



THE GATES SCHOLAR

VOLUME 8 ISSUE 1 SUMMER 2011



UNIVERSITY OF
CAMBRIDGE

The Gates Scholars' Society includes all current and past holders of a Gates Cambridge Scholarship. Its membership is represented by two bodies: the Gates Scholars' Council and the Gates Scholars' Alumni Association.

The Gates Scholars' Council is the governing body of Scholars elected by their peers. A conduit among the community of Scholars, the alumni and the Gates Cambridge Trust, the Council represents the interests and needs of Gates Scholars in Cambridge.

The Gates Scholars' Alumni Association (GSAA) was created in 2005 to represent the needs of over 700 Gates Scholars who have left Cambridge. Through regional events and social gatherings, it strives to maintain communication between former Scholars and the Trust while creating a worldwide network of Gates Cambridge alumni.

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The Gates Scholar is the publication of the Gates Cambridge Scholars' Society. Articles that offer a window into the lives and work of current or past Gates Scholars or articles that tackle large interpretive questions relevant to the Gates mission are particularly encouraged. Highly focused contributions are welcome, but preference will be given to submissions that are of interest to a diverse cross-section of readership in more than one discipline of study. Contributions are subject to editorial approval and/or truncation.

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Message from the Gates' Scholars Alumni Association

It gives us great pleasure to provide you with an update of the various activities taking place within the Gates Scholars' Alumni Association (GSAA). These are exciting times to be a part of the GSAA, and we hope that all alumni and current Scholars will seek more opportunities to become involved. The structure of the GSAA has evolved since the 10th Anniversary event, which took place at the University of Cambridge in June 2010. We now have a clear organisational structure with board members and Alumni leaders directing key activities across the globe.

Our flagship Ambassador programme, which recruits, trains, and coordinates alumni to serve as Ambassadors for the Gates Cambridge Scholarships throughout the world, is fully in place. Dan DiCenso, the Director of the Ambassador Programme, and his team of ambassadors have worked hard to promote the Gates Cambridge Scholarships and assist talented and deserving applicants from around the world. Online webinars to assist US and International applicants were held in October and November 2010, respectively. The last six months also saw the first Ambassador event in Africa, led and executed by Alumni in Ghana.

As more Alumni have decided to pursue professional interests across the globe, our Alumni events have expanded their geographical reach. The GSAA Membership directors, Nathan George and Munkit Choy, have helped Alumni volunteers plan and execute events at various locations around the world. Successful gatherings have included events in London, Bangkok, and Singapore. In Boston, Gates Alumni interacted with Rhodes, Fulbright, Marshall Alumni and other distinguished members of the Royal Society during the 350th anniversary celebrations of the Royal Society at the British Consulate in Boston. Opportunities and resources are available to any alum who wishes to plan an event in his or her home region. The GSAA board strives to ensure that such events not only allow for networking, but also help strengthen the brand of the Gates Cambridge Scholarships and align with the strategic aims of the Trust.

Our Director of Public Interest, Mamta Thangaraj, and our Director of Professional Development, Sook May Ivy, held their first combined webinar earlier this year. The topic 'Career and Ethical considerations' asked Alumni from various industries to share their views on socially responsible business. Panellists addressed how researchers could advance scientific knowledge while having an impact on the ground, and the factors to consider when transitioning into a socially-conscious job. The GSAA would like to reiterate its support for such events, which are aligned to the goals of the Gates Cambridge Trust.

Our Director of Technology, Sarah Tierney, has done much to help the GSAA become more active on-line. Sarah has worked with the Trust to develop a monthly e-bulletin, and all Alumni and current Scholars are encouraged to submit announcements and updates for circulation in the newsletter. We also encourage people to connect on LinkedIn and Facebook. Sarah has also worked with Trust and the Scholar's Council to finalise the structure of the Alumni website and to ensure that all Alumni related information contained in the website is up to date.

Finally, we are pleased to report the deepening of relationships between the GSAA, the Trust, and the Scholars' Council. The GSAA and the Trust are now working closer than ever on these initiatives, something which has been helped by the appointment of the Trust's Alumni Officer, Kirsty Simons. In February 2011, New York alumni, representatives of the Trust, and several GSAA board members enjoyed an evening with the new Provost, Professor Robert Lethbridge, at the Harvard Club in New York. In June, a dinner will be hosted in Cambridge by Professor Lethbridge and the Trust, at which we will welcome graduating Scholars into the Alumni Association. As we execute all our initiatives, and kick-start new ones, we wish to have your continued support in strengthening the governance and execution of GSAA activities. We hope to see more of you involved and lead activities in your respective regions.

Wishing you all the very best for the rest of 2011.

Sincerely,

Jennifer Piscopo and Trivikram Arun
Gates Scholars' Alumni Association Co-Chairs

LIBRARYTOPIA

Caroline Elizabeth Robertson *PhD Candidate Psychiatry, Class of 2009*

From an Elizabethan chained library in Trinity Hall to a faculty library devoted solely to Aerial Surveying, over one hundred libraries fill the city of Cambridge, all within a 2.5 km radius of Great St. Mary's church. These spaces seem to offer an unparalleled connection between the Cambridge student and her academic heritage; great books, dissertations, and ideas were crafted at these wooden tables, beneath these lofted ceilings.

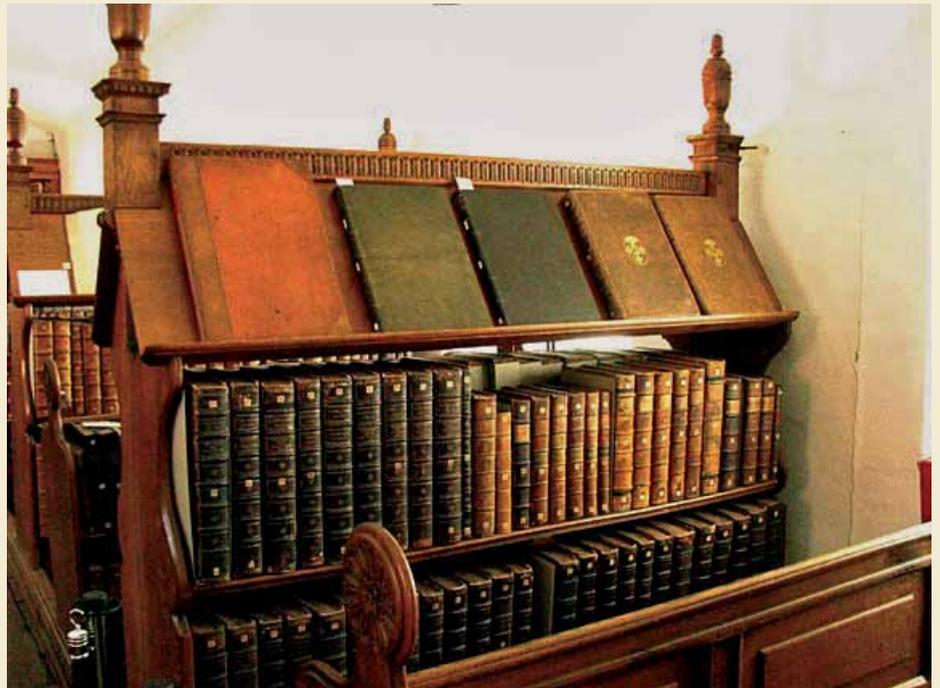
But the library access privileges of a Cambridge researcher do not extend to all hundred of these libraries: on average, a graduate student might have access to three. Interestingly, the particular combination of libraries to which a student has access varies greatly among students, indeed among Gates Scholars.

