Unexpected Encounters

Allegra Goodman and other researchers team up with librarians to optimize the Schlesinger experience

Documentary Cinema from Around the World

Earthquakes, Volcanoes—and Rowing

The First Radcliffe Alumnae Fellow
LEONARD RETEL HELMIRICH, proponent of single-shot cinema and inventor of the SteadyWing camera mount, came to Radcliffe to edit his documentary Position of the Stars.

[FEATURES]

16  Documenting the World  
BY GERALD PEARY  
World-class filmmakers at the Institute

22  Unexpected Encounters  
BY JOAN WICKERSHAM  
How Schlesinger librarians inspire visitors

26  Geodynamics from the Top Down  
BY JONATHAN SHAW  
Leigh Royden attempts to model plate tectonics

[DEPARTMENTS]

1  From the Dean

2  Announcements

3  Around the Institute

30  New Books

32  Quick Study

[ON-LINE]

For complete coverage of Radcliffe Day 2010, visit www.radcliffe.edu/alumnae/rad_day_2010.aspx. Videos of other Institute events are also available.

www.radcliffe.edu

Photograph by Kathleen Dooher
Looking Forward: A Catalyst for Innovation

A FESTIVE CROWD gathered in May for the sold-out Radcliffe Day Annual Luncheon and the awarding of the Radcliffe Institute Medal to Gloria Steinem. The Yard brimmed with friendship, laughter, and animated conversation as we honored Radcliffe’s illustrious history and its vibrant legacy of academic excellence. It was a joyous capstone to the Institute’s 10th anniversary year.

Amid all the celebrating, the Institute has been hard at work planning its next decade. This spring, we brought together Radcliffe faculty associates, Radcliffe and Harvard alumnae/i, and faculty members from across Harvard with leaders of Academic Engagement Programs (AEP), the Fellowship Program, and the Schlesinger Library. This team has developed ambitious goals for extending the Institute’s reach within the University and in the world and for enhancing ties among its programs.

Over the summer, we will be drafting a long-range plan for the Institute. Although we are still in the midst of this process, the direction is clear. Faculty and former fellows urge that we expand the Institute’s offering of unique programs. They seek more opportunities for collaborative innovation and crossing boundaries among disciplines, programs, and schools. They would like more ways to test high-risk ideas, advance Harvard’s intellectual agenda, and seed new areas of intellectual inquiry.

Institute leaders recognize that there is also great potential for additional collaborations among programs, which would gain by building on one another’s strengths and acting as an integrated whole. The two-day conference to be held in October, “Why Books?” exemplifies the power of this kind of cross-pollination. Radcliffe faculty associates designed several AEP workshops focused on book-related topics this past year. The conference itself will feature former fellows and include multiple satellite events, several of which highlight the Schlesinger’s leadership as a library of the future. The conference and related events are expected to draw curators, conservators, librarians, graduate students, and faculty members.

Expansion and acceleration. These concepts will guide our next decade. Faculty and fellows recognize the Radcliffe Institute as the place to experiment with new ideas. As they seek new ways to build bridges and cross boundaries, we are poised to respond.

During our first decade, we established ourselves as one of the world’s premier institutes for advanced study. Now it’s time to be that leading institution—pushing forward the frontiers of knowledge and seeding academic innovation.

BARBARA J. GROSZ
Dean, Radcliffe Institute for Advanced Study
MATH AND LAW PROFESSORS RECRUITED WITH RADCLIFFE PROFESSORSHIPS

The first tenured woman in the math department and a Pulitzer Prize–winning historian have been recruited to the Harvard faculty with Radcliffe Institute professorships.

Sophie Morel was 29 when she was appointed the Radcliffe Alumnae Professor and a professor of mathematics in the Faculty of Arts and Sciences, on December 15, 2009. And Annette Gordon-Reed had won a raft of awards for her book *The Hemingses of Monticello: An American Family* (Norton, 2008) when she was named, in late April, the Carol K. Pforzheimer Professor at the Radcliffe Institute, a professor of law at Harvard Law School, and a professor of history in the Faculty of Arts and Sciences.

With these two appointments, the Radcliffe Institute has now helped to bring six outstanding scholars to four schools at Harvard: the Faculty of Arts and Sciences, the School of Engineering and Applied Sciences, the Graduate School of Education, and Harvard Law School.

“These professors not only strengthen the Harvard faculty and enrich the Radcliffe Fellowship Program,” said Radcliffe Institute Dean Barbara J. Grosz, “but they provide bridges across disciplines throughout the University.”

Radcliffe Institute professorships are especially attractive because they provide faculty members the opportunity to spend four semesters during their first five years at Harvard as members of the Radcliffe Fellowship Program, conducting research and participating in the Radcliffe community. “I look forward to experiencing the rich interdisciplinary environment of the Radcliffe Institute,” Gordon-Reed said when her appointment was announced.

Gordon-Reed earned a JD from Harvard Law School in 1984. She comes to Harvard from New York Law School, where she was the Wallace Stevens Professor of Law, and from Rutgers University in Newark, New Jersey, where she was the Board of Governors Professor of History. During the spring 2010 term, she was a visiting professor of law at New York University School of Law.

Prior to her Harvard appointment, Morel held a postdoctoral position at the Institute for Advanced Study in Princeton, New Jersey, and a research fellowship at the Clay Mathematics Institute, in Cambridge, Massachusetts, an affiliation she will maintain until 2011.

ON-LINE  For more information about Gordon-Reed and Morel, visit www.radcliffe.edu/about/radcliffeprofessorships.aspx.
“Deep biosphere.” The term may conjure images from science fiction, but chemical oceanographer Ann Pearson RI ’10 says, “It’s just a fancy way of saying ‘stuff that lives in the mud.’” She should know: This deep-sea mud, and the life in it, is her specialty.

Many meters below the surface, at the bottom of oceans that remain largely unexplored, a community of microbes thrives. In the first few centimeters of sediment, organisms feed on decaying bits of matter that rain from above. “We’re studying this microbial feast,” says Pearson. Only in the past decade or so has it become clear that there is also an active community of microbes deep in the sediment—hundreds of meters deep—and not much is known about them. How do they live? How often do they divide? Some estimates, says Pearson, have the typical deep biosphere cell dividing only once every 10,000 years (an untestable claim, given that observing the cells’ life cycle is impossible). Yet understanding these
organisms and their biochemical complexity could illuminate our understanding of past, present, and future environments.

The challenge comes in learning about deep bacteria without growing them in a lab—observing them without disturbing them. Pearson, an associate professor of biogeochemistry in the Department of Earth and Planetary Sciences at Harvard at the time she became the first recipient of the Radcliffe Alumnae Fellowship, is developing new, chemical ways of studying and measuring these microbes.

The fellowship has given her time to manage the expansion and renovation of her lab for this purpose—without constant pressure to produce new data. With renovations now completed, the Laboratory for Molecular Biogeochemistry and Organic Geochemistry will use repurposed instruments to make a new kind of measurement. Pearson’s lab is poised to make breakthroughs in the field of analytical chemistry, which would not have been possible without the support of the Radcliffe Institute. “It’s a risky thing to say, ‘This is a kind of measurement nobody’s ever been able to make,’” says Pearson. “It’s very hard to get funding to do that, or to invest the time in starting a new analytical angle in a field like mine, which is very data- and results-oriented.”

The Radcliffe Alumnae Fellowship was established when gifts to the Radcliffe Alumnae Professorship (see Morel announcement on page 2) surpassed the $1.5 million goal. Some 230 donors contributed to the fund, an enormously successful effort on the part of alumnae. Through this new fellowship, Radcliffe women support the careers of Harvard junior faculty members. Pearson is now a newly tenured professor.

### Bringing Justice to the Vulnerable

**by Julia Collins**

On March 1, Canada Supreme Court Justice Rosalie Silberman Abella brought many listeners near tears when she shared remembrances of her family’s Holocaust ordeal in her talk “Identity, Diversity, and Human Rights.”

Introducing the judge, Harvard law professor Frank I. Michelman praised her “marvelously rich and accomplished life,” which started in a displaced persons camp in postwar Stuttgart, Germany. There she was born to Fanny and Jacob Silberman, concentration camp survivors; the Germans had killed their first child, the brother Abella would never know. When Eleanor Roosevelt visited the DP camp, Jacob Silberman in his official greeting pointed out the camp’s children, so few in number: “They alone are our fortune, our sole hope for the future.”

“I was one of those children,” Abella told her rapt audience. “My life started in a country with no democracy, rights, or justice. This created an unquenchable thirst in me for all three.” In 1950, Abella and her family moved to Canada. There she would become the country’s youngest judge ever; creator of the pathbreaking legal strategy to gain “employment equality” for all disadvantaged groups; and, in 2004, the first Jewish woman to sit on the Supreme Court bench.

Human rights law, said Abella, is

### CANADA SUPREME COURT JUSTICE

Rosalie Silberman Abella asks whether the UN is “the best we can do.”
the “application of law to life; without true application there is no justice.” She finds literature “a useful tutor” in exploring themes of human experience and identity in the law, and offered examples ranging over millennia, from Aeschylus’s *Oresteia* to the writers Matthew Arnold, Ralph Ellison, Philip Roth, and Michael Frayne.

