

# THE INSTITUTE LETTER

INSTITUTE FOR ADVANCED STUDY

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## POLITICAL THEORIST DANIELLE ALLEN JOINS THE SCHOOL OF SOCIAL SCIENCE



Danielle Allen

Political theorist Danielle Allen will join the Faculty of the Institute for Advanced Study on July 1, 2007, as the UPS Foundation Professor in the School of Social Science. She will fill the position currently held by Michael Walzer, who is retiring after twenty-seven years and who will become Professor Emeritus.

Allen, who is trained as a classicist and a political theorist, is presently Dean of the Humanities Division of the University of Chicago, where she has served on the faculty since 1997. Through her work in democratic theory, political sociology, the linguistic dimensions of politics, and the history of political thought, she “has already established a quite extraordinary record of achievement,” commented Director Peter Goddard. “Her work is outstandingly original, with enormous depth and range, addressing issues of the greatest importance to contemporary society. Her

appointment here will ensure that the Institute retains a leading position in political theory.”

Widely known for her work on justice and citizenship in ancient Athens and its application to modern America, Allen is the author of *The World of Prometheus: The Politics of Punishing in Democratic Athens* (Princeton University Press, 2000) and *Talking to Strangers: Anxieties of Citizenship Since Brown vs. the Board of Education* (University of Chicago Press, 2004). In 2002, she was awarded a MacArthur Fellowship for her ability to combine “the classicist’s careful attention to texts and language with the political theorist’s sophisticated and informed engagement.”

Allen said she is “astonished and delighted by the opportunity to work at the Institute, to learn from colleagues there, and to devote myself full-time to research. To fol-

low in Michael Walzer’s footsteps is a distinct and exciting honor but above all a challenge. I hope I will meet it.”

Eric Maskin, Albert O. Hirschman Professor in the School of Social Science, described Dr. Allen as having “a lively and penetrating mind” and the propensity to “add a great deal to the intellectual life of our School.” Her plans for future work include a theoretical study of politics and change; an historical study of Platonic political thought; an examination of the concept of equality; and a theoretical study of democracy, knowledge, and higher education.

Dr. Allen received her undergraduate education in Classics (with a political theory minor) at Princeton University, graduating *summa cum laude*. She was awarded an M.Phil. and Ph.D. in Classics from Cambridge University and went on to Harvard University, where she received her M.A. and Ph.D. in political science. She joined the faculty at the University of Chicago in 1997 as Assistant Professor of Classics. In 2000, Dr. Allen became Associate Professor of Classical Languages and Literatures, Political Science, and the Committee on Social Thought. In 2003, she was promoted to Professor. The following year she was named Dean of the Division of Humanities.

In addition to her scholarly achievements, Dr. Allen is an accomplished pianist and a prize-winning poet. In the prologue of *Talking to Strangers*, in which she explicates the causes and consequences of distrust, particularly racial distrust, among democratic citizens, she writes: “The inhabitants of a polity have a shared life in which each citizen and noncitizen has an individual perspective on a set of phenomena relevant to all. Some live behind one veil, and others behind another, but the air that we all breathe carries the same gases and pollens through those veils. More important, our shared elements (events, climates, environments, imaginative fixations, economic conditions, and social structures), when considered at the political rather than the private level, are made out of the combination of all our interactions with each other. We are all always awash in each other’s lives, and for most of us that shared life, recorded as history, will be the only artifact we leave behind.” ■

## INSTITUTE ANNOUNCES APPOINTMENT OF PAUL MORAVEC AS ARTIST-IN-RESIDENCE

Pulitzer-prize winning composer Paul Moravec has been appointed as the Institute’s next Artist-in-Residence. Moravec will join the Institute on July 1, 2007, as its resident composer, introducing new works and leading the Institute’s annual concert series.

Moravec has received numerous distinctions for his work, which includes more than ninety orchestral, chamber, choral, lyric, film and electro-acoustic compositions. He was awarded the Pulitzer Prize in Music in 2004 for *Tempest Fantasy*, a thirty-minute “musical meditation” on Shakespeare’s play scored for clarinet, violin, cello, and piano. His other achievements include a Fellowship in Music Composition from the National Endowment for the Arts, a Rockefeller Foundation Fellowship in Italy, a Camargo Foundation Residency Fellowship in France, and two fellowships from the American Academy of Arts and Letters, as well as many commissions. His music has been described as “tuneful, ebullient and wonderfully energetic” (*San Francisco Chronicle*), “riveting and fascinating” (NPR), and “assured, virtuosic” (*Wall Street Journal*).

At the Institute, Moravec “will build upon and develop our Artist-in-Residence program,” said Director Peter Goddard, “which has established a strong reputation as a promoter of challenging and provocative music and music scholarship, while also utilizing this opportunity for growth in his own work.”

In addition to directing the Institute’s concert series, Moravec will be composing his first major opera as well as a new piece for the Orpheus Chamber Orchestra. Born in Buffalo, New York, and having attended the Princeton-area Lawrenceville School, Moravec said, “Inasmuch as I was raised in Princeton during the late sixties, I regard this residency as a kind of homecoming.”

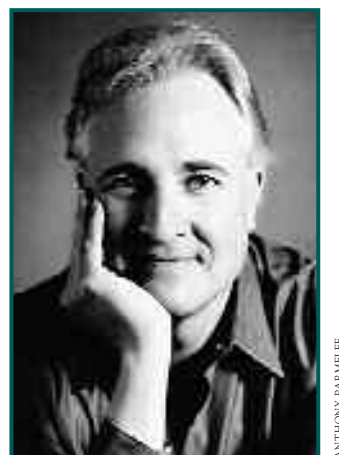
The Artist-in-Residence program was established in 1994 to create a musical presence within the Institute community and to have in residence a person whose work

could be experienced and appreciated by scholars from all disciplines. At the time of the program’s establishment, then-Director Phillip A. Griffiths, now Professor in the School of Mathematics, called it an “interesting experiment” and noted, “We haven’t done anything like this since T. S. Eliot was here in 1948.” (See T. S. Eliot article, page 6.)

Pianist Robert Taub was the Institute’s first Artist-in-Residence from 1994 to 2001, during which time he performed the complete cycle of Beethoven Piano Sonatas over a period of three years. Vox Classics recorded the performances in Wolfensohn Hall, the Institute’s lecture hall and concert venue, producing five highly-acclaimed double-CDs. Taub also introduced a “Musical Conversations” series that brought noted musical figures to the Institute, including James Levine and Milton Babbitt.

Moravec succeeds the Institute’s second Artist-in-Residence, Jon Magnussen, who had just received his doctorate in composition from The Juilliard School when the Institute selected him to succeed Taub in 2000. Magnussen’s appointment ends on June 30 (see article, page 6).

Moravec received his B.A. in music composition from Harvard University in 1980. After graduation, he won a Rome Prize Fellowship from the American Academy in Rome. Upon obtaining both his master’s (1982) and doctorate (1987) degrees in music composition from Columbia University, Moravec went on to teach at Columbia and later at Dartmouth and Hunter colleges. He is currently University Professor at Adelphi University. ■



Paul Moravec

## NEWS OF THE INSTITUTE COMMUNITY

CAROLINE WALKER BYNUM, Professor in the School of Historical Studies, will receive an Honorary Degree from the University of Pennsylvania in May.



Inspired by S. S. Chern: *A Memorial Volume in Honor of A Great Mathematician*, edited by PHILLIP A. GRIFFITHS, Professor in the School of Mathematics, has been published by World Scientific Press.



ERIC S. MASKIN, Albert O. Hirschman Professor in the School of Social Science, delivered the Marshall Lectures at Cambridge University in March.



*Motivic Homotopy Theory*, co-authored by VLADIMIR VOEVODSKY, Professor in the School of Mathematics, and based on lectures given on motivic homotopy theory at the Sophus Lie Centre in Nordfjordeid, Norway, in August 2002, has been published by Springer-Verlag. *Lecture Notes on Motivic Cohomology*, recently published by the American Mathematical Society, is drawn from one-hour lectures given by Voevodsky at the Institute in 1999–2000.



*Mosaics as History: The Near East from Late Antiquity to Islam* by GLEN W. BOWERSOCK, Professor Emeritus in the School of Historical Studies, has been published by Harvard University Press, which has also published his annotated translation of Lorenzo Valla's fifteenth-century oration *On the Donation of Constantine*. Bowersock gave the Runciman Lecture at King's College London in February on "Hellenism in Late Antique Jordan and Syria" and spoke about "The Roman Empire and the Clash of Civilizations" at the American Academy in Berlin in March.



*Three Treatises from Bec on the Nature of Monastic Life* by GILES CONSTABLE, Professor Emeritus in the School of Historical Studies, will be published by Medieval Academy Books in July.



