore. He is now preparing the release of a new CD by his group Magister Petrus and is writing a second book, which is dedicated to monophonic song in the twelfth and thirteenth centuries.

Quynh Nguyen (Music, 2009) delivered a spell-binding performance of solo piano pieces by Frédéric Chopin, Olivier Messiaen, and Maurice Ravel in Elebash Recital Hall on May 3 for the final Music in Midtown concert of the season. Since her New York debut recital in 2001,

the brilliance and beauty of Nguyen's art has been noted by music critics. She has performed extensively throughout the United States and Europe, in notable concert venues such as Avery Fisher Hall at Lincoln Center and the Konzerthaus Berlin. Her international engagements as a concert soloist include those with the San Francisco Concerto Orchestra, the Hanoi Symphony Orchestra, and the Regional Wind Orchestra of Paris. She has also distinguished herself in piano competitions, been featured on numerous radio stations and television programs, and performed in master classes given by world-renowned artists such as Tatiana Nikolaeva, Jeffrey Swann, and András Schiff. Her dissertation, titled "An Analysis of Olivier Messiaen's Last Piano Solo Work: *Les Petites Esquisses d'oiseaux*," received the Barry Brook Dissertation Award from the Graduate Center. Additionally, she received the United States Presidential Academic Excellence Award and a Fulbright Fellowship to study music in Paris. Nguyen currently serves on the faculty of Hunter College and the International Keyboard Institute & Festival at Mannes College of Music in New York City.



PHOTO: MATTHEW KRIE

From the Class of 2012

Linell Ajello (Theatre, 2012) has accepted a two-year Mellon postdoctoral fellowship in the communications department of Tulane University. For her dissertation, "Tragic Practice: Participatory Democracy and Activist Theatre in the U.S., 2000–10," Dr. Ajello studied how the performances of four activist groups engaged in democratic communication and connected scholarship on deliberative democracy with scholarship on tragedy. The groups included Iraq Veterans Against the War, Invisible Children, and Community Action Association, which hosts Poverty Simulations, a role-playing theatre game. In her course work in theatre and political science, she developed her interest in analyzing theatre as political engagement and in performance as a vital form of expression within a democratic republic. During her postdoctoral fellowship at Tulane, Ajello will study current representations—newspaper photos, movies, TV, theatre—of poverty in New Orleans and compare them to presidential and popular discourse about poverty. She will also teach one course per semester on democracy and performance. During her graduate studies, Ajello held three fellowships, which have provided her time to research and write: a two-year Writing Fellowship as well as a Communication Fellowship, both at the Bernard L. Schwartz Communication Institute, Baruch College; and a Graduate Center Dissertation Fellowship. Her publications include "A Game of Poverty and Tragic Deliberation," *Constellations: An International Journal of Democracy and Critical Theory* (forthcoming), and "Profile: 'Sekou Sundiata: Poet and Performer, 1948–2007,'" *Ecumenica Journal of Theatre and Performance* 3:2 (2010).

Sari Altschuler (English, 2012) has accepted a tenure-track position at the University of South Florida (USF) in fall 2012. Her dissertation, titled "National Physiology: Literature, Medicine, and the Invention of the American Body, 1789–1860," explores the collaborative relationship between medicine and literature in the early republic, offering the first genealogy of the medical humanities in America. In her first year as professor of English at USF, she will teach American literature to 1865, nineteenth-century American fiction, and a doctoral-level course. Dr. Altschuler's work has appeared in *Disability Studies Quarterly* and the *Journal of the Early Republic*. The high standard of Altschuler's research and writing has been recognized outside the CUNY system by awards and/or dissertation fellowships from the

University of Pennsylvania's McNeil Center for Early American Studies; the Philadelphia Area Center for the History of Science; the American Antiquarian Society; the University of Virginia; the Library Company of Philadelphia; the Society of Early Americanists; and the Charles Brockden Brown Society. Altschuler also serves on the Modern Language Association's delegate assembly, the American Studies Association Early American Caucus working committee, the Charles Brockden Brown Society board, and the working group for the Future of Disability Studies Project.