“Equality is a lesson learned from the parable of identity,” the judge said. Individuals who are not born into the “dominant social group” controlling entry to the mainstream have three choices: assimilation, retention of differences and separation, or integration. She noted that while Canadian laws seek integration and promote multiculturalism and diversity, “American values appear to favor sameness—the melting pot.”

The most significant US export, Abella noted, “is concern for the rights of the individual.” Yet “chaining ourselves to the pedestal” of individual rights meant ignoring the rights of groups, until World War II “jolted us into acknowledging that individuals could be discriminated against because of their group identity.”

But six decades after the Nuremberg trials, the “luminous understanding” that led to creation of the Universal Declaration of Human Rights has clouded. Human rights abuses continue worldwide, met by silence and indifference. Rule of law has become “the holy grail of rights discourse today,” when “rule of justice” should prevail. The United Nations was set up to implement “never again”; it has failed. We are at a turning point, Abella said. It is time to ask: “Is the UN the best we can do?”

Moving from world history to her own, the judge offered a parting lesson: “To have justice, we must never forget how the world looks to those who are vulnerable.”

In closing, Dean Barbara J. Grosz turned to Abella and said, “Thank you for bringing justice to a world that seems to need it ever more.”

Julia Collins is an independent writer and the author of *My Father’s War* (Four Walls Eight Windows, 2002).
How the mega-selling author took his father’s advice—right to the top of his field

Steven D. Levitt: Freakonomist and Raconteur

by Deborah Blagg

University of Chicago economist Steven D. Levitt’s offbeat genius for illuminating the economic principles at work in activities such as Sumo wrestling, catching terrorists, parenting, and selling crack cocaine has earned him international acclaim, including a spot on the Time 100, *Time* magazine’s annual list of the world’s most influential people. Although he is best known as a coauthor of the mega-selling books *Freakonomics: A Rogue Economist Explores the Hidden Side of Everything* (William Morrow, 2005) and *SuperFreakonomics: Global Cooling, Patriotic Prostitutes and Why Suicide Bombers* (William Morrow, 2009), a March 22 talk as part of the Radcliffe Institute’s Dean’s Lecture Series showcased Levitt’s considerable talents as a raconteur.

In an unscripted speech billed as “Freakonomics and Beyond,” Levitt shared a series of often humorous anecdotes from his academic career, beginning with a self-deprecating recollection of his student days at Harvard. Speaking to an audience that included a sizable contingent of College undergraduates, he described his strategy of ensuring good grades by enrolling only in large, “easy” lecture classes.

“I was a dream student for Harvard,” quipped Levitt, who graduated summa cum laude in 1989. “Every class I took had 300 people. My cost to them was next to nothing.”

Levitt said he struggled to make it through the Massachusetts Institute of Technology’s PhD program in economics. At a low point in his studies, he sought advice from his father, a renowned medical researcher who had built his career around a topic—intestinal gas—that others in his field had eschewed.

Given his own success, the senior Levitt told his son to “choose an area of economics that no one else wants to study, and be the best at it.”

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“I was smart enough to take my father’s advice,” Levitt told his audience, before offering insights on some of his better-known research topics, including climate change, which he and Stephen J. Dubner approach in a novel way in *SuperFreakonomics*. On a serious note, Levitt said he had been “stunned” by the outrage generated by their suggestion that reducing CO2 emissions might not be the only way to fix global warming. “There are some ingenious scientists out there who are proposing other paths,” he noted, “and our support of those paths unleashed some of the most furious hatred I’ve ever experienced.”

Following the lecture, which was part of the Institute’s Academic Engagement Programs, a young audience member asked how individuals can influence large-scale problems. “Forget about changing people’s behavior,” Levitt responded. Citing Salk’s and Sabin’s development of a vaccine to stop polio, a disease once projected to consume 20 percent of the US health-care budget, he stressed that new technology has been critical in “every problem we have solved in the last 200 years.”

“If you come up with a solution for clean energy—better batteries or harnessing the power of waves in the ocean,” Levitt predicted, “you will maximize the probability that you will be remembered for saving the earth.”

Deborah Blagg is a freelance writer.
Circling Saturn  A planetary scientist looks to Saturn and its moons to answer the big questions

Carolyn Porco on Her Celestial Trip

by Robert Naeye  Carolyn Porco is on a mission. As she explained on April 1 to an audience of several hundred at the Radcliffe Gymnasium, in a lecture titled “At Saturn: Tripping the Light Fantastic,” this mission is nothing less than “to understand how our small planet came to be.”

Porco is the leader of the imaging team for NASA’s Cassini spacecraft, which has been orbiting Saturn since July 2004. The giant ringed planet is so large that it could swallow about 1,000 Earths, and its magnificent rings would span almost the entire space between Earth and the Moon.

But it’s not just Saturn and its rings that fascinate Porco, a planetary scientist based at the Space Science Institute and the University of Colorado in Boulder. Saturn is the lord of 61 known moons, making it the centerpiece, she says, of “a rich, complex planetary system.” Two of them, Titan and Enceladus, hold special interest for Porco and her NASA colleagues, who believe these moons may help to answer questions about the origins of life. The researchers have identified several additional small moons, including one that orbits within the rings themselves.

Porco made her mark in the 1980s as a member of the Voyager imaging team, which used data from NASA’s Voyager 1 and 2 to study Saturn’s rings. In particular, she calculated how the gravitational influence of several small moons has sculpted the sharp edges of Saturn’s rings and narrow ringlets.

Unlike the Voyagers, which flew past Saturn and will never return, the $3.4 billion Cassini has settled into orbit around the planet. Cassini is providing far superior images, which reveal new levels of detail and structure in the rings. As Porco explained to her audience during the last installment in the 2009–2010 Dean’s Lecture Series, the same physics and mathematics that govern the giant spiral arms in galaxies like our Milky Way can explain waves in Saturn’s rings that were created by sizable moons. Some of the rings’ features give us a glimpse into the solar system’s distant past, when the planets were forming within a huge disk of gas and dust surrounding the Sun.

Saturn’s largest moon, Titan, is slightly larger than the planet Mercury, and the only moon to harbor a thick atmosphere. That atmosphere is dominated by nitrogen, just like Earth’s, but it also contains small amounts of methane. The methane plays the same role on Titan that water plays on Earth: It forms clouds, rains out of the atmosphere, and collects on the surface to create lakes oozing with organic compounds. Porco sounded choked with emotion when she described the brilliantly successful January 2005 landing on Titan of the European-built Huygens probe, which piggybacked its way to Saturn on Cassini. “This was an event that in my mind was so significant that it should have been celebrated with ticker-tape parades in every major city across the US and Europe,” she said.

But for Porco, the star of the Cassini show has been Enceladus, an ice ball about the size of Great Britain. “We knew it was intriguing from Voyager,” she said, “but what we found is startling.” Cassini images reveal jets of icy particles spraying hundreds of miles into space from the moon’s south pole. Cassini has flown through these plumes several times, and shows that they contain organic molecules such as carbon dioxide, methane, propane, and perhaps benzene. Not only do the plumes contain the stuff of life, but they seem to originate from salty water very near the moon’s surface. “We are more confident than we were five years ago that Enceladus presents an environment where prebiotic chemistry—and perhaps even life itself—might be stirring,” said Porco.

Cassini has already fulfilled all its mission objectives, but because the spacecraft remains in excellent health, NASA has extended its Saturn sojourn to 2017. Porco hopes that someday NASA will fly a follow-up mission to explore Enceladus in more detail, to see if life has taken root. “Should we ever discover that a second genesis had occurred in our solar system, independently outside the Earth,” she said, “then I think at that point the spell is broken, the existence theorem has been proven, and we could safely infer from that that life was not a bug but a feature of the universe in which we live—that it’s commonplace and has occurred a staggering number of times”.

Robert Naeye is editor in chief of Sky & Telescope magazine, published in Cambridge, Massachusetts.
Annual conference brings together scholars and artists to comment on gender and space

Inside/Out

Several years ago, when Radcliffe Institute Dean Barbara J. Grosz began considering the topic of space planning, in the context of the Institute’s needs and as a member of the University’s Allston planning committee, she believed her thinking “stretched over a broad perspective—from the size of a room to the size of a city.” However, exposure to input from colleagues in fields as diverse as architecture, history, art, sociology, art history, and psychology soon convinced Grosz “just how narrow my perspective was.”

“Inside/Out: Exploring Gender and Space in Life, Culture, and Art,” a two-day Institute conference held April 15 and 16, grew out of Grosz’s interest in colleagues’ work on the relationship between space and gender, including the

by Deborah Blagg

PHOTOS BY TONY RINALDO

AFTER THE CONFERENCE’S OPENING PANEL, DANCER AND FORMER FELLOW CHRISTINE DAKIN PERFORMED MARTHA GRAHAM’S LAMENTATION.
The research of Harvard art historian Ewa Lajer-Burcharth, senior advisor to the Institute’s humanities program and the William Dorr Boardman Professor of Fine Arts in the Faculty of Arts and Sciences, who organized the event with Grosz in cooperation with Harvard’s Graduate School of Design. In keynote remarks, Lajer-Burcharth noted that the idea that gender and space are interrelated “emerged at the core of feminist discourse in the 1970s.” Since that time, groundbreaking feminist discussions of architecture, urban planning, design—and, more recently, globalization and the emergence of new technologies—have “transformed our experience and understanding of space and gender.”