Former School of Mathematics Members DAN BARBASCH (1978–79, 1994–95), PETER TRAPA (1998–99, 1999–2000) and DAVID VOGAN (1977–79) were among the researchers who announced in March that they had successfully mapped the structure of the exceptional Lie group E<sub>8</sub>, one of the largest and most complicated structures in mathematics. Congressman Jerry McNerney delivered a commendation of the team to Congress on March 27.



PAOLO BERNARDINI, former Member in the School of Historical Studies (1998–99), has been appointed Professor of Early Modern European History in the School of Law at the Università degli Studi dell'Insubria in Como, Italy.



AMNON COHEN, former Member in the School of Historical Studies (1983), has been awarded the 2007 Israel Prize for Land of Israel Studies. Cohen was cited for his "unique contribution to the research of the land of Israel in modern times in general and in the Ottoman period in particular." The award is presented by the President of the State of Israel on April 24, Israel's Day of Independence.



PIETER TIM DE ZEEUW, former long-term Member (1985–89) and Visitor (1995–96) in the School of Natural Sciences, has been appointed Director General of the European Southern Observatory, an intergovernmental European organization for astronomical research, effective September 1, 2007.

DOROTHY KO, former Member in the School of Historical Studies (2000–2001), was awarded the 2006 Joan Kelly Memorial Prize in Women's History from the American Historical Association for her book *Cinderella's Sisters: A Revisionist History of Footbinding* (University of California Press, 2005).



The 2007 Oswald Veblen Prize in Geometry has been awarded to former School of Mathematics Members PETER KRONHEIMER (1987–89) and TOMASZ MROWKA (2003–04) for their joint contributions to both three- and four-dimensional topology through the development of deep analytical techniques and applications, and PETER OSVÁTH (1997–98, 2003–04) and Zoltán Szabó for their contributions to three- and four-dimensional topology through their Heegaard Floer homology theory.



BERNARD LEWIS, former joint Member in the School of Historical Studies and the School of Social Science (1968–69, 1974–84, 1985–87), has received the 2007 Irving Kristol Award from the American Enterprise Institute for Public Policy Research.



JORDANA MENDELSON, former Member in the School of Historical Studies (2005), has curated the exhibition, *Revistas y Guerra: 1936–1939*, on view at the Museo Nacional Centro de Arte Reina Sofía in Madrid, from January 16 to April 30, 2007. A smaller version of the exhibition is scheduled for fall 2007 at the International Center for Photography in New York.



DAVID MUMFORD, former Member in the School of Mathematics (1962–63, 1981–82), has won the Leroy P. Steele Prize for Mathematical Exposition in recognition of "his beautiful expository accounts of a host of aspects of algebraic geometry."



MIRCEA MUSTATA, former Member in the School of Mathematics (2006) has been awarded a Fellowship for Science and Engineering, which provides an unrestricted research grant of \$625,000 over five consecutive years, from the David and Lucile Packard Foundation.



CLAIRE SALOMON-BAYET, former Member in the School of Historical Studies (1980–81), was awarded the 2006 Marc-Auguste Pictet Gold Medal of the Geneva Society of Physics and Natural History.



Former Member KAREN UHLENBECK (1979–80, 1995–96, 1997–98), co-founder of the IAS/Park City Mathematics Institute and the Women and Mathematics program, was awarded the Leroy P. Steele Prize for Seminal Contribution to Research for her foundational contributions in analytic aspects of mathematical gauge theory.



The Norwegian Academy of Science and Letters has awarded the 2007 Abel Prize to SRINIVASA S. R. VARADHAN, former Member in the School of Mathematics (1991–92), who was cited "for his fundamental contributions to probability theory and in particular for creating a unified theory of large deviations."



The 2007 Norbert Wiener Prize in Applied Mathematics has been awarded to HAROLD WIDOM, former Member in the School of Mathematics (1956–60, 1977–78), who shares the prize with Craig Tracy for their "deep and original work on Random Matrix Theory."



## A TALKING POINTS A

*"Arabia seems to have been a much more developed place than most Islamicists (myself included) had ever suspected—not just in the north and south, but also in the middle. We are beginning to get a much more nuanced sense of the place, and again it is clear that we should think of it as more closely tied in with the rest of the Near East than we used to do. The inscriptional record is expanding, too. With every bit of certainty we gain on one problem, the range of possible interpretations in connection with others contracts, making for a better sense of where to look for solutions and better conjectures where no evidence exists."*

—PATRICIA CRONE, Andrew W. Mellon Professor in the School of Historical Studies, in "What do we actually know about Mohammed?" [www.openDemocracy.net](http://www.openDemocracy.net)

*"There is no such thing as a unique scientific vision, any more than there is a unique poetic vision. Science is a mosaic of partial and conflicting visions. But there is one common element in these visions. The common element is rebellion against the restrictions imposed by the locally prevailing culture, Western or Eastern as the case may be. The vision of science is not specifically Western ... One of the central facts about science is that it pays no attention to East and West and North and South and black and yellow and white. It belongs to everybody who is willing to make the effort to learn it."*

—FREEMAN J. DYSON, Professor Emeritus, School of Natural Sciences, in *The Scientist as Rebel* (New York Review Books, 2006)

*"First, as American citizens, we should not adopt the easy anti-Americanism that fuels and disfigures so much of the global left. We are critics of many aspects of our domestic society and of U.S. foreign policy, but we also know that our country can be and has been a force for good—in the Second World War, to take the obvious example, but also, in my view, in the founding of the UN, in the rebuilding of Europe, in Korea, in Bosnia and Kosovo, in the defeat of communism, and in the first Iraq War. And, for all our failings, we could have been a force for good in Rwanda and could still be such a force in Darfur. The refusal to rely on American power would be more reasonable if there were other powers that we could rely on. But there aren't, and so we have to make judgments about when U.S. power should, and when it should not, be used."*

—MICHAEL WALZER, UPS Foundation Professor in the School of Social Science, in "The Vanishing American Left?" *Dissent*, Winter 2007

*"The critics feel passionately that they are right, and that their viewpoints have been unfairly neglected by the establishment. They strike a populist note. They bring into the public arena technical claims that few can properly evaluate. They are sometimes able to generate astonishing amounts of publicity. We all know examples from our own fields or from the media. Responding to this kind of criticism can be very difficult. It is hard to answer unfair charges of elitism without sounding elitist to non-experts ... Scientists in this type of situation would do well to heed the advice in Nature's Editorial. Keep doing what you are doing. And when you have the chance, try to patiently explain why what you are doing is interesting and exciting, and may even be useful one day."*

—EDWARD WITTEN, Charles Simonyi Professor in the School of Natural Sciences, in "Answering critics can add fuel to controversy," *Nature*, November 16, 2006



# ALGEBRAIC GEOMETRY: THE INTERFACE WITH AND INFLUENCE OF PHYSICS

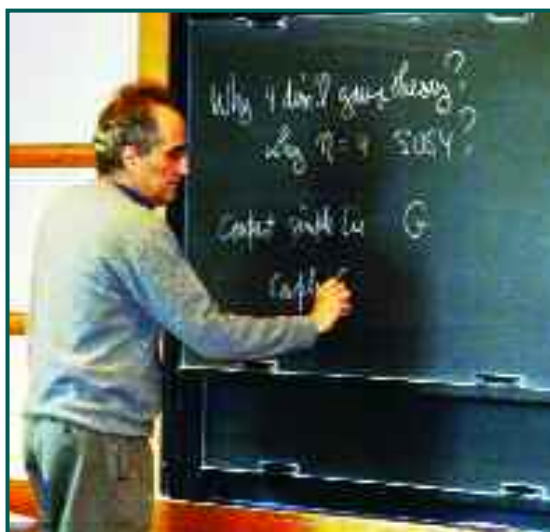
On the occasion of the 1993 dedication of Simonyi Hall, Phillip Griffiths, then-Director of the Institute, spoke on “Mathematics—From Servant to Partner” in which he described how the relationship between mathematics and other disciplines had evolved substantially. “Mathematics functions not so much above or below other disciplines, but within and around them,” stated Griffiths. “It is growing into the status of a full and interactive partner.”

Today, one of the most active areas of interaction is in algebraic geometry, the topic of this year’s special program in the School of Mathematics. “The field of algebraic geometry is particularly noteworthy in the way in which it interacts with many of the other branches of mathematics, algebra, analysis, topology, number theory, and more recently computer science,” said Griffiths, now Professor in the School of Mathematics. “It also has a very long and distinguished tradition here at the Institute in that many of the Faculty members over the years have worked in various aspects in algebraic geometry.”

Algebraic geometry concerns the study of algebraic varieties, which are the common solution sets of polynomial equations. In the 1960s and 1970s its foundations were revolutionized by the French school of algebraic geometry, especially through the work of Alexander Grothendieck. “I think what one has seen during the period I have worked or observed the field has been the resolution of many but not all of the classical problems that came to us from the Italians and the great geometers of the past,” said Griffiths, who has contributed to the reconceptualization of the field with analytical and differential geometric methods and through his pioneering work on the variations of Hodge structures that are now very important in the study of mirror symmetry.

