Newsletter of
Darwin College
Spring 2008

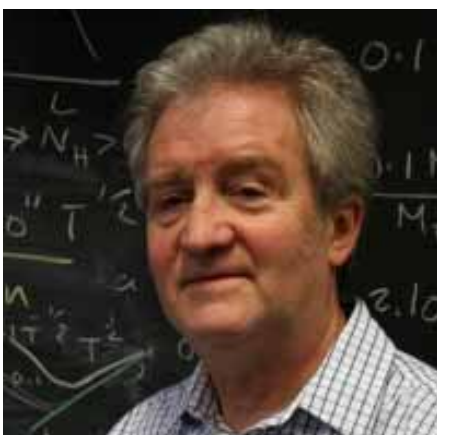
THE DARWINIAN

Science Prospers in Darwin

Presentation of the Medical Futures Cancer Innovation Awards. From left: Michael Buerk, Ron Laskey, Nick Coleman, Nicolaus Henke (of McKinsey & Company the award sponsor), Rory Bremner. Joanna Lumley was also present.

Dr. Nick Coleman and **Professor Ron Laskey** (Fellow) have won two national awards: "The Medical Futures Translational Research Award for Cancer Innovation" and "Overall Winner in the Medical Futures Cancer Innovation Awards". The Medical Futures Innovation Awards aim to encourage, support and reward new ideas and advancements in healthcare that may help improve people's lives. Nick Coleman and Ron Laskey's awards were 'for their work on improving identification of cancer cells in body fluids and tissue samples.' Ron, who is Director of the MRC Cancer Cell Unit in the Hutchison/MRC Research Centre on the Addenbrooke's site, has been the recipient of numerous prestigious awards over the past few years for his ground-breaking research on cancer diagnosis. The Darwinian featured his work in our Summer 2001 issue available as a pdf on the alumni webpages at: www.dar.cam.ac.uk/darwinian/issue1/issue1.pdf

Professor Andy Fabian (Vice Master) has been awarded the 2008 Dannie Heineman Prize in recognition of his outstanding contributions to astrophysics. The Dannie Heineman Prize is jointly awarded by the American Astronomical Society and the American Institute of Physics. Andrew Fabian is a Royal Society Research Professor at the Institute of Astronomy, Cambridge where his current areas of research include galaxy clusters, active galactic nuclei, strong gravity, black holes and the X-ray background. He has also worked on X-ray binaries, neutron stars and supernova remnants in the past. Much of his research involves X-ray astronomy and high energy astrophysics. His notable achievements include his involvement in the discovery of broad iron lines from active galactic nuclei, for which he was jointly awarded the Bruno Rossi Prize in 2001.



Vice-Master Professor Andy Fabian

Professor Jennifer Clack (Fellow) has been awarded the Daniel Giraud Eliot Medal by the National Academy of Sciences for her work studying the transitional period of evolution where creatures moved from water to land. Professor Clack is Curator of Vertebrate Palaeontology at the University's Department of Zoology.

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Her work looks at the evolution of tetrapods, vertebrate creatures with four limbs which developed from fish. The first tetrapods evolved from fish around 370 million years ago. Over many millions of years they developed into a wide range of life including birds, reptiles and eventually mammals and human beings.

Professor Jennifer Clack

By studying fossils Professor Clack has been able to pinpoint many stages of the evolutionary process including the development of lungs, limbs and other anatomical changes necessary for life on land. The National Academy's Daniel Giraud Eliot Medal was established by Margaret Henderson Eliot and has been awarded since 1917.

The 'Real' Marathon

On 4th November 2007, I stepped back 2500 years and ran the original marathon. In 490BC, the Athenians advanced to meet the armies of the Persian King at a place called Marathon in order to defend their way of life from being overrun by the Persian despot. The Persian King had already overrun the Spartans at Thermopylae and now sought to crush the last vestiges of Greek power. The fate of the western world hung on the battle and a much smaller army of well-trained Athenian hoplites eventually triumphed over the Persian armies. The ancient writers claim that only 192 Athenians were killed and all were buried immediately in a mass burial mound which can still be seen at Marathon today. A runner, fresh from the battle, still clad in his armour, called Pheidippides, was sent back the 26 miles to Athens to tell of the great victory. He ran at full pelt and arrived in the city to deliver his message; "nenikesamen" - "we have won!" He promptly died from his exertions. Many centuries later, when the modern Olympics were first staged in Athens in 1896, this historic run was turned into the event we now know as the Marathon.

It was this famous run that I attempted this November in the Athens Classics Marathon, which creates the ancient route as closely as possible from the battlefield

at Marathon to the centre of the ancient city of Athens. The course is known as one of the most difficult on the world marathon circuit and anyone familiar with Greece will know why: the hills are steep and plentiful. I and 9 friends, all running for different charities back in the UK (the Stroke Association in my case), pushed through the km markers one by one, through rain, sleet, sunshine and sharp winds to reach the centre of Athens and the Panathenaiko stadio - the stadium built for the 1896 Olympics. The top Kenyan runner finished the race in 2h 14min - a new course record - others cooly chatted on their mobile phones as they ran, but we achieved our feat at a more modest pace, finishing in-between 4 and 5 hours. Not a record, but a unique experience stretching out across the centuries as we felt the pain and the elation Pheidippides once felt. Truly, one for the memory books.

Michael C. Scott
Moses and Mary Finley Fellow in Ancient History

Old Darwinian Garden Party

Friday 11th July 2008
6.00pm to 7.30pm

Come and join us for this year's Darwin College Society Summer Party!

The College invites you and your family to an informal buffet supper held in the College gardens if the weather is good. Come along and meet up with old friends in the College's beautiful garden. Come straight from work or feel free to drop in at any time between 6.00pm and 7.30pm if you are travelling from further afield!

After the party many people take the opportunity to hone their punting skills or adjourn to the College bar.

Please e-mail or telephone your acceptance by Friday 4th July 2008 at the latest. E-mail alumni.office@dar.cam.ac.uk, phone +44 1223 335690.

When you contact us please provide the following details:

- Your name and when you attended College
- The number and names of the guests you are bringing
- The ages of any children attending
- Your contact e-mail address and telephone number

We look forward to seeing you there!

