

Natural Selections

A NEWSLETTER OF THE ROCKEFELLER UNIVERSITY COMMUNITY

THE MINORITY REPORT

MARY ABRAHAM

In the 2000 United States census, African Americans represented 12.3% of the overall population, Hispanics were 12.5%, Asians 3.6%, and Native Americans accounted for 1% of residents¹. These minorities, with the exception of Asians, are significantly underrepresented in the scientific community, which is therefore losing a valuable pool of scientific potential. Today, in the typical age range for doctoral students, African Americans and Hispanics together represent one third of the US population. However, recent data from the National Science Foundation (see Table 1) shows that African Americans and Hispanics together account for only 5% of the Ph.D.s in the biological sciences awarded in this country. Excluding the Ph.D.s awarded to nonresident aliens in this data set, only 6.5% of the doctorates awarded to US citizens were received by African Americans and Hispanics. This general four to five fold level of underrepresentation has been documented in other comprehensive studies of the data available on this issue². The level of representation of minority students at Rockefeller (see Tables 1 & 2), is higher than the national average for minority representation at the doctoral level, for example, in 2003-4, 14% of the US citizens enrolled here were African American or Hispanic. Although the university has minority representation higher than the national average, Rockefeller still has less than half the expected numbers of minority

students based on a proportional representation of the US population of that age range.

Some of the present problems have a historical root. Racial injustices and economic deprivation chronically hindered opportunities for educational access for the African American community in particular. While the civil rights era brought an end to the most egregious examples of institutionalized racism, the problem of racism and inequalities in access to education still represents a major challenge for this country. Progress is certainly being made towards a more proportional level of participation of minorities in science, but the pace of change lags far behind improvements made in female participation in science, even though the women's movement and the civil rights movement both reached mainstream consciousness around the same time in the 1960s. At the doctoral and postdoctoral level, female scientists are no longer underrepresented. At the faculty level, female scientists are still underrepresented, although the degree of female underrepresentation is substantially less than the degree of minority underrepresentation at this level.

Of course every career is a choice, a decision that everyone has to make for themselves. In some cases, minorities could be deciding that science is an unappealing job. What is of much greater concern are the cases of minorities who are not even considering the possibility of science as a career.

This could be because they lack role models or lack encouragement from their school or family, scientists or scientific institutions. Another critical factor in the participation of the minorities in science is how successfully minorities who join the scientific community are retained and are able to achieve successful career progression. A fifth year graduate minority fellow, Cameron Bess states: "I was the first member of my family to obtain a Bachelors degree. I had little or no support going through the application process since no one in my family even knew the first thing about SATs and college applications. Now I will be the first member of my family to obtain a Ph.D., a fact I am extremely proud of. I still find it very difficult to explain to my family what a Ph.D. means and validate to them that it is not a career that is paved with gold. It can be very isolating, and with all the proud remarks, it can also be a lot of pressure." Although there are a couple of NIH-funded programs that foster or encourage underrepresented young scientists at undergraduate degree level (such as the MARC/IMSD programs), few, if any, programs are in place to help the small number of minority graduate students to progress to the next step of faculty investigator.

The Rockefeller University does not have any mentoring scheme for minority students enrolled here, but efforts are being made at the recruitment level. Representatives of the Dean's Office visit schools in

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Table 1. Ethnicity of Ph.D. Students

| | White US citizens | African American US citizens | Hispanic US citizens | Asian US citizens | Native American US citizens | Nonresident aliens |
|--|-------------------|------------------------------|----------------------|-------------------|-----------------------------|--------------------|
| Ph.D.s awarded in the biological sciences 1995-2004 * | 31,741 (58.7%) | 1,181 (2.0%) | 1,634 (3%) | 6,451 (12%) | 143 (0.3%) | 12,943 (24%) |
| Ethnicity of Rockefeller University graduate students enrolled in 2003-4 ++ | 70 (36.7%) | 10 (5.2%) | 6 (3.1%) | 25 (13.1%) | 1 (0.5%) | 79 (41.4%) |
| Ethnicity of Rockefeller University students awarded degrees for years 2000, 2002, 2004, & 2005 ++ | 30 (35.7%) | 3 (3.6%) | 4 (4.7%) | 12 (14.3%) | 0 (0%) | 35 (41.7%) |

*Source: National Science Foundation Survey

++Source: US Department of Education <http://nces.ed.gov/ipeds/data/>

Puerto Rico, and attend conferences—often accompanied by Rockefeller minority students—such as the Society for the Advancement of Native Americans and Chicanos in Science, and the Annual Biomedical Research Conference for Minority Students. The Dean visits schools with large minority populations such as University of Maryland, Xavier (New Orleans), Howard, Spelman, and Morehouse.