“The space of interest is the space of solutions but I very rarely look at these spaces as solutions to something,” said current School of Mathematics Member Mark Andrea de Cataldo, who with fellow Member Luca Migliorini studies the Hodge theory and the topology of algebraic varieties and algebraic maps between them. “If you slice a sphere in one direction you see circles, if you slice in another direction you see circles. No matter what direction you choose you see circles. If you slice a football you see circles in one direction but you see ellipses in another direction. So you see something is changing. The shape of the slices can tell you something about the original object. Very often I look at the slices and I try to say something about the big picture, the original object.”

School of Mathematics Professor Pierre Deligne used algebraic geometry to prove the



String theorist Edward Witten spoke at a workshop on homological mirror symmetry.

analogue of the Riemann hypothesis for varieties over finite fields, one of the so-called Weil conjectures on arithmetic properties of algebraic varieties proposed by the late School of Mathematics Professor André Weil in 1949. These conjectures stimulated the development of modern algebraic geometry, and their proof is regarded as one of its most important achievements. Andrew Wiles, former Member in the School of Mathematics (1981–82, 1991–92, 1995–2004), also used the tools developed in algebraic geometry in his proof of Fermat’s last theorem.

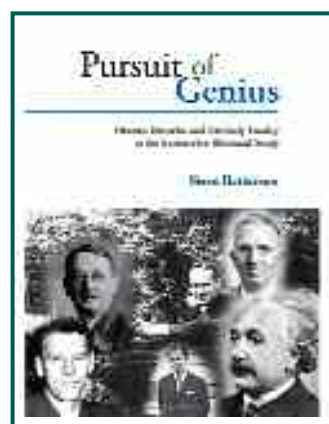
In recent years the interaction between algebraic geometry and theoretical physics has been particularly fruitful. “The Institute has been perhaps the central place where this interaction has occurred,” said Griffiths. In his theory of general relativity, Einstein derived general relativity almost as a branch of geometry, said Griffiths. “That point of view has been greatly extended by the modern theoretical physicists especially here at the Institute, people working in and near string theory,” said Griffiths. “Whereas with Einstein it was differential geometry that was the most relevant, for modern

theoretical physics it is algebraic geometry. Algebraic geometry is the central aspect of geometry for the physicists now.”

This year’s program in algebraic geometry included two workshops on homological mirror symmetry, which Member Jaya Iyer, whose current research involves studying the Chern invariants of Flat bundles on quasi-projective variety and their extensions on good compactifications, found of interest. “My research doesn’t fit into it as yet but I hope I can use their definitions and conceptions to understand derived categories and maybe algebraic cycles and some relations there.”

At the homological mirror symmetry workshop in March, Edward Witten, Charles Simonyi Professor in the School of Natural Sciences and arguably the world’s leading string theorist, spoke about new interactions stemming from the link between gauge theory and the geometric Langlands program. “In recent years algebraic geometry and mathematical physics have begun to interact very deeply mostly because of string theory and mirror symmetry,” said Migliorini. “This crowd of problems suggested by mathematical physicists began to give statements that ought to be true and provable by algebraic geometric means. Mathematical physicists made some guesses based on physics and some really amazing predictions have stimulated a lot of research. This has made algebraic geometry a very hot topic.” ■

## PURSUIT OF GENIUS: A REVIEW BY FREEMAN DYSON



*Pursuit of Genius*  
By Steve Batterson  
AK Peters, Ltd., 2006  
301 Pages

This is the best book that has yet been written about the Institute. It consists of two unequal parts. The first nine chapters provide a detailed and well documented history of the

Institute, from its founding in 1930 to the retirement of the first Director in 1939. The last chapter with the title “Fast Forward” is a brief and superficial sketch of the history from 1939 to the present. This division of the history makes sense, because the archives are open and personally sensitive documents are available for the earlier period, whereas the archives for much of the later period are still closed. The history of the first nine years can be taken as definitive, while the history of the later period is subject to revision. The two pages devoted to the Directorship of Carl Kaysen are based on one-sided partisan statements and would have been better omitted.

Steve Batterson is a professional mathematician who spent the year 1980–1981 as an Institute Member in the School of Mathematics. He came back in 1999 to do the research for this book. Phillip Griffiths, who was then Director, gave him free access to the archives for the ear-

lier period, but the book is not officially sponsored or endorsed by the Institute. Batterson was free to dig out the facts and publish them as he pleased.

The history of the first nine years is unexpectedly melodramatic, full of quarrels and misunderstandings, power struggles and deceptions. It is a story of four dominant characters, the Founders Louis Bamberger and Caroline Bamberger Fuld, the first Director Abraham Flexner, and the first Professor Oswald Veblen. They began with three contradictory visions. The Founders dreamed of building a medical school in Newark, the city in which they had made their fortune and risen to become civic leaders. Flexner dreamed of founding a graduate university that would be like Johns Hopkins, the school that he had attended as a student, but without the encumbrance of undergraduates to be taught and supervised. Veblen dreamed of founding a mathematics institute at Princeton University, like the institute in Göttingen that was a world center of mathematical research. The three visions clashed, and out of their clash emerged the Institute that we know. The Founders were forced to abandon their medical school and also to abandon Newark. Flexner came to grief over his attempt to appoint Professors in the School of Economics without consulting their colleagues. In the end, it was Veblen’s dream that prevailed.

A large part of the book, as indicated by the title, concerns the hiring of the first Institute Professors. The Founders and Flexner behaved like owners of a baseball team bidding for the latest star pitcher. Everyone they hired was supposed to be a genius. They had one spec-

tacular success when they hired Einstein. Most of the time, Flexner was out of his depth, not able to judge the quality of the people he was hiring. The Founders were skeptical of his choices, the Faculty openly rebellious. Veblen was the one who knew what he was doing. Veblen made his choices shrewdly and usually got his way.

I joined the Institute Faculty in 1953, not knowing anything of the earlier history. I was often amazed by the vehemence of the squabbling at Faculty meetings. Every new appointment seemed to precipitate a turf battle between the Faculty and the Director.

Director Carl Kaysen used to say sadly, as many academics had said before him, “The reason academic squabbles are so vicious is that the stakes are so small.” In those days, I never understood why the atmosphere of our Faculty meetings was poisoned with mistrust. After reading this book, I understand better how it happened. The Faculty under Flexner’s regime had grown accustomed to playing hardball. Now, I am happy to see that things have improved. I am retired, the old bitterness is long gone, and we don’t need to play hardball to keep the Director in line.

—Freeman Dyson, Professor Emeritus,  
School of Natural Sciences

Freeman Dyson’s work in mathematical physics has formed the foundation for most modern theoretical work in elementary particle physics and the quantum many-body problem. His current research tries to answer the question, whether any conceivable thought-experiment could detect a single graviton.

## AMBASSADOR LAKHDAR BRAHIMI: DIRECTOR'S VISITOR

Lakhdar Brahimi, former Special Advisor to the Secretary-General of the United Nations, has spent the last year as a Director's Visitor at the Institute for Advanced Study, participating in the School of Social Science's program on "The 'Third World' Now" (see article below) and delivering the Institute's first Lecture on Public Policy. The new annual lecture series will elucidate and weigh in on issues relevant to contemporary politics and social conditions, as well as address scientific matters of broad import every few years.

Born in Algeria and educated in Algeria and France, Ambassador Brahimi has participated in and influenced world affairs for more than five decades, in Afghanistan, Algeria, Haiti, and Lebanon, among other countries. In February 2004, a few months after the assassination of Sergio Vieira de Mello and twenty-two of his colleagues in Baghdad, Brahimi led the efforts of the United Nations in the early part of the postwar transition in Iraq. In his March 28 Public Policy Lecture "Afghanistan and Iraq: Failed States or Failed Wars?" Brahimi, who also assisted in the postwar transitions in Afghanistan, spoke about the circumstances that have led to the present crisis in the Middle East.

"When I was in Afghanistan, in 2002 and 2003, I used to argue that no comparison between Iraq and Afghanistan was justified," said Brahimi. "Iraq looked very much like an anachronistic colonial enterprise that, obviously, could simply not be compared to Afghanistan." Yet, Brahimi continued, "Afghanistan and Iraq are now a sort of Siamese twin joined to one another by Iran, the US presence, and Al-Qaeda. Things are bad in Iraq and getting bad in Afghanistan, to a point where, even in the West, fear is now expressed that the US and its allies may end up losing in both countries."