Seizing this opportunity, Academic Officers of the Gates Scholars' Council organised a series of 'Library Swaps' this past academic year. The plot was simple: 9 a.m., every Monday morning, a rotating Gates Scholar stealthily escorted a small group of Scholars into his College library. Once inside, the group would work quietly until breaking for a casual lunch together in the buttery. Following this pattern, we explored twelve college libraries this year, only failing to penetrate one (Trinity College).

Library lust might seem a bit eccentric to some. Indeed, the sentiment is not popular among College librarians in Cambridge.

The request to visit a library to work for a morning simply perplexed one librarian we approached: why should space be shared with students 'who might be sitting on park benches, for all the use they would be making of the facilities'?

Searching for study spots in Cambridge's many libraries



Consideration of the history of Cambridge's college libraries may begin to shed light on this hesitancy. In the early days of a college library, books were not only priceless items, but personal collections of college fellows, often donated to the college. Many books were even drafted by fellows themselves. This intimate relationship between the fellowship and library persisted for centuries: not

until the mid-1800s were students allowed to borrow a book from the library, and, even then, only through their tutor. (Although it might be noted that Univer-

sity Library (UL) borrowing privileges were only granted to undergraduates last year!) Thus, the college library, historically, might be considered akin to a 'living room library', cultivated and maintained by the family or fellowship of a college.

The private growth of the college library is but one revealing aspect of its history; another describes the role of the library in society. The library preceded the birth of the museum by centuries in the United Kingdom. Until then, it served as a repository of knowledge of all types: sculptural, anthropological, musical, etc. The Wren, for example, was the first point-of-display of the souvenirs from Captain Cook's voyages. As printing houses developed, this dual-role

'The Wren, for example, was the first point-of-display of souvenirs from Captain Cook's voyages.'

became unsustainable. Overspill from great private libraries ultimately stimulated the conception of museums in Britain: the British Museum was composed of the collections of three massive private libraries in its foundation in 1753. The confluence of library and museum, study and presentation, highlights a central character trait of the college library: it is a space where knowledge is on display, not a study centre.

But in this era much of the urge among college libraries to remain private, independent entities derives from a focus on undergraduate education, according to Gonville and Caius's college librarian, Mark Strathan. Strathan believes that the complexities and limitations of a college library's collection decisively shapes the student's understanding of the structure of knowledge. Just as the sides of an LP frame and limit the composition of an album, demanding careful consideration of the length of each song and its relationship to others in the album, so the finite spatial limit of the college library frames the knowledge that is presented to an undergraduate, representing a cohesive unit specially selected for his education by his college. 'These four walls contain what we think is good', Strathan explains. When a student comes to the library looking for a book, he draws it from its place in this collection, and somehow stands in deference to this cannon. Pride in the private organisation of college library collections might be evidenced by the fallout of the UL's effort to organise the digital catalogues of the Cambridge libraries centrally, which met much resistance from college librarians.

Visiting a college library today, a student might not be sensitive to its evolving history or even the complexities of the collection. But one experience seems universal. Strathan notes: 'You walk into a library like this and are overwhelmed by the weight of knowledge. In a sense, the only way to cope with it is to leave and to take away with you something personal.' For some, this is a book; for others, it is the inspiration drawn from writing beneath the light of a stained-glass window.

Letter to the editor

THE GATES SCHOLARSHIP AND MILITARY SERVICE

In the last issue of *The Gates Scholar*, one of our colleagues suggested that the aspirations of the Gates Scholarship Programme are incompatible with military service in general, and United States military officers in particular. We disagree.

Last year, Admiral James Stavridis, the current Supreme Allied Commander Europe, came to Cambridge as a part of the Distinguished Lecture Series. Dr. Stavridis, an intellectual leader and distinguished public servant, earned an International Relations PhD from The Fletcher School at Tufts University and has been involved in numerous humanitarian and diplomatic missions around the globe during nearly 40 years in the U.S. Navy. In his current role, Admiral Stavridis leads the military command of the North Atlantic Treaty Organization, one of the most effective peace-keeping forces of all time. Under the NATO treaty, Western Europe has enjoyed, since 1945, the longest period without a war in its recorded history.

In his lecture, Admiral Stavridis discussed the role of NATO military operations in the 21st century, advocating international cooperation and a global approach to security¹. The open, off-record dialogue that followed the lecture included conversations about the challenges of humanitarian assistance, nuclear proliferation, and peacekeeping operations in the Balkans. The intellectual exchange made it clear that Admiral Stavridis is applying his intellect to improve difficult and perilous circumstances around the globe, as with NATO's involvement in Libya since the lecture.

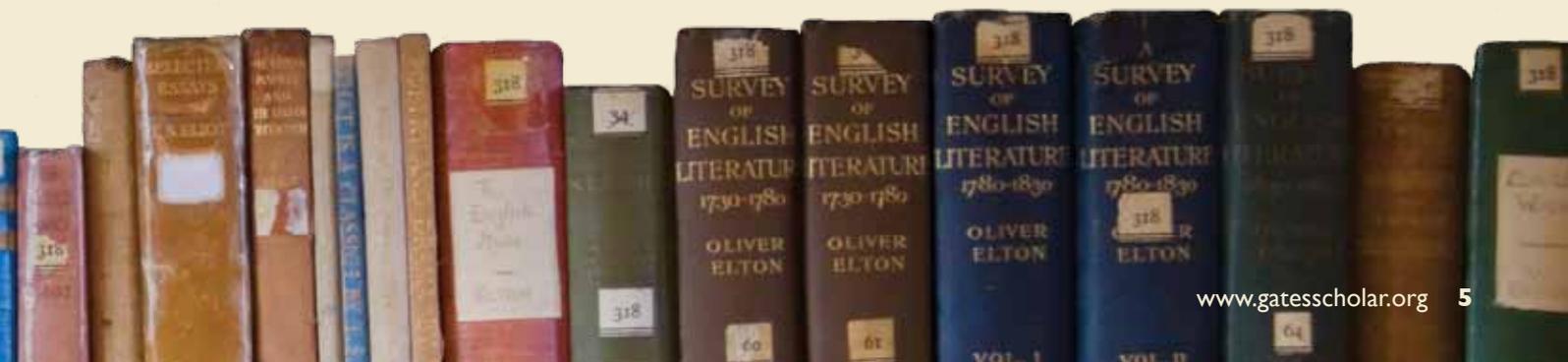
Justice, social responsibility, and human rights are noble ideals; but they are at times precarious and vulnerable. Military intervention is dangerous, expensive, and clouded with uncertainty, but to assume that it is always avoidable is callow. U.S. military officers have been selected as Gates Scholars each year since 2001 to cultivate an intellectual approach and global awareness that better enables us to face challenging decisions in uncertain conditions. We would submit that the task of protecting innocent civilians from murderous violence is an honourable calling, and embodies the Gates Scholars' principle of serving society at its most fundamental level.

