



BABAR AHMAD AND PARLIAMENT

Petition of 140,000 signatures leads to promise of a debate on extradition: **Page 3**

HEALTHCARE PARTNERSHIP

Professor Lord Ara Darzi heads new North West London scheme: **Page 5**



Drop in uni applications

Latest figures reveal further lack of interest in UK university applications

Maciej Matuszewski

The gap between the number of applicants to UK universities this year compared to last has widened. The latest figures from the Universities and Colleges Admissions Service (UCAS) reveal that the number of applicants for higher education courses has fallen by 12.9%, corresponding to over 23,000 people, compared to this time last year. Last month's figures indicated a drop of only 9.0%.

This overall drop comes despite the number of non-EU applicants, who pay far higher fees than others but are not affected by the government's higher education funding reforms, increasing by 11.8% compared to last year. This suggests a growing unwillingness by prospective home students to pay fees of up to £9,000.

The Telegraph this week reported Liam Burns, the president of the National Union of Students, saying that "ministers need to take responsibility for their disastrous education reforms and admit that, regardless of the final application numbers, the behaviour of prospective students will be affected by the huge rise in fees." However, Nicola Dandridge, chief executive of Universities UK, was reported as adding that "it's worth noting that applicant numbers are currently down, not only in England, but also in Scotland, Wales and Northern Ireland who do not have the same fees system".

A UCAS press release also reminds that the final application deadline is January 15 and that "application patterns this far ahead of that date are historically unreliable indicators of

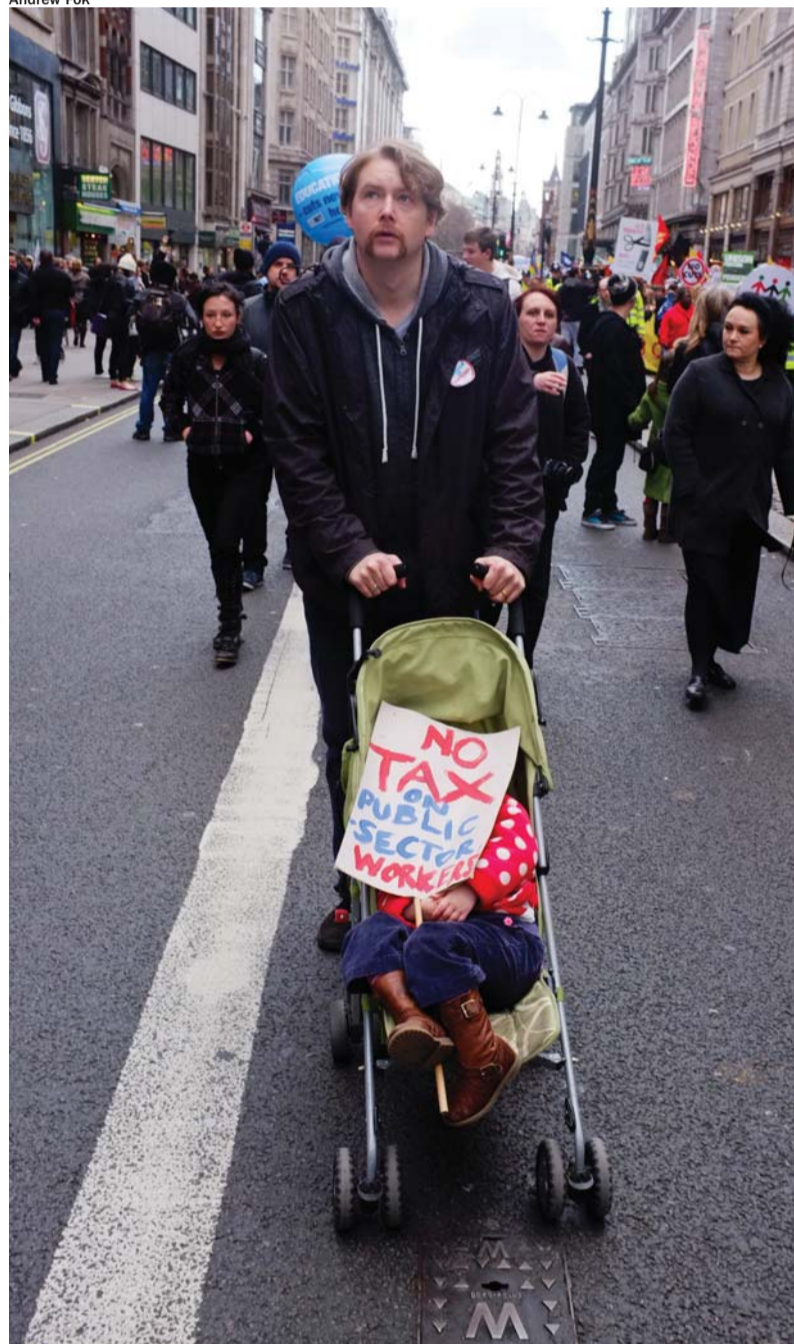
the eventual year-on-year change." In a statement released alongside the figures UCAS Chief Executive Mary Curnock Cook added: "Recent changes in HE funding mean that application patterns this year may be different to previous years and we are gearing up for a possible late surge close to the January 15 deadline where applicants have taken more time to research their applications. We expect some depression of demand due to a decline in the young population but it is much too early to predict any effects from changes in tuition fees."

In fact, the total number of applicants who faced an earlier deadline of October 15 (those applying to Oxbridge and all Medicine and Veterinary related courses) has only fallen by 0.8% compared to last year. The number of UK-domiciled early deadline 18 year old applicants actually rose by 1.1%, despite the population size of that age group decreasing slightly.

It is also perhaps unfair to compare this year's figures to those last year. There was an especially large number of applicants for 2011 entry, undoubtedly in no small part as a result of people wishing to avoid higher fees. Indeed, there has only been a 2.7% drop in total applications compared to figures released in November 2009.

Felix questioned Pro Rector (Education) Professor Julia Buckingham about application figures relating to Imperial College. Professor Buckingham reaffirmed her position regarding the latest figures following
...Continued on Page 5

Andrew Fok



TECHNOLOGY



Facebook OpenGraph against the average **Page 10**

COMMENT



The inevitability of Ron Paul's America **Page 14**

ARTS



Public house poetry in South Kensington **Page 18**

NOVEMBER 30

Wednesday sees mass walkout after Government plans pension changes **Pages 4, 6 and 7**

HIGHLIGHTS

What's on

Chamber Music Society & UNICEF: Charity Concert

Chamber Music Society presents a winter-term concert in association with UNICEF. The members will play a variety of pieces from different genres – includes violin trios, four-hands, solo piano music. £3 for society members, £5 for non-members. Tickets on sale in the JCR on December 2 from 12-2pm. All proceeds will be donated to Children in Need.

Read Lecture Theatre, Sheffield Building, Level 5
Monday 05 December
19:30

Competition



Christmas is coming and the pencil cases may well be bare, but why not get back in the game?

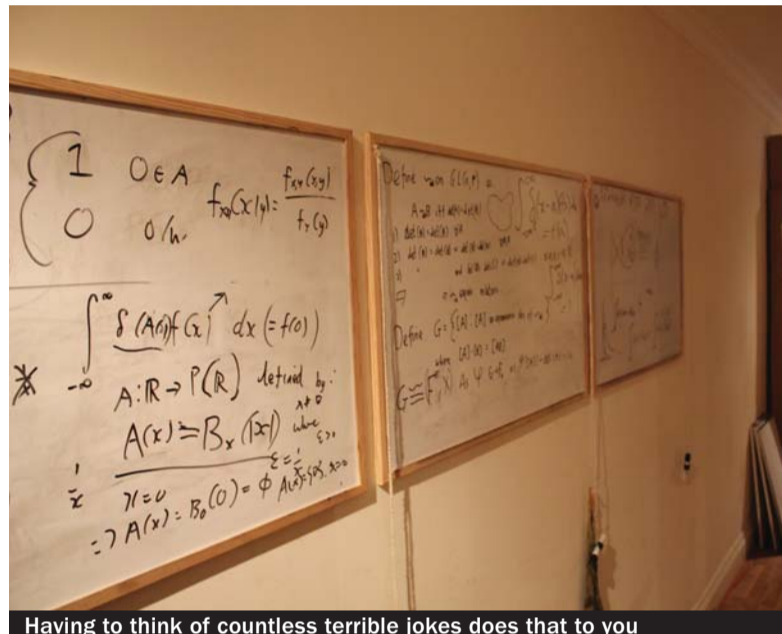
Using colour in your note taking not only livens up the dark winter mornings, but it has proven to help you boost your memory by 78% and effectively increases your attention span by 82%.

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PICK OF THE WEEK

You don't even need a home or garden to enjoy our new section



Having to think of countless terrible jokes does that to you

While I know approximately one person with a garden (and that's a patch of scrubland), our extensive market research revealed that there's a gap in the market for household stories and tips. Behold, the Home & Garden Section, which has somehow survived beyond a week.