After twenty-five years of *coups d'etat*, Soviet occupation, and civil wars, Afghanistan was largely a failed state in the last quarter of 2001. Brahimi presided over the UN Bonn Conference on Afghanistan at the end of 2001, which produced the peace agreement known as the Bonn Process. During 2002 and 2003, he oversaw the agreement's implementation as head of the UN Assistance Mission for Afghanistan in Kabul. "What has been achieved is not negligible," said Brahimi, pointing to Afghanistan's adoption of a constitution, the holding of presidential and parliamentary elections, and various social and economic improvements.

But one of the biggest failings in the implementation of the Bonn process, Brahimi said, is the poor achievement in national reconciliation. "Afghanistan had been the scene of all sorts of conflicts for twenty-five years. A patient and persistent effort was and is still needed to heal the wounds Afghans inflicted on one another. Not much has been done, unfortunately," said Brahimi. "In particular, the government, and even more so its international partners, have not looked as closely as they should have to the Taliban problem."

When, immediately after 9/11, the Taliban administration was routed by the US-led military intervention, "not many people, Afghan or foreign, gave much thought to what had happened to them," Brahimi said, "everyone was satisfied that Afghanistan had seen the last of the Taliban. Yet the Taliban did not surrender and did not recognize defeat. They succumbed to superior force but it is now plainly evident that, in typical Afghan fashion, they were determined to fight another day."

The Taliban, a regime hostile to India, has had a friend in Pakistan, which was created at the partition of India in 1947. "Predictably, some in Pakistan would think of turning again to the Taliban and supporting them, perhaps even encouraging them—to

revive their activities in Afghanistan," said Brahimi. "Predictably, too, the Pakistani establishment would be careful to create conditions of deniability for their activities."

The US paid little attention "to persistent allegations that Pakistan was supporting the slowly resurgent Taliban insurrection and the fact, amply documented, that quite a few Taliban leaders were openly moving around in Pakistan," Brahimi said. The outcome is that today, Afghanistan is again "struggling with its old demons of internal strife. The Taliban, as well as other enemies of the new Afghan State and its international backers, are seriously threatening the modest achievements and fragile institutions that have emerged in the course of the past five years."

Two disastrous wars and thirteen years of crippling UN sanctions, followed by foreign invasion and occupation, meanwhile, have destroyed Iraq, a state once considered on the verge of economic take-off in the 1970s, Brahimi said. "Today chaos rules supreme and Iraq has become the scene of a savage civil war and a growing menace to peace and stability in the whole region."

Brahimi noted that the political debate in the United States (and to a lesser extent in Britain) "has ceased a long time ago to be about Iraq. The debate is now mainly about the problems the United States and the United Kingdom created for themselves because they started this war." Which points to Brahimi's first question: "Why did the United States invade Iraq in the first place? Maybe I am naïve or stupid or both to be asking this question so late in the day. But I do confess that I have not heard one satisfactory answer to this basic question anywhere."

Whether Iraq was invaded for oil or to establish US military bases, to promote democracy or to fight international terror, the reality, Brahimi said, is that Al-Qaeda, which "had no presence whatsoever in Iraq before this war" now "may well be stronger in Iraq than it is in Afghanistan." Furthermore, Brahimi noted,

"the invasion of Iraq has literally given a shot in the arm of Al-Qaeda worldwide."

According to Brahimi, an unknown tally of Iraqis, perhaps as high as 600,000, have been killed since the beginning of the war; the country is patrolled now by some 330,000 Iraqi forces and counting, many of them controlled by militias; two million Iraqis have been displaced internally, while another two million have sought refuge in neighboring countries; hundreds of University professors and scientists have been assassinated; between \$100 billion and \$200 billion in property damage has been incurred; and Al-Qaeda factions are now directly and openly running some districts in Iraq, not only in Al Anbar Province along the Syrian and Jordanian borders, but also in Baaquba and other places around Baghdad.

It is now up to the region to fix the present crisis in Afghanistan and Iraq, Brahimi said. "Both India and Pakistan must agree not to use the territory or the people of Afghanistan against one another. And the US, together with the United Nations, the European Union, and the countries that are most actively engaged in Afghanistan, should patiently but firmly bring all these parties to cooperate effectively to help establish peace in Afghanistan."

As for the future of Iraq, Brahimi believes the region "can fix what the Americans have broken. I am also confident that they fully understand that they cannot do it without the Americans, even less, of course, against the Americans. Three countries should take the lead: Iran, Saudi Arabia, and Turkey. It is not easy, but I sincerely believe it can be done." ■



Director's Visitor Lakhdar Brahimi (left) outside Fuld Hall

DINA KAZAKOFF

## THE "THIRD WORLD" NOW

To help form an intellectual community in the School of Social Science, founding Professor Clifford Geertz instituted yearly themes. Before his death last October, Geertz suggested this year's theme, "The 'Third World' Now."

"Cliff's idea was that it would be a good moment to look back on the countries that were once referred to as the 'Third World' to see the effects of globalization, to examine what the political realignment of the end of Communism had wrought, and to try to make sense, in a comparative way, of the different kinds of changes that have occurred in different places," said School of Social Science Professor Joan Wallach Scott, who ran the program in Geertz's absence.

During the biweekly seminars, Members shared their research, which spanned Africa, Bulgaria, China, Latin America, Thailand, and the Middle East, as well as the fields of anthropology, geography, history, political



Participants in "The 'Third World' Now" seminar

science, and sociology. Topics discussed included detailed analyses of the problem of secularism in Pakistan; the uses of traditional versus Western medicine in Africa; the impact of major economic changes on environmental issues in Latin America; the effects in China of

the modernizing economy on agriculture and urban life; and the variations in processes of development in several different parts of the "Third World."

"One topic was whether it was accurate to talk about 'failed states,'" Scott said. "Many of the countries that are products of national liberation movements, especially in Africa, are characterized by some analysts as 'failed states,' and one of the questions we explored was: Were they really 'failed states'? How could we account for differences in the post-colonial process of nation-building and how did globalization contribute to the form of state that emerged?"

Scott explained that the work of the seminar lead to the refinement of individual research projects. "Our aim was not to produce a single answer to the questions that we raised," she said, "but to enrich everyone's work with new perspectives and points of view different from those they usually encounter in their own disciplines." ■

DONNE PETTO



## THE SENSE OF THE PAST AMONG INNER ASIAN PEOPLES



Professor Di Cosmo (left) with participants of the Inner Asian workshop

In March, Professor Nicola Di Cosmo, Luce Foundation Professor in East Asian Studies in the School of Historical Studies, brought together twelve international scholars who participated in a workshop that explored “The Sense of the Past among Inner Asian Peoples.” The theme offered scholars the opportunity to share information about indigenous sources that enable a better understanding of the place Turkic, Mongolian, and Manchu peoples played in world history. Since their histories traditionally were relayed through Chinese, Byzantine, Persian, and Russian sources, a focus on indigenous perceptions of the past represents a new perspective for Central and East Asian history.

The workshop included scholars from Kazakhstan, Japan, Korea, and the United States, among them Di

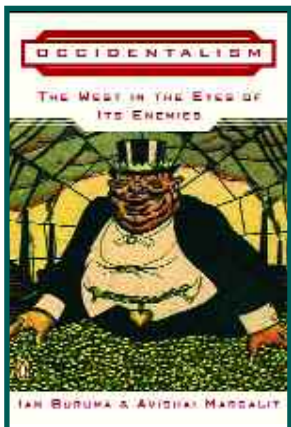
Cosmo and three School of Historical Studies Members, Christopher Atwood, Tatsuo Nakami, and Evelyn Rawski. “A workshop on this theme has never been done before,” said Di Cosmo. “I hope it will help us find a common understanding of how we can speak on this issue.”

From notions and perceptions of history among early Turkic peoples to historical analogies and allusions in the early Manchu state, the workshop elucidated the differences between foreign and indigenous recordings of the past. “Inner Asian peoples did not have autochthonous traditions of history writing, and in some ways this has prevented our understanding of how they understood their own past,” said Di Cosmo. But the last two decades have brought forth a critical mass of original source material. “We have learned a lot more about their

own writings,” said Di Cosmo. “Through these writings, we are gaining a better sense of the relationship between Inner Asia’s present and its past.”

Participants in the workshop, which was made possible with support from the Gerda Henkel Foundation, included Meruert Abuseitova (Academy of Sciences of Kazakhstan); Christopher Atwood (Indiana University, IAS); Nicola Di Cosmo (IAS); Michael Drompp (Rhodes College); Mark Elliott (Harvard University); Johan Elverskog (Southern Methodist University); Peter Golden (Rutgers University); Naoto Kato (Nihon University); Hodong Kim (Seoul National University); Eiji Mano (Ryukoku University and Kyoto University); Tatsuo Nakami (Tokyo University of Foreign Studies, IAS); and Evelyn Rawski (University of Pittsburgh, IAS). ■

## OCCIDENTALISM: THE WEST IN THE EYES OF ITS ENEMIES



Occidentalism, as defined by Avishai Margalit, George F. Kennan Professor in the School of Historical Studies, is a modern phenomenon, a dehumanizing picture of the West, painted not only by its enemies but in fact propagated from within.

