

Brown Sabbatical Research Newsletter



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Foreword

This is the first of what is being planned as an annual publication of the Office of the Dean of the Faculty. Its main focus is on the research by Brown faculty that has been made possible during the past academic year by our sabbatical program (also included are some reports on non-sabbatical research). The word *sabbatical* derives from the Hebrew verb *shabath* meaning “to rest.” In keeping with the ancient Judeo-Christian concept the academic sabbatical designates a time, not of simple inactivity, but of the restorative intellectual activity of scholarship and research.

Brown instituted the sabbatical leave in 1891, eleven years after Harvard had become the first university in the United States to introduce a system of paid research leaves (Brown was the fifth institution in the nation to adopt such a program, following Harvard, Cornell, Wellesley, and Columbia). As these dates suggest, the concept of the sabbatical emerged out of the establishment of the modern research university in America during the second half of the nineteenth century. A 1907 report by a Committee of the Trustees of Columbia University underlines the fundamental principle on which this innovation was based: “the practice now prevalent in Colleges and Universities of this country of granting periodic leaves of absence to their professors was established not in the interests of the professors themselves but for the good of university education” (cited in Eells, 253). Thus the restorative action of the sabbatical was understood to affect primarily not individual faculty members but the university as an intellectual community and an educational institution. The promulgators of the modern university believed that time for intensive focus on research contributed significantly and directly to the quality of the knowledge and methods transmitted by the university to its students and to the public in general.

For over one hundred and twenty years Brown has reaffirmed that belief by granting sabbaticals to its faculty. The following publication of sabbatical research aims to provide some indications of the results of these research leaves over the last year. The entries are lightly edited versions of the reports submitted by the individual faculty members themselves. I hope that they will be found interesting and instructive.

Kevin McLaughlin
Dean of the Faculty

Further reading:

Walter Crosby Eells, “The Origin and Early History of Sabbatical Leave,” AAUP Bulletin 48. 3 (September 1962): 253-256 (<http://www.jstor.org/stable/40222893>).

*Special thanks are due to Assistant Dean of the Faculty Joel Revill and Michelle Turcotte of Brown Graphic Services.

Omer Bartov

HISTORY • ACADEMIC YEAR 2012-2013


Professor Omer Bartov spent his sabbatical year as the J. B. and Maurice C. Shapiro Senior Scholar in Residence at the Center for Advanced Holocaust Studies of the United States Holocaust Memorial Museum in Washington D.C., working on his forthcoming book, *The Voice of Your Brother's Blood: Buczacz, Biography of a Town* (Simon & Schuster), which should be published in 2014.

The book is an attempt to write the history of Buczacz, a small town located in the former Eastern Galicia, now Western Ukraine, from its very beginnings in the thirteenth century to its total destruction as a multiethnic community in World War II. Buczacz had been inhabited by Poles, Ukrainians, and Jews for several centuries. While these religious and ethnic groups never lived with each other in complete harmony, with some exceptions they coexisted peacefully and were economically interdependent. At the same time, they created very different narratives of their past existence in the town, that informed the manner in which they understood both themselves and their neighbors. In other words, the town spoke about itself in three separate voices, each of which was of course further differentiated by period, status, gender, ideology, and so forth.

Yet until the rise of nationalism in this region in the latter part of the nineteenth century – Galicia was the easternmost province of the Habsburg Empire since it was annexed from Poland in 1772 – most of the inhabitants of the town could not envision any other reality but that of living side by side with the other groups. Between 1848 and the outbreak of World War I all this changed, and the different “voices” of the



Buczacz, total view with the Strypa River during World War I: Österreichisches Staatsarchiv, Kriegsarchiv, Austrian World War I photos.



town began to speak of each group as entirely distinct from the others; particularly the Polish and Ukrainian nationalists claimed this town – as well as Galicia as a whole – to be part of their future nation state, while the Jews were increasingly excluded from such nationalist visions. The outbreak of the war and the fraternal conflict that followed it between Poles and Ukrainians added a dimension of massive violence to nationalist rhetoric.

The interwar period saw the town ruled by the resurrected Polish State, which suppressed Ukrainian national aspirations and pursued increasingly antisemitic policies. With the outbreak of World War II the town was occupied by the Red Army for two years, during which time massive deportations of members of all three groups and the decapitation of the local elites, along with the deteriorating economic situation, greatly exacerbated interethnic tensions. The German occupation in 1941-44 put an end to this community. Assisted by nationalist Ukrainian collaborators and other local police and militia recruits, the Germans murdered the entire Jewish population of approximately 10,000 men, women and children. Half of the victims were transported to extermination camps, while the other half were murdered in the town and its vicinity in what were often public acts of mass violence. Local Ukrainian militias also brutally ethnically cleansed the Polish population.


Very little of this history is known in contemporary Buczacz, which is purely Ukrainian. There is no commemoration of the victims, although there are memorials to Ukrainian leaders and heroes. The communities of memory moved elsewhere and kept up their own narratives of the past. But the story of the town as a whole, seen from all perspectives of its own inhabitants, in their own voices, has never been told. It is not only the story of one town but of a vast swath of land, stretching from the Baltic to the Balkans, in which thousands of towns and villages had mixed populations until World War II. In this sense, the story of Buczacz is representative of innumerable other sites, and understanding the dynamic that transformed it from a community of coexistence to a community of genocide has wide-ranging implications for Eastern Europe as a whole, and, in a larger sense, for our understanding of genocide on the local level more generally.

See: <http://www.ushmm.org/research/center/presentations/lectures/lecture.php?content=2-shapiro>

Cynthia Brokaw

HISTORY • ACADEMIC YEAR 2012-13

During the 2012-13 academic year, Professor Brokaw was a Fellow at the National Humanities Center. Her primary project, “Transforming the Frontier: Education, Book Culture, and the Rise of ‘Sichuan Learning,’” traces the intellectual and political integration of Sichuan—a province on the borderlands of China proper, far distant from the imperial center—into the Qing Empire over the course of the late seventeenth, eighteenth, nineteenth, and early twentieth centuries.



Professor Brokaw focuses on the crucial role that the Zunjing Shuyuan (“Revere the Classics” Academy) played in the multi-dimensional process of integration. Before the founding of the academy in 1875, Sichuan scholars were isolated from the Chinese intellectual and political mainstream; ignorant of the major scholarly trends of the day and engaged in a remarkably corrupt educational regimen, Sichuan students performed poorly on the civil-service examinations and had little to offer the increasingly heated debates in the capital over the policies that might enable the Qing to deal with the challenges to its sovereignty offered by the Western imperialist powers and Japan. But once the Zunjing Shuyuan was established, it rapidly became a channel, first, for the introduction of Sichuan students to the major intellectual currents of previous and current century—a kind of remedial education—and, second, for the training of future officials who could learn from the Confucian Classics the principles that would guide the dynasty through its crises.

The goals of the academy were almost immediately fulfilled, as Sichuan students eagerly embraced the sophisticated philological techniques that had dominated eighteenth- and early nineteenth-century mainstream intellectual life. Following the lead of the most prominent academy director, they relied on esoteric readings of one classic, the *Spring and Autumn Annals* (an ancient chronicle, believed to have been authored by Confucius, who, it was said, expressed his moral evaluation of the events recorded in coded language), for their understanding of contemporary events and, most importantly, for guidance in the development of policy. Candidates from Sichuan began to flourish, performing very well in the examinations and earning high posts in the capital. In pursuit of the reformist goals that they derived from their reading of the *Spring and Autumn Annals*, several of these men advised the young Guangxu Emperor in his efforts to develop a program of institutional change that might “modernize” the Qing. These efforts failed, as conservative factions at the imperial court aborted any attempts at reform—and two Sichuan scholars were martyred in the subsequent, quite violent, repudiation of change.

At the same time, the participation of Sichuan scholar-officials in central politics inspired the creation of a regional “school” of Sichuan learning (Shuxue); the link to the center, both intellectually and politically, seems to have inspired a vigorous assertion of regional identity and difference. Long after the defeat of the reform movement in 1898, Sichuan scholars identified with this “Sichuan learning” school and continued to assert the validity of classical learning (in particular the study of the *Spring and Autumn Annals*) as a guide for the interpretation of contemporary events and for the development of strategies to deal with these. To give just one example, a work on Western concepts of international law, translated into Chinese as *Wanguo gongfa* (The public law of the myriad nations), was explained as an up-to-date Western iteration of the system of covenants and alliances that regulated relations among the various states of China from the eighth to the fifth centuries B.C. The need to make these associations between current events and classical precedents persisted well into the twentieth century, as graduates of the Zunjing Shuyuan continued—even in the face of much more radical and iconoclastic proposals—to advocate classical studies as the best foundation for the reading of and solution to current political crises.