Affirmative action programs can be used to try to redress some imbalances. However, by law, while it may be permissible to consider race as a factor in a selection procedure, any specific quota system is not allowed. A landmark case in affirmative action was the 1978 hearing of *Regents of the University of California vs. Bakke*. This concerned a medical school that was using two separate admissions tracks, one for minorities and one for non-minorities, with different selection criteria, such as grade requirements. A white student who had been rejected even though he had higher grades than some minority students who were admitted brought a case against the university arguing that he had been discriminated against on the grounds of his race, denying him his rights to equal protection under the law under the fourteenth amendment to the United States Constitution. In a 5-4 decision, the Supreme Court ruled that the quota system used was unconstitutional as it discriminated against non-minority applicants. They also ruled, however, that consideration of race by the university when making a decision was permissible. This meant that a university couldn't set aside a fixed number of admission places for minorities only, as this would discriminate against non-minorities who would be ineligible for these places. But it was acceptable for universities to consider race as a "plus" factor as long as it was used in addition to many other criteria—student X has good grades, good references, etc., and

also is a minority student and would have the overall educational advantage of increasing diversity amongst the student body.

In 2005, the Woodrow Wilson National Foundation Fellowship issued a report on diversity and Ph.D.s². The study did note a general upward trend of minority representation in Ph.D.s—for example, between 1983 and 2003 the number of African Americans receiving life sciences Ph.D.s doubled and the number of Hispanics tripled. However, the authors noted that in comparison with business or government, doctoral programs have been considerably less successful in achieving a diverse workforce. The study raised many concerns about issues affecting the current situation of minority underrepresentation, including a noted decrease in funding of fellowships for minority students, absence of an effective national alliance of organizations devoted to minority issues in education, and little consensus or data on the most effective ways to improve the situation. This lack of research on the effectiveness of different minority programs was seen as a major obstacle to progress, as little data exists to help universities tailor the most effective minority recruitment possible.

While there is a general national upward trend in minority participation in science, and work being done to improve the situation, the most depressing statistics on underrepresentation are at the faculty level. This is of particular concern since faculty role models for minority students are an important part of the equation of inspiring minority students that they should remain in science and that they can pursue a scientific career to the highest levels of the profession. The faculty diversity at this university (see Table 3) is neither unique nor inspiring. A study from Yale of federally reported data revealed that in 2003 only 2% of tenured professors at Ivy League schools were African American, 1%

Table 2. Ethnicity of US citizens enrolled as Ph.D. students at Rockefeller University between 1998 and 2004

| | Total number of US citizens | % White | % African American | % Hispanic | % Asian | % Native American |
|------|-----------------------------|---------|--------------------|------------|---------|-------------------|
| 1998 | 77 | 57.1 | 6.5 | 11.7 | 24.7 | 0 |
| 2000 | 85 | 60 | 4.7 | 9.4 | 25.9 | 0 |
| 2002 | 102 | 66.7 | 7.8 | 5.9 | 18.6 | 1 |
| 2004 | 112 | 62.5 | 8.9 | 5.4 | 22.3 | 0.9 |

Source: US Department of Education <http://nces.ed.gov/ipeds/pas/>

Table 3. 2003 Rockefeller University full-time staff by ethnicity

| | White | African American | Hispanic | Asian | Native American | Nonresident alien |
|--|-------------|------------------|-------------|-------------|-----------------|-------------------|
| Faculty, tenured | 42 (93.4%) | 0 (0%) | 2 (4.4%) | 1 (2.2%) | 0 (0%) | 0 (0%) |
| Faculty, on tenure track | 10 (71.4%) | 0 (0%) | 0 (0%) | 2 (14.3%) | 0 (0%) | 2 (14.3%) |
| Faculty, not tenured/not on tenure track | 74 (43.5%) | 0 (0%) | 5 (2.9%) | 35 (20.6%) | 0 (0%) | 56 (33%) |
| Full-time employees | 630 (52.1%) | 184 (15.2%) | 129 (10.7%) | 172 (14.2%) | 0 (0%) | 95 (7.8%) |

Source: US Department of Education <http://nces.ed.gov/ipeds/pas/>

Natural Selections

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were Hispanic, and that these numbers had stayed static for a decade. As the numbers of minority students increase, this should eventually lead to an increase in minority faculty. However, the current national levels of minority faculty have not reached the tipping point of normality yet. A striking example of the scale of the problem can be seen if you consider the prestigious Rockefeller University Friday lecture series, in which a noted professor of science from outside is invited here to speak about their research. In this lecture series, between January 2000 and December 2006, there were presentations by 147 scientists (US and foreign born) who were working at other American universities. Looking at the images and names of these scientists on their Web sites to guess their ethnicity, it appears that there were four presentations (2.7% of the total) by Hispanic scientists, and not a single presentation by an African American scientist.