“Occidentalism is by no means the private domain of a particular non-Western civilization, whether

Islamic, Hindu, Confucian or what have you,” said Margalit. “Indeed, all the main outlines of the Occidental picture were drawn within the West and were exported from the West to other parts of the globe. A good metaphor for this is the trail of the colorful cloth that was produced in cheap Parisian factories to be exported to Tahiti only to bounce back, through Gauguin’s paintings, as authentic local Polynesian dress.”

In his book *Occidentalism: The West in the Eyes of its Enemies* with Ian Buruma (The Penguin Press, 2004), Margalit explored anti-Western stereotypes and traced their source to the West itself. Similar to Edward Said’s conception of *Orientalism*, the classic work published in 1978 that describes how Europeans have long stereotyped non-Westerners as childish and irrational, Margalit and Buruma charge that the unflattering stereotypes that feed Occidentalism were perpetuated by Europe’s intellectual rebels from the eighteenth, nineteenth, and early twentieth centuries.

Margalit explained during a recent Friends Forum

that the Occidental picture of Westerners as machine-like creatures without souls stems in part from the contention “that the West at best has civilization but it has no culture.” Culture, Margalit continued, connotes “the deep-rooted creative force of life,” while civilization “ties with the idea of the city, and further tied with it are the ideas of being artificial, superficial, cold, mechanical, abstract, and schematic.”

*“This is more than tough rhetoric. What these people have in mind is not just to spread Islam to the West but to eradicate the idolatrous West from the Islamic world. This is not an impossible political project.”*

The assumed clash between culture and civilization—which Margalit regards “as a figment of a fervent imagination rather than a description of anything real”—is an illusion that has been propagated by cultural pessimists in the West who believe “in the great divide between culture and civilization, and believe that they are caught—against their better judgment and against their will—on the wrong side of the divide.”

The danger is that Occidentalism is more than a stereotype, said Margalit, which “can and does feed ideologies of the most diverse kinds, from Maoism to various forms of political Islamism.” Even though Occidentalism is a modern picture, Margalit said, “some of its features are as old as the Bible. The idolatrous city is one of them. It can be Babylon with its rebellious tower, or it can be New York with its twin Trade Center towers. All we have to do is turn to Osama Bin Laden who, among other things, is a

great believer in the doctrine of the clash of civilizations.”

Margalit believes that the religious view of the West as idolatry is “an original contribution of political Islam to modern Occidentalism.” According to Islamic political ideologues like Abu-l-A’la Maududi in Pakistan, Sayyid Muhamud Taleqani in Iran, and Sayyid Qutb in Egypt, we are now living in an era of the New *Jahilyyya*, meaning “the resurrection and evocation of the notion of *Jahilyyya* understood as referring to the idolatrous barbarism of the West,” Margalit said.

“In the current political Islam the idea of the New *Jahilyyya* is meant to be used literally with all the political and religious implications that go with it—in particular, the command to put the wrong of the *Jahilyyya* aright by its radical eradication,” Margalit said. “This is more than tough rhetoric. What these people have in mind is not just to spread Islam to the West but to eradicate the idolatrous West from the Islamic world. This is not an impossible political project. Being fed by an Occidental religious picture of the West as the source of the New *Jahilyyya*, this project has the potential to become a true revolutionary ideology.”

Margalit discounted the idea that Occidental talk is not serious talk—that “it is said but not believed” and is “mere manifestation of inferiority complex.” Even if Occidentalism, in fact, is an effort to overcompensate for inferiority—the claim that “The Rest has inferiority complex vis-a-vis The West”—Margalit contended that, at best, it “can explain why the Occidentals believe what they believe but not that they do not really believe it. I believe that Occidentalism is believed. And because of that, in revolutionary situations, Occidentalism can be a politically serious matter. The dehumanization of Occidentalism makes it also a serious moral problem.” ■



## JON MAGNUSSEN: ARTIST-IN-RESIDENCE, 2000–2007



MARGARET SULLIVAN

*The Psalm recording at St. Josephs' Seminary*

Following a seven-year term as Artist-in-Residence at the Institute, composer Jon Magnussen is returning to Hawaii, where he was raised, to accept a position as Director of Education at the Honolulu Symphony.

The final concerts in his *Recent Pasts 20/21* series featuring Trio Solisti and the Da Capo Chamber Players were held this spring, closing out Magnussen's four-year program designed to explore the wide variety of aesthetic perspectives in Western art music of the twentieth and early twenty-first centuries.

In addition to curating the concert and lecture season, Magnussen focused his time at the Institute working on his

own compositions, including *The Folding Cliffs*, an opera based on the epic poetry of W. S. Merwin. Among his many accomplishments at the Institute is the recent recording of *Psalm* (2002), which will be combined with a previously recorded version of *The Winged* (1996) and distributed on CD by Albany Records this fall. Both works were composed for the José Limón Dance Company, and the new recordings will become a fixture in the company's future performances of these two pieces.

The ballet *The Winged* was created in 1966, and was performed partly in silence and partly with incidental music by Hank Johnson. When the Limón Company's Artistic Director Carla Maxwell restaged it in 1999, it was accompanied by Magnussen's score.

Funded in part by the Aaron Copland Fund for Music, Magnussen's *Psalm* was recorded in February at St. Joseph's Seminary in Princeton and features members of the Princeton Symphony Orchestra conducted by Mark Laycock; the Westminster Choir conducted by Andrew Megill; and baritone Sumner Thompson.

Choreographed by José Limón in 1967, the ballet *Psalm* was revised in 2002 by Maxwell, who commissioned Magnussen to compose the new score. Maxwell's rendering of *Psalm* premiered at the 2002 Winter Olympics Arts Festival in Salt Lake City and remains active in the dance company's repertory. At its premiere, *The Salt Lake Tribune* called Magnussen's score "hauntingly beautiful." ■

### *Experiencing a World with No Equivalence*

At the Institute, I have experienced a world which has no equivalence. (A reading of the Institute's mission statement makes this clear.) When I arrived in the summer of 2000 as a young composer, I wondered how a composer would fit in, in this world among scholars. Now, after nearly seven years of lunching (as a certified "free agent") among the various Schools' tables in the Dining Hall, I can say that a composer fits in quite nicely. But it's not just about the conviviality of a shared meal. There are, in fact, many 'Artists' in residence who I've come to know at the Institute, and from many different fields. I do not suggest that our languages and materials are the same (or even similar in some cases), but in the processes of our work, we find points in common.

During these past few years, I have taken some significant steps in my work: my music has been performed in some major venues, as well as some minor ones; I have become a published composer; I have made numerous new friends and acquaintances in the music academy and music industry; and this coming fall, an all-Magnussen CD will be released commercially.

These changes have come about, in large part, because the Institute has been my artistic home for these many years. This is a kindness that I could never hope to repay, (but that I do, in fact, intend to repay). As I depart for a new adventure, I take with me the certainty that many good things will come of my having spent this time here. I have not shied from difficult projects (an opera, still in-progress, comes to mind), and I have sometimes taken on too much. As I continue to persist in the joys and the challenges of my work, I know that I will come to realize a potential that didn't exist in me before I arrived at the Institute.

—Jon Magnussen

*Jon Magnussen biking across campus*



DINAH KAZAKOFF

## T. S. ELIOT AT THE INSTITUTE FOR ADVANCED STUDY



COURTESY OF GETTY IMAGES

*T. S. Eliot in his office at the Institute*

On November 26, 1946, Director Frank Aydelotte wrote to T. S.

Eliot, extending an invitation for the poet to "come to the Institute for Advanced Study for a period of two or three months with no duties except to go on quietly with your own work and to engage in such discussion with Members of our group here as may seem interesting and profitable to you." Eliot was unable to accept the invitation until fall 1948, arriving on October 1 of that year aboard the *S. S. America*. His Member stipend of \$2,000 was supplied by the Rockefeller Foundation, plus \$1,000 from the Institute for traveling expenses.

In Princeton, Eliot lived on Alexander Street in a small white-frame colonial house with a garden. During his time at the Institute, he worked on *The Cocktail Party*, his modern take on Euripedes's *Alceste*, involving a troubled married couple, two cocktail

parties, and the intervention of a mysterious stranger. Charles Poore in *The New York Times* described it "as not exactly a warm-hearted play, but it is lit with a frosty brilliance. It might have been called 'Things Are Tough Everywhere,' since its characters—the saint and the sinners—are not promised much pleasure this side of Paradise."

In an October 15, 1948, letter to poet Sir Herbert Read, Eliot refers to "the play I am working on for Martin Brown. He wants a play ready next summer for production if possible in Edinburgh in September." He continues to inform Read, "This Institute is a place which I think you would like, and I shall tell you all about it when I return.