Lajer-Burcharth said the conference was intended to broaden cross-disciplinary discourse by bringing together panelists from traditional academic fields and from the arts. “I’m particularly excited about the dance component,” she said, “because perspectives from dance are so often overlooked in academic conferences.”

The opening session was held at Radcliffe’s Agassiz Theatre to accommodate a performance of Martha Graham’s dance Lamentation by Christine Dakin RI ’08, artistic director laureate of the Martha Graham Dance Company. In the solo work, choreographed in the 1930s, the dancer’s body is completely enshrouded in fabric, which has the effect of both restraining and revealing her movements. By requiring the audience to “pinpoint their visual and psychic attention into a very tight focus,” Dakin reflected after the performance, the dancer in Lamentation serves as a “conduit into Graham’s inner world.”

Dakin’s session had immediate resonance for Nilüfer Göle, whose presentation centered on mahrem, the Islamic sense of privacy. Göle, director of studies at the Centre d’Analyse et d’Intervention Sociologiques, said she was “astonished” at the crossover between her work and aspects of Martha Graham’s dance. “In Lamentation,” Göle said, “the dancer hid her body but made us share the experience of mourning,” which Göle described as “an act undesired in the secular modern world.” In the same way, she argued, “veiling hides Islamic women’s bodies, but makes apparent their gendered religiosity, which is also undesired in a secular modern context.”

Turning to the topic of public and

The conference brought together artists, public intellectuals, and scholars to consider how gender affects the way we experience, construct, and use spaces, and conversely, how the notion of space influences the way we think about gender.
private identities in virtual space, Judith Donath, a Berkman Faculty Fellow at Harvard Law School and former director of the Sociable Media Group at MIT Media Lab, talked about “what it means to represent people in the 21st century.” In Renaissance art, she noted, portraits emphasized physical traits, while modern artists often attempt to convey their subjects’ inner states. In the online world of the 21st century, Donath observed, words have become the basis of portraiture, even though “people use words to lie about their identities and gender on the Internet all the time.”

As more and more human interactions move into cyberspace, she suggested, discerning the way language is used may be a better indication of gender than what is being said, since men are acculturated to be more aggressive in their speech patterns than women.

Temple University psychology professor Nora S. Newcombe also explored the idea of intuitive notions of gender in a discussion of differences between men and women in spatial abilities—a critical requirement for careers in the STEM (science, technology, engineering, and math) occupations. Although as early as age four, boys fare better than girls on tasks measuring mechanical perception, Newcombe said, “the differences are not pervasive, and we can do something about them.” Researchers have observed that young boys are more likely than girls to use hand gestures to reason through tests that require mental manipulation of shapes. When girls are encouraged to gesture, their test performance improves. “Why don’t girls gesture more?” queried Newcombe. The answer may be that gestures take up space, and girls tend to be more modest when it comes to taking up space.

Sociologist Anette Baldauf and architect and research specialist Epifania Akosua Amoo-Adare brought the conversation around to women’s interactions with constructed space in presentations that incorporated aspects of history, migration, and socioeconomic mobility. A noted authority on feminism and its relation to space, the city, and popular culture, Baldauf traced the early evolution of shopping malls, which were introduced in the United States in the mid-1950s by Viennese architect Victor Gruen. Located in the Detroit suburb of Northland, the first US mall was established in the “fertile ground” of the postwar economy, which saw returning veterans reclaiming the jobs women had performed during the war. By refocusing suburban women’s attention away from work and toward shopping for their families, she explained, malls not only boosted consumerism, but also “assured the containment of women, who were now asked to manifest their labor of power as labor of love.”

Amoo-Adare’s presentation drew on her study of shifting attitudes toward household configuration, social practices, and sense of place among Asante women in Ghana as the country’s population has become increasingly urbanized. In previous generations, households were often multigenerational compounds where tasks such as childrearing and cooking were shared. But when asked to describe their concept of an “ideal” house today, younger Asante women talk about small, modern homes better suited to the needs of a nuclear family. One deeply held Asante cultural ideal that has not changed, Amoo-Adare said, is the notion that home ownership is a symbol of progress and a cause for ahokyere, or pride.

The most unusual segment of the conference, by far, was created by visual artist and former MacArthur fellow Janine Antoni, who walked barefoot across the back of each audience member’s plastic chair, snaking her way along the rows in silence, steadying herself by grasping each person’s upstretched hand. After filling her allotted time and space with movement and physical contact instead of words, Antoni left participants to arrive at their own conclusions about the meaning and impact of the exercise they had all just shared. ✯
Why Books? Why Not?

by Ivelisse Estrada

Four flights above Harvard Square, in a window-lined open-floor lab, 19 conservators hunch over their work of bringing two-dimensional objects back to life. The Weissman Preservation Center, associated with the Harvard University Library, specializes in treating photographs, books, and works on paper. One conservator examines a parchment-bound art print book from the early 1600s, its binding buckled and its pages frayed. In the next few months, the book will be prepared for exhibition. A German book filled with elaborate astrological volvelles, or wheel charts, awaits treatment for its original 1580 binding.

On February 12, as part of a workshop titled “Early Paper: Techniques and Transmissions,” the lab held an open house for 80-plus faculty members, students, and library professionals. The workshop was one in a series of three leading up to “Why Books?,” which will take place on October 28 and 29, 2010. “This hands-on element is one that we aim to replicate in the conference,” says Leah Price ’91, RI ’07, senior advisor to the humanities program at the Radcliffe Institute and professor of English and Harvard College Professor in the Faculty of Arts and Sciences. Price is organizing the fall conference with Ann Blair ’84, BI ’99, Harvard College Professor and Henry Charles Lea Professor of History, also in the Faculty of Arts and Sciences.

“We designed these workshops as a way to bring together different constituencies within Harvard’s often balkanized institutional structure,” says Price. “We wanted to involve faculty, graduate students, curators, librarians, conservators, past and present Radcliffe fellows, and others who work with books.”

And, indeed, the workshops have done just that. The first, “Paperwork: Agencies and Subjectivities,” brought 38 participants to the Radcliffe Institute campus to hear about work in progress by Ben Kafka, of the Princeton Institute for Advanced Study, and Lisa Gitelman, of New York University. Art historians, curators, librarians, and philologists from England, Germany, and the United States examined issues around 15th-century illumination in front of an audience nearly a hundred strong. Their work will culminate in a 2014 exhibition of some of these rare specimens, to take place in Berlin and Munich.

Rebecca Fink Wasserman ’87, the director of Academic Engagement Programs at the Institute, says, “The success of these workshops is a testament to the deep and abiding interest in textual materials.”

For more information on the upcoming conference, visit www.radcliffe.edu/events/calendar_2010books.aspx.
From the treelike tracery of nerve fibers to the seashell spirals of galaxies, the same motifs appear and reappear in nature. This resonance of form and function—whether celestial or microscopic—was the subject of a science symposium at the Radcliffe Institute on April 30, titled “Patterning in Nature.”

Across all natural domains, pattern can be defined as “the regular, nonuniform distribution of information in space,” said Arthur D. Lander, a professor in the departments of developmental and cell biology and biomedical engineering at the University of California at Irvine. Pattern embodies, across three dimensions, the same periodicity we see in time—randomness corralled by self-reinforcing stop and start signals. From stars to skeletons, the movement from the diffuse to the clearly delineated also reflects an “incredible morass of feedback and feed forward,” Lander said. Nature’s eloquent beauty masks complexity.

But what most of the audience took away from the symposium was visual delight. “That was a gorgeous presentation,” said a woman in the audience, prefacing a question for cosmologist Volker Springel. “I felt my brain pop.”

Springel, a professor of theoretical astrophysics at the Heidelberg Institute for Theoretical Studies, in Germany, studies galaxy formation, the large-scale structure of the universe, and structures in the early universe. Mapping the deep sky, he has found unmistakable patterns: stereotypically shaped galaxies surrounded by huge regions of empti-
ness, dubbed “cosmic voids.” With this blankness as backdrop, Springel has created supercomputer simulations of the evolution of the world after the Big Bang: a primordial cloud of gas coalescing to clearly defined filaments and then to clustered galaxies and planets. The virtual tour illustrated what Springel called “the great trait of cosmology”: “You can trace the evolution of the universe,” he said.

Opening his talk with a mirrored image of two curled vertebrate skeletons—a bird and a mouse—Denis Duboule, a professor of developmental genetics and genomics at the École Polytechnique Fédérale de Lausanne, Switzerland, shifted the discussion to patterning in the body. Duboule has found that the order of genes in a creature’s DNA determines when each gene will be activated—which, in turn, determines the sequence in which its body structures will develop. Echoing Springel’s remarks on time-traveling the cosmos, Duboule said, “Development is nothing but time. Our neck is older than our sacrum.”

Alexandra L. Joyner, a professor in the Developmental Biology Program at Memorial Sloan-Kettering Cancer Center, offered another angle on body patterning. Her specialty: the development of the accordion-like cerebellum region of the brain. The cerebellum is important in motor control and other functions. Its striking folds—a design common across species—increase both the surface area of the brain and the number of neurons and neural circuits. Joyner has discovered how specific genes regulate the cerebellum’s ornate development. Indeed, underlying its complex circuitry is a fantastical array of neural structures shaped like lollipops, filaments, and stalks.