In 1947, Marie Maynard Daly was the first African American woman to receive a Ph.D. in Chemistry in the United States. She did her postdoctoral research at The Rockefeller University in the Mirsky laboratory and subsequently went on to a distinguished career at Columbia and Albert Einstein University. She offers a great example of what can be achieved when minorities have the opportunity to reach their potential as scientists. Without an active attempt to reach out to and foster underrepresented leaders, scientists, and educators, we will never truly be an academic institution—as the University motto tells us—that works for the benefit of all humanity. ☺

References:

- <http://factfinder.census.gov>
- <http://www.woodrow.org/responsivephd/RPHDresources.php>



*This month, Natural Selections features Ivo Lorenz, Postdoctoral Associate in the Rice Laboratory
Country of Origin: Switzerland*

New York State of Mind

1. How long have you been living in New York? I came to the city four and a half years ago.

2. Where do you live? In Yorkville, on the Upper East Side.

3. Which are your favorite neighborhoods? Greenwich Village and the Lower East Side.

4. What do you think is the most overrated thing in the city? And underrated? Overrated: certain tourist spots in and around Manhattan, such as Times Square, Midtown, or the Statue of Liberty. Underrated: some gorgeous neighborhoods in Brooklyn—Fort Greene, Carroll Gardens, or Red Hook.

5. What do you miss most when you are out of town? The vibrant energy and the cultural diversity of the city.

6. If you could change one thing about NYC, what would that be? Try to lower the noise levels to make the city quieter, at least at night and during the weekends. Without the noise, NYC would probably not be the same though...

7. Describe a perfect weekend in NYC. On Saturday, have brunch somewhere in the East or West Village, walk through the farmers' market at Union Square, drink a cup of coffee and read a magazine in a street café, then take a walk or run in Central Park. Go out for dinner at a nice restaurant, sip a cocktail at a cool lounge/bar, and hit a jazz club for the show after midnight. On Sunday, get out of the city and go hiking upstate, or just lie at the beach on Long Island. If it is a rainy day, one of the many interesting museums is always a good option.

8. What is the most memorable experience you have had in NYC? There is no particular experience, but I always remember



the numerous delicious dinners I have had, the fantastic shows I have seen, and the great people I have met!

9. If you could live anywhere else, where would that be? Being from Switzerland, my home country is obviously a place where I could always live. The Alps are something I really miss here! Italy or France would also be great because they offer both the mountains and the ocean. And the food is just delicious!

10. Do you think of yourself as a New Yorker? Why? I do, although I don't have a right to call myself a 'true New Yorker.' After more than four years, I know many places and spots in the city, and if people ask me for directions in the street or in the subway, I can tell them which way to go most of the time. ☺



The RUSCARS

JEM CASEY

It's award ceremony time, and in 2007 even Rockefeller can't resist showering plaudits on a chosen few. This year will be the inaugural RUSCARS (Rockefeller University Scientific Community Annual Recognition Symposium). The award categories have just been released, although the names of the nominees have not been announced yet. Probably the most hotly contested category will be Special Effects ("For eye-popping experimental results on an epic scale never before seen") which is designed to reward a student or postdoc, who work-

ing around the clock managed to accomplish experimental data gathering that naysayers (non-PIs) predicted would take years. Another category to watch is the Lifetime Achievement Award, dubbed "the golden good-bye," and there has been some speculation that the winner will have to agree to cede some laboratory real estate space in return. The other main categories include Best Lighting Design, which will recognize the most subtle use of Photoshop, the Sound Effects Award will memorialize the most novel sound produced during

equipment malfunction, the Costume Design Award (also known as the Devil wears Prada Award) will honor the best dressed professor, and the Producer Award is for the scientist with the highest grant income for the year. The most predictable award is likely to be Set Design—few would bet against the Taj Meringue, the IT department's impressive new mausoleum, located on the old tennis court site, where people can mourn their departed hard drives that suddenly left this world without leaving even the memories of a backup. ☺

Traveling Back in Time

JIABIN CHEN

Mexico is a place full of surprises. Many people talk about its beautiful beaches in Cancun, yet on a recent trip we found there is so much more that Mexico has to offer. The rich cultural and historical resources in Mexico City are easily accessible via their superb subway system. People are always nice and ready to help even though we don't speak their language. Plus there is food, the forever attraction, cheap and wonderfully tasty. The most amazing part of our trip, however, lay in the archaeological sites, the remains of a past civilization that once prospered in Meso-America.

Meso-America is a term used in archaeology denoting an area that covers the southern half of Mexico, all of Guatemala and Belize, and parts of Honduras and El Salvador. There were many pre-Hispanic civilizations that lived, shone, and finally died in that area. From an outsider's point of view, they all shared similar characteristics. It is probably because they all evolved from, or were profoundly affected by, a mother civilization, the Olmec. The oldest Olmec center known today is San Lorenzo, which was established by 1150 BC and destroyed around 900 BC. Another Olmec site is La Venta, which arose after the fall of San Lorenzo. The ultimate decline of the Olmec civilization was accompanied by the diffusion of its cultural traits. Every other later civilization born in Meso-America, including the famous Maya and the powerful Aztec empire, was developed on the base of the Olmec achievements.