This week we've got some household gold for you, do-it-yourself whiteboards! Whether you're thinking of getting one for your room in halls or for private accommodation, thrill as our resident expert provides you with his top tips to get you started.

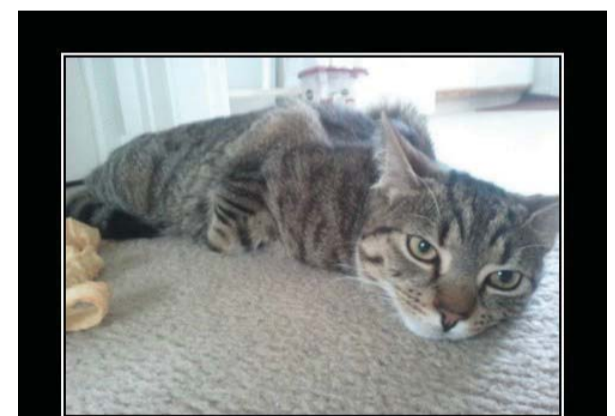
Editor

PING PONG: DIM SUM GIVEAWAY



21st century Tea House **Ping Pong** has 11 central London and City based restaurants serving hand-made dim sum, fragrant teas and cocktails. On top of this, the restaurant is giving away a meal for two. Simply email felix@imperial.ac.uk with the subject heading 'PING PONG' to be in a chance with winning. Competition closes on Wednesday 7 December at 18:00. In addition, Ping Pong are now running a 20% discount for students.

Lolcat of teh week



TEH FIRST PUSHUP

IZ ALWAYS TEH HARDEST

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FELIX

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NEWS

Babar Ahmad petition leads to debate

Votable parliamentary discussion on extradition to take place on Monday

Aemun Reza

An online petition calling for ex-Imperial College staff member Babar Ahmad to be put on trial in the United Kingdom reached 141,000 signatures by its closing date of November 11, passing the requirement of 100,000 for a discussion in Parliament. This has led to a parliamentary debate being held next week on the issue of extradition.

Babar Ahmad is the longest imprisoned-without-charge UK citizen, having been imprisoned for over 7 years. He is fighting extradition to the US and the online petition was set up by his family to grant him a UK trial before he is extradited.

Instead of the case being raised in Westminster Hall as an individual discussion, Babar Ahmad's case was included as a part of a bigger debate on extradition on November 24. The debate was only attended by 35 MPs but the conclusion was that the Babar Ahmad online petition should be discussed in the main chamber of the Commons.

Green Party MP Caroline Lucas specifically mentioned the case during the debate. She acknowledged that the case was unique and the amount of support behind it was substantial enough for its own discussion. She said: "the family and the 140,000 plus people who signed



Leader of the Green Party Caroline Lucas has spoken out in favour of a discussion of the Babar Ahmad case

the e-petition now deserve a full Commons debate on a voteable motion."

She also mentioned that Babar Ahmad's solicitors and the Crown Prosecution Service (CPS) had admitted to never analysing the evidence in relation to his case in a letter dated November 22. This comes as news, as they had previously stated that there was insufficient evidence to prosecute him in the UK, hence his extradition to the US.

Babar Ahmad's father, Ashfaq Ahmad commented on this revelation saying that "It is quite shocking to learn that the CPS made no effort to examine the evidence seized from Babar's home but instead simply outsourced our criminal justice

system to the US. Had it examined the evidence then it could have prosecuted Babar in the UK."

"the family and people who signed the e-petition now deserve a Commons debate"

On December 5 there will be a full votable parliamentary debate on extradition. The Free Babar Ahmad Campaign hopes

that this discussion will have a positive impact on Babar Ahmad's case. They are confident that, even though the case is not mentioned in the final text of the motion, it will be the milestone they need.

Ashfaq Ahmad said: "It is essential that any reforms to the extradition laws that are voted for apply to pending cases such as Babar's as it would be absolutely immoral to extradite British citizens under a Treaty that has been found by Parliament to be unfair."

The full text of the motion calls upon the House of Commons to "reform the UK's extradition arrangements as a matter of urgency to strengthen the protection of British citizens" through the introduction of a Bill in Parliament to "enact the safeguards recommended by the Joint Committee on Human Rights in its Fifteenth Report of 2010-12, and by pursuing such amendments to the UK-US Extradition Treaty 2003 and the EU Council Framework Decision 2002 on the European Arrest Warrant".

This is a significant step for the Free Babar Ahmad campaign. The organisers have expressed their gratitude for the overwhelming public support of 141,000 signatures that brought Babar Ahmad's case to the government's attention. They are now awaiting the outcome of the debate on December 5 and how it will affect Babar Ahmad's case.

e-petitions

Any British citizen or UK resident can create an e-petition, with the aim of the service as an "easy way for the public to engage with politics". Even if an e-petition reaches 100,000 signatures, it does not guarantee a debate in the House of Commons. Potential reasons for a debate not to go ahead include whether the subject of the e-petition is going through legal proceedings, and the resulting propriety.

Government e-petitions vary from topics such as a call to teach coding at primary school level, to calling on the Coalition government to solve "irresponsible dog ownership". The website saw a surge of interest following last summer's riots. An e-petition under the name "Convicted London rioters should lose [sic] all benefits" passed the 100,000 mark in early August, and at the time of going to print stands at just over 250,000 signatures.

Science Challenge winners announced

Alexander Karapetian

The Royal College of Science Union (RCSU) held a formal dinner for alumni and the Science Challenge 2011 winners on Thursday 24 November. The Science Challenge competition is an annual, national scientific essay writing competition aiming to encourage scientific debate, reasoning and the communication of science in a public-friendly context.

Imperial students may enter as well as students from secondary schools and colleges, with the topics separated into Biology, Chemistry, Physics and Mathematics. The overall winner of the Science Challenge 2011 was Andrew Purcell, who received £2000 for his submission to the Physics question, "Why should the average person care whether we discover the Higgs boson?" with Sarah Byrne receiving the runner up prize of £1000 for her essay.

The individual subject prize winners include Felix's very own Travel Editor Christopher Richardson for the Biology

Maria Han Veiga



This year's dinner was held at The Gore Hotel

prize, Science Editors Alexander Karapetian and Kelly Oakes for the Mathematics and Physics prizes respectively and Erica Thompson for the Chemistry prize, each receiving £250 for their efforts. The overall winner for the external school entries was James Bezer, who received £500, with runners up Hiba Chaudhry and Joseph Herbert receiving £250 each.

John Sanderson, President of the Royal College of Science Association (RCSA) was present at the dinner along with Professor Maggie Dallman. Paul Beaumont, Vice President (Operations) of the RCSU and Science Challenge

Chair announced the next challenge's launch date to be 17 January 2012, commenting he "encourages people to enter as it's going to be bigger than ever before", with judges including the BBC's Science Correspondent, The Times's Science Editor and Lord Robert Winston.

Luke Kanczes, RCSU President, said "it was fantastic to see that even after graduation Imperial scientists still have such a strong connection with not only Imperial but the RCSU", adding "it was great to finally announce the winners and I'm looking forward to next year's Science Challenge!"

Sponsored Editorial

More student cuts

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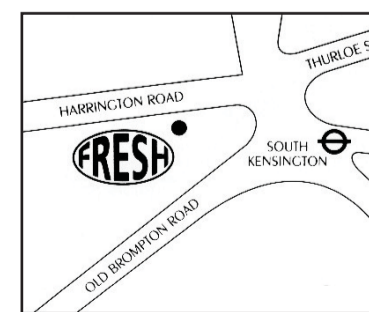
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To book an appointment, call

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NEWS

News Editors: **Sophia David**
Alex Nowbar

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In Brief

Cambridge hold Europe's highest university fundraising total

Cambridge reached a milestone of US\$2.0 billion during its 800th Anniversary Campaign making it the university with the highest fundraising total in Europe. A mammoth US\$905 million (£523 million) was raised by the university's colleges and US\$1.1 billion (£649 million) was raised by the university itself. This 10 year campaign to raise money had its most successful year between 2010-2011 when they raised US\$215 million (£135 million).

Vice-Chancellor Professor Sir Leszek Borysiewicz said that the university and colleges were "immensely grateful" to their donors, out of which a massive 54,000 are alumni who have contributed to colleges and 8000 of them to the university.

The US\$640 million (£390 million) of legacy pledges mean that more benefactions will have been created in the future. Bill Janeway, Co-Chairman of the Campaign Board and Senior Advisor to Warburg Pincus said "the case for philanthropy and fundraising to support Britain's great universities has never been stronger". Fellow Co-Chairman and Senior Advisor to Morgan Stanley International, Sir David Walker acknowledged that the donors "understand the need for sustained investment" for teaching and research to maintain Cambridge's excellence.

In the year 2010-2011, Imperial College raised £9.9 million; 19% more than the previous financial year. Imperial's alumni have doubled the participation rates and, as a result, more Rector's Scholarships have been handed out this year than in 2010-2011. The college aims to award Rector's Scholarships to students who meet the requirements to attend the university, but are unable to because of financial reasons. Undergraduate scholarships have increased by three times, Masters by five times and PhD scholarships have doubled.