From the Alumni Office

Thank you to all of you who made a gift to the postal fundraising campaign that we organised jointly with the Cambridge University Development Office. This was the first time that Darwin College has run an 'annual fund' and we didn't know quite what to expect. However, we have been overwhelmed by your generosity. The Alumni Office has also been heartened with all the letters and e-mails of reminiscences and encouragement we have received.

If you have been meaning to send a gift to this campaign, it is not too late. If you have mislaid the gift form please use the form enclosed in the centre of this newsletter. Or you could use the on-line giving facility; here you can give either by credit card or direct debit. Go to www.dar.cam.ac.uk/alumni/givingtodarwin1.htm and click on the Charity Aid Foundation 'donate now' logo.

Another first for Darwin College is the 'networking' talk and meal we are organising. This will be on Friday 13th June in College and is aimed at Darwinians who studied or work in computing, mathematics and engineering. Unlike reunion dinners, this will be an event where you can meet and talk to contemporaries in your field. Relevant College Fellows and students will also be invited.

The evening will begin at 6.30pm with two informal talks looking at the future of computing from the perspective of renowned experts. Darwin College Honorary Fellow, Professor Sir Tony Hoare will address the topic 'Being sure about computer programs' followed by Darwin Fellow, Professor David MacKay on 'Being less sure about computers'. We are thrilled to have two such eminent speakers. You should have already have received an invitation, if you haven't but would like to attend, please e-mail the Alumni Office to reserve a place.

As you may be aware Darwin College is changing. There is a new Porters Lodge in the Rayne Building and, through an American donor's legacy, funding the purchase of a house in Newnham Path. Originally a Victorian terrace of four cottages it was remodelled into a single house in the 1970s for a retiring Master of Peterhouse. It is just two or three minutes from the College, behind The Malting House and close to other College properties. We plan to re-divide it, to provide two visitors' houses.

Thank you once again for all your emails, letters and phone calls. Please do remember to come and see us if you are in Cambridge.

Stop Press – No 4 Newnham Terrace

The College has an unexpected chance to buy No 4 Newnham Terrace. This is the only house in the Terrace still not owned by The College and the last piece in the jigsaw to consolidate the College's footprint from the Silver Street Bridge around the reach of the river to the Granta. The Diocese of Ely currently owns it, and has recently been in touch about selling us the house. It would provide more student accommodation right on the main site, and allow for the house gardens to be opened into the main gardens, greatly increasing the facility and making already beautiful gardens magnificent! Although it is clear that the College will need to raise a large amount of money to cover the purchase and conversion costs, we are sure that all Darwinians will say that this is a 'must do' project – more news when we have it.

The Darwin Alumni Team consist of:

The Bursar and Development Director, Peter Brindle. Tel +44 1223 335664. E-mail: **bursar@dar.cam.ac.uk**

Alumni Secretary, Sophia Smith. Tel +44 1223 335690. E-mail **alumni.office@dar.cam.ac.uk**

The Bursar's Secretary, Sandra James. Tel +44 1223 335666. E-mail **sj265@cam.ac.uk**

Secretary to the Darwin College Society, Andrew Prentice. E-mail **andrew.prentice@lshtm.ac.uk**

'No 4 Newnham Terrace – the missing piece to the jigsaw which will allow Darwin to extend its gardens right around the bend in the river.'

A more open and fresher look to the Porters' Lodge.

The new cottage on Newnham Path.

2008 Darwin Lecture Series – Serendipity

This year's Lecture Series theme of 'Serendipity' seemed to appeal to both speakers and audience. The lecturers responded, as if to an exam question, by tackling head on how far for their discipline, to use Pasteur's expression, 'chance favours the prepared mind'. The audience's enthusiasm was shown by their consistently filling the lecture theatre and even, at times, the overflow. The series was started, appropriately, by the Vice-Master, Andy Fabian, who has organised so many of these series since the first, 23 years ago. Sensitivity to the significance of apparently irrelevant data has been crucial to many key developments in contemporary astronomy, as he made clear in a fascinating survey of recent advances. Simon Singh was later to provide an often hilarious account of the development of the 'big bang' theory of cosmology enlivened by, among other props, a glowing gherkin. Demonstrations also interspersed Richard Friend's discussion of what made for successful physics research. He combined wry comments on the politics of journals and grants with a compelling plea for independence, openness of mind, and eclecticism. Moving to the life sciences, Robin Weiss came at only four days notice to deliver a broad-ranging and captivating account of the battle being fought by microbiologists against HIV/AIDS.

Away from 'hard' science, the role of serendipity was seen as less significant by Susan Alcock, whose account of classical archaeology made clear that planning and hard work lay behind most happy discoveries. As a journalist turned writer, Simon Winchester's view, given in a biographical narrative that held the audience spell-bound, was that good stories come to those who seek them out. A similar take on the world of politics came from the distinguished Darwin alumnus Oliver Letwin, whose careful argument led to the conclusion that good politicians nurture the electoral climate within which their policies may flourish. It was left to Richard Leakey, in a virtuoso performance, to reinstate the notion of serendipity in the discovery of the origins of mankind. It could be seen both in the chance finding of fossils, and also in the apparently chance circumstance that got our forebears up on two legs, with sensitive hands, and a facility for speech. It is to be doubted whether any of next year's speakers, addressing the theme of 'Charles Darwin', will see serendipity as being a feature of his achievement.

Willy Brown

Travels in Antarctica

Darwin has always had strong links with Antarctica especially through the Scott Polar Institute whose former Director, **Gordon Robin**, was a Fellow. This year **Emily Shuckburgh** (Fellow) has spent several months carrying out measurements for her climate research, and many of Darwin's students have conducted their research in Antarctica . But not all Darwin's associations with the Antarctic are purely academic. In October, **Pauline Cheeseman**, visited Antarctica as one of the increasing number of ecotourists. Pauline (pictured holding the centre of the flag) works by day at the Melbourn Science Park, and on most Friday evenings in Darwin where she puts in the extra hours specifically to finance her wanderlust and a series of exotic travels that have included almost every corner of the globe. Pauline's

16 January
Darwinian Evolution Today
Sean Carroll
University Of Wisconsin

23 January
Darwin's Intellectual Development
Janet Browne
Harvard University

30 January
Darwin And The Victorians
Jim Secord
University Of Cambridge

6 February
Why Darwinism Is Right And Creationism Wrong
Steve Jones
University College London

13 February
Darwinism And Society
Paul Seabright
University Of Toulouse

20 February
Conservation And Extinction
Craig Moritz
University Of California

27 February
Darwin And The Literary World
Rebecca Stott
Anglia Ruskin University

6 March
The Boundaries Of Darwinism
John Dupré
University Of Exeter

Darwin College Lecture Series 2009

Fridays at 5.30 p.m.
Lady Mitchell Hall, Sidgwick Avenue, Cambridge
All welcome

trip took in the Falklands, South Georgia, the South Shetland Islands, the Antarctic Peninsular, Cape Horn, crossing the Drake Passage, and Ushuaia in Argentina. Pauline told the Darwinian that her most magical moments were enjoying the sheer peace of the Lemaire Channel and the virgin snow. She also braved a swim in waters that were supposed to be a little warmed by a natural thermal spring – but the thermal seemed not to be active on her visit giving a water temperature close to zero!