In service to one's own society and to the wider world, Gates Cambridge Scholars have a duty and responsibility to continuously develop into thoughtful and courageous leaders, empowered by our Cambridge experiences to improve the lives of others. Inspired by scholar warriors like Admiral Stavridis, some of us will risk our lives in this pursuit.

Sincerely,

Peter Brereton *PhD Candidate Physics, Class of 2001*
Adam Comer *PhD Candidate Engineering, Class of 2009*
William Eucker *PhD Candidate Polar Studies, Class of 2008*

(1) The recording of the Gates Distinguished Lecture of 31 May 2010 is available online at <http://www.admin.cam.ac.uk/news/dp/2010052804>.



scholar profiles



ORIAN WELLING

PhD Candidate Engineering, Class of 2009

Growing up in rural Wisconsin, Orian was always fascinated by how the things around him were made, and how they worked. More often than not this meant that everything in the house, computers, VCRs, bicycles, would end up in pieces at some point. Over the years he's also learned how to put things back together, and to make creations of his own. His projects have ranged from building houses to designing silicon solar cells. He has re-built an old truck to run on vegetable oil, designed a solar water pumping system for a remote village in Indonesia, and even helped build a musical, robotic wine-glass player.

'Learning to overhaul my bicycle when I was 7 was what really put me on the engineering track', says Orian. No surprise there. Long distance cycle touring is Orian's other hobby (or you might say obsession). He peddled from Alaska to Argentina in 2009, and from South Africa to Egypt in 2009, both times on cycles he built.

After Cambridge, Orian hopes to move back to Wisconsin and start a company developing energy-saving components for vehicles. He currently researches how to push more efficiency out of gasoline engines by reducing displacement volume.

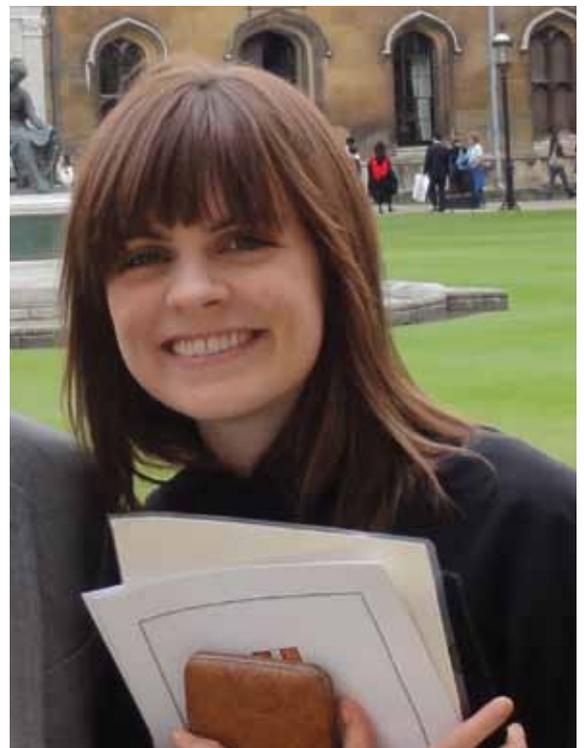
NIAMH SKELLY

MPhil Psychology, Class of 2010

It seems all good things eventually come to an end. It may sound silly to lament graduation, but Niamh is finding Cambridge a difficult place to leave. During her MPhil in psychology, Niamh developed such an appreciation for areas of psychological research that she was nearly enticed to continue on for a PhD.

But Niamh has long dreamt of practicing as a clinical psychologist, and using her research degree to inform her clinical work. This fall, she will be starting a job at St. Patrick's University Hospital in Dublin researching perceptions of quality of care among patients with schizophrenia and bipolar disorder. She hopes the experience she gains on the job will help prepare her for the clinical doctoral course she will need to fulfill this dream.

Luckily for Niamh, as a Gates Cambridge Scholar she will never really have to leave Cambridge *permanently*. She will always have 'family in Cambridge' and she can rest assured that while she may be gone to Ireland now, her ties to Cambridge will always endure.



EMMA ALDEN
MPhil History, Class of 2008

From a young age Emma was drawn to medicine; by comparison an interest in the study of its history happened relatively recently. By a stroke of luck she found herself in a history of medicine survey course during her second year of university, in which she pursued research on gender discrimination and sexually transmitted diseases in Victorian England. She was quickly taken with the field and started to consider how she might marry medicine with its history in a future career. In addition to gaining an appreciation for historical research, Emma also found a mentor in Dr. Susan Lawrence, the professor of the survey course, who Emma considers a driving force behind her decision to apply for the Gates Cambridge scholarship as well as for MD/PhD programs in the history of medicine.

Now in the second year of the MD/PhD program at the University of Pennsylvania, Emma continues to pursue research on sexually transmitted disease in the Victorian period. She says, 'I love proving to skeptics in the medical field that historical research can have a real impact on current problems in public health policy. History doesn't have to live in an academic bubble'.



PAULA ROSINE LONG
MPhil Middle Eastern Studies, Class of 2010

Paula Rosine Long hopes to bridge the gaps between art, activism, scholarship and fashion. Hailing from Carrboro, North Carolina, she studied English and Philosophy at Duke University before completing an MPhil in Middle Eastern Studies at Cambridge. Her dissertation on Edward Said suggests ground-rules for fruitful dialogue on conflicting Palestinian and Israeli narratives and discusses the ethics of merging activist work with the academy. In addition to being an avid activist herself, she publishes poetry and political opinion pieces. Her side-projects have included running a non-profit for children with life-threatening illnesses and working with NGOs abroad in the fields of special education and social justice. A self-taught seamstress, Paula Rosine recently moved to New York to study Fashion Design at Parsons (The New School for Design). One of her dreams is to create a fashion-industry or textile-design partnership with Middle Eastern women's collectives so as to promote social and economic empowerment, as well as intercultural collaboration, through art and design. She also hopes to use the clothing industry to promote mutually-beneficial partnerships across the Palestinian-Israeli divide and other conflict lines.



SOLAR POWER

Xueliang Liu *MPhil Candidate Physics, Class of 2010*

What comes to your mind when you think about solar cells? Rigid and expensive panels of glass and metal on rooftops? Would you think it'd be possible to make them out of clothing instead? That is precisely what researchers in my lab at the Cavendish are trying to do to reinvent the way we harness energy from the sun.

One hour of sunlight on earth is sufficient to power the world for a year, and we currently have technologies to efficiently convert light into electricity. However, these technologies cannot yet economically compete with the alternatives because solar cells today are mostly made from artificial 'diamonds' —high quality crystals of silicon forged by expensive and hard-to-scale technologies. But in recent years the field

of organic electronics (i.e. carbon-based plastics) has opened up exciting opportunities for new physics and technological advances that can change this.