Niki Kesharaju

University of Cambridge



Cambridge celebrated its 800th year in 2009

Public sector protests

Workers took to the streets on Wednesday over Government pension plans

Andrew Fok



Navid Nabijou

This Wednesday, public sector workers up and down the country went on strike, in what was described by some as the "biggest walkout for a generation." The action was directed against the Government's planned reforms of public sector pensions, which comprise part of its wide-reaching deficit reduction plan.

The most contentious aspects of the changes are plans to alter the method of calculating the pension rate from the current system – which is based on the worker's final salary – to one which is based on his or her career average earnings. Accompanying this are plans to raise the retirement age to 66 by the year 2020, with the intention for it to eventually reach 68.

The Government argues that these reforms are necessary, since people are now living longer and contributions to pension plans are no longer keeping step with the costs of those pensions. The Unions counter that the proposed changes will unfairly and disproportionately impact public sector workers, with employees having to work longer and contribute more towards an ultimately smaller pension.

A number of public services have been closed or partially closed as a result of the action. Well over half of all schools in the country shut their doors, while in hospitals thousands of non-emergency operations and appointments were cancelled. Accompanying the strike were large marches in London, as well as other major cities such as Birmingham, Leeds and Exeter.

However, in spite of the scale of the action, problems at the country's busy airports were kept to a minimum, with very few flight cancellations. Imperial College was also little affected, with very few lectures or tutorials being cancelled.

The Government has branded the strike "irresponsible": they claim that it is damaging to the economy and a hindrance to negotiations currently on-going with the Unions. The Unions, however, say that the Government has not properly engaged in negotiations for some time: "this idea that negotiations are continuing is just not true." In recent weeks, the Government has hinted that its current offer to the Unions could be retracted if an agreement is not reached soon.

Photos: Pages 6 and 7

Abu Dhabi Diabetes Centre walk on

Carol Ann Cheah

An annual walkathon to promote healthy living, jointly hosted by the Imperial College London Diabetes Centre (ICLDC) in Abu Dhabi and The National Health Insurance Company Daman, took place at the Yas Marina Circuit (the venue for the Abu Dhabi Grand Prix) on November 25. Walk For Life, which is now in its fifth year, saw a turnout of up to 16,000, with over 45,000 having taken part in it since it began in 2007.

The event saw participants immersed in an afternoon of family entertainment that included a mix of musical acts as well as fun fitness activities, which culminated in a 5km walk undertaken by the participants.

Hosted under the patronage of Her Highness Sheikha Fatima bint Mubarak, Walk For Life is part of ICLDC's award-winning public health awareness campaign, "Diabetes-Knowledge-Action", encouraging the public to take charge of their lifestyles. According to Dr Michael Bitzer, Daman's Chief Executive Officer, Walk For Life "draws the attention of the nation to the importance of regular exercise as part of a healthy lifestyle practice", alongside a healthy and balanced diet.

Meanwhile, ICLDC's Medical and Research Director and Consultant Endocrinologist,

Imperial College London



Professor Lord Ara Darzi is a key figure in the partnership's development

Dr Maha Taysir, Barakat, spoke about the enormous health benefits of exercise. "A sedentary lifestyle and a poorly-balanced diet are likely to lead to excess body weight, which in turn can eventually manifest as Type 2 Diabetes," she said.

The ICLDC is a state-of-the-art outpatient

facility that specializes in diabetes treatment, research, training and public health awareness. Launched in August 2006, the centre was built by Mubadala Healthcare in partnership with Imperial College London. It has since offered diabetes prevention, education and treatment to more than 100,000 people.

New academic health science partnership

North West London hospitals and institutions set to improve local healthcare

Sophia David

Imperial College London is establishing ties with numerous healthcare providers in North West London including approximately eleven NHS Trust hospitals and institutions. The new Academic Health Science Partnership (AHSP), to be launched in April 2012, aims to improve the health and care of the local population of 1.9 million people.

The AHSP will facilitate collaborative approaches between primary, secondary, tertiary, community and mental healthcare providers as well as the academic community at Imperial. For example, there will be greater opportunities to conduct clinical trials at a large and meaningful scale and to apply research findings to benefit a greater number of patients. The AHSP could also take a leading role in training and educating healthcare professionals.

The idea of developing the AHSP has been formulated by Professor Lord Ara Darzi, Head of the Division of Surgery at Imperial, and formerly Parliamentary Under-Secretary of State at the Department of Health.

He said, "The partners involved in developing the AHSP face many com-

mon challenges but have one unifying goal: to bring the highest quality care to the people of North West London. By focusing on our strengths and systematically implementing what is known across the partnership about providing the best clinical care through innovation, we should achieve much more than we could apart. Our simple ambition is to use all of our academic and clinical expertise to improve the quality of care for our North West London population as a whole."

Lord Darzi is to lead a Transitional Partnership Board that will confirm the membership of a number of healthcare providers and establish the organisational and legal structure of the AHSP. The Board will also include members such as Sir Keith O'Nions, Rector of Imperial, Chief Executives of the NHS Trusts and a GP representative.

O'Nions said, "Lord Darzi has developed a convincing vision for achieving higher quality care for patients through innovation, and for strengthening Imperial's links with healthcare providers across North West London, opening new doors for all. He has achieved widespread support for his proposals and I look forward to working with the other partners to shape the AHSP."

Imperial College London



Professor Lord Ara Darzi is a key figure in the partnership's development

Drop in UCAS applications

Latest figures continue to suggest fewer people are considering university as an option

...Continued from Front Page statements made after initial forecasts in October, saying: "Although marginally down on last year, applications to the College look very healthy. We will need to wait until mid-January to draw any conclusions

about the final application numbers." Professor Buckingham told Felix in October that this year's application rates to Imperial were "broadly in line" with 2010 application figures.

While the headline figures do seem

worrying, it is clear that the situation is more complicated than it seems at first sight. It is certainly too soon to be making alarmist comments – we will only know the full impact of the higher education funding changes in January.

ICSMSU Presents
The Snow Ball
 Egg London
 Monday 12th December
 10pm - 4am
 Tickets £15 (inc. 2 drinks)
 Black tie
 Free shuttle service
 between Kings Cross
 station and
 Egg
 Tickets Available Online
 Strictly Over-18s Only - Bring Photo ID
 EGG reserves the right to refuse admission

The Apothecary
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News Editors: **Sophia David**
Alex Nowbar

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NEWS

PROTESTS RETURN TO LONDON

Photos by Andrew Fok



Protesters marched throughout London



Protesters opposed plans for individuals to work for longer and pay more into their pensions



Prime Minister David Cameron labelled the protests as a "damp squib"

NEWS



The Prime Minister and his Deputy making an artistic appearance



Over 70 arrests had been made in London by Wednesday evening



Unions estimated that up to two million people went on strike



The ever-changing shape of Anonymous



Pensions lay at the heart of the protests

In brief**Scientists discover hidden channels under nanofolds and wrinkles**

Wrinkles and folds are important in nature as they allow a large surface area to be fitted into a small volume. Studying these features could lead to the development of smaller electronic devices or even flexible computer tablets. Recent research from a group of scientists from the USA and South Korea has brought these technologies a step closer to reality.

Kyung-Suk Kim, professor of engineering at Brown University, says that “wrinkles are everywhere in science but they hold certain secrets.” Writing last week in the Proceedings of the Royal Society A, Kim and his team describe how they created wrinkles in 20 to 80 nanometre thick gold films by depositing them on a stretched layer of polydimethylsiloxane (PDMS), a rubber-like substrate commonly used in the electronics industry. When the tension on the PDMS was released the gold sheet buckled to form wrinkles. The surface of these wrinkles was then examined using atomic force microscopy while cut sections of the film were studied by a scanning electron microscope.

The team discovered that when the gold film buckles, difficult-to-see secondary wrinkles are formed at large separations from each other in addition to the far more closely spaced primary wrinkles. When the gold film is compressed to a greater degree the spacing between these secondary wrinkles was unexpectedly found to increase, rather than decrease, as is the case for the main primary wrinkles.

The team also found that if the gold was compressed asymmetrically it followed the so-called Ogden model and the wrinkles began to touch, forming fully-fledged folds. Upon closer examination, the team found that previously undiscovered nanochannels were buried below the films. Professor Kim said, “They were hidden – we were the first ones to cut [the film] and see that there are channels underneath.”

The discoveries improve our theoretical understanding of folds and wrinkles, but could also have significant implications for fluid transport and be used in anything from microscopic pumps to water purification systems.

DOI: 10.1098/rspa.2011.0567

Maciej Matuszewski

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Dreaming of another world

Kelly Oakes on what to do if you need to take the edge off painful memories

Have you ever woken up the day after a night out and mentally recoiled in horror as you remember embarrassing things that you said or did under the influence of alcohol? Well, researchers at the University of California, Berkeley, have discovered a way to take the edge off those painful memories — all you have to do is nod off long enough to dream.