Diane Haigh

Diane Haigh (Darwin, 1972-74) was appointed Director of Architecture and Design Review at the Commission for Architecture and the Built Environment (CABE) on 1st October 2007. Di, as friends and colleagues always know her, was at Darwin when she studied for the Diploma in Architecture at the Department of Architecture, having been an undergraduate at Newnham College. Her appointment to CABE is the latest step in a distinguished career in architecture that has embraced research, practice and teaching.

Her experience in practice has included time in the offices of Howell, Killick, Partridge and Amis, the architects of Darwin's Rayne Building and dining hall, and with Norman Foster's office in the years when it was first forging its now international reputation. For twenty years she practised in Cambridge in partnership with her husband William Fawcett. In this period she established considerable expertise in the renovation of historic buildings, most significantly through a series of projects to restore houses by M. H. Baillie Scott, one of the major architects of the Arts and Crafts Movement.

In 1996 Di joined the leading London practice of Allies and Morrison and became a Director in 2006. There her work expanded in scale and scope and included major work at Inigo Jones' Queen's House at Greenwich and a further Baillie Scott project in restoring his house 'Blackwell' at Windermere, to transform it into a major gallery for art and craft. In Cambridge she played a major role in the master planning of the Arts and Humanities Campus at the Sidgwick Site in 2000 and followed this by working on the design of new buildings for the Faculty of English and the Institute of Criminology. Her last projects with Allies and Morrison were both of national significance. The refurbishment of the Royal Festival Hall, one of Britain's most significant, and loved, modern buildings, was completed to acclaim in the summer of 2007. The project adopted the same meticulous historical scholarship applied to the restoration of the buildings by Baillie Scott and Inigo Jones. It involved immense technical expertise in bringing the building up to date, not least in addressing the always-difficult matter of acoustics for music, but all of this was cast within a clear and coherent vision of the historical significance of the building. The New Astronomy Centre at the Royal Observatory at Greenwich combined the refurbishment of historic fabric and the design of the exciting new planetarium.

Di's research work has included both the technological and the historical. In the early 1980s, as a Research Associate at the Martin Centre at the Department of Architecture, she made pioneering studies of the inter-relation between the users of buildings and the processes of environmental management. This played a major role in the development of the Martin Centre's now international reputation in studying the environmental aspects of architecture. These research and practice interests came together in teaching design studios both in the Department of Architecture in Cambridge and at the University of Hong Kong.

Di's 'hands-on' experience with houses by Baillie Scott gave her a unique understanding of their qualities and this led to her curating an Arts Council sponsored exhibition on the architect, which, following its opening at Kettle's Yard in 1995, toured throughout the UK and Europe. A companion book was published in the same year. In 2005 Di gave further expression to this strand of her work when she designed the exhibition 'International Arts and Crafts' at the Victoria and Albert Museum. She returned to the V & A last year when she curated a special exhibition to celebrate the revival of the Royal Festival Hall.

CABE is the government's advisor on architecture, design and public space. The function of the Director of Architecture is to act as principal advisor to the Commission on architectural matters and to direct the work of design review. Each year the latter provides independent assessment of around 350 major architectural projects in Britain. The depth and breadth of Di's work throughout her career ideally equips her to carry out this demanding task.

Commenting on her first few months in the job Di said: "CABE is an extraordinary vantage point from which to observe new developments across the country. By reviewing the designs for most major projects including masterplans, housing, tall building proposals and new schools, CABE is able to improve the design of schemes that affect many thousands of people. I hope to increase the effectiveness of this process so that CABE's advice is able to establish high standards and raise aspirations for good design across all sectors of the built environment."

Dean Hawkes

Images clockwise from top left:

48 Storey's Way, Cambridge, designed by Baillie Scott in 1912, extensively repaired and refurbished in 1991 for Churchill College.
Photograph copyright: Charlotte Wood

Library in the Faculty of English, University of Cambridge, designed by Allies and Morrison, opened in 2004.
Photograph copyright: Dennis Gilbert, VIEW

The new Peter Harrison Planetarium and astronomy centre at the Royal Observatory, Greenwich opened in May 2007.
Photograph copyright: Dennis Gilbert, VIEW

Blackwell, Windermere, another Baillie Scott house built in 1900, was reopened in 2001 as a gallery after extensive refurbishment, led by Allies and Morrison.
Photograph copyright: Charlotte Wood

"Baillie Scott: the artistic house" by Diane Haigh was published alongside the Kettle's Yard exhibition in 1995.

Royal Festival Hall auditorium reopened in June 2007 following extensive work led by Allies and Morrison to refocus the acoustics, revolutionise production facilities, improve audience comfort and refurbish the building fabric.
Photograph copyright: Dennis Gilbert, VIEW


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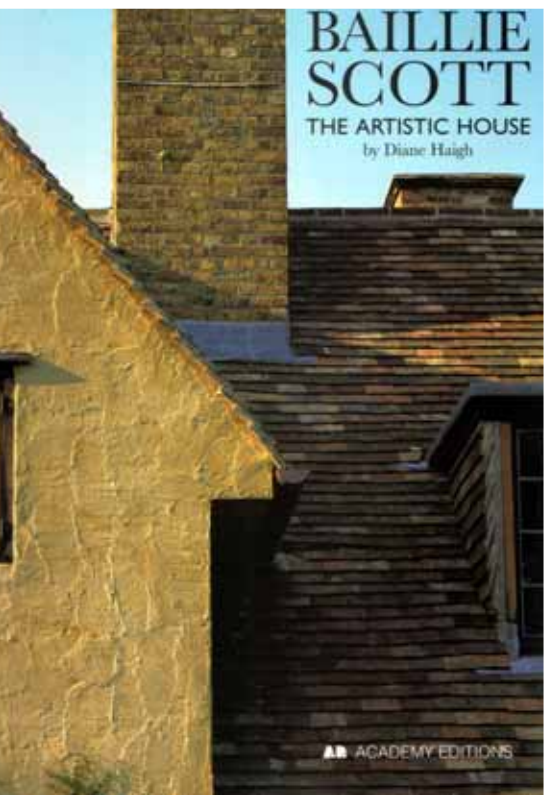

BAILLIE
SCOTT
THE ARTISTIC HOUSE
by Diane Haigh
ACADEMY EDITIONS

The robots are invading your phone lines

Reprinted, with permission, in edited form from an article by Jenny Chapman in the Cambridge Evening News.