David Bahr (English, 2012), who overcame notable



PHOTO: COURTESY OF DAVID BAHR

personal adversity to earn a Ph.D. in English from the Graduate Center, has accepted a tenure-track assistant professorship at the Borough of Manhattan Community College. Born to a single mother battling illness, Dr. Bahr became a ward of the state and was placed in foster care at age two. Over the course of an unsettled childhood, he was reclaimed by his mother, briefly left in a children's psychiatric ward before being transferred to a custodial boarding school, and then returned to his foster family, where he remained until he "aged out" of the system at eighteen. Bahr put himself through college—Hunter and the Graduate Center—while working as a temp and adjunct instructor. "I loved graduate school," he says, "yet I frequently felt discouraged about my possibilities of 'breaking through' as an employable professional." He left after finishing his course work and turned to journalism, writing for the *New York Times*, *GQ*, the *Advocate*, *Poets & Writers*, *Publishers' Weekly*, and *New York* magazine. He received fellowships, from Yaddo and the Albee Foundation, and began to write and publish autobiographical essays and fiction. When he returned to the Graduate Center to explore his interests in autobiography and affect, he was awarded a writing fellowship at BMCC, participated in the Mellon Foundation seminar on "Emotion," and continued to teach. "Considering my personal trajectory," he says, "I am particularly happy about getting a job at BMCC, where I can help others striving to 'make something of themselves.'"

Ananda Cohen (Art History, 2012) accepted a tenure-track position at Cornell University, beginning in fall 2012, as assistant professor of colonial Latin American visual culture in the history of art department. Her dissertation, titled "Mural Painting and Social Change in the Colonial Andes, 1626–1830," focuses on the social history of mural painting in highland Peru from the midcolonial period to the early years of independence, and exam-



PHOTO: COURTESY OF AMANDA COHEN

ines how artists modified religious images to resonate with local indigenous communities. The dissertation offers new insight into indigenous-European artistic and cultural exchange in colonial Latin America. At Cornell, Dr. Cohen

will teach courses in pre-Columbian and colonial Latin American art and architecture. Among her publications are *Handbook to Life in the Inca World*, coauthored with Jeremy James George (Facts on File, 2011); chapters on “Pre-Columbian Art of the Andes” and “Art in the Viceroyalty of Peru” in *Maya Jiménez, Latin American Art* (Pearson, forthcoming 2013); essays on “Early Textile Traditions of South Coastal Peru” and “Featherwork of Ancient Peru” in *Natural and Supernatural: Andean Textiles and Material Culture*, exhibition catalog, Godwin-Ternbach Museum, Queens College, 2009; and book reviews in the *Journal of Latin American and Caribbean Anthropology* and *Ethnohistory*. Among the awards she received during the course of her graduate studies were a 2010–11 CUNY Graduate Center Sponsored Dissertation Fellowship; a 2010 Helen Watson Buckner Memorial Fellowship from the John Carter Brown Library; and a 2005–07 CUNY Graduate Center Dean K. Harrison Award.

Jennifer Corns (Philosophy, 2011) has held a 2011–12 Five-College Dissertation Fellowship at Mount Holyoke College and, since February, has served as postdoctoral research fellow with the Pain Project at the University of Glasgow. Dr. Corns received honors for the defense of her dissertation, titled “Pain Is Not a Natural Kind” and written under the supervision of Distinguished Professor Jesse Prinz. “Reading case studies of pain asymbolics was one of the things that piqued my interest,” she explained. “They seem to experience pain without being bothered by it.” In her dissertation, bringing philosophical inquiries and contemporary pain research to bear, she argued that while pains exist and are useful for categorizing daily experience, they are not a proper scientific category. Corns has presented papers on the philosophy of mind and language and ethics, and has a broad interest in how common, everyday categories—like belief, love, pleasure, humor—are employed for ethical and scientific inquiry. Author of “When Is a Reason Properly Pragmatic?” in *Consciousness and Cognition* (2011), she is currently preparing a book proposal and a number of articles on pain, bioethics, and folk-psychological explanation. The Pain Project, comprising philosophers, neuroscientists, and veterinarians from around the world, focuses on the relations between pain, perception, and emotion, as well as pain in

nonhuman animals. Corns is working with numerous other experts as she continues to develop her own research on pain in hopes of contributing to an improvement in treatment and the alleviation of unnecessary suffering.

Adele Kudish (Comparative Literature, 2012), stu-



dent speaker at the Graduate Center’s 2012 commencement ceremony, accepted a tenure-track job in the English department at Borough of Manhattan Community College (BMCC), where she will teach composition and literature.