Melani Cammett

POLITICAL SCIENCE • ACADEMIC YEAR 2012-13

During her sabbatical year, Cammett completed a new book, *Compassionate Communalism: Welfare and Sectarianism in Lebanon* (Cornell University Press, 2014). She also presented parts of her research at multiple institutions, including the University of Toronto and Guelph University in Canada, Harvard, the University of Michigan, New York University, and the World Bank as well as at various conferences and workshops. Cammett completed as well final revisions on a co-edited book, *The Politics of Non-State Social Welfare in the Global South*, (Cornell University Press 2014), and that book, too, is now in production. In addition, Cammett agreed to co-author the new edition of a classic and widely cited textbook entitled *A Political Economy of the Middle East* (Westview Press, 2014). With co-author Ishac Diwan, Cammett completed a new epilogue for the current edition, entitled “*A Political Economy of the Arab Uprisings*.” The chapter will be sold as a standalone publication electronically and will be part of the reissued 3rd edition of the book, which will be released in July 2013. Cammett also completed several chapters for edited volumes and textbooks, and submitted a co-authored research article, “Does Non-State Provision of Social Services Promote or Undermine Citizen Trust in Government?” for review at *Comparative Political Studies*, a leading journal in the field.

Cammett also began work on a new research project, entitled “Is there an Islamist Governance Advantage?” The project asks whether Islamists provide superior social services as media and scholarly accounts suggest and, if so, how these activities affect political attitudes and behavior. During summer 2013, Cammett worked with collaborators at the American University of Beirut in Lebanon to pilot some surveys for this project. She is planning to apply for large external grants to expand and replicate the research in multiple countries across the Middle East.

Harold J. Cook

HISTORY • ACADEMIC YEAR 2012-13

For the fall of his sabbatical year, Professor Hal Cook served as the annual distinguished Fellow of the Koninklijke Bibliotheek (national library) in The Hague; he spent the spring without formal responsibilities other than conducting research and writing. Early in his sabbatical, Professor Cook completed two collaborative projects that have since been published and was able to attend some conferences. The most interesting of these was a conference in Solo, Indonesia, on the History of Medicine in southeast Asia organized by a society Cook helped to found and in which he continues to be active (*HOMSEA*). Since then, he has helped to plan the next meeting of the association, which will take place in Manila in January 2014. In between these and less time-consuming events, he also conducted research on the famous English physician, Thomas Sydenham, in the Cambridge University Library.

Beginning in September, Cook took up the Koninklijke Bibliotheek (KB) Fellowship, which was attached to the Dutch Institute for Advanced Study in the Humanities and Social Sciences (NIAS). About half the time he cycled from Wassenaar to NIAS, where he attended seminars and luncheons and caught up on secondary sources; the other days he cycled into The Hague to conduct research on books and manuscripts held at the KB. The main requirement of the fellowship was to deliver a *major public lecture* in mid-January, with a *small book* printed ahead of time and ready for distribution afterward; the subject of the book and talk were to be based on the collections of the library. Given that the KB library staff was particularly interested in questions about what is now called digital humanities and in projects related to correspondence networks, Cook used the opportunity to explore a subject he had read much about but only worked on tangentially: the “Republic of Letters.” Cook’s hypothesis was that the Republic of Letters was like a ship floating on seas of other kinds of relationships and information systems. As a test case, he used the correspondence from and to the very learned politician Gisbert Cuper (1644-1716): among the holdings of the KB were over 140 bound volumes of Cuper’s papers, with another shelf of papers next door at the national archives, in Latin, Greek, French, and Dutch, with a bit of Italian mixed in. Cuper turned out to be a fascinating as well as an important figure. Among other things, he was an avid collector of coins from classical antiquity and the Middle East at the same time that he sat on government committees overseeing the Dutch mints and advising on the striking of commemorative medals. The project allowed Cook to compare Cuper’s methods of assessing the truth in the past and his period with our own contemporary methods. Cuper and his correspondents wanted to know the names and sources of information, and to assess tangible evidence (pictures and objects) according to materialist methods, the prototype being methods for assaying currency. Reflecting on recent comparisons, Cook began to think more about the contrasts between the Republic of Letters, founded as it was on face-to-face meetings (carried on afterward by writing), and the anonymity and pseudo-identity phenomenon of modern methods of communication. Cook also reflected on the



A reproduction of a portrait of the chief subject of Cook’s work at the KB in The Hague (Gisbert Cuper). His silk robes are lovely.

changes to our systems of peer review that may be consequent upon many current proposals related to Open Access publishing, and began to speculate about what sound methods for assessing the truth we will find to supplement or even substitute for the ones that Cuper and his like helped to establish. In addition, Cook wrote three new papers on a related subject, the co-production of science and commerce.

Following the conclusion of his fellowship in late January, Cook spent almost three weeks in search of some of the places that the famous philosopher Descartes is known to have been north of the Alps. There are many puzzles about what he might have been doing on his many travels early in his life, with theories ranging from soldiering, to spying for the Jesuits, to seeking the Rosucrucians. Although it was not the best time of year, Cook traveled along the Baltic coast to Emden and Lübeck, down to Hesse, and back up to Rostock and Greifswald, then headed south and east via Dresden and Prague as far as Bratislava before turning west and coming back along the Danube, via Vienna and Ulm, into France, where he visited Decartes' birthplace, school (now a military academy), and various cities in Brittany where his family had interests. The fact that it was hard to keep up with him even in a modern automobile on paved roads dramatically underlined the point that Descartes was no armchair philosopher.

Upon his return to Providence, Cook finished writing two new papers for conferences abroad, one in Lisbon and one in Abu Dhabi and completed polishing for publication one of the papers he had delivered in the autumn. Cook is currently writing about his core interests and is making continued progress on two projects: Descartes's early life and context, and further studies of the first Chinese medical texts introduced to Europe, in the later 17th century, as examples of a larger problem related to the movement of knowledge, that of "translation."



The statue memorializing Descartes' most famous correspondent, the Princess Elizabeth, from Herford, in Germany, where she became the abbess and chief protector of religious dissidents.

Olakunle George

ENGLISH • FALL, 2012

Professor Olakunle George spent his sabbatical semester working on a monograph with the tentative title *Pagans and Patriots: Conversion and the Text of Africa*. The project is a study of different iterations of “missionary moments” in writings on African cultures by a range of writers of African origin. The term “missionary moments” refers to three distinct historical junctures and the writers’ varied responses to them. First is the mid-19th century, marked by British abolitionism and Christian evangelism; second, the mid-20th century, marked by discourses of nationalism and modernization; and third, our contemporary context, marked by paradigms of transnationalism and “globalism” in literary studies. The study thus concentrates on three kinds of texts: travel writing by black missionaries (so-called “black whitemen”) who worked in West Africa in the 19th century; non-fictional texts by intellectuals associated with 1950s “pan-African” movement, and imaginative literature by contemporary novelists. The writers George covers include: Bishop S. A. Crowther (1806-91), Rev. T. B. Freeman (1809-90), Sol Plaatje (1876-1932), Chinua Achebe (1930-2013), Peter Abrahams (1919-), and Wole Soyinka (1934-). The project contributes to postcolonial literary and cultural criticism on a number of levels. George seeks, for instance, to demonstrate the contradictory ways that categories of ethnicity, nation, and race interrelate in modern Africa. He also explores how the texts position “Africa” differently, such that the continent is not just an object of social-scientific knowledge or – as is often the case in popular media – a static signifier of crisis. Rather, Africa emerges as a testament to the challenge and promise of social change, a site for the specific kind of knowledge that literature – and acts of language, more broadly – can yield.

James N. Green

HISTORY AND PORTUGUESE AND BRAZILIAN STUDIES • SPRING, 2013

Professor Green spent the spring of 2013 as a Visiting Professor at Princeton University, where he taught a seminar entitled “Politics and Culture during the Brazilian Military Dictatorship” and wrote three chapters of a biography of Herbert Daniel. Daniel was a former medical student who joined the radical armed opposition to the Brazilian military dictatorship in 1968. Living in exile from 1974 to 1981, he came out, challenged the Brazilian left about their conservative views of homosexuality, and offered a new approach to AIDS when the disease began causing panic among Brazilians in the 1980s. Unknown to newer generations of Brazilians, Daniel is the subject of a biography by Green that strives to recuperate the activist’s legacy as a participant in actions against the military regime and as a leader in the struggle for equal rights for gays and lesbians in Brazil.

While on leave from Brown, Green also developed an international research collaboration with Sidnei J. Munhoz, a leading Brazilian scholar on the Cold War and Professor at the State University of Maringá,

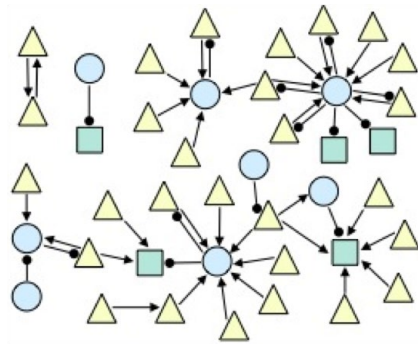
Pananá. The “Opening the Archive” project, jointly financed by Brown University and the State University of Maringá, involves eleven Brown students and two Brazilians who spent the summer of 2013 at the National Archive in Washington, D.C. digitizing and indexing U.S. State Department documents on Brazil from 1963 to 1977. The digitized and indexed documents will be placed on mirror websites in Brazil and at Brown, making them available to researchers worldwide. This project is supported by the Brazilian National Archives and the U.S. National Archives and Records Administration (NARA). It is the first such digital academic collaboration that NARA has sponsored and should serve as a model for future projects.