The visual feast continued through the day. “Dendrites are the most beautiful structures in biology,” said Yuh-Nung Jan, the Jack and DeLoris Lange Professor of Molecular Physiology at the University of California at San Francisco. These exquisite branched collections of neurons conduct electro-chemical stimulation. Using fruit flies, Jan explores the mechanisms that govern dendrite formation—in particular, how different types of neurons develop distinct patterns of dendrite branching. Jan has discovered that dendrites are organized according to three principles: self-avoidance (which creates spacing), tiling (which helps cover an area without redundancy), and coexistence (in which different classes of cells overlap). To back up his claim, Jan showed compelling images of lacy dendritic forms that looked as though they belonged on a gallery wall.

Clifford Tabin, head of the Department of Genetics at Harvard Medical School, studies embryo development. His work is responsible for the current understanding of both embryological and evolutionary questions, such as why the heart is on the left side of the body. Most recently, Tabin has explored how genes determine the pattern of the vertebrate gut: a coiled tube that he likens to a hose wrapped around a spool, with a decided leftward tilt. So species-specific are the configurations of these intestinal loops that in the 19th century they formed the basis for bird classification, with entire treatises written on the topic.

Concluding the symposium was Joanna Aizenberg, the Susan S. and Kenneth L. Wallach Professor at Radcliffe and the Amy Smith Berylson Professor of Materials Science and a professor of chemistry and chemical biology in the Harvard School of Engineering and Applied Sciences. In pioneering research, Aizenberg has studied biomineralization: how living creatures form inorganic materials. The means by which nature creates strong mineralized tissues—from mollusk shells to mammalian teeth—“is the most patterned world one can find,” she said. To prove her point, Aizenberg described a deep-sea sponge known as Venus’s flower basket, 99.9 percent of which is glass. This cylindrical creature is held together by a lattice of unusual square cell structures and coated with complex reinforcing ridges. Though its constituent materials are brittle, Venus’s flower basket sways with ocean currents.

Outside, Radcliffe Yard was filled with the dendritic patterns of trees newly in leaf, the feathery forms of high cirrus clouds, and stippled jet trails. In sync with the day’s presentations, the patterning of nature was on full display.

Madeline Drexler is a Boston-based science journalist, author, and editor of the Harvard Public Health Review.
Radcliffe Day Celebrates Feminism

Momentum had been building for weeks, with the Radcliffe Day tours of the Schlesinger Library fully booked three weeks in advance; the panel discussion featuring alumnae/i of Radcliffe College, the Bunting Institute, and the Radcliffe Institute closed for registration; and nearly 900 signed up for the luncheon featuring Radcliffe Institute Medalist Gloria Steinem. All three events, held on May 28, lived up to expectations, and the weather also cooperated, despite a dreary forecast.

Feminist pioneer Gloria Steinem was by turns irreverent, inspiring, and humorous, concluding her remarks by outlining why the world needs the deep thinkers of the Radcliffe Institute. “Your unique advantage of making others see the world as if females mattered is exactly what we need,” she said.

In her introduction of Steinem, Dean Barbara J. Grosz drew a connection between the boundary crossings that occur at the Institute and the barrier breaking that Steinem has done in her career.

“For complete coverage of Radcliffe Day 2010, including video of Steinem’s address, visit www.radcliffe.edu/alumnae/rad_day_2010.aspx.”

“Gloria Steinem has had a lasting impact on women’s rights ... in this nation and around the world,” Grosz said.
2010–2011 Radcliffe Institute Fellows

Chosen from an international pool of nearly 900 applicants

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Harvard University
Bioengineering
Biomimetics and Quantitative Biology: Conceptual Interpretation and Mathematical Modeling of the Adaptive Design Strategies in Biological Materials, Structures, and Mechanisms

Angela Ards
WILLIAM BENTINCK-SMITH FELLOW
Southern Methodist University
Cultural Studies Theory and Practice
Affective Arts: The Ethics of Self-Fashioning in Contemporary African American Women’s Autobiography

Donald Berman
Tufts University
Music Performance
Dead or Alive: Resurrecting Forgotten Treasures from the Harvard Music Libraries and Performing Them

Daphne Brooks
Princeton University
American Studies
Subterranean Blues: Black Feminist Musical Subcultures—from Minstrelsy to the Post-Hip-Hop Era

Caroline Bruzell
Duke University
Architectural History
The Dead Come to Town: Preaching, Burying, and Building in the Medieval City

Margot Canaday
MARY L. BUNTING INSTITUTE FELLOW
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American Studies

Yu-Hui Chang
BUNTING FELLOW
Brandeis University
Music Composition
The Company of Objects

Bevl Conway
THE CARL AND LILY PFORZHEIMER FELLOWSHIP
Wellesley College
Neuroscience
Color: Neural Mechanisms and Art Practice

Henrietta Harrison
JOY FOUNDATION FELLOW
Harvard University
Asian History
The Missionary’s Curse and Other Tales: A Catholic Village in China, 1700–2000

Nancy E. Hill
SUZANNE YOUNG MURRAY PROFESSOR AT THE RADCLIFFE INSTITUTE
Harvard Graduate School of Education
Developmental Psychology
Cultural Worldviews and Belief Systems: A Nuanced Understanding of Ethnic Heterogeneity in Family Dynamics and Children’s Development

Abigail English
FRIEDA L. MILLER FELLOW
Harvard University
Center for Adolescent Health & the Law
Law School Exploitation and Trafficking of Adolescents: Health, Law, and Human Rights

Irving R. Epstein
GRASS FELLOW
Brandeis University
Chemical Engineering
Cross-Diffusion and Pattern Formation in Chemical, Biological, Ecological, and Social Systems

Abigail English
FRIEDA L. MILLER FELLOW
Harvard University
Center for Adolescent Health & the Law
Sexual Exploitation and Trafficking of Adolescents: Health, Law, and Human Rights

Kristen Godfrey
BOWDOWNE COLLEGE
Social and Cultural Anthropology
Making
Europe and Civilian Slaughter

Gene Andrew Jarrett
WALTER JACKSON BATE FELLOW
Boston University
English Literature
Paul Laurence Dunbar: The First African American Poet Laureate

Walter Johnson
EVELYN GREEN DAVIS FELLOW
Harvard University
North American History
River of Dark Dreams: Slavery, Capitalism, and Imperialism in the Mississippi Valley’s Cotton Kingdom

Ann Jones
Mildred Londa
WEISMAN FELLOW
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Nonfiction and Current Issues

Lynne Jones
International Medical Corps
Memoir
Outside the Asylum: A Child Psychiatrist’s Memoir of Working in Conflict and Disaster

Barbara B. Kahn
EDWARD, FRANCES, AND SHERLEY B. DANIELS FELLOW
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Structure and Function of Novel Lipids in Obesity and Type 2 Diabetes

Karen Kramer
HRBD FELLOW
Harvard University
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Eliza Lamb-Bailey
RADCCLIFFE ALUMNAR FELLOW
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Contemporary Art
Just Art: Imagining Art’s Efficacy

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UNIVERSITY OF NORTH TEXAS
English Literature
Literature and the Question of Beauty

RITA R. HAUSER FELLOW
Massachusetts Institute of Technology
Social and Cultural Anthropology
Charity, Security, and Disparities: Haitian Quests for Asylum

Kristen Godfrey
BOWDOWNE COLLEGE
Social and Cultural Anthropology
Making
Europe and Civilian Slaughter

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Mignon Nixon
Courtauld Institute of Art, University of London
Contemporary Art History
“Sperm Bomb”: Art, Feminism, and the American War in Vietnam

Lisa Goldberg
LISA GOLDBERG FELLOW AND RADCLIFFE-HARVARD FILM STUDY CENTER FELLOW
Carnivàlesque Films
Film, Video, Sound and New Media

David Redmon
Human Rights
WORLDWIDE VISITING FELLOW
In Family Dynamics and Organismic Biology: Conceptual Interpretation and Mathematical Modeling of the Adaptive Design Strategies in Biological Materials, Structures, and Mechanisms

Barbara Weinstein
JOY FOUNDATION FELLOW
New York University
Latin American History
Race, Region, Nation: Slavery and the Construction of National Identities

*Bioengineering cluster
**Fall semester
LEONARD RETEL HELMRICHT
gets up close and personal
with his Indonesian subjects.
by Gerald Peary

The association comes quickly to any dedicated movie fan: Those thousands of sheep scurrying through the main street of a tiny Montana town in the documentary Sweetgrass make you think of the “Duke” Wayne–led
cattle drive in *Red River*, Howard Hawks’s 1948 western classic. Lucien Castaing-Taylor RI ’10, the Joy Foundation Fellow at the Radcliffe Institute, can understand the connection, though he first saw *Red River* long after *Sweetgrass* was filmed. “It’s a total coincidence,” he says. “I grew up in England, where I wasn’t allowed to go to movies, and we had no television.”

The transplanted Liverpudlian telephones in from Big Timber, Montana. In the home territory of the true-life cowboys in his film, *Sweetgrass* is about to have its theatrical debut, in a dilapidated old movie palace that just played *Clash of the Titans*. Castaing-Taylor tries to be hopeful that there’s a heartland audience of “grassroot communities” that will accept that “a 101-minute film about sheep is interesting to look at.”