IMAGINE being able to have an intelligent conversation with a robot who sounds just like a human - they might even throw in the occasional "um" or cough. This scenario is possible, and likely to be at the end of a phone near you very soon. This is the world of Transversal, the Cambridge company recently recognised as among the fastest-growing venture-backed businesses in the UK.

The point about "not even realising" is an important one, as, pause for a moment to think how you feel about making calls that never lead to a real person. Exactly. But put this problem to **Davin Yap**, CEO of Transversal, and he makes it clear this has already been taken into the equation. We just won't know. How scary is that?

Transversal was founded by Davin, a Canadian and at that time, PhD student at Darwin, where he met **David MacKay**, a physics lecturer and fellow at Darwin, now professor. "David came up with the idea for the technology because students were always sending us emails and we thought there had to be a better way of answering them," Davin says.

Readers will have heard much in the past about Bayesian principles, how the work of that obscure 18th century cleric and mathematician would lead, 200 years later to the creation of Cambridge spin-out companies from the university in the form of, among others, mighty Autonomy.

"We are using the same stuff as Autonomy, but doing something different," Davin says. This stuff is about looking for themes and meaning rather than picking out words, and enabled Prof MacKay to cut down on the amount of time he spent answering his students' emailed questions by writing software to recognise the most frequent queries and answer them automatically.

Since then, Sony, Barclays, DirectLine, Scottish Power, Brittany Ferries, Tesco and a whole host of other big names have cottoned on to the Transversal offering and enabled the business to go into profit by year two - quite an achievement for a Cambridge tech company.

When Davin and David set up the company in 2000 they had £2m from London-based Providence Equity Partners: "I didn't look anywhere in Cambridge for the money, there tend to be too many conditions attached, a lot of VCs want double their money back before anyone else gets a dime."

Transversal, based in Regent Street, Cambridge, started out with a number of the students Davin and David were already teaching, who have remained with the business, which still has only 20 people.

Davin talks about "neural networks", "memory engine technology", and, endearingly, the "linguabot". This is another world, and yet it has to be so finely tuned to the real one, otherwise it simply doesn't work.

"We match information based on meaning rather than words chosen. So if the words 'bat' and 'ball' are used in the same sentence, then we know that it is a bat for cricket or baseball and not a flying rodent.

"This means that clients are able to spot a train of thought and this can lead to recommending other products."

Aviva uses Transversal software for its internal HR knowledge base, which has its own dedicated call centres for employees, such is the staff headcount. Deploying Transversal has reduced the running cost by 30%: "It will have paid for itself by next June." The biggest job to date has been for Nissan, software covering 16 languages across 18 European countries.

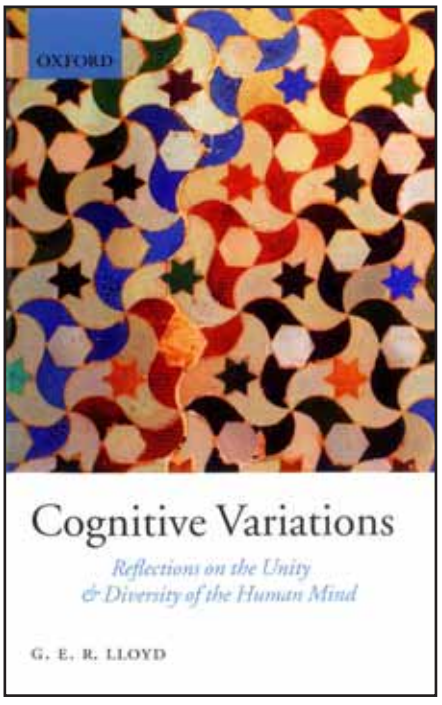
Now we come to the "linguabot", a talking head on a screen, full of chit-chat, Davin says, and capable of answering questions. "What people want is a very simple interface," he says. "They want to see someone on screen who says 'How can I help?'. It's called interactive voice response, but, so far, no customer wants to risk it, no one wants to be the guinea pig. But this software will steer people down the right path, and the goal is that they won't know, yes, we might put in a little cough."

Transversal is beginning to go global, with its partners, and Davin expects to be heading a substantial business in five years time, although concedes a trade sale is likely before too long, so the investors can realise their money. In total, £3.5m has gone into the business, and annual turnover is well into seven figures.

Davin is certainly in no hurry to sell: "I'm having too much fun building the business. When you start out, people don't take you very seriously, and then they listen, and that's really cool."

David MacKay and Davin Yap

Books



A Master on the Mind

Cognitive Variations: Reflections on the Unity and Diversity of the Human Mind, by G.E.R. Lloyd. (Oxford University Press 2007).

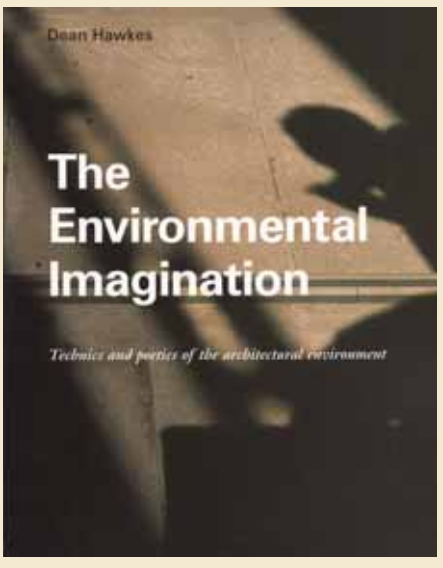
Sir Geoffrey Lloyd (Master 1989 – 2000) continues his prolific output since retirement as Master of Darwin and as Professor of Ancient Philosophy and Science, publishing his sixth book in as many years. Betraying no fear of big questions, this far-reaching and timely book illuminates central questions of what it means to be human. During a period when UK research in psychology has become highly focused on the reductive concerns of functional imaging and signal processing neuroscience, it is worth pausing to consider whether the human phenomena being studied are indeed universal. Since my own time as a Darwin PhD student at the MRC Applied Psychology Unit, I have seen impressive advances in the equipment and accuracy with which brain activity can be measured. Yet, as this book reminds us, it can be far from clear what we are measuring.