In addition to the digitization project, the Brown and Brazilian students are simultaneously doing research for the Brazilian National Truth Commission, a presidentially-appointed body that is investigating human rights violations committed by the state during the Brazilian military dictatorship (1964-85). Green is an Advisor to the Commission and is collaborating with Peter Kornbluh of the National Security Archive, Washington, D.C. on this project. One of the Commission’s seven members is Paulo Sérgio Pinheiro, who has been a Visiting Professor at Brown University on several occasions.

Matthew T. Harrison

APPLIED MATHEMATICS • 2012-2013 ACADEMIC YEAR

Many of Professor Matthew Harrison’s current research projects have been inspired by problems arising in neuroscience involving networks of interacting components. In collaboration with Professor György Buzsáki’s laboratory at NYU and with colleagues at City College New York and the RIKEN Brain Science Institute in Japan, he has been developing methods for the statistical identification of the underlying



connectivity network of electrically recorded neurons. For example, the figure to the left shows an example network inferred from data recorded from the prefrontal cortex of an awake, behaving rodent in the Buzsáki laboratory. During his sabbatical Harrison wrote and submitted a joint NSF/NIH proposal to fund this work. In addition, he began a collaboration with Brown University Professor of Neuroscience Michael Paradiso to develop conditional inference approaches for quantifying the network dynamics of visual cortex neurons, partially funded by a Brown Institute for Brain Science Pilot Research Award.

The general principle underlying Harrison’s approach to these neuroscience problems is called *conditional inference*. This approach has broad applications, both in neuroscience and in other disciplines. An exemplary algorithmic challenge that arises in many conditional inference applications involves randomly generating matrices of zeros and ones subject to certain constraints. During his sabbatical, Harrison submitted an NSF

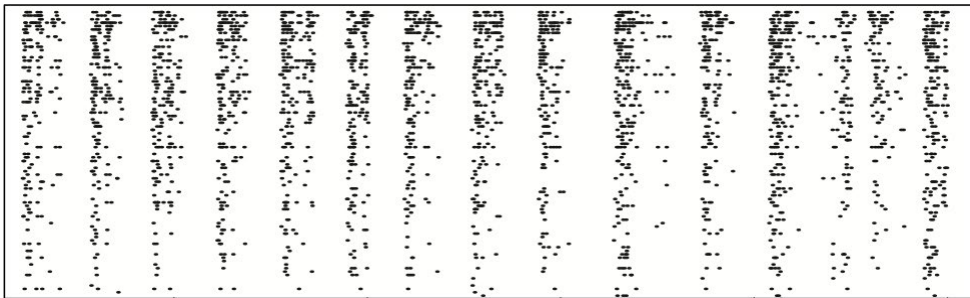
proposal and two papers (with graduate student Jeffrey Miller), one of which will appear in the Annals of Statistics, on the topic of generating random binary matrices with given row and column sums. One of the interesting applications comes from the field of ecology. For example, the figure at right shows a famous ecological dataset (Patterson and Atmar, 1986) with entry (i,j) indicating the presence of species i in habitat j. A software program determines that the number of binary matrices with the same margins as this matrix is the 40 digit number 2663296694330271332856672902543209853700. More importantly, the software can efficiently generate uniform samples from this set of matrices, which can then be used to test various scientific hypotheses about the interaction among species.

Over the past year, Harrison also began a collaborative project with Brown University Assistant Professor (Research) of Neuroscience Wilson Truccolo and his colleagues to develop generalizations of these binary matrix algorithms that can be used to explore the spatio-temporal network dynamics of spiking neurons during human seizures. The figure below shows the spiking of many neurons (vertical axis) recorded over a few seconds (horizontal axis) from a human patient experiencing a seizure. The spiking appears structured on many different spatial and temporal scales, and they hope that their statistical tools can begin to quantify many of these relationships.

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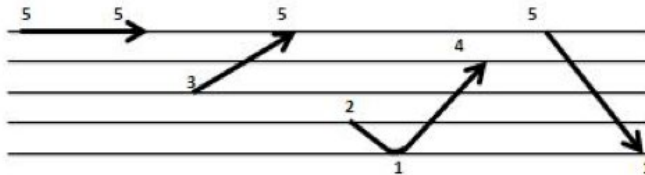
Harrison's third new project involves developing an agent-based simulation of HIV infection dynamics with the hope that this can be used to understand the efficacy of various treatment and prevention strategies. A long-term goal of this project is to incorporate information about HIV mutations across individuals in order better to understand the dynamics of the HIV epidemic. This is a collaborative project with physician and Brown University Assistant Professor of Medicine Philip Chan and with Assistant Professor of Epidemiology Brandon Marshall.

Gail Lung-Hua Hu

EAST ASIAN STUDIES • SPRING, 2013

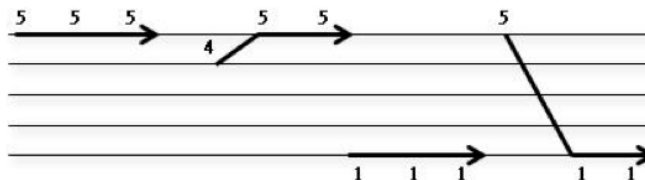
One of the most challenging aspects in Mandarin Chinese for American students is its tones. Mandarin Chinese has four tones, 1st, 2nd, 3rd, and 4th. 1st tone is a high-pitched and flat tone; 2nd tone is a rising tone, much like the rising intonation in the English language for questions; 3rd tone is a very low tone with a dip and a slight rise; 4th tone is a falling tone, similar to the intonation for a stern 'No!' The conventional representation for the contour of these tones is 5-5, 3-5, 2-1-4, and 5-1, respectively.

Conventional Representation



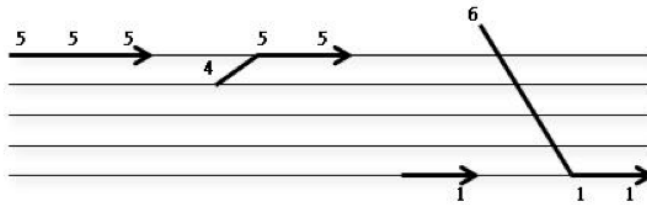
Although this numbering representation system is almost never challenged and has been adopted by almost every Mandarin instructor, for years Ms. Hu has been 'secretly' teaching her own version that she believes more accurately reflects current speech, with a major distinction falling on 3rd tone. While doing research for a conference paper, Hu stumbled onto a young scholar's work that shared a very similar view to her own. Frederic Xu argued that the length of each tone would be more accurately represented if the assigned contouring numbers are increased from 2 numbers to 3. He also argued that modifications need to be made to show the correct contouring. See below for his modified diagram:

Frederic Xu's Representation



Hu was extremely excited to see how similar Xu's version was to her 'secret' version, but had reservations about how Xu treated the length of 3rd tone and the starting point of 4th tone. During Hu's leave in fall 2012, she experimented with Praat, a piece of software designed for the analysis of speech in phonetics. Not surprisingly, the speech spectrogram showed the length of 3rd tone to be much shorter and the starting point for 4th tone is higher as Hu had always believed.

Gail Lung-Hua Hu's Representation




Hu introduced her findings in the National Chinese Language Conference in April, and will share them with a much bigger audience in November at the American Council on the Teaching of Foreign Languages/ Chinese Language Teachers Association conference.

Chad Jenkins

COMPUTER SCIENCE • SPRING, 2013

During his sabbatical leave, which he spent at Willow Garage, Professor Chad Jenkins helped to found and lead the Robot Web Tools organization. Robot Web Tools is a collection of open-source modules and tools for building web-based robot apps, and more generally creating the World Wide Web for robots. The basic paradigm of a robot web app uses the same design as the World Wide Web. On the web, a person uses a web browser (or “client”) to make requests of a remotely running “server” using an agreed upon “protocol” (or language) for exchanging messages. In the non-robot web, the content of these messages typically relates to serving documents with increasingly rich multimedia content. In contrast, robot web apps for controlling a robot remotely highlight a number of challenges resulting from interacting with the non-document physical world, such as time-sensitivity, big data, and 3D visualization. In addressing these challenges, the core of Robot Web Tools is founded upon early work by Jenkins' group at Brown, developing the rosbridge network protocol and rosjs JavaScript library for modern browsers and using the popular Robot Operating System as a robot server.




The real benefits of the Robot Web Tools organization are broadening the global robotics community and enabling them to do more through open-source software and knowledge sharing. Jenkins and his partners – including Robert Bosch LLC, Willow Garage Inc., Worcester Polytechnic Institute, and Yujin Robotics – have provided a new website, ample documentation, a new email list, and a collection of tutorials and live demos. Work at Brown and by Robot Web Tools has created a burgeoning ecosystem for robot web apps, allowing robots to deliver medicines in hospitals and draw calligraphy, enabling true telepresence, and improving cinematography.