We took our trip against the time line of history. We started out in Mexico City, which houses the site of the sacred city of the Aztec empire, Tenochtitlan. When the Spaniards, led by Hernán Cortés, landed on the shores of the Gulf of Mexico in 1519, the Aztec emperor Montezuma welcomed them. By then, the Aztec civilization had reached its peak. Stretching from Hildalgo in central Mexico into the southern province of Chiapas, the Aztec empire controlled a large

area, subjugated many cultural groups, and enjoyed a resourceful life. They built Templo Mayor (the Great Temple) at the heart of Tenochtitlan. It was designed according to their model of the center of the universe, where the horizontal plane converged with the vertical plane. The Aztec people viewed the universe as having thirteen celestial levels and nine underworld levels, all of which were vertically aligned. In between the celestial and the underworld levels was the earth. The earth had two axes as directions

Aztec people came from Tula, the capital of the legendary Toltec civilization. The Toltec people, in turn, migrated from Teotihuacán, the place where gods were born. The remains of Teotihuacán are located about one hour's drive away from Mexico City. Although the excavation there is not completed yet, what we saw easily took our breath away. Several huge pyramidal temples, all with Teotihuacán's characteristic slope-panel style, line the Avenue of Death, the main arterial road of the city. Teotihuacán was the first



Mayan temples in Palénque

of the universe. At the point where the axes met, the Great Temple rose up. Each Aztec dynasty added one more layer to the previously constructed temple to make it wider and higher. Eleven layers of construction can be found today. The temple was their most sacred place where all the important rituals such as those dedicated to their gods, rulers' ceremonies, and nobles' funerals, were held. Yet today, their Great Temple is just a vast court of broken walls and stones, with an occasional relief that is still faintly colored. Right after the fall of the Aztec empire to the conquerors in 1521, the Great Temple was destroyed and new rulers began constructing palaces, the style of which belonged to their own world. We were among the ruins in the afternoon. The sun was shining, but the black stones never glittered. The site remained silent among crowded visitors, although it must have many untold stories, perhaps too many to tell.

According to historical traditions, the

urban civilization in Meso-America and remained as the most attractive cultural center for several hundred years. But it did not escape the fate of decline, which happened around 750 AD. All gods and goddesses to whom the pyramids were dedicated to have been probably asleep for more than a thousand years. People here today are just visitors, Mexican or foreign. But standing there in the open field, with pyramids rising high into the

sky around us, we were simply dwarfed. It was like a dream coming true. No matter how many times we had seen colossal sculptures from ancient Meso-America in museums and books, or we had read about their past splendors, nothing could compare to the moment we saw the actual site. We couldn't imagine how they built this vast, well-planned, and beautiful city, but we could imagine how wonderful a civil center it must have been. We walked around the city and climbed up to the top of the temples, not for sacrifice or worship, but to get in touch with a past that was only recognized and respected in recent history.

Taking a south-bound route down to the lowlands of Mexico, we reached Palénque, a classical Mayan site. The center of the Mayan civilization has always been in Guatemala. Not surprisingly, Palénque is neither the biggest nor the most important Mayan site. But it is the most beautiful. It is located in the mountainous rain forests, and it pro-

vided the extra pleasure of savoring beautiful mountain scenes while visiting ruins there. The Mayan pyramids are somewhat different from those in Teotihuacán and in the Aztec Great Temple. They don't have an obvious slope-panel style, which was perhaps first developed in Teotihuacán. But the gods the pyramids were dedicated to were all related. The sun god is most prominent in the Aztec culture, but also present in all other Meso-American civilizations. The lunar god, who seems most phenomenal in Teotihuacán since its magnificent temple is associated with a large complex of buildings, is also seen elsewhere in the region. More importantly, they all share the powerful rain god who oversees agriculture, and the corn god who is reborn everyday. Their mythical stories are perhaps as fascinating and as complicated as those of the ancient Greeks, but unfortunately most written materials in Meso-American civilizations were lost after the Spanish colonization, and mythical tales known today are scant. Fortunately, however, the Mayan script has been deciphered. Their unique and complex writing system has convinced even the most conservative linguists that writing can originate independently.

Our trip ended in Palénque. Yet there is

so much in Mexico that we could go back for. The Yucatán peninsula, for example, has two major post-classical sites, Chichén Itzá and Tulum. There is also the modern town Tula, the favorite candidate for the historical site of legendary Tula. If you are not interested in archaeology, Mexico is also famous for beaches and pretty colonial villages.