In her dissertation, titled “Double-Dealings and Double Meanings: Doubting and Knowing in European ‘Analytical’ Fiction,” she examined the way authors represent consciousness—in particular doubt, error, and obsessive love—in works of literature written well before Freudian psychoanalysis and the discipline of psychology were established in the late nineteenth century. During 2011–12, Dr. Kudish was the recipient of a Sponsored Dissertation Fellowship and the Renaissance Studies Certificate Program’s Travel and Research Grant. In Spring 2012, she was invited to present three papers: “Adapting the Novels of Madame de Lafayette” at the American Comparative Literature Association’s annual conference; “Double-Dealings and Double Meanings: Deliberation and Dissimulation in *La Princesse de Clèves*” for the Graduate Center’s Renaissance Studies Certificate Program’s colloquium series; and “Intimacy and Dissimulation in Marguerite de Navarre’s *Tenth Nouvelle*” for a graduate seminar on “Fictions of the Psyche.” She is currently working on an article on Samuel Richardson’s last novel, tentatively titled “Avoiding the Chimera: Anti-Romance in *The History of Sir Charles Grandison*.” During the course of her graduate studies, Kudish taught English composition, English literature, comparative literature, and French language at various CUNY colleges; served as a 2009–11 BMCC writing fellow; and, from 2009–11, was an adjunct instructor for European humanities courses in the Morse Academic Plan at NYU.

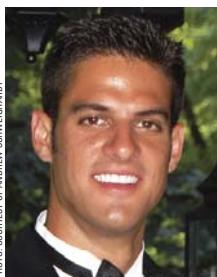
Carmella Marrone (Sociology, 2012) serves as



Higher Education Officer at Queens College, where she founded and now directs the Women and Work Program (WWP), the topic of her dissertation: “A Community of Women: A Model Intervention for Overcoming Poverty

and Domestic Violence.” Since its inception in 1998, WWP has graduated nearly two thousand women, offering them a pathway into well-paid jobs and an end to the terror of domestic violence. Earlier in her life, Dr. Marrone pursued a successful career in the corporate world and raised her daughter as a single mom. A severe bout with cancer inspired her to change her life. She earned two B.A.s and an M.A. at Queens College and enrolled as a doctoral student at the Graduate Center in 1998. Soon thereafter, a truck crushed her arm and nearly took her life. Her path to recovery and a resumption of studies was slow, but she credits the success of her endeavor to the Graduate Center’s Office of Student Affairs and the assistive technology available there. A dedicated activist on behalf of social justice for women, Marrone has been highly honored for her outreach to the city’s ethnic communities—African American, Hispanic, South Asian, Chinese, and Korean—and most recently for her work with the White Ribbon Campaign, in which men pledge to help bring an end to domestic violence. She has also been featured on CUNY-TV and New York 1 TV and in *Q Magazine* and *Education Today*, among other media.

Andrew Schweighardt (Criminal Justice, 2011)



accepted a position as visiting scientist in the counterterrorism and forensic science research unit of the FBI laboratory in Quantico, Virginia. After studying biochemistry and criminal justice as an undergraduate, Schweighardt entered the Graduate Center’s doctoral program in criminal justice in 2006 and began studying under the advisement of Associate Professor Margaret Wallace, director of the M.S. forensic science program at John Jay College of Criminal Justice, who also serves on the doctoral faculty in biochemistry and criminal justice. Schweighardt’s research interests lie in microbial forensics and his dissertation, titled “Pathogen Detection Using the Luminex Multi-Analyte System,” involved the development of a DNA-based method of identifying bacteria that could be used by a bioterrorist and earned him the “Best 2012 Dissertation” distinction from the doctoral program in criminal justice. His publications include a chapter in *Forensic Chemistry* and articles in *Journal of Forensic Sciences* and *Forensic Science International: Genetics*. In his new position with the FBI, Schweighardt will continue working on methods of pathogen detection in addition to participating in other research projects on the cutting edge of forensic science.

GC's Earth Scientists Put New York City's Solar Power Potential on the Map

New York City's first solar map, based on the most detailed three-dimensional measurements of the city available to date, has been generating a good deal of buzz throughout the five boroughs. And well it should, given that this powerful online tool quantifies the capability of New York City's rooftops to generate clean energy, while simultaneously lowering consumers' utility bills.

Easily accessible to all, the map (found at <http://nycsolarmap.com>) is the brainchild of Professor Sean Ahearn, director of the Center for Advanced Research of Spatial Information (CARSI) at Hunter College and a member of the GC's doctoral faculty in earth and environmental sciences. To create the map, launched last June, Ahearn, an expert in photogrammetry and remote sensing technology, worked with a team of doctoral and postdoc students as well as Sustainable CUNY, the City of New York, and the United States Department of Energy.