Jenkins' research is also making a dramatic impact on people's lives. Due to Jenkins' efforts, Henry Evans, a mute quadriplegic, is able to explore outdoor environments using quad rotor helicopters. Through a web interface created by Brown Robotics with rosbridge and ROS, Henry uses Parrot AR.Drone quad rotor helicopters to explore and monitor his home. As described by the website Robots for Humanity, "Henry Evans is a mute quadriplegic, having suffered a stroke when he was just 40 years old. Following extensive therapy, Henry regained the ability to move his head and use a finger, which allows him to operate computers... [This] demonstrates how people with severe physical disabilities could use personal robots to gain independence... Currently, Henry uses a head tracker to operate a variety of experimental user interfaces. These interfaces allow him to directly move the robot's body, including its arms and head... Robots that complement human abilities are extremely valuable, especially when they help us do things that we can't do by ourselves."

William Keach

ENGLISH • ACADEMIC YEAR 2012-13

Professor William Keach's current book project, and the object of his sabbatical work, is provisionally titled *The Ruins of Empire and Romantic Cultural Property* and focuses on early nineteenth-century British literary representations of ancient Mediterranean and Middle Eastern ruin sites and artifacts whose status was, and still is, complexly determined by the imperialist rivalry of the Napoleonic Wars, by shifting ideologies of "ruin value" inherited from the Enlightenment, and by the massive and unprecedented expropriation, transfer, display, restoration, and marketing of art of many kinds during this period. Familiar examples of the literary texts include Byron's polemic against Lord Elgin's acquisition of sculptural remains from the Parthenon in *Childe Harold's Pilgrimage*, Percy Shelley's "Ozymandias," and Keats's "Ode on a Grecian Urn." In these and other Romantic texts ancient art objects are positioned at an intersection between ideas of aesthetic autonomy on the one hand and the vestiges of historical and political determinations on the other. Ancient ruin sites and objects are themselves texts from which histories of past political power were read and projected into the present and future imaginaries of early nineteenth-century readers. This process may be most effectively conceptualized and explored through distinctive discourses of cultural property which were emergent during and just after the Napoleonic era—and which in our own present moment have come to define debates and transactions concerning wartime looting, the art and antiquities markets, and the national and international control of cultural capital.



The book opens with an introductory chapter on ruins as cultural property, exploring connections among Enlightenment, Romantic, and modern ruin discourses in relation to the development of theories of cultural property that bring into view the links between Napoleonic ruin culture and our own. Keach then turns to the two great eighteenth-century philosophical histories of ancient ruin, Gibbon's *History of the Decline and Fall of the Roman Empire* and Volney's *The Ruins: or Meditation on the Revolutions of Empires*, both of which have an important but deflected connection to the problematics of cultural property. From here the book moves to chapters on Byron and Shelley and focus on their poetic responses to the ruins of Rome in the immediate aftermath of the Napoleonic occupation (1809-1814; Byron visited Rome two years after Waterloo, Percy and Mary Shelley three years after). The following chapter, "The Romance of Restoration," looks at literary responses to the project – led by Britain and the Duke of Wellington – of returning antiquities and other works of art expropriated by the French to the palaces, villas, and churches of Italy during the period of political "restoration" following Napoleon's defeat. There is then a chapter on what Keach refers to as "Cockney ruin culture": through print shops, dealers in inexpensive reproductions, and the British Museum, middle-class London writers such as Keats, Hazlitt, and Hunt gained access and responded on their own terms to the material remains of ancient culture disseminated under the pressures of empire. The final chapter looks at Mary Shelley's dystopian novel *The Last Man* (1826), which ends by imagining the only survivor of the human race completing his autobiographical narrative among the ruins of Rome in what would be, within the book's futuristic chronology, our present century. The book emphasizes throughout the ways in which current preoccupations with ruin and cultural property, especially with ruin as cultural property, are anticipated and influenced by contradictory developments within what we call "Romanticism."

Greg Landsberg

PHYSICS • ACADEMIC YEAR 2012-13

For 2012-2013, Professor Greg Landsberg was granted a leave to serve as the Physics Coordinator of the Compact Muon Solenoid (CMS) experiment at the CERN's Large Hadron Collider (LHC), near Geneva, Switzerland. Landsberg moved to Geneva area at the end of 2011, as this job requires his full-time presence at CERN.

The CMS experiment is one of the two biggest particle physics experiments in the world. Together with the ATLAS experiment, it is pursuing the cutting-edge particle physics research at the energy frontier. The main goal of this research is to elucidate the electroweak symmetry breaking mechanism of the Standard Model of particle physics and to look for new physics beyond it.

At the CMS, Landsberg serves as the Physics Coordinator; along with the Spokesperson for the experiment, Landsberg is charged with developing and carrying out the entire physics program of the experiment, as well as leading and directing over 2,500 physicists.

2012 was by far the most productive year for the CMS experiment, if not for the entire field of particle physics. The major breakthrough of the ATLAS and CMS experiments at the LHC was the discovery of a new particle with the mass of 125 GeV, a very likely candidate for the Standard Model Higgs Boson – the holy grail of particle physics for the past half century, and the particle behind the mechanism of electroweak symmetry breaking. The search for the Higgs Boson was one of the main *raison d'être* of the LHC.


As the Physics Coordinator of the CMS experiment, Landsberg led the quest for the Higgs Boson, which resulted in a major discovery in the field. The preparation for the Higgs discovery started in late 2011, when Landsberg's group made a strong case to the LHC accelerator team and their competitors on ATLAS that the experiments should be run at a higher energy – 8 TeV instead of the previous 7 TeV. Landsberg's group gambled on the fact that the LHC community would accept the recommendation and started generating a massive number of computer simulations of the Higgs Boson production and decay at the higher energy. The availability of these simulations, which took several months to produce, was crucial for the CMS's ability to present the results of the search for the Higgs Boson in five decay modes on July 4, 2012, when the discovery was announced simultaneously by the two experiments at a special seminar at CERN. The competing ATLAS experiment was able to show only two out of five channels on that date, largely because they fell behind on the simulations.

The new 125 GeV particle discovery was followed by over one billion people around the world – as many as the number of Facebook users! – and was published in a special issue of Physics Letters B journal [S. Chatrchyan et al. (CMS Collaboration), Phys. Lett. **B716** (2012) 30] in August 2012. In less than a year since its appearance, this seminal paper already received over 1200 citations, making it a “renowned paper” in the field of particle physics.

For a press release related to the discovery and media links,
see: <http://cms.web.cern.ch/news/observation-new-particle-mass-125-gev>.

In October of 2012 Landsberg returned to Brown to lead *a public event* dedicated to the Higgs Boson discovery, which was very well attended. President Paxson, Landsberg, and his experimental particle physics colleagues, among them Gerry Gurlanik, who was one of the people who predicted the existence of the Higgs Boson nearly half a century ago, all gave speeches at this event. A special colloquium for the Physics department followed, led by Professor Landsberg.

While leading the discovery of the Higgs boson was so far the apex of his special mission leave, Landsberg has also accomplished much additional work within the CMS experiment, including a large number of precision measurements of various standard model parameters, redirection of searches for physics beyond the Standard Model toward probing “natural” scenarios, etc. The CMS experiment was first to measure the W, Z, and top-quark single- and pair-production cross sections at the new LHC energy; it also measured the top-quark mass to the precision exceeding the one achieved by any previous experiment, including the Tevatron experiments that discovered the top quark in 1995. The searches for physics beyond the Standard Model conducted by the CMS Collaboration last year have excluded large classes of new physics, such as Technicolor, and significantly constrained the allowed parameter space of many other models, such as Supersymmetry or extra dimensions in space.



The CMS experiment has published 127 physics papers in 2012 summarizing the results of the many studies conducted during Landsberg's term as the Physics Coordinator. The number of papers keeps growing in 2013, and Landsberg expect a similar number of publications by the end of this year, bringing the crop to some 250 papers produced during his "watch" at the CMS.

Last, but not least, Landsberg continued to advise two Brown graduate students and two postdoctoral fellows, all of whom are working on the CMS experiment or using its data. All in all, Landsberg has been a part of two very productive years, resulting in major publications and in a major discovery that literally changed the field of particle physics.

Heather Leslie

ENVIRONMENTAL STUDIES AND ECOLOGY AND EVOLUTIONARY BIOLOGY • FALL 2012

Professor Heather Leslie spent her junior sabbatical conducting marine conservation science research in New England and Mexico's Gulf of California. She drafted three papers based on earlier research conducted with her students in these places, two of which are now in review and the *third of which* was just published in one of the leading journals in her field, Conservation Biology. Professor Leslie also submitted a number of grant proposals to support future research, including one the US National Science Foundation's Coupled Natural and Human Systems (CNH) program, entitled "CNH: Adaptive capacity and resilience of small-scale fisheries to environmental and economic variability in Mexico's Gulf of California." This new project will build on Leslie's current NSF funded project on the ecological and economic dimensions of the region's fisheries. During her sabbatical, Leslie also finalized the first major publication from the NSF-funded work. *This article* highlights opportunities for both people and nature to benefit from market demand and careful regulation of nearshore fisheries, and was just published in Ecological Applications.