It is always touching to visit archaeological sites to see achievements of past peoples, especially of those extinct civilizations. Biologists talk about environmental diversity, but what about cultural diversity? At archaeological sites in Mexico, we lamented the loss of Meso-American pre-Hispanic cultures, the vanishing of which has made our world less diverse. Back in Mexico City when we stepped out of the ruins of the Aztec Great Temple, we found ourselves faced with a grand cathedral. The Metropolitan Cathedral at the side of the Zócalo plaza stands no inferior to any monumental cathedral in Europe. But at that moment, it was not the beauty of the cathedral that tore my heart, it was the contrast between it and the ruins. A large part of the Great Temple cannot be excavated because it is the base of the cathedral. The Great Temple has only littered stones left to remind people of its existence, but the cathedral is proudly

and beautifully standing. Outside the ruins, modern Mexicans pray to a god who was unknown to their ancestors, but whose followers later conquered them.

Mexicans may have realized the contrast long before. Their recent history from independence to reformation, and then to revolution, is in certain aspects a struggle to regain their own identity. Today, there is an archaeological museum at every excavation site dedicated to educating people about their past history. Mexico has first-class museums. They are not simply educational showcases, but artistic masterpieces as well. The National Museum of Anthropology in Mexico City is a distinguished example of its kind. It offers an overall introduction to all Meso-American civilizations, with ancient treasures beautifully presented, exhibition halls carefully designed, and gardens pleasantly arranged. It could be a fine piece of art work with anything displayed inside. People are not just shown museum pieces there, rather they get an extraordinary experience. Little by little as your journey continues, you begin enjoying the lives in pre-Hispanic Meso-America, the philosophies, beliefs, architecture, wars, markets, crafts, languages, scripts, etc. All things native then are now alive again. ☉

Rockefeller University Film Series

ALEXIS GAMBIS AND LUKASZ KOWALIK

With St Valentine's Day right around the corner we would like to invite you to *Amores Perros*, the sensational debut film of the Mexican filmmaker Alejandro González Iñárritu—also known as *Love is a Bitch*. This narrative takes the form of a trilogy following people with wildly dissimilar lives through a chain of events that converge through a bloody accidental car crash. One focuses on Susana (Vanessa Bauche), a young mother married to an abusive thug, and her relationship to her brother-in-law Octavio (Gael García Bernal). The second tracks businessman Daniel (Alvaro Guerrero), who leaves his wife and daughters for a gorgeous model Valeria (Goya Toledo). In the third, a disillusioned ex-revolutionary, El Chivo (Emilio Echevarría), obsesses about his daughter Maru (Lourdes Echevarría) while plotting his criminal trade.

This breathtaking snapshot of Mexico City in the mid-90s is all about family values, ruined dreams, and sacrifices. *Amores Perros* gives us an outsider's view of the dangers and illusions that even the most

privileged caste is confronted to. Iñárritu plunges through the story with passion, naked emotions, melodrama, and the romantic sentiment they conjure. From the brutal fights in Mexico City ghettos, through the emotional refuge a homeless man finds in his animal companions, to the tragic epic of a terrier inside the floors of an apartment, the titular dog becomes the symbol of life and the baggage that comes with it. So, *no mames guey!* Join us for a breathtaking evening on the streets of Mexico City.

The second movie of the month is the acclaimed *The Battle of Algiers*, directed by Gillo Pontecorvo, who passed away last year. This 1966 Golden Lion winner tells a story of Ali la Pointe (Brahim Hagiag), a petty criminal and boxer who becomes a radical—and eventually a revolutionary leader—after witnessing an execution in a colonial prison. The backdrop to the story is the Algerian War of Independence, the progressively brutalizing fight between the Algerian National Liberation Front and the French colonists. The film is notable

because of its dispassionate clarity, it reconstructs the history and puts the viewer right in the midst of events. The result is thrilling, the clash of civilizations terrifying. As recently as 2003, the Pentagon organized a screening, and the flyer read: How to win a battle against terrorism and lose the war of ideas. Children shoot soldiers at point-blank range. Women plant bombs in cafes. Soon the entire Arab population builds to a mad fervor. Sound familiar?

The chilling relevance of the film is yet another reason to watch it, if not for the stunning, realistic cinematography, political controversies it caused, or Ennio Morricone's superb score.