Matthew Walker, lead author on the study published last week in the journal *Current Biology*, and his colleagues showed that rapid eye movement (REM) sleep, the phase of sleep in which we dream, is associated with a decrease in activity in a part of the brain that processes emotions. This decrease in activity allows a more ‘rational’ part of the brain to take over the processing of memories, decreasing their “emotional intensity”.

Thirty-five people, split into two groups, participated in the study. Both groups viewed 150 images, chosen to elicit certain emotions, twice, with 12 hours between the two viewings. The only difference was that one group saw the images in the morning and then again in the evening in the same day, having remained awake in between, whereas the other group saw the images in the evening and then again the next morning, after a night’s sleep.

Those that slept in between the two viewings reported a significant decrease in their emotional reaction to the images. MRI scans also showed a significant reduction in activity in the amygdala, a part of the brain that processes emotions. Walker and his colleagues noticed that when activity in the amygdala decreased, the more ‘rational’ prefrontal cortex became more active.

REM sleep is also associated with changes in neurotransmitters. Walker and colleagues



You should have seen this guy last night... he's going to have to nap for a very long time

measured electrical brain activity and used this to show that levels of neurotransmitters associated with stress decreased during REM sleep. Walker thinks that reprocessing emotional experiences during this period will soften those memories and allow us to wake up feeling better than when we went to sleep.

Unfortunately, dreaming won’t stop other people remembering your drunken escapades, but at least your own memories of the event will be a bit blurry around the edges.

More seriously, the findings point to an explanation of why people with post-traumatic stress disorder find it difficult to recover from their experiences. Walker thinks that perhaps this dreaming therapy does not work the way it should in people with post-traumatic stress disorder, so they relive the full painful experience

every time the memory is triggered.

But hope is not lost for patients with post-traumatic stress disorder. A physician at a US Department of Veteran Affairs hospital noticed that post-traumatic stress disorder patients who were taking a generic blood pressure drug had fewer reoccurring nightmares. It turned out that the drug has the side effect of suppressing the stress neurotransmitters that are usually reduced during REM sleep.

This observation was what prompted Walker to investigate the link between REM sleep and post-traumatic stress disorder in the first place. This study helps to explain how the drug helps those with post-traumatic stress disorder and may even open doors to new treatments that relate sleep and mental illness.

DOI: 10.1016/j.cub.2011.10.052

Fleming’s fungus finally identified

Sarah Byrne

Moulds are perhaps the least celebrated of organisms, with the notable exception of the one that led to Alexander Fleming’s discovery of penicillin in 1928. The story is well-known: the fungal spores were accidentally allowed to contaminate a petri dish, Fleming observed that the mould was killing the culture of bacteria on the plate, and on further investigation it was found to be secreting an anti-bacterial substance which we now know as the first antibiotic: penicillin. It’s surprising, then, that we’ve never known exactly what it was.

At least, that was the conclusion of recent research from Imperial’s School of Public Health, published in *Molecular Ecology*. The species has usually been identified as *Penicillium chrysogenum*, a commonly occurring microscopic fungus found in air and household dust and on some foods. And indeed *P.*

chrysogenum, originally derived from mould on a cantaloupe melon, has been the culture of choice for industrial penicillin production over the years. However when preserved samples of Fleming’s culture were subjected to modern genetic analysis techniques, they turned out to contain a separate species, as yet unnamed. In fact, what we’ve previously considered to be simply *P. chrysogenum* actually appears to cover four distinct species.

This finding is of more than historical interest, however. Subtle differences between species of fungus mean they secrete slightly different versions of the antibiotic, or yield greater or lesser amounts. Understanding the differences and accurately identifying distinct strains gives us the ability to select for particular pharmaceutical properties, and discover entirely new compounds. As antibiotic resistance becomes an increasingly serious problem, innovation and clearer understanding in

this field are essential.

Also this work offers a fascinating insight into the complex and debate-filled world of fungal species identification. Distinguishing between species is not always straightforward, least of all when dealing with microscopic asexual organisms where it is difficult to even define exactly what ‘species’ means. Indeed Fleming himself originally identified his fungus as *P. rubrum*, before *P. chrysogenum* was accepted as the correct diagnosis.

Earlier this year, other prominent researchers in the field published their claim that Fleming’s species is in fact *P. rubens*. We may well expect a response from them soon, and the outcome is by no means certain. It would seem a fitting tribute, however, if Imperial scientists could honour their famous predecessor by giving his species their proposed name of *Penicillium flemingii*.

DOI: 10.1111/j.1365-294X.2011.05244.x

Earth's core deprived of oxygen

Nicola Guttridge

The composition of the Earth's core has been a mystery to scientists for nearly 60 years. While we know much about how this section of our planet affects us in terms of magnetism, energy generation and planetary dynamics, its precise makeup has remained hazy. Until recently all we knew was that the core is composed of predominantly liquid iron, along with small amounts of nickel, and 10% (by weight) of light elements.

Researchers have now used a mix of seismic and geophysical data, in conjunction with laboratory models, to determine the relative proportions of these light elements present at the centre of our rocky planet. New research by Haijun Huang and colleagues, published in *Nature*, examines their respective abundances and comes to a surprising conclusion – the Earth's core is oxygen-poor.

The composition of the Earth's core is vital; differing elemental proportions would result in different rates of cooling, rate of core growth, and evolution of our internal geodynamo – something that results in the generation of and variation shown in our magnetic field. By examining our core, it is also possible to gain remarkable insight into the conditions present when the Earth formed, and its subsequent geochemical evolution.

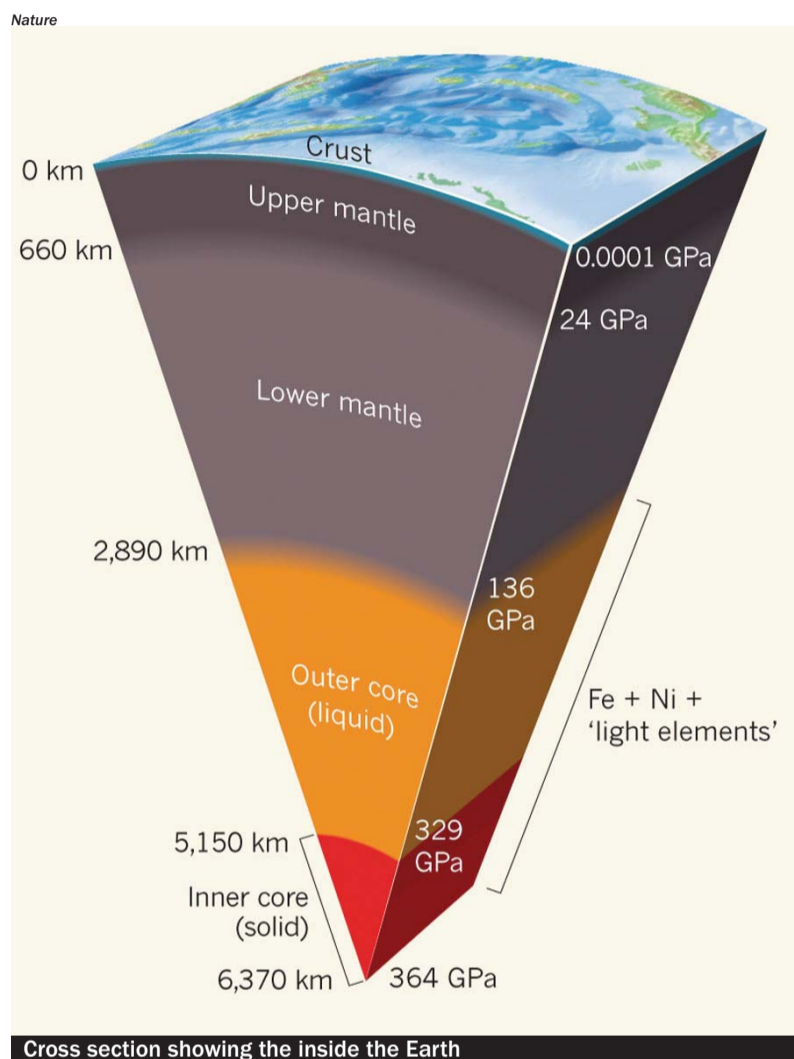
The Earth's core is known to be composed of a large, liquid outer core that houses a smaller, solid inner core – this is shown well on the accompanying image. The extreme temperature and pressure conditions make it difficult

to investigate how seismic isotropy, velocity and density would differ with the presence of varying light elements. Possible suspects for this light element quota include sulphur, oxygen, silicon, carbon and hydrogen, due to their solubility at the temperature and pressure ranges required.

Huang and the research team performed shock-compression experiments, where samples are subjected to core-like conditions through high-velocity impacts. Experiments such as these have played a major role in unveiling current knowledge about core composition; when iron-rich samples are used the results are extremely close to those we expect to occur in our core. The researchers used liquid samples in order to increase the accuracy of their findings as far as possible, and measured the sound velocity of the shocked samples along with the density and temperature states achieved through the impact.