Leslie continued to mentor students during her sabbatical, including Environmental Science honors thesis candidate Katherine Siegel, EEB/Brown-MBL Ph.D. candidate Sarah Corman, and postdoctoral research associate Dr. Leila Sievanen. Siegel was awarded one of CES's highest honors upon graduation and received CES's best poster award for the research she conducted in collaboration with Leslie.

In addition to her research and teaching, Leslie continued to mentor students and lead the Voss Environmental Fellows, an undergraduate research and policy training program she co-founded in 2009. The Voss Environmental Fellows Program supports Brown undergraduates, faculty, and collaborating environmental professionals as they pursue use-inspired research projects of mutual interest. By learning to apply the scientific method and employ approaches from multiple disciplines in dialogue with the potential research users, students gain intellectual breadth and skills that they can apply to solve problems in diverse contexts

beyond Brown. Leslie and colleagues recruited the fourth cohort of students during her sabbatical: as of July 2013, 29 students have participated in the program, which is coordinated through the Environmental Change Initiative, with support from the Center for Environmental Studies, the Engaged Scholars Program, and the Dean of the College.



La Paz area fisherman holding a Pacific red snapper, also known as a huachinango. Photo by L. Sievanen.



The tremendous marine biodiversity of Cabo Pulmo is one of the motivations for Prof. Leslie's research. Photo by Octavo Aburto.

Eng-Beng Lim

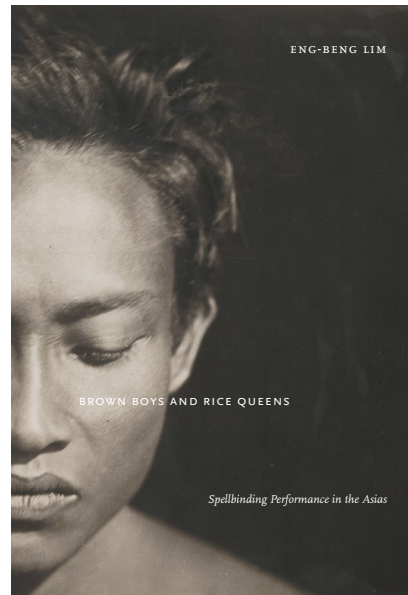
THEATRE ARTS AND PERFORMANCE STUDIES • SPRING 2013

While a Visiting Scholar at UC Berkeley, Professor Eng-Beng Lim discovered a large archive of Colin McPhee's Balinese photography and films from the 1930s. Lim was immediately curious to know if the visual records of this collection corroborated his account of McPhee's time in Bali, since the introduction to Lim's monograph begins with a reading of a multi-media rock opera "A House of Bali," based on McPhee's 1947 memoir of the same title. What Lim found in the archive exceeded his expectations.

McPhee is widely regarded as the progenitor of twentieth century world music inspired by the Balinese gamelan; he transcribed Balinese ceremonial music for the piano and other Western percussion instruments such as the xylophone and glockenspiel. McPhee was also part of an enclave of artists, writers, stars, and anthropologists, including Margaret Mead, Jane Belo, Gregory Bateson, Ruth Benedict, Claire Holt, Noel Coward, and Charlie Chaplin, who resided in the salon-like compound of German artist Walter Spies during the inter-war years in Ubud, Bali. This trendsetting enclave helped to secure the Dutch colonial makeover of the island as paradise in the early-twentieth century, and their combined legacy continues in myriad ways to influence the performance, discourse, and imaginary of Balinese exotica even today.

In his book, *Brown Boys and Rice Queens: Spellbinding Performance in the Asias*, (forthcoming in November 2013,) Lim pointed to McPhee's contribution to this legacy as a secondary case study. Part of Lim's argument hinges on the white man/native boy dynamic as the structure of artistic exchange or collaboration between the West and the East. McPhee's sonic and visual play with Balinese art traditions, like other examples in Bali, Singapore, and Asian America, is embroiled in a queer, colonial history that is either disavowed or gently set aside as an open secret. That history is a persistent problematic and manifests in the queer representation of adult Asian men as emasculated, servile, or effete boys. Lim examines McPhee's relations with the Balinese boys who served as his muse, houseboy, and protégé, arguing that this is not only allegorical of colonial conquest and queer love but also a trope of Asian performance writ large.

Lim suggests that this "open secret" of the white man/native boy involves the tropic spell of colonial encounters in the Asias, or a mutually constitutive magic between the (formerly) colonizer/colonized based on the performativity of the dyad's queer coupling. Hence, particular elements of the fantasmic power relationship – the happy native boy, the spellbound white man – have to be imaginable so as to secure the queer intelligibility of the scenario and its sensory pleasures. At stake in such a staging



Lim's book cover features an entranced Balinese man from a 1931 German orientalist film, *Island of Demons*. The book is part of the "Sexual Cultures" series of New York University Press. It is the winner of the 2013 CLAGS Award for outstanding first book project.

is the formulation of a critical reading practice according to which the native boy is both a primary focus and the central figure of colonial modernity. How would his queer encounters and transmogrifications change the way we tell stories about the colonies, diasporas, and transnational border zones of Asia in performance and theatre?

Lim was hardly surprised to find that among McPhee's vast collection of photographs and films at the UCLA archive is a set of photographs on Balinese men and boys who are staged in soft, recumbent poses that can only be described as ethno-porn. They are reminiscent of the photographs by Walter Spies that inform the Balinese chapter of Lim's book. The two archives converge around the beautiful brown boys in the same Balinese setting. Lim argues that the trope and body logics of the brown boy are visualized as the porno-tropics of the Asias, confirming the centrality of queer imaginary wherever the dyad is found. But this visual archive also calls for a different analytic and comparative study than the assemblies of interpretation Lim postulated for his book, which focused on the queer dyad's impact on Asian performance in a transnational configuration.

Over the summer, Lim returned to Singapore where he was able to do additional research on his continuing study on queer, Asian performance in the region while participating in the city-state's fifth Pink Dot festival, where a record breaking 21,000 people gathered as a counterpublic of lesbian, gay, bisexual, transgender, queer and queer-affirming individuals at a local park to form a human pink dot. This public performance of pinkness is now being replicated throughout the world, including Hong Kong, Utah, Alaska, Taiwan, Okinawa, New York City, Montreal, and London. Lim also chaired a panel on Afro-Asian studies at the Inter-Asian Cultural Studies conference held at the National University of Singapore, and brought his colleagues to see Alfian Sa'at's *Asian Boys Vol. 1*, a groundbreaking gay play that anchors the second chapter of Lim's book. That the city-state has retained Victorian-era penal codes against homosexuality while enabling queer theater and public events such as Pink Dot to flourish is part of a contradictory transnational and Asian modernity that exceeds the analytics and epistemologies of established fields of study. Lim was also a participant in two publication-driven research workshops, one at the University of Washington, Seattle, on the "Politics of Storytelling in Island Imperial Formations," and the other on "Island Images Imaginaries" at the University of California Humanities Research Institute Short-Term Collaborative Residency, Irvine. Finally, Lim returned to campus to be a guest speaker at BIARI's "Theatre and Civil Society" seminar where he lectured on the stakes of doing transnational performance projects in Asia based on the work of world authors such as Shakespeare, Haruki Murakami, and David Henry Hwang. He had an invigorating time discussing transnational cultural politics and neoliberal corporatization with the institute's global participants, and helped to facilitate some of their projects.

Catherine Lutz

ANTHROPOLOGY • ACADEMIC YEAR 2012-13

Professor Catherine Lutz spent her sabbatical year working on three projects. The first involved collective research on the costs and consequences of the war in Iraq. For several years, Lutz has co-directed the *Costs of War Project* with Neta Crawford of Boston University. This project has gathered together thirty researchers from a variety of social science fields with expertise in aspects of the human, social, and economic consequences of the wars of the post-9/11 period. This year, a number of new papers were solicited on topics that include the impact of war injuries on military families and on Iraqi civilians, an estimate of both the allocated and obligated federal dollars spent to date on the wars, and the state of democracy in post-invasion Iraq. With the help of staff at the Watson Institute for International Studies, this work was released just prior to the tenth anniversary of the invasion of Iraq in March 2013, and shared with journalists writing stories for that anniversary. The findings of the Costs of War project were picked up by many of the major news outlets in the US and overseas. Beyond co-directing the Costs of War project, Lutz contributed a research paper on the reconstruction of Iraq and worked towards completion of a short book overviewing what is known about the immediate and long-term consequences of the wars in Iraq, Afghanistan, and Pakistan.


In a second project during the past year, Lutz wrote two papers drawn from previous research on the car in American society. In the first paper, she reviewed the relationship between the car and urban life and in the second, using ethnographic and national economic data, she argued that a car-dependent transportation system contributes to the production of inequality.

Finally, Lutz began work with the United Nations on the problem of sexual exploitation and abuse by peacekeepers. Lutz has been asked to travel to four UN missions, including Haiti, Liberia, South Sudan, and the Congo, and to produce a report on the findings and policy recommendations for the Department of Peacekeeping Operations and the Department of Field Support for the Secretary General.