**Film Saturation**

It’s been a banner year, 2009–2010, for the fellowship program, with three world-class documentarians—Leonard Retel Helmrich RI ’10, from Holland and Indonesia; Kamal Aljafari RI ’10, a Palestinian citizen of Israel; and Castaing-Taylor, a professor in the Department of Visual and Environmental Studies at Harvard—in residence and using their time for inventive new projects.

“I’ve been given a computer, editing equipment, two office spaces, and the financial freedom to work,” says Retel Helmrich, the David and Roberta Logie Fellow and a Radcliffe-Harvard Film Study Center Fellow. For Aljafari, the Benjamin White Whitney Scholar and also a Radcliffe-Harvard Film Study Center Fellow, the Radcliffe opportunity has included a solo photo installation mounted in Byerly Hall. “I’m free to produce, to create whatever I want,” says Aljafari, “and to go to the Harvard Film Archive for 35mm screenings.”

Far, far from home, Retel Helmrich and Aljafari journey together to the archive as part of their Harvard routine. Aljafari says, “I watch whatever they screen, from John Ford to cinematographer Gordon Willis, who was there for a live appearance.” Indeed, cinematography is a special obsession for all three of the fellows, who take intense pride in how their non-narrated projects are shot—the masterly camera movement, the precise framing, the long takes, the interplay between image and sound—which puts them far afield from the routinely filmed voice-over documentary dominant around the world.
And if the visuals and audio tracks are in challenging counterpoint, as with the sound design of Castaing-Taylor’s *Sweetgrass*? The acclaimed feature documentary about Montana sheepherders was rejected by 20 film festivals, recalls the filmmaker. Only after the Berlin and New York fests championed *Sweetgrass* did many others fall in line—like sheep?

**Family Drama in Jakarta**

Leonard Retel Helmrich is currently completing a trilogy that follows an impoverished but resilient Indonesian family, the Sjamsuddins, through a decade and a half of their lives, both at home and in the public sphere in Jakarta. Since filming began, Indonesia has moved from a post-Dutch colony dictatorship to a shaky young democracy, increasingly influenced by radical Islamists. The earlier *The Eye of the Day* (2001) and *The Shape of the Moon* (2005) concentrated on the relationship between the scrappy, street-savvy mother and her good-natured but indolent son, Bachtiar, who is uninspired at work and unwise in love.

Bachtiar (“Bakti”) was his driver when, in the 1990s, Retel Helmrich was filming Indonesian student protests. “I followed Bakti home and watched him interact with his Christian mother and brothers. All the changes in the country were there, in politics, economics, religion. The family represented Indonesia itself, in its unity and diversity.” A one-person crew, Retel Helmrich shot the Sjamsuddins up close, including their battles with creditors, Bachtiar’s mother’s relocation to the countryside, and Bachtiar’s conversion to Islam to appease a new spouse.

The filmmaker describes *The Position of Stars*, in progress, thus: “More of Bachtiar with his wife, and he, chosen head of the neighborhood, with a small salary for keeping the gutters clean. His niece, Tari, going to college, though she doesn’t appreciate that nobody in the family can afford it. She’s a pain in the ass!”

Retel Helmrich faced the ethical question of many documentarians: Do you intervene in the lives of your protagonists if they are poor and suffering? His answer came easily when *The Shape of the Moon* won a €15,000 cash prize at a Dutch film festival. A Suffolk University student takes Retel Helmrich’s SteadyWing for a spin.

**HELMRICH MANEUVERS**

**Single-shot cinema and the invention that makes it possible**

“The earliest documentaries by the Lumière Brothers were shot from a tripod,” says Leonard Retel Helmrich, a Radcliffe fellow and filmmaker, beginning his lecture to production students and film faculty members at Suffolk University. “But the camera became far more cinematographic when it got off the tripod.” Retel Helmrich’s credo for his documentaries has been to photograph in the most free-flowing, three-dimensional, acrobatic way possible. A video camera gliding through space, moving high and low, orbiting around and up close, like shooting underwater but on dry land: That is his single-shot cinema.

“I try to shoot without looking into the eyepiece,” Retel Helmrich explains to the gathering. “I want to be among the people at the moment when things are happening.” Dissatisfied with the standard way of filming, with a camera propped on one’s shoulder (“You are always behind the moment,” he says), Retel Helmrich invented a startlingly simple bit of technology that makes it possible for a camera to be raised above one’s head for high-angle shots, lowered near the ground to follow someone’s moving feet, or, most often, held unnoticed at chest level. Patented by Retel Helmrich in Europe, the mount looks like handlebars holding the camera on either side: the SteadyWing. During a special workshop, Suffolk students took turns maneuvering a video camera every which way with the SteadyWing.

What mobility! What visual freedom! “The camera is your pencil, your way of writing,” says Retel Helmrich, who often spreads the word in SteadyWing workshops. “You now can express your personal approach.”

—Gerald Peary
EVEN THOUGH THEIR subjects and approaches are quite different, each of these filmmakers takes great care to impart a strong sense of place. In this way, they make their films intimate portraits of not only the characters but also the spaces they inhabit.

IN THE SUMMER OF 2003, Castaing-Taylor and his partner, Ilisa Barbash, documented a group of roughly 3,000 sheep as they made their final summer-pasture journey in eastern Montana.

THE RESULTING FILM, Sweetgrass (2009), chronicles the months-long, 150-mile drive through the Absaroka-Beartooth Mountains—and is as much about the landscape as it is about the relationship between the sheep and their herders.

WHEN I FILM MY FAMILY, I invade their lives,” says Aljafari. In Port of Memory (2009), he follows the lives of his grandmother, uncle, and aunt, who live in the Jaffa neighborhood of Tel Aviv. The film tries to convey what it means to be an Arab in a Jewish-dominated society.

THE EYE OF THE DAY (2001) is the first film in a trilogy about a Christian working-class family, the Sjamsuddins, in the slums of Jakarta, Indonesia. A one-person crew, Retel Helmrich shot the family up close. He says they “represented Indonesia itself, in its unity and diversity.”
festival. He paid for a plush couch for the mother; a better college for Tari, so that she could keep up with her mall-going middle-class friends; and two motorbikes for Bakti to utilize as taxis.

And Retel Helmrich’s intense emotional attachment to the Indonesian family he is shooting is obvious to those watching these films. He says, “For me, it is all about the feelings I want to share with the audience.” His consciously subjective way of seeing is facilitated by his choreographed long takes; he moves deftly around the family and into their faces as they communicate. His coined term for his methodology: “single-shot cinema.” Retel Helmrich reiterates his point: “Single-shot cinema enables me to capture my personal feelings about the event—in a single shot.”

Exploring Arab Identity
Kamal Aljafari also produces intimate family-drama documentaries, but the Palestinian clan is his own. *The Roof* (2006) and *Port of Memory* (2009) feature his parents and siblings living in Ramle, Israel, and his grandmother, uncle, and aunt in the Jaffa neighborhood of Tel Aviv. It’s their story of being Arabs in a Jewish-dominated society, of daily frustrations and indignities, and of a nostalgic yearning for life pre-1948, before many of their relatives fled to exile in Beirut, prior to the Israeli state. “This is our country,” one person says, “and we became its tail.” But what can they do now? Most often, his relatives sit comatose before blaring TVs. They wash their hands; they eat.

Aljafari says, “My films are about these daily rituals, these automatic movements, this escaping of reality, more than they are about the conflict of Israelis and Palestinians.” His documentaries are contemplative and open-ended rather than polemical, and—with their elegant tracking shots, emphasis on architecture, water, and formal space—in line with European art-house cinema. “I’m not trying to reach the masses,” Aljafari concedes. “I see cinema as a personal expression. My films are part of a wider project on the ‘cinematic occupation.’ We are all doing that as filmmakers, every time we shoot. When I film my family, I invade their lives.”

Aljafari’s current project, complementing his documentaries, is a theoretical photographic book about “claiming space.” As a Palestinian, he reclaim images from Jaffa, which he feels were appropriated by the Jewish Israelis. Once a potent Arab city, Jaffa devolved into a downtown suburb of Tel Aviv after the 1948 war, a place where, he says, “Tourists come on weekends to eat some good hummus.” In the ‘60s and ‘70s, Jaffa became a backdrop for Israeli comedies and a Chuck Norris action flick, narratives that erased any knowledge that this was ever a flourishing Arab neighborhood. Or that Arabs even lived here.

“I’m very much interested in these absences,” says Aljafari. For his installation and a book, he has reproduced frames from these movies in which—look closely!—Palestinian people appear in the corners of shots. As do Arabic signs and buildings.

An Anti-Pastoral?
Castaing-Taylor is likewise consumed with a place on camera for the marginalized. *Sweetgrass*, recorded by Castaing-Taylor and produced by his partner, Ilisa Barbash, is an homage to two barely surviving American cowboys who drive sheep herds to pasture through the rugged mountains of eastern Montana. They’re Pat and John, who, amid the most glorious rustic scenery, curse and suffer impossibly arduous, low-paid employment.