Comparing these sound velocities and densities with the geophysical seismic data known for the core, Huang and colleagues were able to rule out certain compositions. They experimented by splitting the 10% by weight between oxygen, sulphur and iron, and found that samples with more than 2.5% oxygen by weight were unable to match the required dataset for density, temperature and sound velocity. "The results show that we can rule out oxygen as a major light element in the liquid outer core," say the researchers.

While sulphur is able to match the dataset required, previous accretion models have limited the proportion of



this element to only a small amount. Huang and colleagues have significantly advanced our understanding of the Earth's geochemical origins and elemental structure, but further ex-

perimentation is required using different mixes of light elements in order to fully determine the composition of our core.

DOI: 10.1038/nature10621

Science Societies

Philip Kent

November 26 saw the first of what is hoped to be an annual convening of the science societies of universities in the UK at a dinner, attended by some of the most prestigious names in the discipline.

Guests of honour included HRH The Duke of Kent; Nobel laureate Sir Paul Nurse, who received his prize for his research into cell duplication; Sir Roland Jackson from the British Science Association; and Professor Kevin Warwick, described as the "world's first cyborg" for implanting a RFID chip in his body.

Dinner was followed by an amusing and inspiring speech by Sir Nurse, who described his path into science (beginning with the sight of Sputnik 2 over the skies of Neasden), his work that led on to his Nobel Prize, and where he sees science in the future.

Of special note is the Frances Crick Institute, opening in 2015. Nurse described the Institute as being "anarchic," with 1,500 staff being organized in no departmental structure. It is hoped this way of structuring the Institute will lead to increased freedom, with no senior managers causing roadblocks to new research proposals. When asked if there are any examples of this arrangement in practice, Nurse did, however, reply "in my head".

Nurse also urged the attendees to use their scientific skills for the good of the nation. While he stressed that only those with a deep passion for science should go on to do research, it was important, he said, that we ensure that public are of a sound scientific knowledge, especially as the future becomes even more scientifically advanced. He used an example of the lack of scientists in Parliament as an example of where we fail at the moment, especially considering the ill-informed debate in the past, such as over GM crops.

Facebook is making the world even smaller

Alexander Karapetian

Facebook has conducted a joint study which suggests that there are, on average, 3.74 degrees of separation between users on the popular social networking website. The study, joint between Facebook's data scientist Lars Backstrom and four researchers from the University of Milan, found that the number of people that link two others on average is approximately four. That is, as the authors of the study explain, "when considering another person in the world, a friend of your friend knows a friend of their friend."

The study was carried out in May before the 'Subscriptions' feature was added to Facebook and celebrity fan 'Pages' were not taken into ac-

“There are on average 3.74 degrees of separation between users on Facebook”

count in the data. All active members of the site were included in the study, and users were deemed to be such if they had logged on at least once over a 28 day period. This marks the largest test regarding Hungarian author Frigyes Karinthy's idea that there were six degrees of separation be-

tween any two people on Earth. The hypothesis has long since been tested with various samples, including a notable effort by psychologist Stanley Milgram in the 1960s involving delivering a letter to an arbitrary person by passing through acquaintances.

Facebook's social graph data had 721 million members at the time of the experiment, with a total of 69 billion friendships. The researchers were able to analyse the data using rules from graph theory within discrete mathematics and by performing combinatorial analysis. They used a 24-core computer with a 1 terabyte (TB) hard disk to crunch the numbers, costing them "no more than a couple of thousand pounds".

Facebook typically limits users to a maximum cap of 5,000 friends. The

median amount from the sample size representative of 10% of the global population was only 100 friends, accounting for 0.000014% of Facebook's total membership. Results indicated 99.6% of all pairs of users were connected by 5 degrees of separation, with 92% connected with only four. The average distance between any two users was found to be 3.74 degrees, shorter than the average distance of 4.28 found by a similar Facebook study in 2008, strengthening the idea that a larger sample size often results in a lower separation level.

The researchers said that "the average distance appears to be stabilising", suggesting it would not change from 3.74 even if the rest of the world joined Facebook.

arXiv:1111.4570v1

Raphael Scheps



Sir Paul Nurse spoke at the dinner

Want to write for Felix Science? Email us!

TECHNOLOGY

Tips & Hacks

AMD pulls out of 'two-horse race'



A company spokesman for AMD recently stated that the company is going to “let go of the old ‘AMD versus Intel’ mindset”, a rivalry that has been ongoing for decades. It’s hardly surprising that they’ve decided on a shift in strategy, as they just haven’t been able to compete in the last few years. Even the latest Bulldozer chips – which were meant to be the pinnacle of desktop power – flopped. Meanwhile, Intel are going from strength to strength, with their Sandy Bridge line trouncing anything and everything that gets in the way. So what can we expect from AMD in the coming years? They have never expressed interest in building chips for smartphones and other handhelds before – and that’s a market already dominated by ARM. But they could have something in their sleeve. Or perhaps they’re looking at the emerging ultrabook market: one without a clear chip leader. Only time will tell, but with nothing to lose, it was probably the right decision for them.

School ICT to finally be revamped

A major initiative has been launched to drag Britain’s computer science curriculum into the 21st century, with one major goal being the reform of an ICT curriculum that has aged considerably since its introduction in the 90s. The Next Gen Skills campaign, which was coincidentally launched just before the release of a government report on the state of the national IT education system, aims to modernise a syllabus which at the moment focuses heavily on using software rather than making it. There does appear to be some confusion over what constitutes ‘computer science’ and ‘ICT’, perhaps emblematic of the dire need for a revision of some sort. With the government agreeing on the need for intervention, the only question is whether and where funding is to be found for it. The hope is that the new curriculum will focus on creative coding rather than repetitious Excel tasks; creating inventive programmers (think Minecraft) rather than earnest number-crunchers. The revision is merely in its first steps at the moment, but the coming year should see some clearer details emerge on the nature of the changes to be made. Hopefully, the legacy of the BBC Micro can be repeated in a modern context; it’s the only thing that will keep Britain competitive in an hugely technology dependent world.

Facebook: all shared out?

Feroz Salam

I expect most of you have noticed the new items that have started appearing in your Facebook feeds: Spotify playlists of music that your friends are listening to, and news articles from a whole host of national and international papers. They are part of the ‘OpenGraph’ scheme that Facebook has been pushing in earnest over the last few months: adding a few tags to your website means that any links to your website from within Facebook makes it a Facebook page.

Facebook’s been selling this feature hard: it describes the feature as enabling you to ‘integrate your Web pages into the social graph’, whatever that means. Yet how much control does the average user have on articles that appear in your profile, and how intrusive is the new service? As anyone trying to use any of the new links will have noticed, you can’t click on news articles on Facebook without signing up for ‘a new social reading experience’. Before agreeing to use the service you can choose which of your friends get to see what articles you read, a feature which I suspect few people are using. On getting through to the article, you are delivered to a Facebook themed version of the news website, with an option to visit the actual website if you wish.

It’s all fairly straightforward and has been embraced with some enthusiasm by downturn-stricken publishers as a way of driving hits and advertising revenue. Yet despite the new me-



dia/social media feeding frenzy, of how much benefit is this to the average user? The new interface adds nothing of value to the reader, unless you find comfort in reading reams of PR waffle about the power of social sharing. The biggest change that you have probably noticed is that your feed is now cluttered with the titles of articles your friends have read. If you have anywhere near the average number of friends, the articles are bound to be from a wide selection and not really catered to anything you are interested in. As far as new and interesting reading material goes, I’ve seen little. The same applies to Spotify in my opinion. I don’t make friends solely on the basis of music taste, and in many cases would rather not know about what my friends have been listening to.

One might argue that the responsibility of choosing which feeds end up in your timeline lies with your friends, as they are in control of what you see after all. Yet I would have to disagree – the sharing system in Facebook is very cleverly organised to make limiting sharing a few orders of difficulty more complex to organise than expanding sharing. In a sys-

tem geared towards drastically increasing the amount of information you push out to the world, it’s not surprising we’re hit with much more than we can possibly care about.

It wouldn’t be wise to underestimate the way media sharing has changed our communication. Yet sharing is only effective when it is organic, not when it is forced. Whole hordes of PR representatives shouting about the value of ‘next generation creative synergy’ will not get me to read an article about something that doesn’t interest me, no matter how hard they push it into my feed.

Social media is in essence about finding information that interests you that you wouldn’t have found before, but it doesn’t mean that information can be thrown at you from every context. When I log onto Facebook, it is to share things with all my friends, a diverse bunch of people from different countries, with diverse political and cultural tastes. Shoehorning views that are of no interest to them into my feed doesn’t interest me. Sharing has been great, but as with everything, the point of ‘too much’ has been reached.

Lost focus? Try the Lytro

Chris Bowers

Have you ever taken a picture, only to be disappointed when you later find it to be out of focus? You’re certainly not alone. Enter Lytro, the world’s first consumer-targeted light-field camera.