Kiri Miller

MUSIC • SPRING 2013

Professor Kiri Miller spent her sabbatical developing her research on *Dance Central*, a digital game series that teaches players full-body choreography using motion-sensing technology and multisensory feedback. This study is part of Miller's larger research agenda on forms of play, performance, and embodied practice that bridge virtual and visceral experience (see: *Playing Along: Digital Games, YouTube, and Virtual Performance*). Miller uses qualitative ethnographic methods to investigate digital media and participatory culture; her work shows how digital media are brought to bear in the transmission of multisensory embodied knowledge. (See bit.ly/kiriDCblog for a sample conference paper, with multimedia examples.) During her sabbatical,



Miller conducted fieldwork at a major game convention, developed a qualitative survey about the gameplay experience, and carried out web-based research on player communities and the circulation of game-related media (e.g., player-produced YouTube videos). This research project gives equal attention to interface affordances, game design, player experiences, and game-related discourse, shedding light on how people draw on their embodied knowledge in making sense of emerging technologies.

Miller's work stands at the intersection of ethnomusicology, media/technology studies, performance studies, and popular music studies. This commitment to interdisciplinarity entails some significant challenges, including keeping up with current scholarship across several distinct fields and engaging in collegial outreach to plant the seeds for collaborative work. Miller's sabbatical semester was invaluable in affording time for these endeavors. During these five months, she presented invited lectures on her current research project at the Annenberg School for Communication at the University of Pennsylvania, in the music departments at Harvard University and Northwestern University, in the Performance Studies department at Texas A&M University, and as the keynote lecturer for the Five Colleges Certificate Program in Ethnomusicology (hosted by Amherst College). Miller also presented conference papers at the annual meeting of the International Association for the Study of Popular Music (U.S. branch) at UT-Austin, and the intensive Mellon Summer Seminar in Dance Studies hosted by the department of Theatre Arts and Performance Studies at Brown. She attended two major media studies conferences: the annual meeting of the Society for Cinema and Media Studies and MIT's Media in Transition conference. She also participated in two smaller interdisciplinary conferences at Brown: the Artists and Scientists as Partners (ASaP) Symposium on the intersection of expressive arts (music and dance) with biomedical interventions in neurodegenerative disease progression; and the Habits of Living conference on "networked affects."

Sharing her work around the country, getting to know colleagues in other disciplines, and reading widely and deeply during these few months laid the groundwork for Miller to complete a new article on dance games and gender performance and submit it to a major media studies journal (where it is currently under review). She also completed the revisions for a book chapter on *Dance Central* and multisensory musicality (forthcoming in the peer-reviewed *Oxford Handbook of Interactive Audio*), and won a grant from Brown's Creative Arts Council to support her summer 2013 research on the next stage of this project.

Karen Newman

COMPARATIVE LITERATURE • FALL, 2012

Professor Karen Newman spent her sabbatical working on several projects including organizing two conferences, one at Brown and another for the Folger Library in Washington, D.C. in September before traveling to France and England to do some archival work for an article soon to appear in *Seventeenth-Century French Studies*. In France, Newman studied a fan by the well-known seventeenth-century French engraver Abraham Bosse. The availability of luxury goods is often thought of as a twentieth-century phenomenon,

but the “consumer revolution” taking place in Europe in the seventeenth century accelerated the pace of production, availability and consumption of goods of all kinds, particularly luxury goods. Paintings and engravings, printed books, silk, gloves, and lace, watches, porcelain, and fans all became coveted objects available to a widening demographic. The Bosse fan represents a “Judgment of Paris” and thus raises a host of questions from aesthetics to new technologies of engraving, reproduction, and the copy. Newman presented her new work in the late fall at the Université de Paris-Est, Créteil with which Brown has a new exchange, and subsequently as the first Elizabeth Munves Sherman ’77, P’06, P’09 Lecture in Gender and Sexuality Studies for the Pembroke Center. The remainder of her time was spent on a book project on the reception of Shakespeare in Europe, a section of which she presented summer 2013 at the European Shakespeare Research Association, Institut de Recherche sur la Renaissance, l’âge classique et les Lumières, Université Montpellier 3.



Photo courtesy of The Fan Museum, Greenwich, England.

Stephen Parman

GEOLOGICAL SCIENCES • FALL, 2012

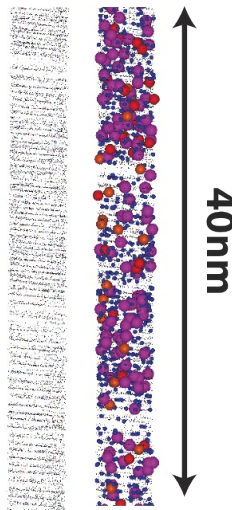
During his sabbatical Professor Stephen Parman visited the laboratory of Professor Brian Gorman at the Colorado School of Mines to explore the capabilities of a new analytical method called laser-assisted atom probe tomography (APT) and its potential applications to geosciences. APT offers a unique combination of nanometer spatial resolution and parts per million detection limits. It works by using a high electrical field

combined with a femtosecond pulsed laser to evaporate atoms from the surface of the sample one at time. The laser pulses up to 250,000 times per second, releasing an atom 1 out of every 10 shots on average. So about 25,000 atoms are detected per second under ideal conditions. Typical runs image 1 to 10 million atoms, though hundreds of millions of atoms are possible.

The electric field accelerates the atoms (now ionized) to a large 2 dimensional detector that locates where the ion came from on the sample surface. As the sample is ablated layer by layer, a three-dimensional image of the position of the atoms is obtained. In addition to position, the detector quantifies the time it takes for the ion to travel from the surface of the needle to the detector. Since the electrical field is known, the mass to charge ratio (m/q) of the ion can be calculated and its identity discerned. Essentially, it is a time-of-flight mass spectrometer.

Atom probe tomography has been around for many years, but has been restricted to use on metals, as non-conducting samples were torn apart by the high electrical field. The introduction of the laser pulsing reduces the electrical field needed to evaporate samples, so that now semi-conductors and insulators can be analyzed. Most geologic samples are insulators or semi-conductors, and so the recent advances allow geomaterials to be analyzed for the first time.

To date, Parman has analyzed a variety of olivines (one of the most abundant minerals in the interior of planets), lunar volcanic glass, iron oxides and natural platinum alloys.



Above is an APT image of a natural PtFe alloy. The left image shows the position of the Pt and Fe atoms (black dots). The atomic planes of the material are clearly visible. The right image is the same as the left, but with the positions of trace elements in the alloy shown as different colored spheres: Ir (blue), Ru (red), Rh (magenta), Cu (orange). Scale bar is on the right.

Richard Rambuss

ENGLISH • ACADEMIC YEAR 2012-13

Professor Richard Rambuss used his sabbatical to begin work on a new book that takes him afield from his scholarship in sixteenth- and seventeenth-century English literature to film and contemporary culture. The book is titled *Kubrick's Men*, though this study is not about Kubrick's male stars per se (among them Kirk Douglas, James Mason, Peter Sellers, George C. Scott, Ryan O'Neal, and Tom Cruise). Rather, Rambuss's book is concerned with Kubrick's oeuvre – from his early photographs for *Look* magazine and short-form documentaries to his highly auteurist feature films (many of them all but all-male) – which Rambuss reads as a sustained meditation on the male condition, not only in the present, but also in history and in the future. The through-line for Kubrick's body of work, according to Rambuss, is less violence or sex than it is the pressurized exertion of masculinity in unusual, often extreme circumstances, where it may be mightily taxed, exaggerated to various effects be they tragic or comic, or metamorphosed, distorted, reconfigured, or undone. Kubrick's movies work out case-study-like narratives – many of them clinical, even mechanical in their feel, all of them highly aestheticized in their presentation – about masculinity with the screws put to it. “Torture the women,” Hitchcock had it. For Kubrick, the interest was men in extremis.

The year that Rambuss spent focusing on Kubrick coincided with a major show on Kubrick's work and life at is the Los Angeles County Museum of Art: his first retrospective in the context of an art museum. The exhibit (which Rambuss visited twice during his leave) presented annotated books and scripts; correspondence and notebooks; set models, costumes, and props; production photography; and even lenses and cameras. The show begins where the first chapter of Rambuss's book begins: that is, with the photographs that Kubrick took in the late 1940s for *Look* magazine. Barred from college because of his poor grades, Kubrick landed a job fresh out of high school as a staff photographer at this artier rival to *Life*. At *Look*, he honed his technique for relaying narrative in pictures, for stylizing narrative and feeling into serial images. Shooting male entertainment celebrities (Montgomery Clift, Leonard Bernstein, Frank Sinatra) and male athletes (especially boxers) were among Kubrick's fortes.