Look all around in nature. The beautiful variety of colours of the flora and fauna comes from the unique interactions of their organic molecules with sunlight, which involves energy. The plants have acquired a way to harness, albeit rather inefficiently, this energy using photosynthesis, and we have taken our share of it from consuming the end products as food, or more recently in our history through burning their fossils. But can we do it more efficiently and cleanly today by understanding and improving upon nature's secret technologies?

The first breakthrough came in the realisation that organic molecules similar to those in plants can do what we have long thought only metals are capable of — conduct electricity. Then people started replacing the metals and semiconductors in some electrical devices with organic materials. The organic LED (OLED), for example, had been recently commercialised

Gates Scholars Forum:

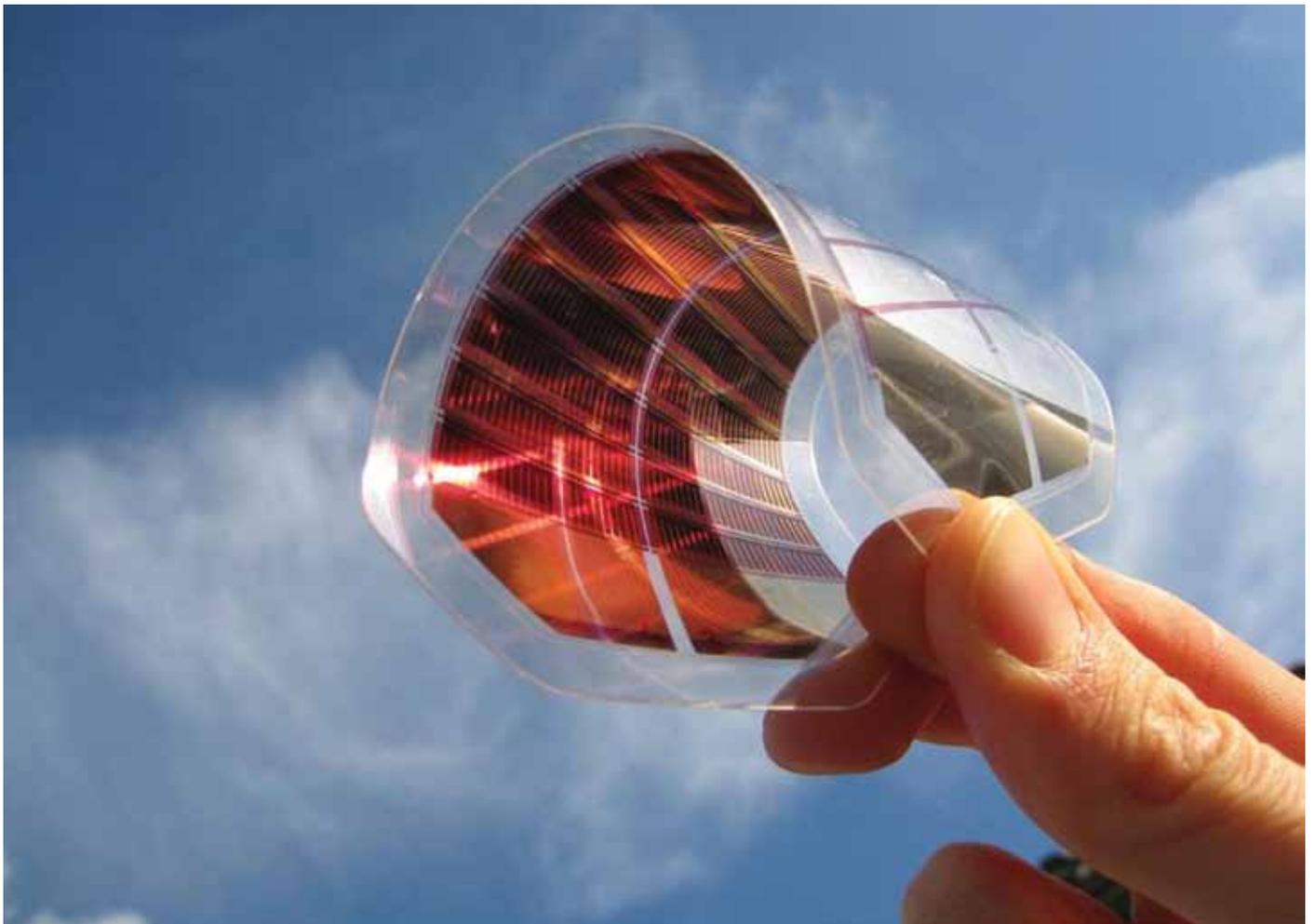
What is your most embarrassing Cambridge-related story?

My first year in Cambridge, I brought a cheap, 20-year-old North America to UK plug converter to use my laptop in the office. It had a big design flaw: a screw on the face of it connected to the live pin, and when I plugged it in, it shorted. The plug converter exploded in my hand, the whole corridor lost power, and the sysadmins were not happy with me. The year after that I was a case study in the Health and Safety lecture on electrical safety for all new engineering PhD students!

Joseph Bonneau
PhD Candidate Computer Science, Class of 2008

I was in Cambridge for less than a week, and was talking with my advisor and supervisor. They had just informed me that a formal lab meeting with our collaborators was approaching. I respectfully sought what I could do to contribute, and remembered that I should verify I would be appropriately dressed. So I said, 'I was thinking of wearing black pants to the meeting, would that be acceptable?' My advisor looked at me with raising eyebrows, and my supervisor, with a grin, said that would be fabulous. At my blank expression in return, he leaned over and informed me that here, pants are what go on underneath trousers.

Alexandra Kamins
PhD Candidate Veterinary Medicine, Class of 2009



How new techniques will change the future of energy production

for displays. The solar cell could all the more benefit from organic materials' strong and tunable light absorption, easy and inexpensive processing (similar to printing newspapers), and lightweight flexibility, which can reduce the cost of transportation and installation.

But despite these advantages, organic solar cells today still cannot compete with the currently dominant inorganic (i.e. silicon) technologies mainly due to their shorter lifetimes and lower power conversion efficiencies. Oxygen and water, elements vital to our own survival, are killers of organic electronics because they steal electrons from the molecules, making them lose conductivity. Therefore reliable encapsulation is crucial. On the other hand, to improve efficiencies, major research efforts have been undertaken in the areas of device architecture, molecular design and structural control. A working solar cell requires two different materials, called 'n' and 'p' types. The border between n and p is where the messengers of energy throughout the solar cell have to deliver the energy packets that they pick up from absorbed sunlight. Conventional solar cells are designed in a sandwich-like structure, which is good enough for high-quality silicon-based cells, but inefficient for organics, in which the energy messengers have much shorter lifespans. In organic cells, many energy messengers die before reaching the border. Consequently, energy packets from light absorbed far from the border are lost. The design breakthrough was in swapping the sandwich for a salad (technically, a 'bulk heterojunction'), with n and p types completely blended so that the average distance to the border is much

shorter and most messengers can reach the border to deliver within their short lifetime.