Like James Agee and Walker Evans in their classic book about southern sharecroppers, *Let Us Now Praise Famous Men*, Castaing-Taylor has been plagued by what he calls “ethical self-doubt” in his aesthetic engagement with poverty. By showing his movie, he is exposing his taciturn cowboys to public scrutiny. “Am I objectifying them?” he asked. “Am I exploiting them?”

In February 2010, he and 27 cowpokes made a five-hour drive west from poor, hardcore Republican eastern Montana to a film festival in liberal, college-educated Missoula. The cast stood to applause from the 1,200 spectators at the end, and one member joined Castaing-Taylor onstage for questions, notably about what it was like to see themselves write large onscreen. Afterward was memorable: Out in the parking lot, the magnificent 27 stood by their trucks drinking beer. Castaing-Taylor recalls, “A hippie girl who had seen the movie found that her automobile was pinned in. So twelve cowboys lifted her Subaru!”

Even more than cowboys, *Sweetgrass* is about sheep—3,000 head, sometimes seen in extreme long shot, sometimes with the camera shoved in their wooly faces. Pregnant ewes, newborn lambs, bleating sheep, sheep embarrassed by being sheared naked. Sheep in all their semiotic ambiguity. “Almost universally, they are defined by their docility and stupidity,” Castaing-Taylor says. “But they are also allegorized in all the Abrahamic religions as symbols of purity and innocence. In the film, I think their sheer force of numbers creates a feeling of transcendence. Ideally, viewers are transported to another space, one where nature and culture are reconfigured—humans bestialized and animals subjectified—where, in short, the question of what it’s like to be a ‘sheep-in-the-world’ is taken seriously.”

At Radcliffe, Castaing-Taylor now readies eight audiovisual works for gallery installation. They are related to *Sweetgrass* and to earlier works he has shown at the Marian Goodman Gallery and the X Initiative in New York. “There will be different channels of sound around the room and a freestanding screen suspended from the ceiling. You’ll be able to walk around it and see on the screen that every sheep and lamb is different.”

Gerald Peary is a professor of communications and journalism at Suffolk University and filmmaker of the feature documentary For the Love of Movies: The Story of American Film Criticism (2009). In 1998–1999, he was acting curator of the Harvard Film Archive.
DIAGRAM for The French Chef’s pilot episode

ALBUM COVER featuring lesbian music icon Alix Dobkin

AVIATOR Amelia Earhart’s baby book

FEBRUARY 1955 issue of Seventeen magazine

ETIQUETTE GUIDE dating back to 1897

WHISK once used by author and TV personality Julia Child

HOME MOVIE featuring actress and author Lorraine Huling Maynard

RADCLIFFE COLLEGE student handbook, 1949–1950

FASHION PLATE from 19th century French magazine La Mode Illustre

CIRCULAR LETTER written by Sarah Bryant Fay

ELEANOR HOLMES NORTON photo inscribed to activist Mary Gibson Hundley

TRADE CARD depicting women rowers, 1903

All items are from the Schlesinger Library collections. For more information, visit www.radcliffe.edu/schlesinger.
The Schlesinger Library at Radcliffe is full of stories. There are stories contained in printed matter: novels, memoirs, biographies, and periodicals. There are stories in handwritten documents—letters and journals. There are stories told, silently but eloquently, by artifacts: a dressmaker’s notebook filled with samples of buttonholes; a collection of handwritten recipes, whose example of spirit, or automatic, writing on a chalkboard.

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by Joan Wickersham
splotches and stains attest to frequent use; a T-shirt from an early feminist rally.

And then there are stories of the people who visit the library—of why they seek out the Schlesinger and how they make use of it. As novelist Allegra Goodman ’89, RI ’07 says, “Libraries aren’t just about information anymore. What makes libraries special is the people—the librarians.”

**The Imaginary Collection**

When Goodman began her Radcliffe Institute fellowship, in the fall of 2006, she knew she wanted to work on a novel about a character who collects cookbooks but doesn’t cook. Nancy F. Cott, the Carl and Lily Pforzheimer Foundation Director of the Schlesinger Library and Jonathan Trumbull Professor of American History at Harvard, suggested that Goodman talk to Barbara Ketcham Wheaton, food scholar, writer, and long-time honorary curator of the library’s renowned culinary collection.

“Talking to Barbara was the moment when the novel came together,” Goodman says of the conversation in which Wheaton described what might motivate someone to collect cookbooks. “Suddenly I could see what the passion is.”

The passion for collecting, Wheaton believes, “often begins because cookbooks evoke memories—things that connect people to their own past. Sometimes there’s an interest in an ethnic culinary heritage, or in community cookbooks from where they grew up. But it can grow into an obsession. It can bend people out of shape, become financially ruinous, and eventually ruin any joy in the cookbooks themselves.”

Goodman says of her novel *The Cookbook Collector* (Dial Press, 2010; review on page 30), “The psychology of collecting is very important. The story is set during the dot-com bubble, and there’s a lot about the search for love and fame, and the desire to keep acquiring.”

Together, Goodman and Wheaton curated an imaginary cookbook collection. “Barbara would suggest we include this book and that book,” Goodman says. “All the books were real, but in the case of something very rare, we might create another extant copy. At one point, as the list got more and more exciting, Barbara started fanning herself and said, ‘You do realize, Allegra, that I’m consumed with lust.’”

Wheaton enjoyed working with Goodman partly because “Allegra was pursuing the material in the collection in a different way,” she says. “It’s refreshing to be asked questions that make us see things differently. I didn’t want to interfere with her writing; I thought my job was to supply her with a buffet she could make her meal from.”

Reflecting further on the Schlesinger and how different people use the collection, Wheaton says, “Everybody begins by knowing nothing. I walked in years ago as a user and picked up my first medieval cookbook with a mind full of ignorance, but I just kept plugging away.”

**A Voice from the Past**

Mia Walker ’10 came to the Schlesinger Library as a student in a seminar taught by Alice A. Jardine, professor of romance languages and literatures and of studies of women, gender, and sexuality, called “I Like Ike, but I Love Lucy: Women, Popular Culture, and the 1950s.” Reference librarian Sarah Hutcheon had assembled a selection of materials from the library—photographs, manuscripts, books, and periodicals—in order to vividly illuminate the
is the people—the librarians.”—NOVELIST ALLEGRA GOODMAN ’89, RI ’07

era and also to introduce the students to the depth and breadth of the Schlesinger’s collections. Among Hutcheon’s picks was a series of letters written by Susan (Suzy) Houston Reid ’62 while she was a student at Radcliffe. “Her voice just jumped out at me,” Walker says. “I picked up the folder and I don’t think I heard another word anyone said during that entire hour.”

Reading the letters, which Suzy Houston wrote to her parents back home in Texas between 1958 and 1962, Walker discovered a voice that was both of its time and timeless. “She was very smart. Her perspective is dramatic, honest, incredibly astute. There is so much joy, and so much of the comedy of everyday life, but she’s in touch with some darker part of reality.”

Inspired by the freshness and intelligence of Houston’s voice, Walker began writing a play. She returned to the Schlesinger again and again, sitting in the reading room with her laptop, reading the letters and making notes. “I got the idea to create a dramatic story around the letters,” Walker says. “She writes about Plato and Camus and tells about a date with the sophomore jock. And then there will be a tonal shift: She’ll tell her parents that she’s ‘in the blues,’ but then assures them that all she needs is some sleep. ‘I will conform,’ she writes.”

Walker’s play features Suzy Houston’s interior voice and paints a portrait of Radcliffe in the late 1950s. “The bell desk in the dorm became a dramatic device. And cake—they were always serving cake!” Houston and her friends loved Broadway musicals, and Freud was much on their minds. At a recent public reading of Walker’s as-yet-un-titled play, the audience laughed at Suzy’s lighthearted observation that her roommate had decided Saint Augustine must be a Freudian, since he wrote so much about his mom.

At the same time, Walker feels, “There just can’t be that much of a difference between her world and mine. Or perhaps the world I’m living in is the way it is because of voices like hers.”

Reference librarian Hutcheon is fascinated by what Walker did with the materials shown to the “I Like Ike” class. “I think the way we present things to students can make a difference. Susan’s box of letters is just a box, but we showed it with photos of Radcliffe students from the ’50s, a student handbook, a yearbook, and the college newspaper—and suddenly it’s in a context, it’s alive. It’s wonderful to introduce students to the collection and show them how to find things, but often we don’t know what they do with it. I was really excited to learn what Mia was doing because theater and art is a different kind of use.”

Old Objects, New Contexts

As they did with Allegra Goodman and Mia Walker, the Schlesinger’s librarians often play a pivotal role in inspiring and informing the efforts of the faculty members, students, scholars, artists, and members of the public who use the library. As Ellen Shea, head of public services for the Schlesinger, points out, “Every in-person visit is mediated through a librarian, because everything we have is behind a vault door. We’re not just going to answer your question, we’re going to say, ‘Oh, you’re interested in this—do you know that we also have that?’”