This book opens with all the excitement of a detective story, in a chapter investigating familiar, yet still surprisingly unresolved, questions of colour perception. Along the way we meet puzzles that are well known from popular psychology. Is the "red" that I see the same as yours? Are there universal colour names that can be translated between cultures? How many words does an Eskimo have for snow? Do different languages shape our minds differently (the Sapir-Whorf hypothesis)? Why do we see seven colours in the continuous spectrum of the rainbow? In this last, the benefits of bringing an Ancient Philosopher to the task become clear – we learn that Aristotle saw only three (or perhaps four) colours in the rainbow, while Xenophanes gave two of those different names! The detective story proceeds to unearth the "crimes" of modern experimental method in which studies aiming to identify universal colour names failed to account for the ways that a simple paint chart might be interpreted when questioning people of different world cultures. We learn that even the latest neuroscience (drawing among other sources on John Mollon's excellent contribution to our own Darwin lecture series book Colour) has to deal with fundamental gaps in knowledge. Why are both male monkeys and male humans disproportionately "colour blind"? Is it possible that, while most of us have three kinds of colour receptor in our retina, and those who are red-green colour blind lack one of those, some people have four kinds? How could colour be uniform across cultures, when it seems impossible that it can be uniform among individuals?

Following chapters of this fascinating book are structured along similar lines, first addressing a central question of mind from some (relatively) familiar perspectives of neuroscience and developmental psychology; next challenging the predominantly Western, or even just monolingual, foundations of that question from the cross-cultural perspective of social anthropology; then further contrasting these contemporary alternatives with sophisticated classical philosophical analyses from the ancient civilisations of Greece and China, which can themselves be as unfamiliar as any in the ethnographic literature. We learn about ideas of rationality, the self, emotion, classification of the natural world (including recent contrasts from the evolutionary taxonomy research of new Darwin Associate Dean, Giselle Walker), and even our understanding of space – are my "left" and "right" the same if I turn around, or do they change when I move, as in some non-Western languages, and indeed as my own daughter believed at the age of three?

Sir Geoffrey gives us many reasons to be wary of claims for "natural" or "universal" descriptions of mind, but he also refuses to resort to simple cultural relativism. The boundaries between "nature and nurture", or biology and culture, are far more subtle than is acknowledged by many investigators. Just as empirical neuroscience has had to discard the simpler "black box" signal-processing chains from perception to action that were inspired by cybernetics and cognitive science, so it seems that future understanding of the mind will have to account for the capacity of the brain to be shaped by culture and experience. Along the way, it looks as though the concerns of this entertaining and challenging book will continue to hold critical relevance for many years to come.

Reviewed by Alan Blackwell (Darwin Fellow, Reader in Interdisciplinary Design)



Dean Hawkes.
The Environmental Imagination:
Technics and poetics of the architectural environment.
Routledge, London & New York,
ISBN10 0-415-36087.
Price £28.00.

The Master's 2007 visit to China

The Master with Chinese graduate students

At a time when we have increasing numbers of Chinese students in College, I find it particularly interesting to be invited to China, and to learn something of the rapidly changing society from whence they come. The extraordinary pace of economic growth of their country is now familiar to us all. What is less well known are the potential social problems it is generating, and the concern of the Chinese leadership to pre-empt and mitigate them. One problem is the danger of labour exploitation as their private sector booms with a lack regulation not seen in Europe for over a hundred years. Another is the threat posed by deepening inequality to the social harmony so desired by the Party.

Four years ago I travelled around China as a guest of their national trade union organisation because the Chinese government wanted to facilitate union growth and industrial conciliation as moderating influences. Last year their agenda had moved on. The government had decided that individual employees have to be given a more robust legal basis for the protection and advancement of their rights. A law introduced in June requires employers to provide a written contract of employment. This has been a major innovation for a society unaccustomed to individual rights. I was invited as one of a group of British employment specialists to take part in seminars with government officials and academics at which the far-reaching implications could be discussed. Most of our time was spent in Beijing, but a trip to the old capital of Xi'an enabled us to meet graduate students at the North-Western School of Law and Politics. For older generations, many aspects of the current social change are disturbing. The young graduate students with whom I was photographed were a joy to meet for their enthusiasm for the new rights, and for the pertinence of their questions.

Representatives of The Chinese University of Hong Kong visit Darwin

The Vice-Chancellor of CUHK, Professor Lau presents the Master with a memento of their visit.

In February 2008, Darwin hosted a visit of Professor Lawrence J Lau, the Vice-Chancellor of the Chinese University of Hong Kong (CUHK) and a dozen of his colleagues.

CUHK is unique as it is the only university in Hong Kong to adopt a collegiate system. However, the University's success in fundraising means that they are now planning to establish a number of new Colleges to cater for increased student enrolment and especially graduate. During an interesting visit the Vice-Chancellor and his colleagues were able to gain a closer understanding of how Collegiate Cambridge operates, and in particular the rôle and support work of the graduate colleges.

A year with Cambridge University Women's Boat Club: inside view of Darwinian rower

Anyone who's ever had the misfortune of being surrounded by rowers at any social event will have inevitably experienced 'rowing chat' – a topic that can never be exhausted, interrupted or let alone changed by a non-rower! The author is certainly guilty as charged with being a rowing chat addict. And yet, when I sat down to write this short piece about my life as a CUWBC rower, I was stuck for words. "What is it about rowing" I wondered, "that is so preoccupying and enslaving for one's mind, and yet so difficult to explain to the outside world?" Every Wednesday afternoon for six months the CUWBC squad has spent two to three hours on an erg, making the same repetitive movement over and over again. Hundreds of thousands of times. What drives us to want to perfect repetitiveness, to iron out anything that makes the next stroke different from the previous one?