Manhattan Borough President Scott Stringer is one of many enthusiastic about the map's potential—so much so that it forms the basis of his *Rooftop Revolution*, a January 2012 report issued by his office, in which he argues for the passage of a

Solar Jobs Act, now pending before the state legislature. Using data culled from the map, Stringer contends that installing solar panels on the rooftops of the city's schools alone "would eliminate some 76,696 tons of carbon from the air each year, the

solar photovoltaic (PV) and solar thermal systems. It is "an outstanding achievement, one that will facilitate building owners' use of renewable energy to provide electricity," says Cherry, adding, "More solar PV systems will mean reduced energy usage and lower CO₂ emissions—definite benefits for the environment."

The CARSI team's computer models were able to estimate how much solar energy would fall on each city surface over the course of the year.

equivalent of planting over 400,000 trees," and in the process could create an estimated 5,423 green-collar jobs.

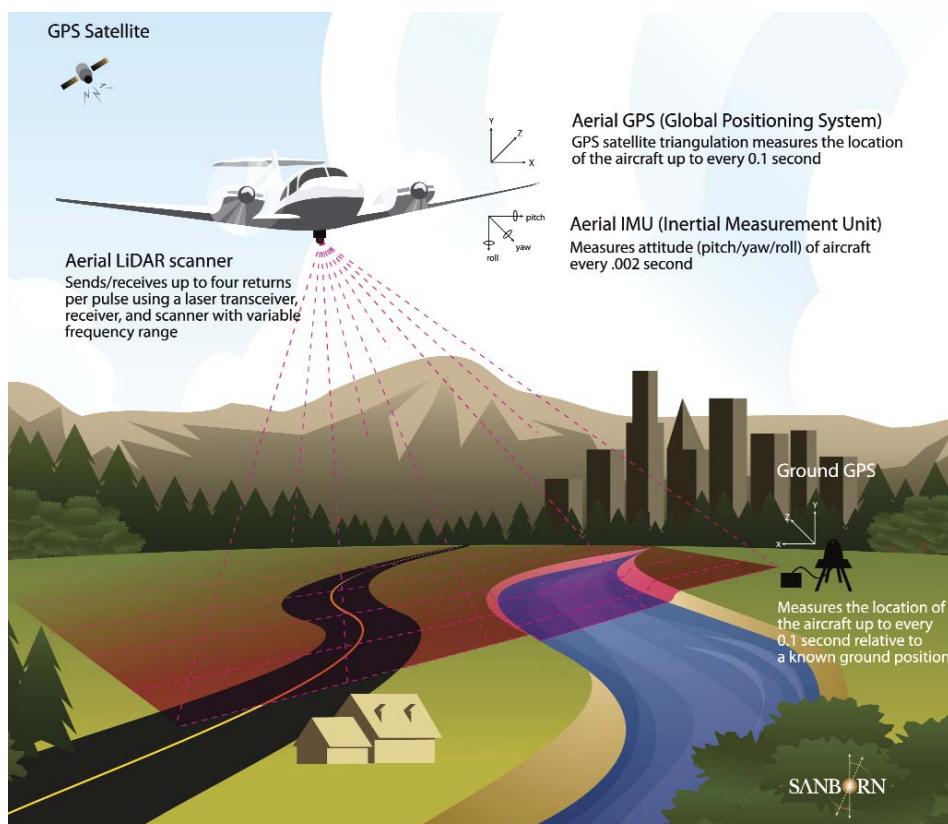
Another devotee of the solar map is Richard Cherry, president of the Community Environmental Center, a New York City nonprofit that provides energy-conservation services and installs

Speaking at the GC on March 2 during "Imagining Sustainability in the NYC Region," the eleventh annual colloquium of CUNY's Interdisciplinary Network for Nature, Ecology and Society (NES), Ahearn demonstrated how, with just a few quick keystrokes, the map can be used to identify the solar potential of each of New York City's one million rooftops, along with the financial savings and environmental benefits that would result. The map also identifies sites of existing solar PV and solar thermal installations throughout the city, and provides practical information for those serious about converting their buildings to solar power.