Films are screened in Caspary Auditorium at 8 p.m. on Monday evenings and are open to the entire Tri-Institutional community, as well as guests. Admission is free. ☉

2/12 *Amores Perros* (2000) directed by Alejandro González Iñárritu

2/26 *The Battle of Algiers* (1966) directed by Gillo Pontecorvo

Student Nominated Friday Lecture: Dr. Richard Lenski, February 9, 2007

MATTHEW SEKEDAT

Every summer the graduate students at Rockefeller University have the opportunity to select a researcher who will speak at the weekly Friday Lecture series. This is the second year of this series and, from the many outstanding nominations submitted, the students voted for Dr. Richard Lenski, Hannah Distinguished Professor of Microbial Biology at Michigan State University. He will be giving his talk titled 'Phenotypic and Genomic Evolution During a Long-Term Experiment with *E. coli*' on February 9 at 3:45 p.m. in Caspary Auditorium.

Dr. Lenski and his colleagues study the reproducibility of adaptation, and the relationship between phenotypic and genomic evolution. He has maintained cultures of *E. coli* for 18 years, subjecting them to various types of stress and quantifying the dynamics of their adaptation. For the last decade Dr. Lenski has been working on "digital organisms"—computer programs that compete for food (computing bits), replicate, and evolve—to explore the evolution of biological complexity. For his creative work Dr. Lenski was awarded the MacArthur Foundation Award in 1996, and was elected to the National Academy of Science in 2006, among many other recognitions.

Graduate students who are interested in meeting Dr. Lenski, either individually or with a group, will have many opportunities to do so during his visit. If you are interested, please contact Matt Sekedat via e-mail (sekedam@rockefeller.edu). ☉

In Our Good Books

Some reading suggestions have been kindly provided by staff members of the downtown bookstore McNally Robinson.

The World of Yesterday by Stefan Zweig

Written about interwar Europe, this powerful memoir by one of the greatest writers of his day is at once a profound historical document and an inspiring story of a life nobly dedicated to art. This is a life changing book, impossible to read only once.

Why I Write by George Orwell

This treatise is a beautiful depiction of Orwell's drive and a critique of his native culture and times. Get it.

Trouble on Triton by Samuel Delany

Sex, war, avant-garde theater! This is home-town hero Delany at the height of his powers holding court on semiotics and space travel in a character driven new wave Science Fiction novel. A great introduction to a master of the field.

Tropical Fish by Doreen Baingana

Gorgeous, gorgeous writing about three sisters growing up in Idi Amin's Uganda, and beyond. Perfect for people who love rich writing, a historical as well as family perspective, and plenty of human drama. A group of connected stories in different voices.

Special Topics in Calamity Physics by Marisha Pessl

Yes, she's showing off her prodigal gifts, but with heart and soul and wonderful black and white illustrations.

ACADEMIA NUTS



"I'm not saying I disagree, I'm just saying you're wrong!"

Pride of Baghdad written by Brian K. Vaughan, drawn by Niko Henrichon

Brian K. Vaughan is one of the smartest writers in mainstream comics. He can create a talking animal story (based on the actual lions who escaped from the Baghdad Zoo during the 2003 invasion) and turn it into a desperately moving commentary on freedom, security, family, and the mess of good intentions. And illustrator Henrichon's broken Baghdad is beautiful. For the comic-book geek, or the newbie interested in the most literate and relevant this genre has to offer.

The Power and the Glory by Graham Greene

This story of one of the last whisky priests, who has become the quarry of an activist police officer in Communist Mexico, is quite possibly one of the best books ever written. The internal and external conflicts, the slippery definitions of good and evil, right and wrong, are examined with patience and beautiful subtlety.

Of Human Bondage by Somerset Maugham

This novel is billed as the account of a young man's tumultuous affair with a selfish woman, but the painful romance serves mainly as a recurring reference point by which we follow the narrator's captivating struggle to mature and find a satisfying identity amongst competing social pressures. ☉

McNally Robinson independent bookstore is well worth a visit, they have a fantastic selection of books on their shelves. The store is located in NoLiTa at 52 Prince Street between Lafayette and Mulberry.

Visit them on the Web at <http://www.mcnallyrobinsonnyc.com/>

The Super Bowl, an American Holiday

AILEEN MARSHALL

What is the Super Bowl? Almost everyone has heard of the Super Bowl, whether or not they follow American football. It has long been one of the most watched television shows, last year viewed by almost 134 million in this country alone. It is broadcast in 234 countries, and in thirty-two languages.

American football is a derivative of rugby. It started in colleges in the 1880s. The game was so rough that in 1905, eighteen college players died from injuries. This led to better rules and equipment to protect the players. Professional games started in the Midwest in the early 1900s. In 1920, the National Football League (NFL) was founded.

For those who are not familiar with the game, it is played on a 100 yard long field, with every 10 yards numbered. At each end of the field is a 10-yard long "end zone." The last yard line on each end of the field is called the "goal line." Goal posts are at the back of each end zone. Each game is divided into four 15-minute quarters, with a "half-time" period after the second quarter. Each team defends their half of the field. The object of the game is to get the oblong shaped ball into their opponent's end zone and score points.