I do not know the exact answer. However, I know what it feels like when things go right – when a crew of eight people moves in perfect unison with each other and with the boat running underneath. It feels like you are one entity, like a single organism - maybe a whale? - gliding effortlessly through the waters. I even remember the first time I felt that harmony – back when it was still warm even in the early mornings, we were still training on the Cam and had just come round the First Post Corner. We only managed to settle at a stroke rate lower than what was written on the training plan, but it suddenly felt different - smooth and flowing - and the cox, who, much more seasoned than the sparkling-new triallists, said "Well, you've found something there!" (sounding a little bit suprised…).

One year passes quickly, and yet I feel that the road I've travelled has been immensely long. Taking up rowing with Darwin College Boat Club in Michaelmas term 2006, as a complete fresher unfamiliar with the jargon (let alone the 'rowing chat'), is something I will always be grateful for. This year with CUWBC has seen over 20 hours of training a week – seven river outings including five early mornings (the 5:58 train to Ely to row on the wider Great River Ouse) and land training every evening. Screaming out in pain is just another accessory at the training sessions. And yet, I never have and will never regret doing it. And I think I've understood a little of what it's all about. It is not just about how unbelievably low your 2k time has got, or how small your body fat percentage is, or how monstrous the circumference of your thigh. It's not simply about absolute numbers. It's about emerging knowing that you are someone who's able to push beyond what you thought was possible, beyond the excruciating physical pain, and knowing that you truly earned that seat in the Cambridge boat. At the time of writing, the Henley Boat Races – women's Varsity Boat Race – are approaching fast (Easter Sunday, March 23rd). We cannot influence the strength of our dark-blue rivals. But we will line up on Henley course knowing what sheer determination has brought us there. Knowing how far you and the girl next to you are willing to push yourselves to win. Simply because when you win, nothing hurts!

This year is special for our College as there are two Darwinians in CUWBC – myself in the Blondie crew (pictured right below) and Zoe Rutterford (pictured left) as the top spare.

Evgenia Ilyinskaya
2nd year PhD student in Geography

Obituaries

Edward Peter Chronicle 1966-2007

Bill Samii has written to tell us of the untimely death at an early age of Edward Chronicle who studied for his PhD at Darwin between 1989-93 at the MRC Applied Psychology Unit (now the MRC Cognition and Brain Sciences Unit). Bill writes: 'Ed had many friends at Cambridge and was very active in Darwin College affairs. He was captain of the boat club in 1990-1991, when we earned our blades in the May Bumps, and he also enjoyed cycling and cooking. He enriched my Cambridge experience greatly, teaching me the subtleties of British (rather than American) English and introducing me to high caliber British cultural offerings such as "Minder" and "Only Fools and Horses." Ed and I went to the Henley Royal Regatta -- as spectators -- several times, and the last time we saw each other was at Henley in 2000. Everybody who knew Ed will miss him greatly'.

His obituary is available at: www.psychology.hawaii.edu/pages/news/chronicle.htm and on Darwin's Alumni web pages.

Richard Frank Holmes 1928-2007

Richard Holmes, who died on 24 August 2007, was a Fellow of Darwin College for almost the whole of its existence.

'Dick', as he was known to his close friends, and 'Holmes' as he was universally known in Cambridge, spent almost all his adult life in Cambridge. He suffered from tuberculosis as a young man, and had to spend long periods in sanatoria. During these periods of recuperation, he came to love languages and literature. He came up as an undergraduate to Corpus from Bancroft's School in Essex, and graduated with First Class Honours in Modern and Medieval Languages in 1953. Thereafter, the whole of his career was spent in the central administration of the University, from which he retired as Deputy Registrar in 1993.

The suggestion that Dick might become a Fellow of Darwin College came from the first Master, Frank Young. It was an inspired decision. Holmes had a healthy scepticism of the ways some of the ancient Colleges were run, and he was exactly the right person to join the College at the beginning of its life to help in setting its course for the future. When Dick became a Fellow, there were just 10 students. He served on all the major college committees, and he was the principal architect of the first College Statutes and Ordinances. He served as College Secretary for three years before becoming an Emeritus Fellow in 1996.

Perhaps because of the health problems which Dick experienced as a young man, he had a deep concern for any student with disadvantages. As Secretary of the University's Board of Examinations for more than 20 years, he was a fierce defender of any student whom he felt might have suffered unfairly at the hands of the authorities. And woe betide any tutor who did not give proper support to a student in difficulties.

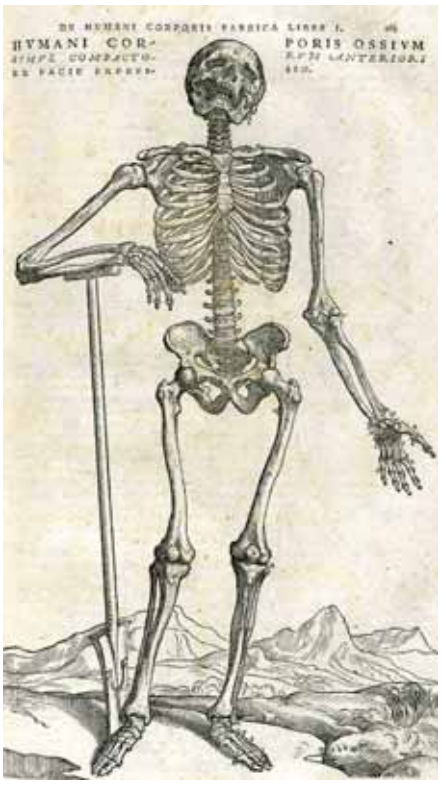
At the end of the 1970s, the British Government decided that students from overseas had to pay much higher fees than domestic students. It was vital for Cambridge's position as a leading international university to keep its door open to talent from overseas, and Dick played a leading role in the establishment of the Cambridge scholarship trusts which were set up to raise funds for supporting students from all over the world. He was particularly interested in the Cambridge Livingstone Trust which was set up specifically to help talented but disadvantaged students from southern Africa, and he made regular visits to Africa to help with the recruitment of Livingstone scholars.