During his talk, Ahearn went into some detail as to how the map was created. To collect the data that were used, he explained, a twin-engine plane equipped with remote sensing technology known as Light Detection and Ranging (LiDAR) flew over the five boroughs on nine late-night aerial mapping missions in the spring of 2010. Using the data collected, a Digital Surface Model (DSM) of the city was made.

The expertise of three people on Ahearn's team was essential to transforming the data into a solar map. Hyo Jin Ahn, a postdoc in Ahearn's lab, worked with the remote sensor data; Jake Garcia, a doctoral student in the GC's earth and environmental sciences program at the time, was responsible for the map's front-end interface; and Gordon Green, a doctoral candidate in the same program, preprocessed the data. "We had detailed topographical information of all the terrain, trees, and buildings from LiDAR," says Green, "and the pre-processing included running a computer model that used this data to estimate the amount of solar energy falling on each surface throughout the year."

One site making the leap to solar power, which could be completed as early as this summer, is a building at LaGuardia Community College. "Solar panels will be installed, and batteries will be purchased as part of a NYSERDA (New York State Energy Research and Development Authority) grant," announced Ted Brown, executive officer of the Ph.D. Program in Computer Science and a leader in the CUNY Sustainability Project. According to Brown, who is also executive director of the CUNY Institute for Software Design and Development (CISDD), "The building will then have three different options to acquire its electrical



Topographical data for the solar map came from data collected by nine night overflights of the city using LiDAR (Light Detection and Ranging) technology that employs a narrow laser beam, measuring distance to the ground, to map topographical features on the surface.

energy: from New York's power grid, using the regular energy supplier; from solar panels when the sun is shining; or from energy prestored in batteries for future use."

Since the cost associated with charging and discharging the batteries varies, as does the cost of obtaining energy from the power grid (always higher during peak periods of need), CISDD doctoral students and faculty members are developing algorithms to determine the best (least expensive) time to charge the batteries, and what the savings could be. Similarly, Ahearn and his team are intent on updating and improving the New York City solar map wherever possible. This includes recalculating the financial incentives, as they change, relating to solar power, and even enhancing the map with additional data, such as which rooftops would benefit the most from the application of a reflective white "cool roof" coating. Though cool rooftops can lower internal building temperatures by as much as 30 percent, thus reducing energy use, cooling costs, and carbon emissions, says Ahearn, scientific analysis could help to determine which

roofs would benefit the most. "Some roofs may be black and absorbing a lot of energy," he noted, "but they may be shaded all day, so you're not going to get a big savings."