The game begins with a kickoff, one team kicking the ball towards the opposite end zone. The position of the ball on the field at the beginning of each play is called the line of scrimmage, where the ball is placed after the last play ended. Usually a play starts with a "snap," a player on the offensive team snaps the ball to the "quarterback," the pivotal position. The quarterback can either throw the ball, a pass to a "receiver," or hand off the ball to a "running back" to run with it. The offense is allowed four tries, or "downs," to move the ball ten yards. After the team advances ten yards, they are rewarded with another four downs. If they fail to move the ball ten yards by fourth down, they lose possession of the ball to the other team, "turnover."

A play in which the ball is kicked between the goal posts, is called a "field goal" and earns three points. Running with the ball into the end zone, or throwing the ball to a teammate in the end zone scores a "touchdown," worth six points. After a touchdown, the team is allowed to kick from the 3-yard line through the goal posts for one "extra point." All this time the opposing team has their defensive players on the field to stop the

advance. They do this by hitting, or "tackling" the other team, or by catching, or intercepting the ball.

Professional leagues have come and gone, but in the 1960s, two professional leagues existed, the American Football League (AFL), and the National Football League (NFL). The first match up of these two



leagues was called the AFL-NFL World Championship Game, played on January 15, 1967. This later became known as Super Bowl I, as that was the name that the media and the public used. The two leagues merged later that year to form the current National Football League, the NFL, which consists of the two conferenc-

es, the American (AFC) and the National (NFC). The champions of these two conferences play each other in the Super Bowl.

Vince Lombardi was the head coach of the Green Bay Packers when they won the first two Super Bowls. After his death in 1970, the trophy awarded to the winning team was named after him. Interestingly, no tapes exist of the first two Super Bowls. In those days, no one thought anyone would want to watch the same game again. In addition, videotape was very expensive and regularly taped over. The NFL has a large reward offered for either one of the tapes. One of the most famous of these early games is Super Bowl III, in which Joe Namath of the New York Jets successfully predicted their defeat of the heavily favored Baltimore Colts.

The game is always played in either a warm weather venue or a dome. The site is decided years in advance. No team has ever played in its home stadium for the Super

Bowl. This year's game will be played in Dolphin Stadium in Miami Gardens, Florida, on February 4, 2007, at 6:00 p.m.

Over the years, the Super Bowl has become a major media event. Many people watch it for the famous commercials and the half-time concerts as much as for the game. Since it is such a highly rated show, advertisers will premier elaborately produced commercials during the broadcast. The cost of commercial airtime during the Super Bowl has sharply increased over the years. A 30-second spot during last year's game was reportedly \$2.5 million. Famous commercials include Budweiser's "Bud Bowl," Pepsi ads featuring a different celebrity each year, and an Apple computer ad by director Ridley Scott. The pre-game and half-time entertainment has gone from college marching bands in the early years, to major headliners. The pre-game show and the singing of the national anthem always feature renowned singers like Stevie Wonder or Aretha Franklin. The half time show is a well-produced concert starring the likes of Aerosmith, the Stones, Michael Jackson, or Paul McCartney. Janet Jackson gained media attention for her half-time show in 2004 when a "wardrobe malfunction" caused one of her breasts to be partially exposed for a second. This led the Federal Communications Commission to increase enforcement of their standards for television and radio broadcasts.

The Super Bowl is a championship match of the two best teams after five months of football, including pre-season. The commercials and entertainment have become such media events that coverage starts early in the day, while the actual game starts in the evening. It has become common practice to host Super Bowl parties in homes, bars, and restaurants, whether or not the local team is involved. Super Bowl Sunday has become an American holiday with lots of snack foods, excitement and entertainment, as well as the game.

A few sports bars in this neighborhood are likely to be having Super Bowl celebrations. Becky's, at First Avenue and 64th Street is probably the closest. O'Flanagan's, First Avenue at 65th Street is worth a visit. Bar Coastal, First Avenue at 78th Street, and Ship of Fools, Second Avenue at 82nd Street are also worth a trip. Look for celebrations at your local bar this February 4! ☺

What Are You Really Celebrating This Month?

TARI SUPRAPTO

February is here, and for many people, this month brings us Valentine's Day. We don't get the day off, but it's always marked in the calendar and many people mark it as a special day to celebrate love and romance. Valentine's Day is commemorated by the exchange of cards, gifts (ranging from simple to lavish), red roses, chocolates, hearts, Cupid, and candlelit dinners with special high-priced menus. The pomp and circumstance of Valentine's Day leads many people to anticipate it with joy and also many to dread it. Trust me, it's not just single people who don't look forward to this special day—I've heard a number of people in relationships also start moaning about the burdens of this holiday due to the pressure and possible expense so soon after the Christmas holiday. I've heard one married person cynically refer to Valentine's Day as a "Hallmark Holiday," i.e. a day that allows card companies to increase their product sales. So, why is February 14 the designated day of love?