So what does that mean? In your everyday camera, what the sensor captures when you press the button is what you’re stuck with. It doesn’t matter how many millions of pixels you can capture at once if the light information you gather results in a blurry image. The light-field technology used in the Lytro takes a completely different approach to avoid this. Instead of focusing on a point and capturing the light information for that perspective, the camera captures up to 11 million rays of light going in every direction.

The main (and cool) advantage of this? You get to focus and refocus your photos after they’ve been taken. Not only that, but there’s no auto-focus motor working in the time between you pressing the button and the picture being taken. That results in the picture you end up with being much closer to the one that you saw with your eyes when you pressed the button – essential for fast moving objects and the



like.

So what about the actual camera itself? It’s surprisingly small – a cuboid-shaped device just over 11cm long and 4cm wide and high. With that you get a small (3.3cm) touchscreen, shutter and power buttons, either 8 or 16GB of storage and a very decent 8x optical zoom. It’s light too, weighing in at just over 200g, but it’s strong aluminium shell means that it doesn’t have to skimp on durability to achieve that figure.

The pictures come in at about 20-25MB each, and Lytro quote that the 8GB models (“Graph-

ite” and “Electric Blue”) will hold about 350 pictures, with the 16GB model (“Red Hot”) holding up to 750. The different models are priced at \$399 and \$499 respectively, which isn’t cheap, but isn’t too expensive either when you consider how new this technology is.

If you often find you’ve missed out on capturing those unmissable moments due to shoddy focusing, or perhaps you like to take pictures of fast-moving objects, then the Lytro may be the camera for you. Even if you don’t buy this camera, I reckon we’ll be seeing a lot more of this technology in the years to come.

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POLITICS

Looking at *The Bottom Billion*

A review of the book and a glance at the main problem in international development

Rory Fenton

The world of international development is more often than not more complex than the image the rock concerts and heart-strings-tugging TV ads might project. Often riddled with scandalous corruption and heated debate, a heavy dose of evidence is clearly needed. Oxford Professor Paul Collier aims to provide just this in his 2007 book *The Bottom Billion*. Billed as an explanation as to 'Why the poorest countries are failing and what can be done about it', the book injects a generous helping of evidence and statistical analysis in the aid debate, like smashing LSE and Imperial together in a particle accelerator.

A real strength of this book is that it manages to be utterly devoid of ideology. It doesn't even argue that fighting poverty is a moral issue, rather pointing out that the practical benefits more than pay for themselves. This absence of ideology is achieved through a technique after my own scientific heart: statistical evidence. Debate around development tends to be focussed on 'poverty traps'. The Left believe that being poor to start with keeps you poor; you can't afford anti-malaria medicine so you get sick which means you can't work which keeps you poor which means you can't afford the malaria medicine next time either. All the poor need, say the Left, is one Big Push to get them onto their feet, to buy medicine for them, to educate their children etc. The Right, on the other hand, deny the very existence of such traps with all the passion of Dawkins and his New Atheists. It is aid, they say, which keeps people poor by making them dependent on hand-outs and putting money in the hands of unpleasant politicians.

Collier, on the other hand, sits betwixt these positions, shaking his

scarily educated head. Just look at the evidence, he implores. *The Bottom Billion* is just that; the evidence. And having been head of development research at the World Bank and now director of the Centre for the Study of African Economies at Oxford, he's accrued quite a bit of evidence in his time, all of which has led him to believe that yes there are some poverty traps. But they come in different forms and may be affecting a given country in different ways. These traps are: conflict, natural resources, being landlocked and poor governance.

Conflict

It's pretty obvious that a country in the midst of a civil war is not going to develop very well economically but what Collier does is to quantify this truism. From the stats, a given failing state has about a 14% chance of civil war within a 5 year period. He finds that each percentage point knocks a percentage point off that risk. So a poor country growing at 2% will have the risk of civil war reduced to 12% whereas a country declining at 2% each year will have the risk increase to 16%. Of course, you might think that the prospect of peace leads to greater spending and so peace causes growth and not the other way around, but even when growth is caused by a rain shock (a flood, drought of very good rainy season), the same effect is found on the risk of conflict.

This might be hard for many to accept, as it is tempting to believe that rebels are fighting for some kind of cause, not simply because of a low growth rate, and besides, isn't much of Africa's civil strife simply a result of the horrors of colonialism? But when Collier compared countries with varying levels of economic inequality

and oppression of minorities as well as whether or not they had been colonised, he could find no clear evidence that these made countries any more conflict prone.

Other than the human misery caused by civil war, the impact is economically devastating. Collier puts the economic damage due to civil war at \$64bn to both the country itself and its neighbours. Given that two civil wars on average start every year, that's about \$100bn lost – more than the entire global aid budget.

So the poorer a country is, the more likely it is the fall into the very conflict that keeps it poor.

Natural Resources

Natural resources should be an easy route out of poverty and yet some of the world's poorest countries have an abundance of the stuff, just think of Angola and the Democratic Republic of Congo. Natural resources feed into the conflict trap since they provide something clearly worth fighting over, as seen in the movie *Blood Diamond* set in Sierra Leone. But natural resources can damage any country because they reduce the treasury's reliance on individual taxes, thus making politicians less accountable to their people. It is also much easier for politicians to embezzle money from natural resources and spend the money on simply bribing community leaders for their people's votes.

What Can Be Done?

Simply giving poor countries money is the obvious answer. But when used unwisely, aid can be counterproductive. When money flows into a country in the form of foreign currency (such

as with aid) it needs to be converted into local currency to be useful. However, aid isn't the only foreign currency that needs to become local; money generated from exporting goods also needs to be converted into local cash. So aid money actively competes with exports, reducing the value of engaging in the kind of trade which could pull the country out of poverty. Added to this, many poor countries place high tariffs on imported goods, which makes it even less likely that citizens will want to purchase foreign currency; they have nothing to buy with it, reducing the exchange value of the aid.

It also isn't clear that aid necessarily brings growth (as argued most strongly by NYU's William Easterly). Collier points out that a good natural experiment for an increase in aid money can be seen by the increases in the Nigerian governments revenues due to record oil prices; no additional growth followed. Not only can direct financial aid have this effect, so can the debt relief so loudly trumpeted by the Live 8 concerts. This doesn't mean that aid is doomed to failure; rather that it can't be seen as a magic bullet.

And aid money doesn't necessarily go where the West might want it to go. Collier estimates that about 11% of aid is actually spent on the country's army, representing 40% of military spending. Interestingly, Collier finds that the influx of aid increases the probability of a coup; to the victors, the spoils. Aid also reduces the need for economic reform, as it removes its urgency.

Given this, Collier's conclusion is not that we should give up on aid, rather that it should be given when the time is right. Corrupt governments will only waste the stuff, but once a genuine reformer gets in they should receive all the help they can get.

Military Intervention

This is undoubtedly the most controversial section in *The Bottom Billion*. Remember the \$64bn lost by each civil war? Collier argues that military intervention can prove to be one of the most successful forms of aid, provided intervening forces are prepared to take real risks, unlike the infamous peacekeepers in Rwanda, who would only fire when fired upon, not when civilians were at risk. The economic arguments make a novel addition to the tired (but compelling) moral ones.

Conclusion

Collier, in all, seems convinced that we can chip in. International regulation is his weapon of choice to tackle companies that pay bribes and to provide a benchmark for reform minded politicians. His case for military intervention is definitely the most daring of his proposals and in a post Iraq world, the least likely to take place. Aid can make a difference when directed at the right time and at the right kind of investment (like infrastructure). The book is certainly very 'big picture' and a proper review of how aid works at the local level will have to wait for my rereading of *Poor Economics*. All in all, a worthwhile, interesting read.

And the title of the book? Perhaps the most successful criticism contained within the book is contained within that title. It is time, Collier argues, to move away from seeing a world of 1 billion rich people and 5 billion poor when so many of those poor are pulling themselves out of poverty. The Millennium Development Goals make this mistake by bunching the world's poor together. A new development strategy focussed less on booming China, India and Brazil could achieve a lot more for the poorest billion who, so far, seem stuck at the bottom rung.

The world beyond College walls



by **Joseph Letts** and **Rajat Jain**

Iran

After Tuesday's storming of the British Embassy in Iran by angry protesters, tensions have risen between Iran and several European countries. British diplomatic staff have been evacuated from the country and on Wednesday Germany and France announced they were also withdrawing their embassy staff in Tehran.

Wednesday saw a further breakdown in relations between London and Tehran as Foreign Secretary William Hague gave Iranian diplomats 48 hours to leave the UK.

Mexico/US

US police have found an impressive drug tunnel, which links warehouses in Tijuana and San Diego. The tunnel is approximately 4.5 metres deep and contains lighting and transport carts for efficient drug movement.

Mexican security forces seized three tonnes of marijuana at the tunnel entrance shortly after discovering the tunnel in a warehouse in Tijuana.

A US police spokeswoman speaking during a press conference said it was the most impressive drug tunnel they have found in 5 years.