An upcoming exhibit of objects drawn from Harvard’s many museums and libraries offers an example of how faculty members collaborate with librarians to view old objects in new contexts. Laurel Thatcher Ulrich, the 300th Anniversary University Professor, and Ivan Gaskell, the Margaret S. Winthrop Curator of Paintings, Sculpture, and Decorative Arts in the Harvard Art Museum, are planning the exhibit in conjunction with a new general education course, “Harvard Collections in World History.” “Our idea is to begin with a core exhibit that shows a microcosm of Harvard collections in a gallery at the Science Center,” Ulrich explains. “But then we’ll feature a series of ‘guest objects’—items from one Harvard collection that would show up in another. The idea is to open up the idea of how we categorize objects.” For instance, Ulrich suggests, summer-camp beadwork from the Schlesinger’s collections might take on a different meaning if displayed alongside Native American beadwork from the Peabody Museum’s Hall of the North American Indian.

By the time Schlesinger librarians meet with Ulrich to spread out objects on a table and discuss which ones might figure in the exhibit, they will have done a lot of brainstorming among themselves. Because the staff members—librarians, manuscript processors, archivists—know the collection so well, they can hear an idea like Ulrich and Gaskell’s and start imagining items that might be interesting. “You have to be able to think across categories,” Sarah Hutcheon says. “For instance, if someone is looking for material about polio, you might remember that a colleague mentioned that a box of family papers came in with a lot of references to polio.”

Ellen Shea points out that the process of finding imaginative new uses for the historical materials is not only invigorating—that’s why we love working here”—but also ongoing. “Someone will see Laurel and Ivan’s exhibit, which takes such a different direction, and then will be inspired to go in another different direction.”

The meaning of a particular book or paper or object is always changing, depending on who is looking at it, when, and why. As Barbara Wheaton says, “The Harvard library system holds things safely until the time comes for someone to see them and make sense of them in a new way.”

JOAN WICKERSHAM is a writer in Cambridge, Massachusetts. Her book The Suicide Index: Putting My Father’s Death in Order (Harcourt, 2008) was a National Book Award Finalist.
Geodynamics from the Top Down

How the woman formerly known as “Wiki” went from rowing to geophysics

BY JONATHAN SHAW

Leigh Royden studies the large-scale motions of Earth’s lithosphere from the surface down.
PLATE TECTONICS is a scientific theory that relates the movement of thin, rigid plates on Earth’s surface to convection currents in its hot interior. Chains of volcanoes and earthquakes delineate the plate boundaries. Beneath the plates and their boundary zones, viscous rock flows at depths of hundreds of kilometers in the mantle. Sometimes, at mid-ocean ridges and mid-plate volcanoes, this hot viscous mantle reaches the surface as magma and it solidifies, creating new crust. At other times, it flows horizontally beneath the base of the plates before eventually cooling and being incorporated into them, finally descending to create a great circle—a conveyor belt in Earth’s mantle that can build mountains and move continents. At least, that is how geophysicists have traditionally thought about plate tectonics.

But Leigh Royden ’76, RI ’10, the William and Flora Hewlett Foundation Fellow at the Radcliffe Institute and a professor of geology and geophysics at the Massachusetts Institute of Technology, takes a different perspective. She is trying to understand the large-scale motions of Earth’s lithosphere—the crust and uppermost mantle—not from the inside out, as most geodynamists do, but from the surface down. An increasing body of knowledge—to which she is an important contributor—suggests that stresses at the surface and characteristics of the plates themselves, rather than viscous mantle flow at depth, play a primary role in organizing the global tectonic system.

Royden got into geophysics almost by accident. In 1975, while still an undergraduate at Harvard and Radcliffe concentrating in physics, she was the United States women’s national rowing champion in single sculls and a silver medalist as part of the women’s eight at the World Championships. Plate tectonics was not much on her mind. She had taken “a couple of classes in geology,” she recalls, but it wasn’t until the following year, while training for the 1976 Olympic Games in Montreal, that she learned about the field of geophysics from a fellow rower who was dating a graduate student in the field at MIT. “Wow, physics and geology together,” she thought. “I never knew that existed.” An introduction to the young man’s advisor—MIT professor of geophysics John Sclater—led to the offer of a summer job at Woods Hole. But Royden turned the opportunity down in favor of the chance to row in Montreal.

Then, one month before the team selection, she tore multiple ligaments in her leg in a running accident, effectively ending her Olympic aspirations. “Wiki,” as she was known, suddenly found herself on an entirely different path. She took the summer job, discovered the joys of field geology and mapping, and, with encouragement from Sclater, went on to earn her PhD from MIT in 1982. When he left the following year for a position at the University of Texas at Austin, MIT offered her a job.

Unlike many of her colleagues, who study geodynamics on a global scale, Royden has focused her career on regional-scale understanding of how topography is built, asking (because these are very messy, complicated systems), “How can I describe 90 percent of what I see by one or two processes going on in the crust or the mantle—and how can I quantify that?” For example, she has studied small, local subduction zones that move around very quickly on a geological time scale. These zones, where the lithosphere is being subsumed into the underlying, viscous asthenosphere, move by trench “rollback,” she explains. Imagine a sheet of paper suspended horizontally by its four corners. Grab a finger’s width starting at one of the edges and pull down. A strip tears across the middle of the sheet. This is what happens during trench rollback, with the difference being that the force ripping the strip at its edges is provided not by fingers but by the slab’s own weight. The dense, descending lithospheric material pulls the rest of the slab in after it.

Royden studies the forces at play in subduction
zones like these. As the slab tears from the adjacent lithosphere, sinks, and rolls back, its weight forces material from in front of the slab out and around to the back, in a circular motion. By estimating the slab’s weight and the viscosity of the surrounding mantle, one can, in theory, quantify the forces that determine the speed at which the trench will move. Modeling this has so far proved very difficult, Royden says, “because it is a fluid dynamics problem in the upper mantle, where the fluid flows vertically and horizontally, including ‘toroidal flow’” (in a circle around the slab). Her work has nevertheless played a critical role in identifying some of the key forces at play in such local subduction zones.

Likewise, “we now know that subduction provides most of the force for driving the motion of the plates” among the major tectonic plates covering most of Earth’s surface, Royden explains. But there are many important unanswered questions: “We don’t know what organizes plate tectonics. Why do we have just a few really big plates rather than lots of small ones?” Was it always this way during the past 4 billion years of Earth’s history?

During her fellowship year, Royden has been working on a model tectonic system that might shed light on such questions. Her “toy Earth” is simple: a subduction zone, with rules for its behavior, and a spreading ridge that follows rules she has figured out over years of fieldwork on regional-scale systems. She starts with one plate and goes to two and then three, to see how they interact. She is not trying to describe Earth, but by creating a tectonic system in which she knows all the variables, she hopes to identify key regulators of behavior.

A critical question involves the early planet, which produced much more internal heat than Earth does today. “It had to be losing heat a lot faster,” says Royden, “but how? Did it have lots of little plates with many mid-ocean spreading ridges, because that is where a huge amount of Earth’s heat is lost?” Or did it have a few major plates that simply moved faster, bringing greater quantities of hot material to the surface? Her model does not incorporate temperature directly, but it does include viscosity of the asthenosphere—a proxy for temperature—and, therefore, may suggest whether the organization or motion of plates changes in response to higher temperature. “I do a lot of quantitative work in order to get a qualitative understanding,” she explains. “I’m interested in what a typical time sequence of evolution from one state to another might be.”

“I won’t know until I get there how much new insight is going to come out of this,” she adds, “but if I can come out with a qualitative understanding of how these simplified tectonic models work, what makes them change from one state to another, and how stable they are, I feel that will be a really important contribution.”

Jonathan Shaw is the managing editor of Harvard Magazine.
NEW BOOKS

Our Prelapsarian Days

Letters to Jackie: Condolences from a Grieving Nation
by Ellen Fitzpatrick ’59, RI ’09
Ecco; 355 pp.; $26.99

The assassination of John F. Kennedy brought on our national fall from innocence and ushered in the era of instinctive skepticism about government that scarcely any of us questions today. Within a decade of November 22, 1963, there had been too many tragedies and betrayals of trust to number: mounting casualties in Vietnam and the horror of My Lai; the assassinations of Malcolm, Martin, Bobby; Agnew’s resignation, Watergate, and Nixon’s impeachment hearings. But it was the first Kennedy assassination that forced us into modern times.

And so it seems all the more striking that a means of communication now almost lost to us—the handwritten letter—has surfaced to recall those prelapsarian days. While historian Ellen Fitzpatrick’s heartrending compilation explores the nature of the nation’s grief and, thereby, the meaning of the Kennedy presidency, the most powerful aspect of her volume is the relentless expression of shock in each letter, a response that could have been registered only by those who still believed. Some of the writers approach poetry, as does Long Island salesman Irving Silverstein, recalling a glimpse of the president:

He stood in the open car, Mrs. Kennedy, the day was raw and cold. It was November. A chilling rain made the waiting for him difficult for Susan age 9 and Ellen age 6. The home-made placards were softened and moisture had taken its toll of the lettering “We want Jack.” Yet we waited.

He stood in the open car, hatless, the momentary cheer, he turned toward us, I shouted, “DON’T CATCH COLD!” he smiled, reassuringly, caught my eye for a fl icker of a second and he was gone into the night.

In truth, the letters have been here all along, and the story of their preservation is one that Fitzpatrick tells with relish. A quarter of a million letters reached the White House in the fi rst week alone. “Whenever I can bear to, I read them,” Jackie told the nation in her brief remarks at the funeral on November 25, promising that “your letters will be placed with his papers” in the Kennedy Library. Anthropologist Margaret Mead insisted they be sorted into categories for future scholars. But no one until Fitzpatrick has studied the collection closely or taken the trouble to track down some of the correspondents to learn what has become of them since they wrote. The result is an extraordinarily sad but inspiring portrait of the way we were, and, by implication, who we have become.