Currently, the most efficient organic system is described as a 'meatball spaghetti', an intimate mixture of polymer strands with C60 buckyballs. Chemists are continuing to cook better spaghetti and meatballs for higher performance. But the influence of blend structure or morphology on performance has also gained increasing attention. For example, efficiencies can be more than doubled by a little steaming, frying, or adding some extra exotic spice. Such simple, yet terrifically effective, methods are attractive for applications, but the difficulty lies in observing structural changes manifest at the one billionth of a meter level and understanding the mechanisms, which may direct us toward inventing even more effective methods. This has been my research area.

Finally, a renewable energy source like solar can have far-reaching influences beyond the realms of science and engineering. It can be a critical ingredient for development, particularly in parts of the world that are fortuitously gifted with abundant sunshine. Rapid progress has already been made in organic photovoltaics over the last decade, and the current lack of understanding conceals the potential for even further gains. So hopefully, organic solar energy can make an important contribution to science and society in the future.

In my flat on Fitzwilliam Street in January 2011, I began reading the papers of French diplomats stationed in Egypt during World War I. I travelled to the archives in Nantes the previous November, but it was only after the new year that I sifted through the documents. The reports detailed the upheavals of wartime Egypt, the rising cost of food, labour unrest and new British restrictions on a relatively free press. With war's end, Egyptian leaders sought a place at the Peace Conference in Paris, hoping to make their case for independence before the world. The British rejected the proposed Egyptian delegation, or Wafd, and a popular revolution erupted in March 1919. Egypt in the aftermath of the War, my PhD topic, seemed a long way from the Egypt of today. It was certainly far from my Cambridge flat. Suddenly, it was closer than ever.

As I streamed BBC Arabic, trying not to breach Pembroke's draconian bandwidth limit, I struggled to understand the analysts switching between formal and colloquial Arabic. I called several friends in Cairo but cell phone service was cut, so I did my best to make sense of the images of mass protests.

Despite having just read about civil-disobedience in Egypt in 1919, the images were foreign to me. They resembled nothing of the Egypt I experienced in June 2009, only days after President Obama's historic visit to the country. Staying with Cairene friends, born and raised in the city, I toured Egypt for nearly a month, visiting its ancient souks, storied Mosques and cafés where revolutionaries gathered to debate the British occupation in the early twentieth century. I absorbed the intoxicating chaos of Cairo's streets and marvelled at the splendour of the Nile. Aside from narrowly escaping speeding cars, my stay had not been dangerous. Nor had I witnessed anything like the social mobilisation that would take place less than two years later. The closest I came to a protest was watching the celebrations after Egypt's football team defeated Italy in the Confederations Cup. It was a brief moment of national unity. Drivers honked their horns and peaceful but boisterous mobs waving Egyptian flags roamed Cairo.

I was finally able to contact a friend when mobile service was restored. My friend, an investment manager, exemplified

Revolutio



The Middle East has been undergoing a remarkable period of change since the start of this year. Of 22 member states of the Arab League, all but three have experienced protests, with revolutions resulting in Tunisia (14 Jan) and Egypt (11 Feb), and civil war breaking out in Libya in March involving NATO air forces. Some governments have responded with brutal crackdowns in Yemen, Bahrain, and Syria. The spark that lit the flame of protest was the indignation of a Tunisian street vendor, who, unwilling to continue absorbing the injustices and humiliations of his society, committed an act of self-immolation that resonated with and spurred the masses into the streets in rejection of their authoritarian regimes and in eager pursuit of justice.

The fervour reached its height during the protests in Tahrir Square in Cairo, Egypt where the people were enkindled by a newfound hope for the future and a freedom to control their own destinies. Yet at this juncture, can the unity that

brought together disparate elements of society, Muslims and Christians, liberals and Islamists, maintain itself as the people of Egypt attempt to purge established institutions of corrupt practices while building new ones? Will the process carry forward with a broad consensus to fulfill the collective aspirations of the people, or will the unity fragment as entrenched interests seek to manipulate it?

The narrative is still unfolding and its course is unpredictable. In January a church in Alexandria was bombed, but those images were later replaced by one of Christians protecting Muslims while praying in Tahrir Square during the protests a month later. However, sectarian violence has returned with clashes between mobs of Christians and Muslims in Cairo that left two churches in flames on 8 May. Further concern at the rise of Islamist influence was voiced by Sir Richard Dearlove, former head of the British Secret Intelligence Service (MI6), to Gates scholars at the distinguished lecture on 27 April when

the young, tech-savvy professionals stewarding the uprisings. He had been in Tahrir Square the previous day, observing the relative absence of Brotherhood activists, the diversity of the protesters, and the increasingly violent effort of the security services to intimidate protestors. Few thought the situation in Egypt was sustainable, but even fewer expected it to implode while Hosni Mubarak was still alive. Perhaps, though, the January Revolution should not have been so surprising. As recent as 2005, protests had shaken the regime, but the better analogy is 1919. Just as the 2011 protests were shaped by events in neighbouring Tunisia, regional events also helped spark the uprisings in 1919. In the prelude to World War I, Egypt had seen an influx of Syrian and Maghrebi agitators who contributed to the anti-colonial organisations forming in Cairo, Alexandria and Port Said. The protests of 1919 marked the first time women took to the streets, and they, too, were at the forefront of the recent demonstrations. Like Facebook and Twitter, in 1919 protestors exploited new social media, including newspapers, pamphlets and printed advertisements to coordinate strikes.

Greek and Italian workers, as well as prominent Copts and Jews, played a part in the national struggles of 1919, not dissimilar to the cooperation across visible class and religious lines characterising the events of 2011. Similar to 2011, when the Brotherhood was slow to engage with the revolutionary process, waiting cautiously on the side-lines while secular groups took the initiative, 1919 produced a largely secular-national movement that centred on an end to the British occupation, calls for a constitution and improved labour conditions for the country's unskilled workers.

Although Britain granted Egypt nominal independence in 1922, Egypt's liberal national movement fragmented and ultimately subsided as the interwar years unfolded. It was eventually the army that seized power in 1952. It subsequently stifled any opposition, targeting, especially, the elements that had long promoted democratic reforms. Will history repeat itself?

Max Reibman

PhD Candidate History, Class of 2010



n in Egypt

he expressed that the Muslim Brotherhood is 'at heart a terrorist organisation'. It will remain to be seen what kind of influence they will exert on the new Egypt.

Two divergent forces appear to be on hand. The first is embodied by the youth movements expressing politically liberal ideals of protection of civil rights, free, fair, and democratic elections, and the pursuit of justice and elimination of corruption. The second force arises from the strong religious tradition in the region and the sympathy for and fascination with the idea of an Islamic state, whose characteristics outlined by most of its supporters are in conflict with modern notions of human rights as enshrined in various UN declarations and covenants that protect the equality of women with men and the right to religious freedom. Will the call for civil rights, democracy, and justice translate into a transformation of the attitudes and values requisite for upholding these principles? Will sincere spirituality and the upholding of cherished moral values over-

come extremist religious ideologies? The coming months will be captivating to watch how events unfold in Egypt and what new tone will be set in a region that has lived through a history of colonialism, authoritarian rule, and outright tyranny.