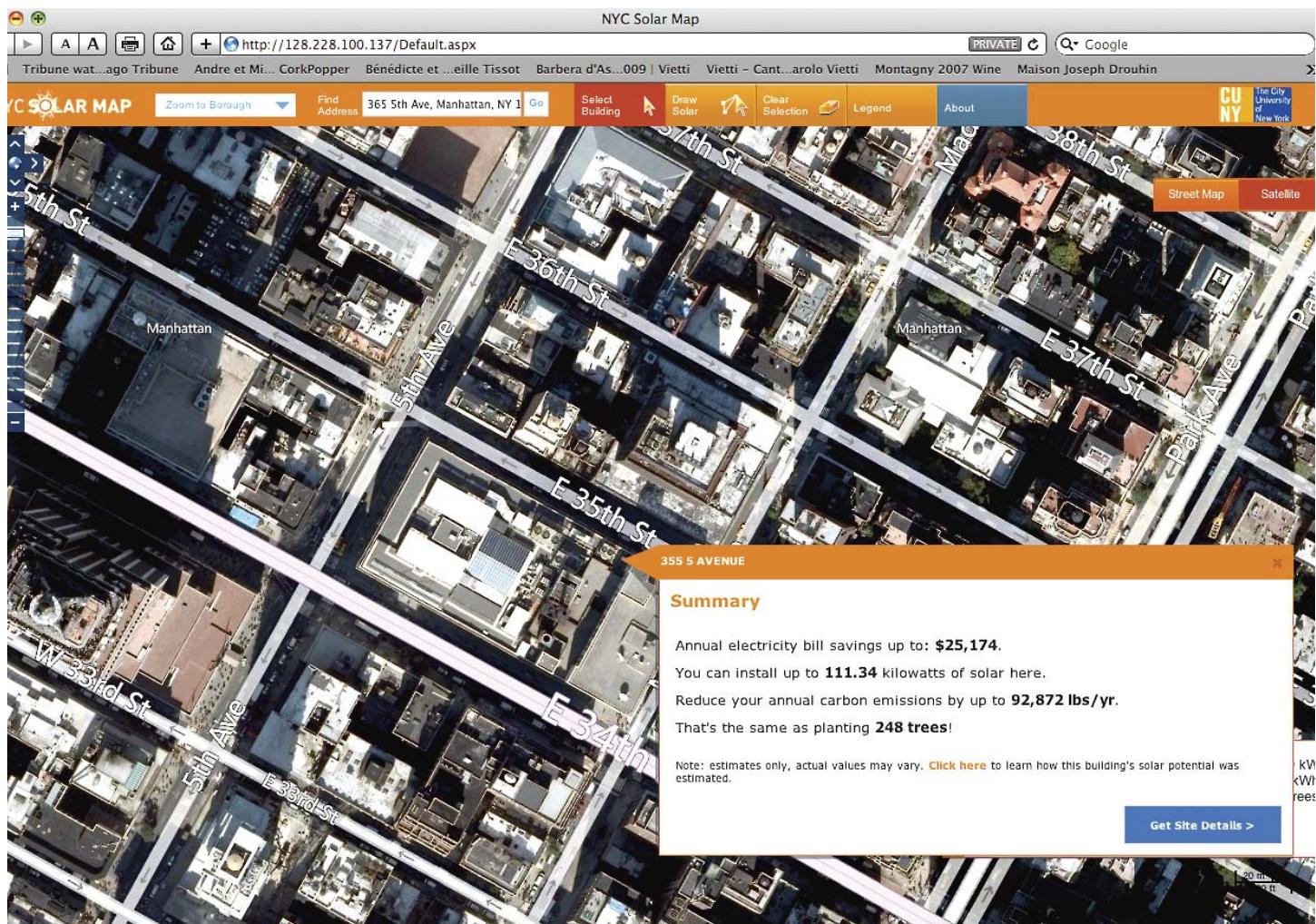
"To my mind what is most useful about the map is that it makes solar power seem less like a distant possibility and more like an immediate choice," said Green, when asked what he feels are the map's key merits. "Hopefully the map will help get users a little closer to actually calling a solar installer and getting the ball rolling."

Convincing even 10 or 20 percent of New Yorkers to convert to this alternative energy source is indeed a challenge, but one that, if accomplished, could have a huge environmental impact, says Ahearn, whose assertions are substantiated by data found on the map. In all, the map shows, New York City contains about 615 million square feet of roof space usable for solar PV installations. If even a fraction of this area were put to use, New York's reliance on the high-emissions backup generators needed during such peak demand times as summer heat waves would be greatly reduced. And if

New York City has 615 million square feet of roof space usable for solar PV panels, which could produce close to half the energy needed to meet the city's peak power demand.

rooftop use were optimized in all five boroughs, the panels could meet close to half the city's demand for power during peak periods, and cover 14 percent of its annual electricity consumption. Now that is a "cool" concept, deserving of a place on the map!

For more information about the New York City Solar Map, see <http://www.cuny.edu/about/resources/sustainability/solar-america/map.html>.



The Graduate School and University Center
The City University of New York
365 Fifth Avenue
New York, NY 10016

Non-Profit Org.
U.S. Postage
PAID
New York, NY
Permit No. 2057

Public Programs at the Graduate Center Fall 2012

Extraordinary Lives

GC PRESIDENT BILL KELLY INTERVIEWS OUTSTANDING PUBLIC FIGURES

Perspectives

CONVERSATIONS ON POLICY AND PLACE WITH PETER BEINART

Elebash Presents Live@365

A SHOWCASE FOR NEW WORLD MUSIC

Gotham Center History Forums

CAPTURING NEW YORK CITY'S RICH AND FASCINATING PAST

For a full and detailed schedule of public programs visit www.gc.cuny.edu/events/public_programs after August 1.

GC Membership

Join now—not only will you be supporting a great institution, but you will also benefit from the extraordinary perks of GC Membership. If you donate only \$50 or more, you qualify for membership.

Among the benefits are a discount on tickets to Public Programs, a subscription to *FOLIO*, advance notification of our programs, and exclusive events open to members only.

Most important, you will be supporting the Graduate Center and helping to strengthen the scholarly work of our students and faculty.

www.gc.cuny.edu/membership

365 Fifth Avenue (at 34th Street), New York City

THE GRADUATE CENTER
CITY UNIVERSITY
OF NEW YORK