Alone With You: Stories
by Marisa Silver ’82: Simon & Schuster; 164 pp.; $22

For the characters in Marisa Silver’s collection of eight haunting tales, the future seems both precarious and narrowed; old disappointments weigh heavily. Julia, the mother of an autistic woman who becomes pregnant while living in a residential home, fi nds herself offering up as wisdom the notion that “sometimes your whole life got lost.”

Yet Silver shows us that understanding and eventual acceptance of loss or limitation can open doors previously closed, enabling her characters to fi nd ways to “move forward, even if there were no directions.” Helen, a onetime aspiring concert pianist now traveling to a German medical clinic with her ailing mother, can use the musical knowledge that had not quite taken her “close enough to beauty” to make her way into the future. “The path through this complicated piece of life,” Helen realizes, “was now as inscrutable as a piece of music could be when fi rst confronted—a wild and alien language of signs that seemed like the ravings of some madman until you put your hands on the keys and played one note, then the next, then the next.” Each of these precisely rendered tales proves the valor of forward motion, even—especially—when it seems too much has been lost.

The Cookbook Collector: A Novel
by Allegra Goodman ’89, RI ’07
Dial Press; 394 pp.; $25

Midway through her captivating new novel, which covers a span of years already lost to history (“a strange time, a fairy-tale time”)—the years leading up to 9/11—Allegra Goodman takes her protagonists, two 20-something sisters of opposing
temperaments, on a visit to Muir Woods, across the Golden Gate Bridge from San Francisco. In one of many rhapsodic passages, on anything from fine wines to high-tech startups to rare first editions, that push this novel toward poetry, Goodman writes of the redwood grove: “Fecund, furrowed, teeming with life—even the fallen trees blossomed forth with lichen and rich moss and ferns. Every rock and stump turned moist and rich, every broken place gave birth.”

The Cookbook Collector teems with new life: a dozen characters on both American coasts, whose lives intersect in ways that Goodman lovingly traces, drawn together by their very different, often conflicting, passions for “the beautiful, and the authentic” in books, in nature, in political action, in religion—and in one another. A collection of rare cookbooks, “practical, but also mythic,” offers up mysteries and, as the waifish younger sister, Jess, recognizes, “served as guides for elevating and intensifying earthly pleasure.” Another of Jess’s insights—“Desire shifts to expectation, and expectation creates desire”—sums up the experience of reading a novel that is as delectable as its title suggests.

In the hands of any but an extremely skilled novelist, Sue Miller’s experiment could easily have failed: Concot a play, bring readers to watch it, and then spin a tale—involving playwright, lead actor, and two audience members—in which the meanings of that play-within-the-novel are examined from radically divergent perspectives by each of the four characters. Yet Miller uses this scheme to create one of her most satisfying novels, a work that confirms her place among the masters of the genre.

And have I mentioned 9/11? The tragedy looms, both realistically and fantastically, over the lives of Miller’s characters, along with other, more private tragedies, all worried over and worked through on the page so plausibly that the occasional triumph feels like our own victory. In an early scene, Leslie Morse, a Mrs. Dalloway figure who occupies herself selecting a bouquet of flowers for her young brother’s playwright girlfriend on the night of the performance, remembers an evening when she entertained the couple at her house in the country, recalling “the pleasure of listening to them” from the kitchen, where she was cooking dinner. Despite the grief Miller’s characters experience in the course of this tale, we are always deeply aware of the pleasure of listening to them as they talk and think their way to resolution.

The History of White People by Nell Irvin Painter PhD ’74, BI ’77
W.W. Norton; 496 pp.; $27.95

“It wanted the freest poem/in the world,” Major Jackson writes in “Quaff,” one of the 80 lyrics on subjects from “Hookups” to “Headstones,” “Manna” to “Zucchini,” that fill this new volume. Yet for the most part, Jackson contains his thoughts in a 10-line form, challenging himself to find freedom in restraint, compression, concision.

The result is more pure poetry than we have seen before from Jackson, a turning away from narrative (although stories are here: of love affairs, past friendships) toward abstraction, and sound or image for beauty’s sake. “What must one feel,” he asks, “when light rises from everywhere?” In a poem like “My Face in the ATM Screen,” however, Jackson is just one of us, under surveillance at our very own banks, contemplating “A single day/ of concatenated cams streaming.” He admits, simply, “My funds were secure but not me,/ for I was lovesick. . . . I am unhappy/despite the approaching spit of bills/flapping near my zipper.” Here is the poet speaking freely, making poetry of the quotidian, even as he is poking fun at mundane ritual, modern technological exigency. At such moments we are ready to believe—as Jackson has titled another poem “Heaven Goes Online”—in 10-line odes to the extraordinary.

Being white these days is not what it used to be,” Nell Irvin Painter writes at the end of her far-ranging meditation on the shifting meanings of skin color from ancient times to the present. Indeed, her history is not so much of a people as of an idea: the notion that skin color matters. If any book can push American society toward the “postracial” era the Obama presidency once seemed to herald, it is Painter’s clear-eyed analysis of a history both quixotic and pernicious.

To read American intellectual history from Painter’s perspective is to find several dearly prized cultural heroes unmasked. Alexis de Toqueville, that benevolent Frenchman whose favorable impression of our democratic institutions and folkways endeared him to Americans in his time and since, simply ignored the slave-holding South in making his positive assessment? Well, yes—more or less. Ralph Waldo Emerson, the founding spirit of American individualism, an advocate of “Saxon” race supremacy? Well, yes—definitely. But Painter’s argument is both so persuasive and so entertaining that we hardly mind. As her narrative moves toward the present, there is an exhilaration in having experienced, as a reader of this ultimately open-hearted book, ample proof that “human beings’ short history relates us all to one another.”*
Siddhartha Deb

Siddhartha Deb RI ’10—novelist, journalist, and associate professor of creative writing at the New School in New York City—was born in northeastern India, the setting for his award-winning novels, *The Point of No Return* (Ecco, 2002) and *An Outline of the Republic* (Ecco, 2005). It’s no wonder, then, that his first narrative nonfiction book examines contemporary India. Titled “Do You Know Who I Am? Stories of Wealth and Poverty from the New India,” the book he worked on at the Radcliffe Institute follows five characters, each representing a markedly different segment of the population, as they make their way through their increasingly globalized society.

Giving Shape to Chaotic Experiences

Which aspect of your work do you most enjoy? The part where I sit in front of my computer and see how sentences, paragraphs, and narrative begin to give some shape to chaotic experiences.

Who are your heroes? Those who go against the received opinion of their times, those who agitate against the inequities of power and wealth, and those artists who bring love and a little madness into their work rather than cold, careerist calculations.

Which trait do you most admire in yourself? The combination of desperation and discipline I bring to every project. Unfortunately, it’s more desperation and less discipline.

Who is your muse? My son Ranen, who is four years old, and who seems to think that my existence is fundamental to his happiness.

What is your most treasured possession? Two books: Pablo Neruda’s *Selected Poems* and Walter Benjamin’s *Illuminations*.

What inspires you? Please see above.

Name a pet peeve. I am my own favorite pet peeve.

If your life became a motion picture, who would portray you? Johnny Depp, without a doubt, although he’d have to get rid of his hair.

Where in the world would you like to spend a month? There are few places in the world I don’t want to go to, but South America seems to be exerting an especially strong pull right now.

What is your greatest triumph so far? To have retained the desperation needed to keep writing.

Whose tunes do you enjoy? The French rapper MC Solaar seems to have become part of my life, along with assorted Bollywood tunes from the ’50s to the present, as well as Bob Dylan, Pete Seeger, and Ani DiFranco.

What is your fantasy career? The same as the one I have, but where I write much better than I do now.

What is the most challenging aspect of being a Radcliffe fellow? Overcoming the awe I feel at the focus, commitment, and genius that the other fellows demonstrate so casually.

You now live in New York, but India is your home. What has it been like to revisit it during your reporting? The process begins with complaints on my part at how strange it is to be in India, the dissolution of those complaints as I start eating mangoes (if it happens to be summer), followed by the feeling that I’ve never left and that it’s still home.

Deb says he brings a “combination of desperation and discipline” to every project.
“i’m not an actor, and i’m not a temptation,” jokes Jericho Brown RI ’10.
no, he is a poet.
Once a speechwriter for the mayor of New Orleans, Brown now teaches creative writing at the University of San Diego. His poems cover such topics as race, sexual identity, biblical themes, and mythological characters, all of which he writes about in an intensely elegiac manner. he asserts, however, that despite the elegiac nature of his poetry, “actually, i’m full of joy.”
The American Fellow at the Radcliffe Institute this year, Brown is completing his second poetry collection, provisionally titled “The New Testament.”
"Why Books?" will probe the form and function of the book in a rapidly changing media ecology. Speakers from a variety of disciplines—literature and history to sociology and computer science—will discuss the public-policy implications of new media forms and will explore some of the major functions that we identify with books today: production and diffusion, storage and retrieval, and reception and use.