Dick had an acute mind, and he was an avid reader. He had a particular liking for chess, where he was many times Cambridgeshire champion; and for bridge which he continued to enjoy playing to the end of his life. Despite the vigour with which he went about his many jobs, he was essentially a private man; but it was obvious that he was very proud and supportive of his wife Sonia and their two sons. He will be greatly missed as a good friend of the College, and as a wise and constant source of advice to his many friends and colleagues in the College and in the University.

Geoffrey Fisk 1916-2007

When Geoffrey Fisk came here in 1990, only a few Fellows knew his academic record. After graduation, others in Darwin slowly discovered this, and much more.

A link with Cambridge was made at St. Bartholomew's Hospital, where his first job was to be last house surgeon to Sir Geoffrey Keynes, whose wife Margaret was one of Charles Darwin's grand-daughters. When war broke out in 1939, 'Bart's' was evacuated to Barnet where Geoffrey worked throughout the London Blitz. As air-raid casualties fell in numbers, wounded combatants increased so much that a centre in the eastern region became essential. So he was seconded to Cambridge, as chief assistant to the orthopaedic surgeon at Addenbrooke's Hospital, to set up an Emergency Medical Service (EMS) unit at the Ley's School, where the boys' dormitories became hospital wards! Later Susan came to Addenbrooke's, marrying Geoffrey in 1944.



As an RAF specialist he invented an operating splint, known as the 'Fisk lead hand', still used worldwide. From 1949 to 1976 he was an NHS consultant to the Seamen's Hospital London and to others in Essex and Hertfordshire. Additionally, he trained young surgeons; was appointed Penrose-May Teacher and Hunterian Professor of the Royal College of Surgeons; and went to the USA on a Fulbright Travelling Fellowship.

Aged 82, in Vancouver, the International Societies for Hand Surgery recognised his pioneering work. Other travel included the Charles Darwin Research Centre in the Galapagos Islands. A highly productive editor or contributor to several textbooks, he wrote many articles and papers.

On retiring to Cambridge, he worked on the Regional Disability Tribunals until 1989. Then, resuming interest in anthropology, he applied for an MPhil course. Darwin is fortunate to be a College he selected. He was lucky to have an enlightened admissions committee assessing his application. He proposed research in 'the morphology of the wrist joint', his detailed statement planned to extend his surgical experience to anthropological aspects; and to further his interest in the calcaneum (heel bone) by studying 'changes in material from ancient Egypt' in the Duckworth Collection of the Museum of Archaeology and Anthropology. He was the first clinician to examine these bones from Upper Egypt, rescued from burial sites in Nubia before the Aswan High Dam flooded the Nile Valley. His field work was at Witwatersrand University on fossil bones. There he came across a calcaneum which he realised had been broken and had healed. This discovery required orthopaedic expertise and may represent the oldest confirmed united fracture ever identified. The condition of the skeletal remains from Nubia, after several millennia, was such that he had to study pathological changes

Illustrations from Vesalius' 1543 first edition of '*De Corporis Humani Fabrica*'.

in larger bones, rather than the morphology of the wrist and heel. On acceptance of his thesis, 'The Pathology of the Spinal Column of Nile Skeletons from Assuan and Kerma', he took his MPhil in 1991, aged 74.

Whenever in Cambridge he came to Darwin events, especially the Lecture Series. His devotion to the College led him to offer us two rare books. One, a first edition (1543) of Vesalius' 'De Corporis Humani Fabrica' contains remarkable illustrations of human anatomy. The other, Spigelius' 'Opera' (1645) includes the first publication of William Harvey's 'De Motu Cordis'. These are one of the most significant personal benefactions ever made to the College.

Characteristically, Geoffrey Fisk's generosity was so undemonstrative that it risked escaping notice. Similarly, few Darwinians realised that he was such a great man. However, all who befriended him knew that he was a good one. Searching elsewhere reveals more of his greatness. We who knew him here appreciated his goodness. This legacy will endure as we extend heartfelt sympathy to Susan and her family.

Chester White, Emeritus Fellow Darwin College

Bob Sloss 1927-2007

Bob was born in Dover and in 1938 moved to Dumbarton in Scotland. Here he experienced the Scottish educational system of Dumbarton Academy. It was austere, accompanied by physical violence and 'teaching by terror'. A shipyard, an aircraft factory and a main gasworks surrounded Bob's home. So during the Second World War the entire area was an excellent landmark for German bombers. Air raids and nights in air raid shelters were routine.

Bob entered Glasgow University and after a year he was called

up for the armed forces. He was sent to naval training in what had been a Butlin's Holiday Camp in Skegness. From there he was posted to Hong Kong, his job here was to teach and prepare soon to be demobbed servicemen for University. In his spare time he ventured into media; first as a film critic for the China Mail newspaper and then producing a programme for the radio station ZBW Hong Kong, 'the voice of British Broadcasting in the Far East'.

Bob returned home in 1947 to complete University. He also acted and produced programmes for BBC Scotland. When Bob completed his studies he married Jackie and entered teacher training college qualifying in 1952.

He was then commissioned into the RAF, and while stationed in Australia he was asked to take a course in Chinese. He went to London and then Hong Kong University for 2 years to learn Chinese. In 1966 Bob was asked to be the founder commandant for an Armed Services language school. He designed buildings, wrote the curriculum, selected staff and the school flourished well into the 1990's.

In 1969 Bob was headhunted by the Professor of Oriental Studies at Cambridge to lead a postgraduate course to teach Chinese, and in 1972 the Faculty offered him a Lectureship. Bob went on to develop Chinese computer programmes and devices and was instrumental in the development of the Granta Backbone network providing broadband fibre optic connection to every department and college. Bob was active at Darwin College, from when he was elected to the Fellowship in 1984 until his death. He served as College Dean until he retired from the University in 1995.

Throughout his career he has taken chances, grasped opportunities and he sought the adventure of new developments and technology. In these endeavours he has shown courage, laced with the utmost optimism. He said what he thought, but was always there to lend help and encouragement. Bob lived life to the full and enjoyed it.

An edited text of the address given by Martin Gienke at the service for Bob Sloss at the Cambridge Crematorium 19th December 2007.