An encouraging sign of the youth movements has been the rejection of the authoritarian state arising from dissatisfaction with the lack of opportunity and a desire to participate fully toward the betterment of society. The youth have rejected as norms those behaviours and attitudes that resulted in injustice, corruption, and inequality, and which underlie despotic regimes. Will this be a prelude to new movements outside of the Middle East that lead ultimately to a rejection of the phenomena of the authoritarian state, and in its stead to the development of systems that ensure the peace and tranquility of its peoples with justice as the ruling and safeguarding principle?

Nabil Wilf

PhD Candidate Biochemistry, Class of 2007

The Japanese triple and Japan

Gitte Marianne Hansen

PhD Candidate Asian and Middle Eastern Studies, Class of 2009

In just moments thousands of lives were lost and tens of thousands more were left homeless after the earthquake, tsunami and nuclear disaster in northeast Japan. Psychological trauma, including that suffered by watching and re-watching the enormous tsunami devour entire coastal towns of the best disaster-prepared nation in the world, is a long-term challenge.

With today's technological connectivity, being far away from the epicentre does not diminish the traumatic impact. As a recent Cambridge PhD graduate from Japan writes, 'I am lucky. Since the earthquake I have been with my family, seeing events unfold from inside Japan. You, who are all far away in Cambridge, must be extremely worried – probably impatiently waiting without being able to do anything'.

Japanese in Cambridge

Cambridge has three Japanese societies: the Japanese Interdisciplinary Forum (Toiro-kai), which arranges academic events, the smaller family-friendly Cambridge Japanese Society (Nihonjin-kai) and the Anglo-Japanese Society, which is run by undergraduates, many with an international upbringing and therefore often not considered 'real' Japanese.

Traditionally these three societies rarely interact. However, with the devastating news many quickly bonded, using their mutual identity of 'Japanese abroad' to cope with the shock.

Business as usual

Apart from immediately joining the UK 'Japan Earthquake Relief Fund'. Toiro-kai carried on with events as planned. On the night after the earthquake, members took part in a panel discussion about Japanese companies despite one panellist's fears that both his grandmothers had drowned in the waves. A meeting with high-school students also took place two days later.

This pride to carry on with business as usual should be understood as a way to overcome anxiety by insisting on continuing the present into the future.

Grief

A Japanese PhD student in psychology and her British husband, a minister of the Church of England, organised a memorial service for the victims in Japan. Held at Selwyn College chapel, the Christian service incorporated Buddhist elements and undergraduates from the Anglo-Japanese society read out messages they had received from Japan that expressed forward-looking togetherness and encouragement.

After the service a group of Japanese professionals and university students, including two language school students from northeast Japan who had only re-established contact with family and friends the previous day, had a home-cooked

The disaster Japanese people abroad

Japanese dinner. Although this mix of age and social position usually requires a certain level of formal language, their common 'Japanese-ness' seemed to bring each of them comfort, encouraging friendly exchanges from the start.

Action

During dinner, one language school student said that he refused to just sit and watch. Despite the risk of breaking British fund-raising laws, he decided to raise funds on the streets of Cambridge. He later described a chance meeting with a Japanese housewife, who had written to the Mayor and secured a fundraising permit one day after requesting it (the process usually takes two weeks).

The two immediately joined forces, and aided by Anglo-Japanese Society members, raised nearly £10,000 in just two days. When I congratulated them, the housewife laughed, 'I know where the well-to-do shop, so I told the students to meet me at Waitrose.'

A few days later, a general meeting at Wolfson College resulted in a diverse exchange of ideas between Cambridge-Japanese university undergraduates, PhD students and professors as well as Japanese pensioners, housewives, children and working professionals. After a brief introduction, one person suggested we do a round of jikoshōkai, or self-introduction, a practice that, apart from revealing information

about social hierarchy (a necessity to properly converse in Japanese), also functions as a unifying ritual bonding individuals to the group. However, on this occasion, by allowing individuals a chance to share feelings, empathise and listen to others, it served as so much more.

One company employee read an e-mail from his friend in Fukushima. Others recalled stories from the 1995 Kobe earthquake, which gave hope to those who have only witnessed disaster from media-created spaces.

The initiatives taken by Japanese in Cambridge in the immediate aftermath of the disaster have been followed by charity raffles, cake sales, concerts, etc. With the rebuilding challenge Japan faces, the raised capital will be put to good use.

Unlike poverty-stricken Haiti where thousands still suffer after the 2010 earthquake, Japan, as one of the world's strongest economies, will rise again. But as the recent PhD graduate wrote, 'the charity events will surely also foster psychological support to Japanese people outside Japan'. My own involvement alongside Japanese people in Cambridge has indeed helped me gain strength to deal with my own trauma and to find hope for Japan.

*a more detailed diary version of this article is available at <http://infocus.asiaportal.info/2011/03/29/blogsin-focus2011marchaway-home-when-disaster-strikes/>

LET THEM VOTE!

Emily Gladden *MPhil Candidate Criminology, Class of 2010*
Fiona Roughley *LLM Candidate Law, Class of 2010*

The UK bans all convicted prisoners from voting. The blanket ban dates back to at least the Forfeiture of Goods Act of 1870. In February this year, MPs in the House of Commons voted 234 to 22 to keep the ban. And yet the question remains: why?

When the English courts flatly rejected arguments for lifting the ban, prisoners took their claim to the European Court of Human Rights in Strasbourg. In 2005 they won a partial victory: according to Strasbourg, Article 3 of the First Protocol of The European Convention on Human Rights (to which the UK is a party) requires that at least some prisoners must get the vote. Five years later, none yet have it.

The underlying issue

Calls to continue to deny all prisoners the right to vote are vociferous and popular. Of the dissenting voices, the Howard League for Penal Reform's is perhaps the loudest. However, even it calls for only some prisoners to have the vote.

In our view, the public debate has missed the bigger question: why should prisoners be disenfranchised at all? If we start from the principle that in a democracy all citizens have the vote unless there is a compelling reason to deny it then surely we must need compelling justification before removing this fundamental right from prisoners.

Is there a justification?

The most common arguments for denying prisoners the vote are (a) that it is a form of punishment prisoners deserve; (b) that revocation of voting privileges is the legitimate consequence for those who break the social contract; and (c) that prisoners are morally suspect and should not be trusted with the vote.

None are convincing.

For one, there is no link between disenfranchisement and the blameworthiness or harm caused by the offender. Other crimes that are not met by a custodial sentence may be equally anti-social or 'un-citizen like' and yet they do not result in disenfranchisement. Moreover, the loss of the right to vote plays no overt role in sentencing and there is no evidence to support claims that denying prisoners the vote deters them from crime or helps their rehabilitation.

Arguments based on a hypothetical social contract are also unhelpful. True, convicted prisoners have broken the 'rules' of society. But so have convicted persons with non-custodial sentences. Imprisonment is the

physical removal of a person from the community (and revocation of any necessarily consequential rights such as liberty and freedom of association). It is not an expulsion from all aspects of society. Prisoners are still citizens of the country and remain affected by government policies.

The moral argument is also fundamentally misconceived. Suffrage is a right not a privilege. Morality has no role to play because voting is an expression of political equality not moral worthiness. As Albie Sachs, former Judge of the Constitutional

'Morality has no role to play because voting is an expression of political equality, not moral worthiness.'