*T. S. Eliot*

Incidentally, Princeton is a much more pleasant place to live in than most of the big university centers. It is purely a university town and one has the sense of being very near the country."

When news came a month into his stay that he had won the Nobel Prize in Literature, Eliot wrote to poet and editor John Hall Wheelock, "The award has given me mixed feelings, because it would have been more convenient in another year, as it is I am under obligation to go to Stockholm at rather short notice, and, therefore, I am obliged to curtail my visit."

Six months after premiering in Edinburgh in the summer of 1949, *The Cocktail Party* opened on Broadway, winning an Antoinette Perry "Tony" award in April 1950. When it opened in London in May, one critic observed, "Sir Bronson Albery, manager of the New Theatre, tells me that he cannot remember a heavier advance booking there ... Everybody wants to see it because everybody wants to be in a position to say that he or she admires it, despises it, adored it, loathes it, understands it or can't make out what the blazes it is all about." By November, the play had been translated into French, German, Italian, and Swedish.

When asked by a *Time* magazine reporter why he had written the play in verse rather than prose, Eliot replied: "I can write verse better than prose. When it is colloquially spoken, the very rhythm gets under people's skins and has a kind of atmospheric effect ... The effect of first-rate verse should be to make us believe that there are moments in life when poetry is the natural form of expression of ordinary men and women."

Before departing Princeton in November 1948, Eliot donated a copy of *Notes towards the Definition of Culture* (Faber and Faber, 1948) to the Institute library. In this critical treatise, which Eliot originally authored as a series of articles in *New English Weekly*, Eliot observes, "So of society we can only say: 'We shall try to improve it in this respect or the other, where excess or defect is evident; we must try at the same time to embrace so much in our view, that we may avoid in putting one thing right, putting something else wrong.' Even this is to express an aspiration greater than we can achieve: for it is as much, or more, because of what we do piecemeal without understanding or foreseeing the consequences, that the culture of one age differs from that of its predecessor." ■



# ART AND SCIENCE: PROJECTS OF THE CREATIVE IMAGINATION

## The Mathematical Infinity



THE J. PAUL GETTY MUSEUM

According to Greek mythology, the multiple heads of the Hydra, depicted on the Etruscan water jar above, grew again as fast as they were cut off, demonstrating infinite properties.

The concept of infinity has been treated in many different ways during the ages, according to Professor Enrico Bombieri, IBM von Neumann Professor in the School of Mathematics, from rejecting it as an irrational absurdity to accepting it as the ultimate, inaccessible, perfection.

"Is the essence of infinity the uncountable, the immeasurable? Or is infinity the ultimate, complete, perfect entity?" asked Bombieri, during his January 31 lecture "The Mathematical Infinity." "Well, this I would leave to the philosophers and theologians, but my concern would be infinity in mathematics. Is infinity part of mathematics?

Is infinity a number, or can it be treated as such? The answer is, well, it depends on how you do things."

Infinity has played, and still plays, a shifting role in mathematics, Bombieri said: from total avoidance in the Pythagorean school, to the Aristotelian partial acceptance of it as a useful convention (but always avoidable), to the Cantorian point of view related to counting and leading to a notion of different types of infinity, all of them acceptable at the same time in a precise model of mathematics.

Today, mathematics has arrived at a pragmatic view of infinity, according to Bombieri, and its acceptance has led to some counterintuitive paradoxes, as well as some positive results. "Infinity has come back into mathematics in a far more powerful way, to coexist with the finitistic approach of Aristotle," said Bombieri. "There is no need to coerce every proof into a finite argument. In the view of many mathematicians, the intellectual contortions needed to remain within the realm of the finite indicate that a wholesale rejection of infinity in mathematics is not a good thing. What really matters is the final understanding, coupled with a good foundation. Goodness is guided by 'Ockham's Razor': always choose the simple way. Aesthetics enters into mathematics."

Computer science is also leading to a new precise concept, Bombieri said, namely the impossibly large in the realm of the finite. "Is it possible that the solution of the basic P versus NP problem, with its finitistic formulation, will require a daring excursion into the realm of infinity? Only time will tell. We have also seen the existence of the incomputable: Functions that no one can write down in standard recursive terms. Certainly, the computer has shown us, in a dramatic way, the distinction between the 'finite' in real life and the 'finite' beyond our grasp."

Enrico Bombieri has been a Professor in the School of Mathematics since 1977 and IBM von Neumann Professor since 1984. One of the world's leading authorities on number theory and analysis, he is a Fields Medalist for his work on the large sieve and its application to the distribution of prime numbers.

It is noteworthy that as between two proofs of a theorem mathematicians will prefer the one which, as they say, is more "elegant," a term which has primarily an aesthetic rather than a logical significance. It is a striking fact that creative mathematicians think of their subject as an art as well as a science. Perhaps the best analogy is with architecture, which in its highest forms combines use and beauty. Both art and science on the highest level are projects of the creative imagination, and the likenesses between them becomes more significant than the differences.

—Frank Aydelotte (Director, 1939–47), October 1941

## The Difficult Task of Erasing Oneself

Some modern artists, in their pursuit of perfection, have tried to erase all traces of him- or herself, according to Yve-Alain Bois, Professor of Art History in the School of Historical Studies, a precept that has helped sustain many different artistic practices during the past century, from Kasimir Malevich's *Black Square* of 1915, Jean Arp's collages "according to the laws of chance" of 1916–18, and Piet Mondrian's modular grids of 1918–19, to Pop Art, Minimalism, Process art, Conceptual art, and beyond.

In his March 7 lecture "The Difficult Task of Erasing Oneself: Non-Composition in Twentieth-Century Art," Bois pointed to "The Search for the Absolute," Sartre's famous text on art written as a preface to an Alberto Giacometti exhibition in 1948. In his text, Sartre noted that the sculptor knows that there is "nothing superfluous in man." "But what if it is man, man himself, who was deemed superfluous?" asked Bois. "In fact, it is my contention that a good portion of the modernist production, throughout the last century, tried to ask this very question, tried to conceive of itself as a search for the possibility of effacing man and erasing his traces."

Malevich, according to Bois, was "the first abstract artist to claim that he was searching for the absolute, which he called the 'zero of form.'" In his lecture, Bois mapped the patterns of development in this drive towards impersonality in twentieth-century art. "All these works do have something in common," Bois stated. "They all manifest an urge to suppress composition as sheer arbitrariness and to motivate the practice of art by way of some ordering principle that would not depend upon subjective choice."

In the past century, modern artists have engaged in various non-compositional strategies, Bois stated, which can be divided into six categories: chance; the grid; the collapse of image and field; the deductive structure; the monochrome; and the process. Yet, according to Bois, non-composition ultimately proves unsustainable. "One after the other, the

evolution of each non-compositional artist seems to reach a point after which, progressively or abruptly, the wheel turns back on itself," Bois said, pointing to the oeuvres of Ellsworth Kelly, Sol LeWitt, Piet Mondrian, Alexandr Rodchenko, and Frank Stella.

Even Duchamp, Bois said, accepted defeat. In a 1960 interview, Duchamp stated, "I consider taste—bad or good—the greatest enemy of art. In the case of the ready-mades, I tried to remain aloof from personal taste and to be fully conscious of the problem ... many people can prove I'm wrong by merely pointing out that I choose one object rather than another and thus impose something of my own personal taste. Again, I say man is not perfect, but at least I have tried to remain as aloof as possible, and don't think for one minute that this hasn't been a difficult task." ■

Yve-Alain Bois, a specialist in twentieth-century European and American art, has been a Professor in the School of Historical Studies since 2005. He is currently working on several long-term projects, including a study of Barnett Newman's paintings; the catalogue raisonné of Ellsworth Kelly's paintings and sculptures; and the modern history of axonometric projection.

## THE SENSUOUS IN ART

Seven lectures on the theme *The Sensuous in Art* were presented by the Institute for Advanced Study and Princeton University in the 2006–2007 academic year. From medieval to contemporary art, the series focused on what Yve-Alain Bois, Professor of Art History in the School of Historical Studies, called "a return to the object" in art history "after, and benefiting from, two decades of intense theorization."

The lecture series, made possible with support from The Andrew W. Mellon Foundation, was organized by Bois and Hal Foster, Chair of the Department of Art and Archaeology at Princeton University, and alternated in venue between the Institute's Wolfensohn Hall and McCormick Hall at the University.

The series began with Anne Wagner, Professor of Modern Art in the Department of History of Art at the University of California at Berkeley, who examined the structuring traces that the consumption of global capitalism leaves behind. Jeffrey Hamburger, Professor in the Department of History of Art and Architecture at Harvard University, looked at the ways the sensory came to be integrated into the spiritual in medieval art. Experimental approaches to representing human physical nature in the work of Giorgione, Titian, and Domenico Campagnola were examined by Stephen Campbell, who teaches Italian art of the fifteenth and sixteenth centuries at the Johns Hopkins University.