Egypt

Last week protests in Tahrir Square were restarted as the population shows its dissatisfaction with the rule of the military council that took over the governance of Egypt after the deposition of former President Hosni Mubarak. Since they started to lead the country, public safety has decreased and economic investment in the country has declined. After increased pressure, the Supreme Council of the Armed Forces promised to hold a presidential election in June, as well as releasing political prisoners.

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BUSINESS



Letter from the Editors

"I have no more patience for this Europe where Autumn wears the face of Spring and Spring reeks of misery." So spake Martha in *Le Malentendu*, Albert Camus's 20th century take on the Greek tragedy, Oedipus. As the European countries that constitute the Eurozone struggle through their sovereign debt crisis, Martha's bleak outlook resounds true with the public zeitgeist now, in the 21st century.

In the late spring of 2010 Greece became the first country in the Eurozone to receive a bailout from the EU and IMF; in the autumn of that year Ireland too was bailed out; this spring came Portugal, next in cycle of seasons and bailouts. At home a spring marked by freezes to public sector pay for the next two years has now been followed by the announcement in the Chancellor's Autumn Statement that increases after this period will be capped at one per cent, indicating continuing unhappiness for those who have taken to the streets in strike this Wednesday.

With cuts coming quickly and signs of improvement slowly, predicting the end of this age of austerity felt in both the UK and the EU is difficult. Changes to the way things have been done up until now will have to take place though; the Eurozone's crisis is reaching breaking point. Italian bond yields are beyond the levels that drove Greece, Ireland and Portugal to their bailouts, and as Italy is simply too big to rescue, the pattern of the last few seasons cannot be repeated. The solution favoured by the markets would be to allow the ECB to buy up the bonds of struggling nations and issue "eurobonds", backed by all the Eurozone countries. But with German Chancellor Angela Merkel refusing to move from her stance that solution should come instead from reform and a closer fiscal union, we must try and call on more patience, as we wait for the rest of this tragedy to play out.

– The Business Editors

A Western tragedy

The Felix Business Section finally turns its eyes to Europe in an attempt to explain the seismic pressures of the bond markets

Albert Nickelby

As a result of the so-called "Euro debt crisis" – whose solution seems to be too distant still to be clear – several of the euro club countries have been bailed out. Starting with Greece (2009), Ireland (2010) and Portugal (2010) have also been rescued, and in all the cases, the process followed a similar pattern.

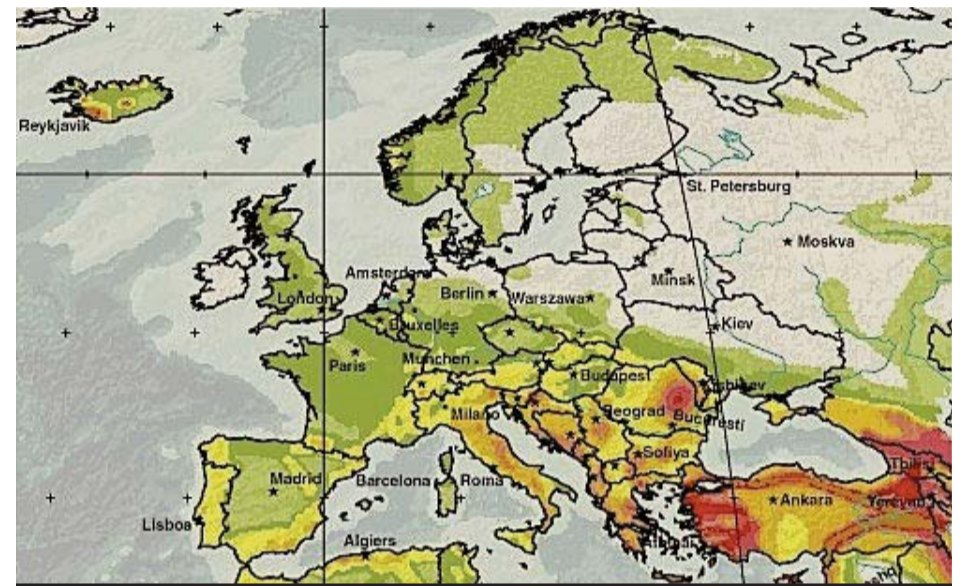
At some point, financial analysts and the "markets" – that abstraction which so conveniently hides the fact that they are made up of people – start questioning the capacity of those countries to honour their debts. How so? Enter the credit rating agencies, whose credibility, severely harmed by the credit crunch, does not prevent them from offering their educated opinion on the subject, in the form of the rather vulgar recitation: "public debt is too high; current deficit is not being adequately tackled; hence, we are cutting their credit rating from AA– to BB+ with negative outlook..."

This brings in to question the ability of those countries to pay their debt, and panic ensues. Their public debt bonds, which are exchanged in secondary markets, become far less attractive than before, and the interest rates investors ask for buying new emissions surge. In no time, these rates have reached such high levels (about 7% interest for 10 years bonds is usually thought to be the limit) that it becomes unsustainable for those countries to sell their bonds on those terms. As a result, the credit rating agencies cut their rating further, and in no time those countries have to be bailed out by the IMF and the European Union.

As a spectator, the process seems quite dramatic. The attention of the media focuses on public finances – self-styled financial experts start pontificating about their problems, their economies scrutinised and questioned as a whole. A media circus begins, that only precipitates the outcome, and, upon being bailed out, they are forced to undertake severe budget cuts, which inevitably depress the economy further, thus forcing them to take even more radical measures that necessarily produce further recession: the tragedy has just begun.

The arguments analysts and experts usually offer are always the same. They will point out the unsustainable amount of public debt with respect to the GDP; then that their governments have failed or have not done enough to reduce their deficits; that the ongoing economic crisis means that they are less likely to grow enough to pay off their debts; that their economies have severe structural problems that make the long term sustainability of their finances impossible unless dramatic reforms are implemented. They will suggest liberalising the labour market, increasing the retirement age, VAT and other taxes, and slashing government spending: "privatisation, deregulation and liberalisation", economists' universal panacea.

These arguments seem sensible: offered from an expert's perspective they are by all means good ones. However, the fallacy is that the



A seismic map of Europe produced as part of the Global Seismic Hazard Assessment Project achieved huge impact in benchmarking the risks of seismic activity across borders against a global standard. For better or worse, credit rating agencies map the debt risks of the world's countries

same arguments offered to question the public finances of Greece, Portugal, Italy, Spain or Ireland can equally be used to question those of more economically fortunate countries such as the UK, Germany, France, or the USA.

"The prudent finances of Germany seem no better than those of the often questioned Italy"

Consider, for instance, the UK, where public debt amounts to 81% of the GDP. If the total debt is accounted for, i.e. if the foreign debt due to private individuals and companies is included, the UK's debt is of 436% of its GDP. That is amongst the highest in the developed world: each UK citizen owes €117,580 to foreigners. Now, compare these figures with those of, say, Spain: public debt, 67% GDP; total (public+private) debt, 284% GDP; each Spaniard owing €41,366 to foreign investors. The prudent finances of Germany (83% GDP public debt; 176% GDP total debt; each German owes €50,659 abroad) seem no better than those of the often questioned Italy: 121% GDP public debt; but 163% of total foreign debt, so that each Italian would owe €32,875 to foreign investors. France has an 87% GDP public debt, a 235% GDP total debt, and each French citizen owes €66,508 abroad. Among the already bailed out countries, Ireland seems by far the worst case: 109% GDP public debt, and a staggering 1,093% GDP total debt, with €390,969 per capita debt: the Republic of Ireland, with 4.5 million population, owes as much money as

the Kingdom of Spain, with 47 million population. Greece has 166% GDP public debt, and 252% GDP total debt, each Greek citizen owing €38,073 abroad.

Of course, the economies of Spain, Italy, Germany and the UK are not the same, which roughly explains why some are so severely questioned and others so mildly treated: it is, after all, a matter of confidence, of whether investors believe you will be able to honour your debts or not. And that confidence is more or less based on the strengths investors may see in each country's economy. For instance, the UK has a huge financial sector and attracts and moves a great deal of capital, which accounts for much of the private debt; as long as it does not have to be bailed out by the UK government (an impossible deed, looking at the amount it owes), the UK seems to have a strong enough economy to be able to honour its debts. The huge Irish debt is also explained by the amount of foreign companies that, thanks to the Irish fiscal dumping system, have their European headquarters in the emerald isle; but as the housing bubble burst, Irish indebtedness was judged too large. In turn, Spain has suffered a devastating burst of its construction and housing bubbles, so although its public finances are by far the best of all the countries considered, its overall economic situation, with 20% unemployment rate, doesn't seem very attractive. And Germany's economy has fared so well during the recession, and its fame as a country that always pays its debts is so well established, that despite its public finances being no better than any others', it is still regarded as a safe haven.

But, all in all, reasons to fear the long-term sustainability of public debt are not that well founded. Consider, for instance, Germany. It is quite true that its economy is the strongest

Autumn harvest?