Court of South Africa said: 'The vote of every citizen is a badge of dignity and personhood. Quite literally, it says that everybody counts...it declares that whoever we are,

whether rich or poor, exalted or disgraced, we all belong to the same democratic...nation; that our destinies are intertwined in a single interactive polity.'

What do other countries have to say?

Around the globe, practice is inconsistent. Bulgaria, Estonia, Georgia, Hungary, Lichtenstein all share with the UK a blanket ban on prisoners voting; Australia, France, Germany, Greece, Italy, the Netherlands, Poland, Turkey and Romania let some prisoners vote; and in Croatia, Denmark, Finland, Macedonia, Serbia, Slovenia, Spain, Sweden and Switzerland all prisoners are able to vote. In the US, 14 states impose life-time bans on voting for anyone with a felony conviction, even after the cessation of imprisonment. Only Maine and Vermont allow prisoners to vote.

So why give prisoners the vote?

There's a whole host of reasons as to why suffrage is constructive for prisoners. Susan Easton in the *Guardian* observed that it would 'give prisoners a stake in the democratic process and promote a sense of civic responsibility' perhaps contributing to their rehabilitation. Those arguments aside, in our view, the single biggest reason why prisoners should get the vote is because, in the absence of a specific connection between the crime committed and the electoral process, there is no sufficient reason to deny it to them.

Political equality is fundamental to democracy and it is the presumption from which any matter of suffrage must start. We may not like some of the horrific, stupid and even inexplicable conduct of prisoners in their past. That is why we incarcerate them and attempt to rehabilitate them. But even our dislike and moral disapproval cannot also justify denying them the vote. The UK's timeline has already expired. Give them the vote.

'Political equality is fundamental to democracy and it is the presumption from which any matter of suffrage must start.'

GLOBAL CONSULTING

Noa Epstein *MBA Candidate Management, Class of 2010*

As MBA students at the University of Cambridge Judge Business School (JBS), we get 5 weeks in spring to do a Global Consulting Project (GCP) for companies and organisations worldwide. Our team, comprising Axel Wittmann (Austria), Lola Adebajani (South Africa), Yutaro Kojima (Japan) and me (Israel), is doing a consulting project for Google, who is partnering with Mercy Corps (NGO) on the Arab Developer Network Initiative (ADNI). The project is geared towards training and mentoring Palestinian software developers to build and monetize mobile and web applications. Our goal is to develop an implementation plan for rolling out the initiative in the Palestinian Territories, in a way that will be scalable to other Arab countries.

How the project came about

In addition to having a great project experience and working with a leading company, I wanted to use the GCP opportunity to make a real difference. Passionate about peace building in the Middle East through business and entrepreneurship, I pitched the consulting

project to Megan Smith, Google's VP of New Business Development and Director of Google.org, when she spoke at the Silicon Valley Comes to Cambridge event in November 2010. Megan connected me with Gisel Kordestani (Hiscock), Google's Director of New Business Development, who is passionate about busi-

ness development in the Middle East, and our team was commissioned to work on ADNI.

Between London, Tel Aviv, Jerusalem, Ramallah and Gaza...

Our team has met with a wide range of stakeholders from the technology and business communities in London, Tel

Aviv, Jerusalem and the Palestinian Territories, to gain insights for the ADNI training, mentorship and seed funding models. We have surveyed and interviewed Palestinian software developers to better understand their needs. Palestinian software entrepreneurs face challenges that resemble a kaleidoscope. The closer you look, the more fragmented and complex the reality you find, but at the same time, twisting and turning the device can reveal amazing shapes and opportunities. These are exciting times for the Palestinian ICT ecosystem. Sadara, the first venture capital fund to invest in technology ventures in the West Bank, was launched this month and large U.S. technology companies, including Google, Cisco, HP, Intel, Mediacom and Salesforce,

com, are showing real commitment to ICT business development in the Palestinian Territories through investing in PITI (Palestinian Information Communications Technology Capacity Building Initiative). ADNI is all about leveraging these recent developments and enhancing the ecosystem of Arab software developers through training, mentoring and funding of early-stage startups.



DESIGNING POLICY

Eva-Maria Hempe *PhD Candidate Engineering Design, Class of 2007*

Using design methods and thinking in policy marks a shift from looking for approaches that work and trying to imitate them elsewhere to looking for how to develop approaches which work in a local context.

What has design got to do with policy? It strongly depends on what you understand by design. Often design is equated with aesthetics, making pretty things which are (more or less) functional. However a look in the dictionary reveals that design is about purposefully and consciously creating an object or a service. In the meaning design is highly relevant for policy making. I will focus on organisational decisions surrounding public services, but the call for more design in policy making does certainly apply more generally.

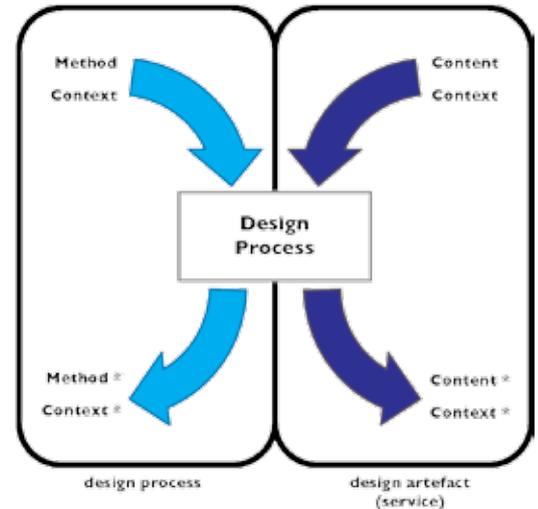
Design processes are characterised by a thorough exploration of needs followed by divergent phases where a multitude of ideas are generated and convergent phases where these are carefully and systematically assessed. In general, the process of solution generation and refinement is highly iterative and ideally solutions are tested on a small scale before they are implemented. By contrast, policies are often made ad hoc: politicians or government officials identify a need and come up with a solution to meet it. There is usually no or only a half-hearted exploration of alternative concepts and it is also rarely questioned if the identified needs are perhaps only symptoms of other, underlying problems.

A linked problem is that it is popular and often encouraged to take a 'best practice' approach to meet the need. This means looking for a solution which works elsewhere and attempting to imitate it. However, this approach

overlooks the fundamental importance of a multitude of contextual factors. A public service is always strongly linked to the social system it serves. As each network of social interactions is unique, it is likely that the supposed best practice is not at all best practice for the local situation.

A design-based process for developing policy looks at what works elsewhere only to obtain an idea about which factors make it work. Tore Rose, a former UN Resident Coordinator, once outlined that results ultimately depend on actions; actions follow from design; and design is empowered by knowledge. Thus substantial effort is placed on gathering knowledge on what is really going on and how this could be addressed. 'Best practice' can provide guidance on what this knowledge might be, who should be asked for which information. This way 'best practice' actually turns into 'best process'. However, as there is an infinite number of factors which could have an effect — starting from the proverbial butterfly flapping its wings — it is also an important part of design to prototype, experiment and test ideas first, although this might not always be possible.