Veronese's Allegory of Love II ("Scorn")

David J. Roxburgh, Professor of Early Islamic Art and Architecture in the Department of Art and Architecture at Harvard University, addressed the ideal values espoused in Islamic calligraphy, dealing with production and reception, as well as the neglected formal and aesthetic features of writing itself. The relationship between emotion and representation as depicted in the Greek myths on the walls of Pompeian houses was explored by Natalie Kampen, Chair of the Department of Women's Studies and the Barbara Novak Professor of Art History at Barnard College, who focused in particular on the way family representations were characterized and the suggestion of a complex process of "emotional interpellation" in the imagery. Irene Winter, William Dorr Boardman Professor of Fine Arts at Harvard University, examined the "wow"-effect of visual experience in ancient Mesopotamia, particularly how the human body is selectively revealed and concealed, the parts as well as the whole often coded for sexual, not just sensual, appeal. Focusing on four enigmatic paintings by Veronese in The National Gallery in London, T. J. Clark, the George C. and Helen N. Pardee Professor of Art History at the University of California, Berkeley, discussed Veronese's brand of hedonism, and the artist's unique feeling for the body's architecture and balance, paying particular attention to Veronese's treatment of cast shadow, one clue to the artist's feeling for matter and passing time in general. ■



UNRESTRICTED SUPPORT: CRITICAL TO THE INTELLECTUAL LIFE OF THE INSTITUTE

Each year about 200 Members come to the Institute where they are given the freedom to work on the attainment of long-term goals without pressure for immediate results. While the focus of their work may have changed throughout the Institute's history, Memberships have been and remain critical to the intellectual life of the Institute and its community. In order to continue to provide a haven for theoretical research and intellectual inquiry, the Institute continues to seek unrestricted support, through both annual gifts and endowments. The generosity of donors directly enables the intellectual work of a number of scholars, a few of whom are highlighted below.

William D. Loughlin Memberships

The William D. Loughlin Memberships were endowed by Robert and Ginny Loughlin to honor the memory of Mr. Loughlin's father, William D. Loughlin, a prominent radio engineer and founder of Boonton Radio Corporation. His career forged a natural connection to his support for physics at the Institute, but Loughlin was also a scholar in Greek and Latin, with a deep, personal love of history. For this reason, Robert Loughlin structured the gift in honor of his father to benefit the School of Historical Studies as well as the School of Natural Sciences.



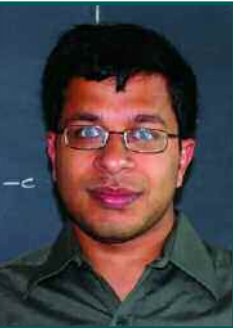
DAVID LANGSLOW  
School of Historical Studies  
*Classics, University of Manchester*  
David Langslow has been working on the first critical edition of the ancient Latin version of the medical works of Alexander of Tralles. He also has been working on the notes to accompany a new version in English (already complete) of the *Lectures on Syntax* by the great Swiss classicist, Indologist and Indo-Europeanist, Jacob Wackernagel (1853–1938).



ANIRBAN BASU  
School of Natural Sciences  
*Mathematical and Particle Physics, Institute for Advanced Study*  
Anirban Basu has been analyzing patterns of chiral symmetry breaking in asymptotically free quantum field theories, which is necessary to study QCD at low energies. He is currently investigating toy models in two space-time dimensions where calculations are under greater control.

D. E. Shaw & Co., L.P. Membership

The D. E. Shaw group is a global investment and technology development firm. Since its organization in 1988, the firm has earned an international reputation for financial innovation and technological leadership.



NEERAJ KAYAL  
School of Mathematics  
*Computational Complexity, Indian Institute of Technology*  
Neeraj Kayal has focused on Complexity Theory, especially the complexity of computational problems arising out of number theory and algebra. His work has focused on devising deterministic algorithms for identity testing (determining whether a circuit computes the identically zero polynomial) and the complexity of computing algebraic dependence.

Leon Levy Foundation Membership

The late Leon Levy, a Wall Street investor and philanthropist, was a Trustee of the Institute. The Leon Levy Foundation, which has a strong interest in the interplay of psychology and economics, based on Mr. Levy's own interests, was formed when he died in 2003. The Foundation also funds a public lecture, the Leon Levy Lecture, which is given by the Leon Levy Foundation Member each year (see article, right).



HENRY S. FARBER  
School of Social Science  
*Economics, Princeton University*  
Henry S. Farber has been working on several projects, including an analysis of the role of reference-dependent preferences in labor supply with application to New York City taxi drivers, and an analysis of voter turnout with application to union representation elections. ■



Taxi Drivers and Neoclassical Economics

What can taxi drivers teach economists about the standard neoclassical model of decision making? The question was addressed by Henry Farber, this year's Leon Levy Member in the School of Social Science, in his recent lecture "Lessons from Taxi Drivers: The Challenge of Behavioral Decision Theory to Neoclassical Economics." Every time he gets into a taxi, Farber explained, he talks to the driver. "The first time, I asked, 'Excuse me, do you mind if I talk to you?' The driver said, 'Oh, no problem.' I said, 'Can you tell me when you stop?' He said, 'Yeah, when the light's red.' And I realized I have to be more clear." In fact, Farber's questions to taxi drivers relate to behavioral economics, which posits that individuals deviate from the economist's standard model of rational decision-making in important and predictable ways. Behavioral economics poses a serious challenge to the practice of economics and much theoretical work and experimental laboratory evidence has been produced in support of this new approach. However, evidence from the field on decision-making in real-world settings is more limited.

Taxi drivers, according to Farber, can provide insight into labor supply behavior and the differences between the neoclassical approach, which involves intertemporal substitution, and the behavioral approach, which involves target earnings. In decisions involving intertemporal substitution, individuals maximize utility by allocating resources across time; they will work more in high-wage periods and less in low-wage periods. In decisions involving target earnings, individuals will stop working once they reach an income target; they will work less in high-wage periods and more in low-wage periods. "What determines, what explains whether a driver stops or not after a trip?" Farber asked. "Is income or hours the dominant factor when explaining the stopping decision?" Farber found that most of the taxi drivers he spoke to "appear to make their hours decisions in a manner consistent with the neoclassical model," meaning they "drove until they felt they had worked a full day or were tired." In studying the trip-sheets of fifteen drivers for a total of 538 shifts, Farber also determined that each additional hour raised the probability of a driver stopping after a trip by one percentage point and found no significant change in the stopping probability as income accumulated. Farber concluded that his data on taxi drivers supports the intertemporal model of decision-making and that target earnings do not appear to be a useful predictor of labor supply. "How well does the standard model hold up to the behavioral challenge? I continue to believe the standard model has enormous predictive and analytic power. It remains a useful tool for policy analysis," said Farber, who added, however, that behavioral considerations can be very important in some settings. "The behavioral challenge has been a very positive thing for economics. It makes us really think hard about what we're doing. But I think we need to be careful about taking these claims and saying that they have important real-world implications in all settings." ■

The Institute expresses deep appreciation for the annual and endowed Member support provided by the following individuals, organizations, and foundations:	Association of Members of the Institute for Advanced Study (AMIAS)	Friends of the Institute for Advanced Study	The Andrew W. Mellon Foundation
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## E. A. LOWE AND VIRGINIA BROWN: PALAEOGRAPHERS “CONCERNED WITH TRIFLES”

*I must record my appreciation of the part played by Dr. Virginia Brown, my present assistant at the Institute for Advanced Study, in preparing the final volume of C.L.A. Her scholarly qualities and her flair for dealing with Latin manuscripts stamp her as a worthy follower in the path blazed by Traube.*  
—E. A. Lowe



Palaeographer E. A. Lowe

In 1968 Dr. Virginia Brown came to the Institute for Advanced Study to work as a Research Assistant to E. A. Lowe, then Professor Emeritus in the School of Historical Studies. At the time Lowe was working to complete *Codices Latini Antiquiores* (C.L.A.), his monumental palaeographical guide providing descriptions and estimated dates and places of origin, with sample facsimiles, of all extant Latin literary manuscripts that Lowe considered to have been copied before the ninth century.

“A lot of the work was spent on reviewing dates and origins of fragments or entire manuscripts that he had assigned to certain periods and to certain places of origin,” recalled Brown. “He would give me the photo that he was reproducing and he would say, ‘Tell me what you see.’ He was asking me to approach it as a real palaeographer. He was asking me to date and to place it.”

Brown, now a Senior Fellow at Toronto’s Pontifical Institute of Mediaeval Studies and a Professor at the University of Toronto, returned last term to the Institute for the first time since leaving in 1970, shortly after Lowe’s death in 1969. While her husband James Hankins spent the term as a Member in the School of Historical Studies, Brown spent much of the term immersed in the E. A. Lowe papers at the Pierpont Morgan Library in New York. She also explored the Institute’s archives for information on Lowe’s early years here.