The book's first chapter, titled “Kubrick's Men's Pictures,” is especially concerned with his *Look* photo-essay on a handsome middleweight prizefighter (and Navy veteran) from Greenwich Village, New York named Walter Cartier. The *Look* piece became the basis for Kubrick's very first film, a 1951 sports short about Cartier called *Day of the Fight*. Two more short form documentaries on male subjects followed. Kubrick's *Flying Padre* (also from 1951) is about a Catholic priest who makes his pastoral visits to his far-flung flock, spread out over 4,000 miles in northeastern New Mexico, via his own single-engine airplane. Kubrick's third film, *The Seafarers* (1953) is an industrial documentary for the Seafarers' International Union, which wanted an in-house promotional film about the men who crew American ships. *The Seafarers* has its place, however minor, among Kubrick's most male-oriented works. Here not only is this documentary's subject – the “brotherhood of the sea,” with its quasi-military hierarchy and traditions – male, so is its intended audience of new or prospective union members.

The second chapter of Rambuss's book is entitled "Kubrick's War Films: Numbers, Tactics, Sex, Style, Taste." No genre occupied Kubrick as extensively as the war film. Four of the thirteen movies that he directed over the course of his forty-six year career as a feature filmmaker are war movies – the most for him of any genre. *Fear and Desire*, Kubrick's 1953 little-seen feature debut, is a war film. Four years later, he directed another one: the World War I male melodrama, *Paths of Glory*, which was his breakout movie. (The aborted *Aryan Papers*, an adaption of Louis Begley's semi-autobiographical novel *Wartime Lies*, would have been his World War II film.) In 1964, Kubrick released his third war movie, *Dr. Strangelove, or How I Learned to Stop Worrying and Love the Bomb*: a nuclear war nightmare comedy. His fourth and final war film, *Full Metal Jacket* (1987), is about the Vietnam War and the "manufacture" of marines. Rambuss's book considers each of these films, as well as Kubrick's most ambitious unrealized film project: a colossal biopic about Napoleon Bonaparte, for which he wrote a treatment in 1968 and a screenplay in 1969. (He envisioned Jack Nicholson as his Napoleon and Audrey Hepburn as his Josephine.) Kubrick told potential investors that he expected this film to be nothing less than "the best movie ever made."

Rambuss's book works out an aesthetical reading of Kubrick's war films: a reading that turns on the role therein of literature and culture, manners and ritual, and style and taste: all this in the indicatively male domain of the military, where in Kubrick's films, we encounter a variety of warring masculinities. Kubrick's movies do not glamorize war, or any kind of masculine battlefield heroism (which, like patriotism, is here in short supply). But Rambuss argues that Kubrick was all but incapable, formally speaking, of making what could be called simply an antiwar film.

Marc Redfield

ENGLISH AND COMPARATIVE LITERATURE • ACADEMIC YEAR 2012-13

Professor Marc Redfield used his sabbatical to come near to completing his latest book, and to lay the groundwork for research projects that will occupy him in coming years. The book, titled *The Invention of Theory: Deconstruction in America*, takes a close look at the emergence of "theory" as an academic phenomenon and cultural buzzword in the United States in the 1970s. "Theory" was identified with "deconstruction" and with the so-called "Yale Critics," particularly Jacques Derrida and Paul de Man, during this formative period. In his latest work, Redfield seeks to respect and read closely the texts written by these and other figures while taking "theory" seriously as a small but interesting media event. Of course the divergence between what the texts were actually saying and what was being said about them, both inside and outside the academy, was often quite wild. But precisely this is of interest: why was it that "deconstruction" attracted the degree and kind of notice that it did, when it did?

In addition to his work on theory, Redfield used guest appointments at two German research institutions in 2012-13 to pursue a longstanding interest in Goethe's complex, ironic staging of aesthetic education. In a number of fictional works of his middle period, Goethe crafts ironic responses to the idealizing aesthetic of

Schiller's *On the Aesthetic Education of Man* (1794-95). These responses also make insistent, if often indirect reference to the war with France that is one of the dominant contexts of Goethe's and Schiller's writing during this time. Redfield's new project explores ways in which Goethe's texts reflect on mediation and violence as part of their reflection on art, politics, and war. During the fall of 2012 Redfield completed an essay on Goethe's *Conversations of German Refugees* (1794-95); during the spring he worked mainly on Goethe's *Elective Affinities* (1809) and on Walter Benjamin's important essay on that text. Redfield's work on Benjamin is also feeding into a separate research interest centered on literary engagements with city of Berlin.

Timmons Roberts


CENTER FOR ENVIRONMENTAL STUDIES AND SOCIOLOGY • ACADEMIC YEAR 2012-13

Building on his interest in finding ways to break the impasse in the global climate change negotiations, Professor Roberts spent the academic year as Non-Resident Senior Fellow at the Brookings Institution in Washington, D.C. While a Fellow at the Brookings, Roberts co-authored a *briefing paper* that proposed a new way to negotiate a global deal on climate change, utilizing a smaller group of countries called the Major Economies Forum and fairer accounting rules.

Roberts's primary project was a book under advance contract with MIT Press, called *Power in a Warming World*. Roberts also made progress on another MIT Press book on Latin American leadership on Climate Change, and on two readers for classroom use from Wiley/Blackwell. One of those will be a second edition (*The Globalization and Development Reader*), while the other will be new (*The Globalization and Environment Reader*). He is hopeful that three of these books may come out in 2014. On top of his books, Professor Roberts saw six pieces to press as articles and book chapters.

Roberts also gave a number of talks this year including invited lectures at Harvard, Rutgers, Boston University, Clark, Vanderbilt, University of Maryland, Brookings, a side event at the UN climate negotiations in Doha, Qatar, and at the Federal University of Fluminense, Brazil and the State University of Rio de Janeiro. In June, he talked with the 22 girls in his daughter's fourth grade class at Lincoln School about climate change—a talk at which he mixed the seriousness of the topic with positive things we can individually and collectively do to address the problem.

Roberts' work at the Brown Climate and Development Lab continued during his leave, and in November the lab helped write *an open letter* to President Obama from the Chair of the group of the world's 48 Least Developed Countries in the UN negotiations, which appeared in the *Guardian* and was immediately circulated to the State Department and White House. The letter was linked to a powerful two-minute video written with support from Lindsay Richardson and Ben Mandelkern in the Watson Institute.



In addition, Roberts co-published *a policy briefing* through the London-based International Institute of Environment and Development. It assessed whether developed countries were meeting the promises they made back in 2009 in Copenhagen to deliver \$30 billion to help poor countries adapt to climate change and avoid high-carbon growth pathways. An expanded version of this briefing was released in the spring through the European Capacity Building Initiative (ECBI) and Oxford Climate Policy. These briefings are having a major impact, being read and mentioned in United Nations climate change negotiations in Doha, Qatar. The IIED paper was quoted in 130 media outlets worldwide.

Butch Rován

DEPARTMENT OF MUSIC • SPRING 2013

During his one-semester sabbatical, Professor Rován completed work on three major projects: a new piece for solo performer and custom instrument; a curated volume of interactive video works; and a new piece for video. In addition, he attended performances of his recent work for piano and electronics, *Desire with Digressions*, in four concerts both here in the U.S. and abroad.

Rován began his sabbatical by developing the software for a new interactive instrument that he designed and built, called “the GLOBE.” It is a wireless device that has the ability to capture a performer’s gestures in order to control audio and video synthesis in real time. Rován created the first full-length piece for the instrument — *of the survival of images* — for an invited concert that he performed as part of the Cramb Residency at the University of Glasgow in March. Program notes and his performance of the piece can be viewed at: http://www.soundidea.org/rovan/portfolio_survivalofimages.html

At the invitation of the *Computer Music Journal*, Rován curated a DVD featuring new works for interactive video and sound. The volume includes eight pieces by a range of internationally known performers. In selecting the group, Rován featured an array of approaches to working with sound and image, as well as different modes of interaction. His own piece, *of the survival of images*, will be included in the volume, which the *Journal* plans to release in Fall 2013.

In October 2012, Rován premiered *Desire with Digressions*, a piece for piano and interactive electronics inspired by a short story of the same name by Brown professor Brian Evenson. Rován used part of his sabbatical to work on the next phase of this work—a kind of “silent” film that accompanies (and is accompanied by) the original piano piece. Filming for the project took place on location in Rhode Island, California, Colorado, Paris, and Germany, as well as in the Granoff Studios here on campus.

Desire with Digressions has enjoyed an enthusiastic reception since its premiere last October. Originally written for pianist Bruce Brubaker at the New England Conservatory, the work was also performed by

Simon Smith in Glasgow in March, again by Brubaker in New York City in April, and finally by Keith Kirchoff in St. Paul at the annual conference of the Society for Electro-Acoustic Music in the U.S. (SEAMUS) in April. As a result of the SEAMUS performance, *Desire with Digressions* was selected as one of eight works to be released on CD by the Society next year.




Richard Evan Schwartz

MATHEMATICS • ACADEMIC YEAR 2012-13

While spending the academic year as a Visiting Fellow at All Souls College, Oxford, Schwartz completed a 250-page research monograph entitled *The Octagonal PETs*, which he has submitted for publication with the American Mathematical Society. Schwartz describes the research for this project in the following way: One starts out with a glass cube and fractures it in very specific places to produce a pattern of cracks. Picture a diamond cutter rather than a sledge-hammer. The cracks divide the cube into smaller pieces. These pieces are then again fractured according to certain rules, and so on. Schwartz's research concerns the patterns that begin to emerge when this fracturing process is repeated indefinitely.