It is useful to distinguish two types of knowledge in a design process — knowledge concerning the artefact and knowledge concerning the process of designing. The latter is largely concerned with methods. How to carry out the design process, which information sources can be accessed and what is the overall attitude towards the project. Artefact knowledge, on the other hand, is concerned with what is being designed, what the immediate and underlying needs



are, and what the available resources and conditions are. For example, when designing a hospital in a remote location it has to be taken into account that it might be more difficult to find highly trained staff, but that on the other hand, staff turnover might be lower than in a city. Both types of knowledge also have a contextual dimension. These are not specific things, like the methods used in the design process or the content of the design task, but are more general, such as where the service is operating and the design takes place. Examples are local attitudes, beliefs or custom. Designers thus play a role coordinating people in power, bureaucrats and also ethnographers and other experts on the particular culture to ensure that local needs are really understood and people are able to engage and participate in the design in a meaningful way.

This is a field which is just emerging and many of the participants have only recently started to talk to each other and develop a shared vocabulary. But the potential contributions of design thinking to more effective policy making are receiving more and more attention, for example, by the English NHS or the United Nations. The basic issues are how to find out the true needs, critical contextual factors as well as meaningful ways of engagement and knowledge acquisition. These are the same in all fields of public services, from health care services in the developed world to security activities in the developing world. The particular design processes, however, will depend on both the type of public service as well as — of course — contextual factors.



Working together for increased success, or cooperation, is a key factor gluing together human society, and plays an important role in the lives of many other species from bees to meerkats. By understanding cooperation in non-human animals we can obtain clues to the evolutionary origins of our own cooperation and factors that help to stabilise it. Such research can also provide important insights into the ecology and cognitive abilities of the species we are studying.

Many animals cooperate to obtain food, either with members of their own species or others. The most complex form of cooperative hunting is coordination, which involves individuals playing specific roles within a hunt (e.g. blockers and chasers), and in some cases communicating. Until recently this was known only for mammals and birds. However in 2006, Prof. Redouan Bshary and colleagues showed this behaviour is not restricted to these taxa, which are traditionally considered among the most intelligent. He found that giant moray eels and grouper fish on coral reefs increase their prey capture-rate by cornering prey-fish with their complementary hunting techniques of slithering through cracks and crevices in the reef (morays) and high-speed bursts out in the open (groupers). The grouper initiates a joint hunt by shimmying its body next to the moray's, and the two generally swim within 2m of each other while hunting. The grouper can also indicate the position of hidden prey to the moray via head-down headshakes.

My PhD research aims to probe the depths of this interaction by firstly gaining a greater understanding of its natural history, and then determining what cooperative and cognitive feats these fish are capable of via manipulative studies. Currently I am conducting a field study on the Great Barrier Reef to determine if only certain individual groupers cooperate and whether they favour certain individual moray partners. I will use this information to inform a manipulative study which will examine whether groupers 'choose the best collaborator', a feat currently thought to be restricted to chimpanzees. Among other things, I hope my research will help to shift public attitudes away from fish as being simply something for the plate.

COOPERATIVE FISH

Alexander Vail *PhD Candidate Zoology, Class of 2010*



Migrat

Wendi Adelson *MPhil International Relations, Class of 2002*

Here in Tallahassee, Neighborhood Health Services accepts the patients that fall through the cracks of our social safety net. As Director of a Medical Legal Partnership that connects the Colleges of Law, Medicine and Social Work at Florida State University, I get the chance to unite students from each discipline around assisting some of these people. The idea behind such an interdisciplinary collaboration is not new, and there are many variations on this model world-wide. Our model focuses on understanding and addressing the social determinants of public health and inspiring public interest commitments in our students.

Part of the reason I was chosen for this position is that the health clinic identified immigration assistance as one of its two main legal needs. For the past ten years — before, during and after my time as a Gates Scholar — I have been deeply engaged with questions of human migration. Since law school, my practice and teaching have focused on the intersection between child and immigrant advo-



alumni updates

The first get-together event for Gates Alumni in Asia was held in Bangkok on 20 February 2011. All three Gates alumni who currently reside in Thailand (Diane Archer, Ornsaran Manuamorn, and myself) attended this event with partners. We also invited our guest advisor (Khun Pajera) who was the former President of the Cambridge Thai Society to join and give us a whole range of ideas of how to kickstart Gates Cambridge alumni activities in Thailand. We agreed that for our next alumni activities we will organize a talk with Cambridge Thai Society, and will help promote Gates Cambridge scholarship as well.

Osornprasop Sutayut
PhD International Studies, Class of 2002



ting *into* health

cacy; I have represented victims of human trafficking, asylum seekers, unaccompanied immigrant children, and those who have experienced violent crimes. As Director of this Medical Legal Partnership, I will continue to work with immigrants, provided that they seek medical assistance at the clinic. When I interviewed for the position, the law school inquired about the connections between immigration and health, not certain of their definite intersection. I offered this example, one I have seen all too often: Let's say that an undocumented immigrant woman enters the health clinic, suffering from bruising, severe anxiety, and perhaps a broken limb. If this woman is injured as a result of an abusive relationship, then she has several options to petition for her own immigration status. If we could help her be aware of these possibilities, then perhaps her injuries would stop, and her anxiety would lessen.

Countless times when working with my clients, I wished that I also had mental health training so that I could more fully

care for all of an individual's needs resulting from the traumas of trafficking or persecution. The Medical Legal Partnership uses community resources from multiple disciplines (social work, law and medicine) to assist vulnerable immigrant clients with all their needs. Healing broken spirits and bones sometimes takes a village.

From my time in Cambridge, where I studied migration policy, to my hands-on work now, I am still employing many of the skills I acquired as a result of my time in the UK. As a Gates Scholar, I had the chance to test the limits of my intellectual and cultural understanding: two skills that I continuously practise and hopefully improve upon as part of my current work. As individuals continue to migrate to other countries, and illness fails to recognize international borders, the connections between global health and human migration will only increase. As Gates Scholars (and alumni), we have the fortune and obligation to be a part of finding solutions to emerging and vexing challenges like these.

The visit of Prof. Robert Lethbridge, Provost of the Gates Cambridge Trust, to Singapore in March 2011, provided a perfect opportunity to inaugurate the city-state's chapter of the GSAA. Four Gates Alumni currently resident in Singapore attended an informal lunch at the Min Jiang restaurant in Singapore on 10 March. We had a great time getting to know the Provost and his wife Vera, reminiscing about our time in Cambridge, reflecting on where we were headed in life, and what the Gates Scholarship meant to each of us. The fact that the GSAA office arranged this amidst the Provost's hectic schedule of meeting the leaders of the country (most of whom seem to have attended Fitzwilliam College!), reminded us of being part of a unique venture, and one we are proud to be ambassadors of. We hope this to be the first of many events here, and ex-



tend an invite to all Alumni and Scholars passing through to get in touch. We'd be happy to use you as an excuse to indulge

in some Gates and Cambridge nostalgia!
Anand D Jeyasekharan
PhD Oncology, Class of 2004