Professor Ian P. Stevenson 1918-2007

Few academics had such an extraordinary career as Dr Ian P. Stevenson, Visiting Associate Member of Darwin in 1987/88, died February 8, 2007 in Charlottesville, Virginia. Born in Montreal, Canada, he was educated first at St Andrew's University in Scotland then at McGill University in Montreal. He received his medical degree at the latter and after a short period of research in biochemistry he became interested in psychosomatic medicine and psychiatry, joining a research group at New York Hospital in the late 1940s. At the young age of thirty-eight Stevenson was appointed Professor and Chairman of the Department of Psychiatry at the University of Virginia.

Dr Stevenson was dissatisfied with both conventional biochemistry and Freudian psychoanalysis and after a meeting with the writer Aldous Huxley began to experiment with

psychedelic drugs in a psychiatric context. This brought about a new interest in extrasensory perception and another venue of enquiries: into a variety of experiences suggesting survival after death. Stevenson began research into reported cases of reincarnation and in 1961 visited India and Sri Lanka looking into cases of young children having "memories" of previous lives. Some years later he launched the Division of Personality (now Perceptual) Studies at the University of Virginia, a research unit which deals, in Dr E.W. Kelly's words, with "previous life memories, near-death experiences and related phenomena". In 1982 he was one of the founders of the Society for Scientific Exploration, an organisation for scientists involved in 'unusual' areas of research.

Dr Stevenson was a tireless researcher- he published fourteen books and numerous essays and case studies. Dr Stevenson was particularly disappointed by the fact that most scientists tended to dismiss these 'reincarnation' cases without reading what he presented as evidence. In 1974 he published Xenoglossy: A Review and Report of a Case better known as the "Jensen tapes", the story of an American housewife who in several deep hypnotic sessions started speaking old Swedish in a deep voice, through the 'persona' of Jensen, a Swedish farmer from the 17th century. No opportunities for her to learn Swedish existed and, as far as I know, nobody has come up with a plausible scientific explanation to the mystery of this particular case of xenoglossy.

It was Dr Donald West who invited Ian Stevenson to Darwin. After this initial Visiting Fellowship he came back several times on short visits. He liked Cambridge, particularly the open-minded atmosphere of Darwin College. Dr Stevenson had no children and is survived by his wife Margaret.

George Gömöri (Emeritus Fellow)

The Computer Lab Ring

If you did a computer science degree or diploma during your time at Darwin, or if your career has taken you in a computer-related direction, check out the Computer Lab Ring, the graduate society of the Computer Laboratory.

The Ring is not a fund-raising organisation. "It is there to provide real value to Computer Lab graduates throughout their lifetimes," says Professor Andy Hopper, Chairman of the society and head of the Computer Lab. "All the services are designed to help members to improve their career prospects and create wealth.".

Networking is core to the Ring. It's fair to say that many computer scientists are not natural networkers, and for recent graduates settled into their first jobs, the value of networks of business contacts is hard to grasp. In an interview for The Ring, the organisation's newsletter, Dr Ian Pratt (King's, 1989), who recently sold his company XenSource to DarwinCitrix for $500 million, observed that he had come to realise "the importance of personal connections and the importance of a network of contacts. Trying to do something without those is tough."

Especially popular with younger members are regular social events in Cambridge, London and Edinburgh. These are well attended and, more often than not, lubricated with a sponsored bar. Other events include a London summer garden party, round tables — where a small number of members spends an evening in discussion over dinner with a visiting expert — and the flagship annual dinner in Cambridge. There is also careers advice and mentoring available for younger members.

The Hall of Fame is the growing set of more than 150 companies founded by Ring members. They can recruit staff through the jobs bulletin board and are eligible for the Hall of Fame awards, presented at the annual dinner, of which past winners include Codian (recently acquired by Tandberg for $270 million), Jagex, Equisys and Zeus.

Joining the Ring is a great way to keep in touch with members and Cambridge. To find out more about the Computer Lab Ring, visit the Web site at www.camring.ucam.org, or get in touch with Darwin member Richard Jebb (rjebb@aol.com)

Richard Jebb

Darwin's Growth

In the mid 1980's graduate student numbers in Cambridge started to climb steeply from a steady base of 2500 to the current level of over 6000. Darwin has also grown over this period and now totals over 550 students (though a proportion of these are 'writing up' and are no longer fee payers). What are the consequences of this growth for the character of the college and its ability to meet the needs of students? Is all growth good? Or should Darwin have a considered growth strategy that might include caps on future growth? These issues are currently being considered by Governing Body. If you would like to add your voice please write to: **darwinian@dar.cam.ac.uk**.

Darwinian Descendant

Congratulations to Pirin and Sa'ad Al-Omari on the birth of their son, Tarik - a true Darwin baby if there ever was one. His parents Pirin Erdogdu (Ph.D. Astronomy 2000-2004) and Sa'ad Al-Omari (M.Phil. 1999, Ph.D. Zoology 2004) are both Darwinians and met at Frank Young House.

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Darwinian Puzzle by Groucho

The Transatlantic Cable

A transatlantic cable contains 20 electrical wires. Unfortunately the cheap cable manufacturers gave all 20 wires the same colour. You have the job of figuring out which wire is which, that is, creating a consistent labelling of the wires at each end. Your only tools are the ability to connect wires to each other in groups of two or more, and to test for connectedness with a continuity tester. What is the smallest number of transatlantic trips you need to make, and how do you do it? As an illustration, if the number of wires were just 3 then the task could be solved in two trips by labelling one wire at one end a, connecting the other two together, crossing the Atlantic, measuring which two wires are connected, labelling them b and c and the unconnected one a, then connecting b to a and returning across the Atlantic, whereupon on disconnecting b from c, the identities of b and c can be deduced.

[This puzzle is found on page 173 of Information Theory, Inference, and Learning Algorithms by David J.C. MacKay (C.U.P. 2003), available free online at http://tinyurl.com/d6vck. A solution is on page 174.]

Solution to Groucho's previous puzzle:
Monopoly can be played with dice labelled (1, 3, 4, 5, 6, 8) and (1, 2, 2, 3, 3, 4).

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Richard Jebb
Dean Hawkes

The editors especially welcome short articles, pictures, artwork and news from our overseas alumni.
Correspondence to:
darwinian@dar.cam.ac.uk

Calendar of alumni events

2008

Friday 16th May
Darwin Society Dinner

Friday 6th June
Former Fellows' Reunion

Friday 13th June
Computing, Mathematics and Engineering Alumni Networking Dinner

Friday 11th July
Old Darwinian Summer Garden Party

Saturday 27th September
Alumni Buffet lunch