While at Oxford, Schwartz completed a 170-page children's book, entitled *Really Big Numbers*. This book, which will be published by the American Mathematical Society, gives a feel for what truly huge numbers are like and explores the connection (or rather disconnection) between language and mathematical intuition. Evans's goal was to write a book that would be appreciated and enjoyed even by mathematically brilliant children.



Finally, in addition to giving a number of invited lectures and attending several seminars in England, France, Switzerland, and Poland, Schwartz wrote a 45-page research article, entitled “The Pentagon Spirals,” which he has submitted for publication in the *Journal of Experimental Math.*

Nina Tannenwald

POLITICAL SCIENCE • ACADEMIC YEAR 2012-13

In 2012-2013, Professor Tannenwald took a non-sabbatical leave to serve as a Franklin Fellow in the Bureau of International Security and Nonproliferation in the U.S. Department of State. Based in the Office of Multilateral Nuclear and Security Affairs, Tannenwald served as an advisor on U.S. nuclear nonproliferation policy and participated in the office's work to strengthen the Nuclear Nonproliferation Treaty (NPT) and the International Atomic Energy Agency (IAEA).

In this capacity, Tannenwald drafted talking points for principals in the bureau and otherwise helped to develop and implement U.S. policy on nonproliferation and disarmament. She also served for a time as a special assistant to the Assistant Secretary, the head of the bureau, which involved working on a range of nonproliferation and counter-proliferation issues.

The year in government provided a fascinating window into the U.S. policy process and provided numerous insights for both Tannenwald's research and teaching. Her scholarly interests lie in the area of norms and institutions in the security area, and she has written extensively on nuclear weapons issues. During graduate school Tannenwald had served for a summer in the U.S. embassy in Amman, Jordan, but ultimately chose a scholarly career. After fifteen years in academia, the opportunity to apply her scholarly expertise to policy work was appealing, and reinforced her belief that research in international relations should contribute to policy debates.

In the State Department, Tannenwald confronted daily the contrasts between the academic and policy worlds. It was both fruitful and challenging. Scholarly work prizes a different set of skills than policy analysis and debate. While she sought to hone her policy skills, Tannenwald's experience inside the policy process also provided a fascinating, if somewhat sobering, window into how policy officials respond to ideas and commentary from the outside. It raised a new set of questions about how academic ideas translate—or fail to translate—to the policy world.

Toward the end of the leave year Tannenwald had an opportunity to examine this challenge more systematically when she participated in a week-long seminar sponsored by the School of International Service at the American University designed to help academics “bridge the gap” between the scholarly and policy worlds. The seminar provided an ideal opportunity for Tannenwald to reflect on her experience in government and sharpen her understanding of where and how in the policy process academic ideas can best contribute.

Most importantly, the experience in the State Department has provided a wealth of new insights for Tannenwald's teaching and research. An initial article, on "Justice and Fairness in the Nuclear Nonproliferation Regime," will be published in fall 2013 in the journal *Ethics and International Affairs*. The article argues that unaddressed grievances about inequities in the NPT are undermining the willingness of non-nuclear states to do more to strengthen the nonproliferation regime. Several internal think pieces that Tannenwald wrote for the nonproliferation bureau will serve as the basis for future article-length publications. Finally, Tannenwald also looks forward to developing a course on nonproliferation and weapons of mass destruction.

Rebecca Weitz-Shapiro

POLITICAL SCIENCE • ACADEMIC YEAR 2012-13

Professor Weitz-Shapiro spent the year at the *Center for Advanced Study in the Social Sciences (CEACS)* at the Juan March Institute, in Madrid. Over the course of her sabbatical, she made sustained progress on two ongoing research projects, began a new project in collaboration with a scholar she met in Spain, and presented her work at three different venues in Spain.

Weitz-Shapiro's book manuscript seeks to understand variation in the extent to which mayors rely on clientelistic or patronage politics. In the manuscript, entitled, *Paths to Accountability within Democracy: Curbing Clientelism in Local Government*, she draws heavily on original empirical data collected from towns and cities in Argentina. Weitz-Shapiro presented parts of this project at the *Iberoamerican Institute at the University of Salamanca*, where she received feedback from students and scholars working on Latin America, including a well-known Argentine scholar of local politics who served as the discussant.

A second ongoing project, co-authored with Matt Winters (UI-UC), seeks to understand why corruption persists in many democracies. It uses a series of original surveys in Brazil to shed light on when the public is most likely to act on corruption. In August 2012, Weitz-Shapiro and her co-author oversaw a series of focus groups in Sao Paulo, Brazil, in order to address some lingering questions from an earlier survey (carried out in 2010). These focus groups then helped to shape an additional survey, which was planned over the course of the academic year and was implemented across Brazil in May 2013. They also continued work on a second paper from the 2010 survey, which is in preparation for submission. *A first paper* will be published in July 2013 in the journal *Comparative Politics*. Weitz-Shapiro presented parts of this project twice at the Juan March—first at the CEACS permanent seminar, and then at a conference held there on parties and partisanship. Separately, in June 2013, she presented *preliminary results from the May 2013 survey* at a one-day conference on the correlates of corruption held at the Autonomous University of Barcelona.

Finally, Weitz-Shapiro's sabbatical year has fostered new intellectual connections and collaborations. She embarked on a new project with an Argentine economist based at the University Carlos III in Madrid that uses unique, micro-level election data from Argentina to test alternative theories of the strategies (legal and illegal) political parties use to garner votes in that country.


Esther Whitfield

COMPARATIVE LITERATURE • ACADEMIC YEAR 2012-13

While on sabbatical Professor Esther Whitfield worked on a book manuscript titled “War Metaphors in the Americas.” The book explores how a language of war has been articulated in political speech in the Americas to name policies and situations other than armed conflict between states, and how literary and visual culture operates in these contexts. Whitfield’s principal case studies are Argentina’s “dirty war”; Mexico’s “war on drugs”; the “war on terror” initiated in the U.S.; and the fifty years of “war on imperialism” that have allowed the Cuban government to mobilize society through a series of military metaphors. The book seeks to establish, in the context of the contemporary Americas 1) why war metaphors have had such currency among political leaders, and their risks and benefits for both the desired outcome and citizens’ sense of wellbeing, 2) the transnational dimensions of rhetorical “wars,” and the significance of the US-driven wars on terror and drugs for political language in Latin America, and 3) the ways in which specific works of art and literature, an archive of which Whitfield has assembled from a range of contemporary materials, address the use of war metaphors in the public sphere.

Whitfield focused her efforts during the sabbatical on researching and writing the book’s introduction and first chapter. The introduction situates the historical deployments of war metaphor that are the book’s subject within a broader, theoretical discussion of metaphor that draws from several disciplines, among them literary and cultural criticism, cognitive science and political theory. It engages with these to address how a language of war serves to order complex situations through the opposition of right to wrong, to enlist citizens’ support, and legitimize extreme measures against often ill-defined enemies. Further, it considers the likely impact of alternative rhetorical frameworks, such as the tolerance-based ones proposed by prominent critics of the global war on drugs, medical ethicists assessing the war on cancer, and many cultural practitioners.

While researching the book’s first chapter, Whitfield spent part of the spring semester in the Cuban province of Guantánamo, reviewing the archives of literary journals and regional newspapers and interviewing writers and visual artists. The chapter demonstrates that over the past decade, and even as actions at the U.S. naval base have become notorious for their departure from international concerns, there has emerged a “Guantánamo” in which the designs, rhetoric and experience of those on both sides of the base’s border coincide. On the one hand, the U.S. naval base is a site that has localized two of the most powerful, instances of war rhetoric in the recent history of the Americas: the U.S. government’s “War on Terror,” in which the language of war has been deployed against an indefinite enemy (even as soldiers have engaged in real and deadly combat on battlefields around the world), and Cuba’s decades-long war against the much-invoked forces of imperialism, waged through a catalogue of “battles,” “campaigns” and “offensives” against ideological forces supposedly at work against the Cuban Revolution and originating in the U.S. On the other hand, there is an alternative, more conciliatory mapping of Guantánamo to be read in the creative expression of detainees at the naval base and inhabitants of the Cuban province that surrounds it. Despite the strict isolation of one population from the other, and tight controls on the flow of information to each of them, poetry by detainees included in Marc Falkoff’s collection *Poems from Guantánamo* and recent



Cuban fiction, essays, and visual art that address the base draw from similar tropes to represent, or imagine, what lies on the other side of the border. In doing so, they invoke a surprising sense of mutual empathy, and a Guantánamo less divided than its barbed-wire fences would imply. “Guantánamo,” then, becomes the site of a double convergence: in the first instance, that of two rhetorics of war that take it as an extension of their battlegrounds; and, in the second, that of a poetics of solidarity emanating from either side of its border.



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