The origin of Valentine's Day can be traced back to Roman pagan traditions in the third century. Every February, the Romans celebrated a feast called Lupercalia to honor the god Lupercus, who protects shepherds and their flocks from predatory wolves. The feast was also an occasion when the names of young women were drawn from a box in order to match them with their male partners for the year. When Rome was Christianized, the priests replaced Lupercalia with St. Valentine's Day, and the names of saints took the place of the young ladies, as this lottery system of matchmaking was deemed un-Christian. The young man would have to try to live his life in the manner of the saint whose name he drew for that year.

Who exactly was St. Valentine? The history is a little dubious as there seems to be more than one man named Valen-

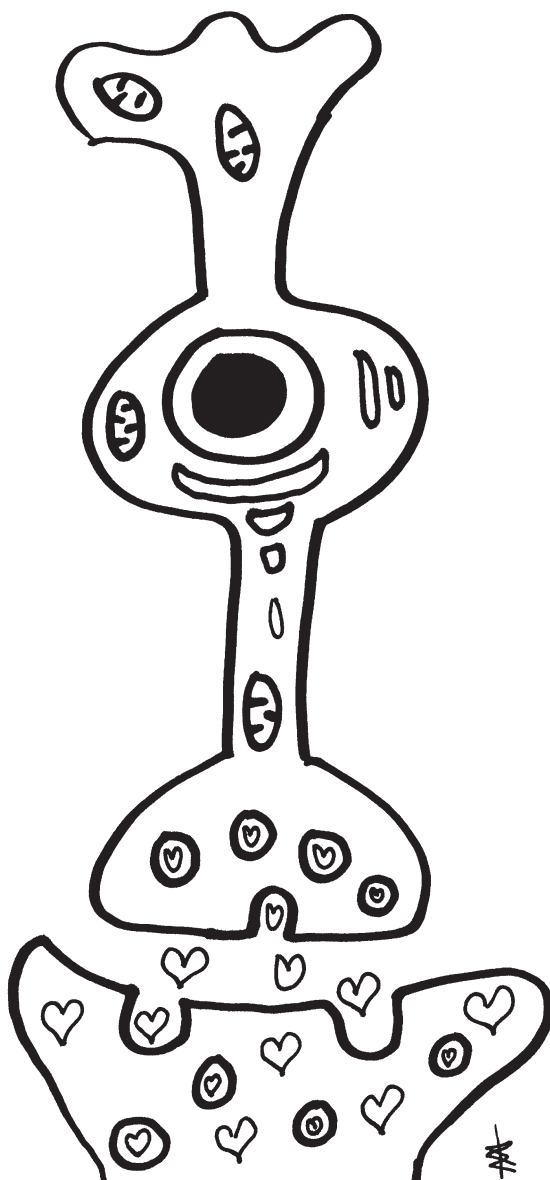
tine who was honored with feasts on February 14. During his reign, Emperor Claudius believed that unattached men were better soldiers and forbade any more marriages to take place during his war campaign. A priest named Valentine married couples in secret and was punished with a life sentence in prison.

There is a version that says that Valentine was imprisoned for helping Christians

(Claudius hated Christianity) and then was put to death on February 14 in 269 AD. Another story claims that Valentine fell in love with the jailer's daughter and he sent her a letter signed "From your Valentine"—the first Valentine's Day greeting card! That expression is still used to this day. Obviously all the stories describe Valentine as a very sympathetic and heroic character. Over time, all of the versions were unified and Pope Gelasius declared February 14 as St. Valentine's Day.

How did we return to Valentine's Day and February 14 as the day of love? In the Middle Ages, it was commonly believed in France and England that the mating season for birds began in mid-February and thus St. Valentine's Day became a day for romance. The Christian tradition of pulling saints' names out of a box was unpopular and by the fourteenth century, young men were drawing the names of young women again. Instead of having a mate for the year per the pagan tradition, the young man would wear the woman's name on his sleeve and protect and attend to her for the year. This made the woman his "valentine" and they exchanged tokens to symbolize their bond throughout the year.

By the middle of the eighteenth century in England, it became common practice for family, friends, and lovers to exchange notes and small gifts on St. Valentine's Day. Printed cards replaced written letters due to advances in printing technology at the end of the century, and cheaper postage contributed to the increased popularity of sending out Valentine's Day greetings. This tradition spread to America—the first commercial Valentines were made by Esther Howland in the 1840s. One can only speculate on how this holiday became so commercial in the US—the rise of capitalism, perhaps? Regardless, celebrate Valentine's Day if you wish. The American economy salutes you! ☉



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PDA NEWS

Tri-Institutional Career Symposium on Wednesday March 14

Super Bowl party on Sunday February 4

Watch your e-mail for the announcement of a PDA open meeting in February