Last November, Brown delivered the Hofer Lecture at Harvard University, speaking on “E. A. Lowe in Italy and the Making of *The Beneventan Script*,” his 1914 landmark publication in which he gave the distinctive script used in the medieval Duchy of Benevento the definitive name by which it is still known. This was followed in December by a lengthy article that was published under the same title in the annual journal of the Vatican Library, *Miscellanea Bibliothecae Apostolicae Vaticanae*. In the article, Brown traces “the circumstances and factors that enabled Lowe, a Jewish Russian immigrant to the United States while still a child, to produce such a mature, authoritative, and eminently readable work as *The Beneventan Script* when he was just thirty-four years old.”

E. A. Lowe, who was born in 1879 in Moscow, Russia, served as a lecturer and reader in palaeography at Oxford University from 1913 to 1948 and was appointed as one of the Institute’s first Professors in 1936. At the memorial in Lowe’s honor in 1969, then-Director Carl Kaysen referred to a letter from Lowe to Founding Director Abraham Flexner, dated August 14, 1934. “It refers in great detail to those things which

Lowe felt he would need if he were to come to Princeton to do his work,” noted Kaysen. “There’s a personal word of greeting in the beginning, a personal word at the end, and four pages of discussion of what a palaeographer needed to do his work.”

Lowe, who defined a palaeographer as one “concerned with trifles,” remained at the Institute for the rest of his life, becoming Professor Emeritus in 1945. The great majority of his work on C.L.A. was done at the Institute, “whose liberality and generosity enabled the project to reach its goal,” Lowe wrote. At the Institute, Brown assisted Lowe with the supplement to the eleven-volume C.L.A., as well as the revision of the second volume. “Dr. Lowe’s eye was so good and so sharp and so well trained that even at age 89, he could say, ‘I think this is French,’ and I would say, ‘Why do you think it is French?’ And he would tell me. I would write it all down.”

Brown has since become a leading palaeographer renowned for her expertise in the Beneventan script. At the invitation of Lowe’s family, Brown produced a second edition, published in 1980, of *The Beneventan Script*. Among Brown’s subsequent discoveries, was that Beneventan did not end in the thirteenth century as Lowe had supposed but rather continued to be copied into the first half of the sixteenth century.

Over the years she has continued to collect and catalogue extensive examples of Beneventan script. For the 50th anniversary of the *Mediaeval Studies* journal, of which Brown was then the editor, Brown contributed “A Second New List of Beneventan Manuscripts,” a follow-up to Lowe’s “A New List of Beneventan Manuscripts” published in 1962. She has recently put the finishing touches on “A Second New List of Beneventan Manuscripts, Part V”; the list of surviving Beneventan manuscripts and fragments now numbers over 2,000 up from the 600 Lowe had documented.

Brown has continued as well to carry on new research concerning C.L.A., in which Lowe catalogued 1,811 examples of surviving Latin script. Having worked with Bernhard Bischoff on a C.L.A. addenda published in 1985, Brown is now working on a comprehensive supplement to C.L.A. with James John, Lowe’s Research Assistant from 1951 to 1964, with whom Brown previously produced a second C.L.A. addenda.

When Lowe died on August 8, 1969, he had seen proofs of all except the three indexes at the end of the C.L.A. supplement. In the introduction he noted: “I would be less than candid if I did not conclude with some expression of gratitude for the good fortune a kind fate granted in enabling me to finish, despite the weight of years of waning strength, the task undertaken nigh four decades ago. The long journey is ended. The good ship C.L.A. has been brought safely into port, and its goodly 1,811 passengers, eloquent though mute, are bound to have much to say to future generations as they have had to the present.” ■



Virginia Brown with Lowe’s C.L.A. in the Institute’s library.

## CROSSROADS AT IAS: CELEBRATING SIXTY YEARS

For sixty years, the Crossroads Nursery School at the Institute for Advanced Study has educated the children of Faculty and Members.

From its founding at a Faculty meeting in 1947 to this day, the Institute continues to be actively involved in the school’s evolution. Myrna Jenkins, director of the school since 1978, said that despite the some-

what transient nature of the school’s international population, which fluctuates according to Members’ terms, “there is a strong sense of community and continuity provided through the support we receive from the Institute and its Faculty. They are continually involved.”

Before its present location in the former Electronic Computer Project building, the school occupied two World War II-era huts. Over the years, it has been guided by members of the Institute community, among them Susan Bombieri, Roberta Gernhardt, Charlotte Langlands, and Isabel Paret, who currently sit on the board. Past board members have included Michelle Akina, Imme Dyson, Lily Harish-Chandra, Allen Rowe, Bridget Spencer, and Marcia Tucker. In a letter on the occasion of the School’s 50th Anniversary, the late Homer A. Thompson, Professor in the School of Historical Studies,



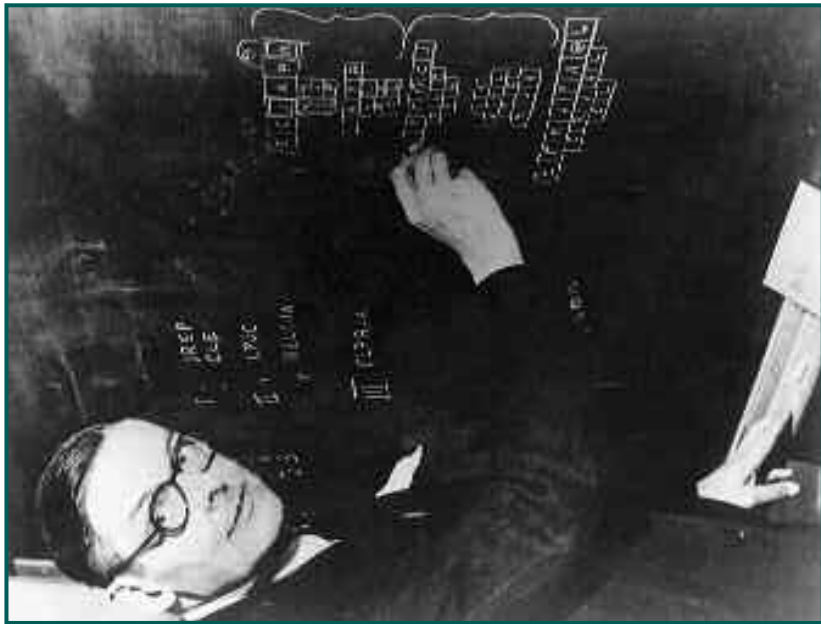
noted: “It would be hard to resist an appeal from the Crossroads Nursery School. I’m well aware of how much the School means to the visiting Members of the Institute by assuring them that their youngsters are not suffering from neglect while they are concentrating on the research for which they came to the IAS. I often think too of the role played by the School in

introducing to this community so many young people from all over the world.”

While Crossroads maintains a close relationship with the Institute, operating in a building which the Institute provides, it has its own separate not-for-profit status and is self-sustaining. Crossroads is currently raising funds to replace its playground equipment in order to meet new state requirements. The Institute is prepared to provide labor to install the equipment and half the \$35,000 cost of materials, and Crossroads is seeking to raise the remaining \$17,500 necessary to fully fund the project. If you are interested in making a contribution, you can mail your tax-deductible check to Crossroads Nursery School, 225 Olden Lane, Princeton, NJ 08540. You may also contact Danielle Otis at 609-683-4910 or otisdanielle@yahoo.com. ■



# THE INSTITUTE LETTÉR



T. S. ELIOT AT WORK ON THE COCKTAIL PARTY

In November 1946, Frank Aydelotte (Director, 1939–47) invited the poet T. S. Eliot to come to the Institute for Advanced Study as a Member in the School of Historical Studies and the first unofficial artist in residence at the Institute (see article, page 6). By the time Eliot's appointment, along with the appointments of the British historian Arnold J. Toynbee and the Danish physicist Niels Bohr, was announced in *The New York Times* on January 13, 1948, J. Robert Oppenheimer had succeeded Aydelotte as Director (1947–66). Eliot arrived at the Institute in October 1948, observing in a letter to his secretary in London, "My ship was a day late on account of headwinds, but the voyage was otherwise comfortable, and I am very sumptuously installed here in Princeton."

The photograph above, which shows Eliot with blackboard diagrams of his play *The Cocktail Party*, was taken at the Institute on November 10, 1948. Six days prior, the Nobel Foundation had awarded Eliot the Nobel Prize in Literature "for his remarkable pioneering work in modern poetry." Eliot left the Institute at the end of November in order to deliver his Nobel lecture on December 10 in Sweden. When *The Cocktail Party* premiered in August 1949 at the Edinburgh Festival, it was described as "one of the finest dramatic achievements of our times" by the *London Daily Telegraph*.

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