Rajvinder Virdee discusses what we might reap from Osborne's offerings in the Autumn Statement



The Autumn Statement: 10 Key Conclusions

- Economic growth forecast downgraded
- An extra £111bn of government borrowing over the next 5 years
- 1% cap on public sector pay rise (after 2 year pay freeze is over)
- Rise in state-pension age to 67 brought forward to 2026 (from 2034)
- Basic State pension to increase to £107.45 p/w
- January's 3p increase in fuel duty delayed until August
- Credit easing of £20bn (but possibly up to £40bn) to start helping SMEs borrow
- £1bn to subsidise 6-month work placements for 410,000 young peop
- £5bn new spending on infrastructure (another £20bn to be unlocked from pension funds)
- £400m to kick start construction projects

in the eurozone, but its public debt is still an 82% GDP; its 10 public banks are close to bankruptcy, and many of its municipalities and lands are broke. A large proportion (37% and increasing) of its energy imports are Russian gas; and, most worryingly, its demographics are catastrophic: with an average retirement age of 62, in 2060, 44% of the German population will be over 65 years old. There is already a huge shortage of qualified labour, and Germany has been forced to attract engineers from all over Europe to (roughly) sustain its huge industrial sector.

“The economic perspectives of Europe do not seem buoyant”

The UK is no better: apart from its huge external debt, it heavily relies on an oversized financial sector that has already been bailed out by the taxpayers and it is not, nonetheless, faring much better. Its industry having dwarfed in the last 30 years, many of its northern regions have been depopulated and underdeveloped, as the traditional industries were not replaced. There exists the increasing possibility of secession of some of its regions; and its isolationist tendencies continuously harm its national interests, as it keeps question-

ing the EU (while at the same time its economy heavily depends on being a member), to the point of being excluded from many negotiations where financial taxes and other decisions directly affecting the City are taken. There are no natural resources left, most of them being imported. By 2050, 25% percent of the population will be over 65, and although the UK is expected to become the most populated country in Western Europe, its social inequality, already among the highest in the developed world is, too, expected to grow.

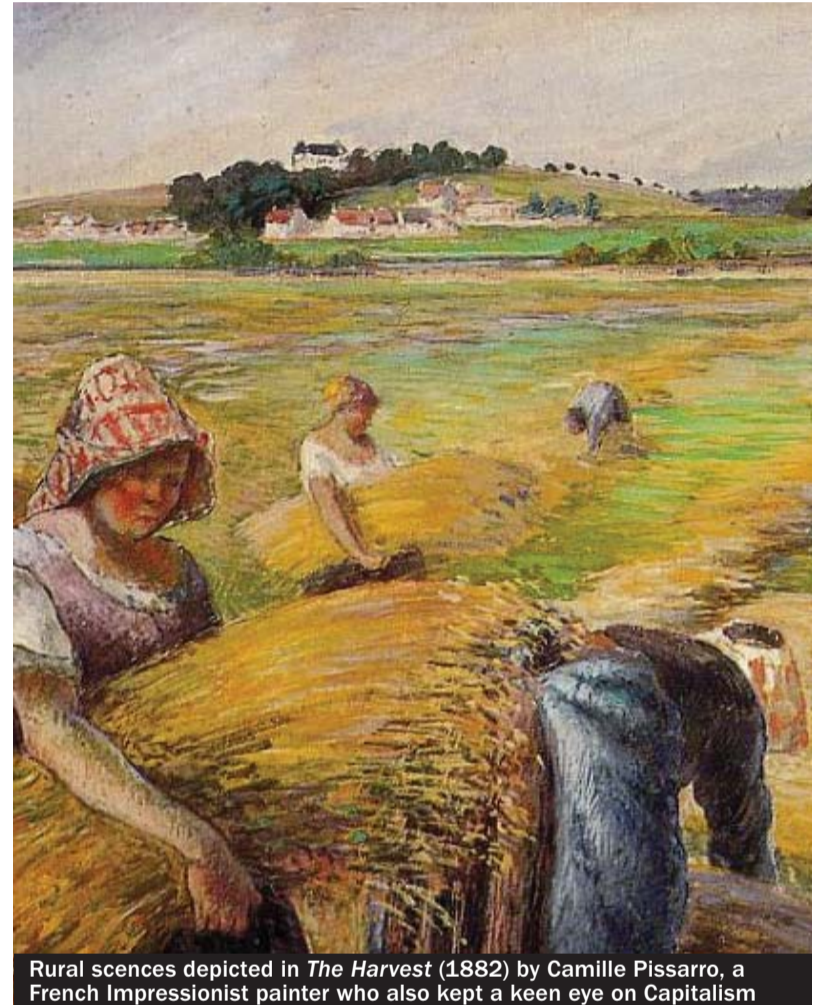
Thus, with some countries bailed out, some others at the edge of being so, and even the most prosperous nations being objectively in not much better position, one can conclude that, in general, the economic perspectives of Europe and the Western World do not seem buoyant. Recent analyses suggest that by 2050, Europe (and that includes the UK) will have lost 50% of its wealth in relative terms. The USA's preponderance seems to be waning, its political elites having lost their inner consensus in a situation that strikingly resembles that of the British Empire during the first half of the 20th century. The shift towards eastern Asia seems inevitable, and the current debt crisis appears to be but signalling that shift. The sad thing is that, obnubilated by our neighbour's problems, no country in the West seems to have realised that some long-term thinking beyond the “austerity measures” might be necessary, if only so that our future can be tackled with something other than hopes of bringing the long-absent confidence fairly back.

On Tuesday, George Osborne, Chancellor of the Exchequer, updated Parliament on the current economic situation of our nation, and what the government plans to do about it. The Autumn Statement is seen as an important event in government, as it offers an opportunity to reflect on pledges made in the main budget, and adjust policy depending on recent events. The Chancellor and his team take the Office of Budget Responsibility's published report on growth and borrowing forecasts and use these to adjust the official government position accordingly.

One of the pivotal moments of Osborne's address to Parliament was when he admitted the Government's failure to eliminate the budget deficit by the end of this Parliament. This was one of the Tories' main pledges during the election campaign of 2010, and signals a major blow to the Conservatives.

The general economic outlook is far bleaker now than it was 24 months ago; it seems that the austerity measures and the weakness of our public finances, combined with the international economic situations have led our economy back to recession. Whether or not Osborne's policies are the main responsible is a question of opinion. On the one side, the government is arguing that the stagnation is mainly due to external factors such as commodity prices and the Eurozone crisis; on the other hand, Labour argues that it is the way the extensive spending cuts were implemented – without giving time for the economy to recover, and relying too much on the private sector – that is the problem.

In any case, the economic situation is bleak, and it is going to be so for far longer than expected. This has led the opposition and many international commentators to consider Osborne's plans as doomed. However, the Conservatives do not appear to be ready to acknowledge failure. Thus, during his address, the Chancellor pointed out that the cost of our debt had become extraordinary low cost. Indeed, this week British bond prices dropped below the price of German debt. That is very significant; German debt is seen as extremely safe, and is usually used as a benchmark to measure your debt against. Although Osborne's failure to tackle budget deficit within this Parliament will mean that the UK will have to borrow more, this will cost less than expected. Whether or not this is due to the austerity measures is not clear; analysts such as David Blanchflower



Rural scenes depicted in *The Harvest* (1882) by Camille Pissarro, a French Impressionist painter who also kept a keen eye on Capitalism

believe that the only reason for this is that, our economic growth being so low, investors think the Bank of England will not dare to increase the interest rates in the next few years. Conservatives claim it is due to the success of the austerity measures.

Talking about state pensions and public sector pay could lead to novels worth of material, but once again Osborne's message seems to be that we are going to have to start contributing more (especially if you work in the public sector) for our welfare. But the increase in the basic state pension should help alleviate issues such as dropping many into poverty at the same time. The fuel duty increase that was planned for January has been postponed till August, but lobbyists would prefer it to be scrapped altogether, under the claim that energy and petrol companies will just increase their prices and make consumers duty.

Finally, Osborne made pledges concerning spending on infrastructure, building and community projects. However, he also acknowledged that the extra expenditure in those sectors would be compensated by further cuts

in other areas, probably firing more civil servants and freezing their pay further. Credit easing is planned to start soon, helping SMEs borrow at lower interest rates. We will also see a large investment in infrastructure, with rail and motorway upgrades amongst many others and £400m to be spent on new building projects. The 6-month work placement idea looks good on the surface, but looks remarkably similar to the Future Jobs Fund that was scrapped when the coalition came into office. But at the same time, any scheme that tries to help youth unemployment cannot be too harshly criticised.

The main message from the Autumn Statement is that everything is worse than before. Thus, the Conservatives are now on the defensive, starting to make pledges promising plans for the economy to start growing again. However, what Osborne offered this week seemed to be a lot about small policy, still too obsessed with keeping an austerity plan that seems to be slowly sinking. With these promises of action, at least they seem to discard the option of just sitting tight, crossing our fingers, and hoping we all get out of this intact.

Comment Editors: **Tim Arbabzadah**
Sam Horti

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COMMENT

FELIX

Imperial is unique rather than active

Following the sudden impact of the first wave of student protests last year, this week's pension protests almost seem part of a natural occurrence, but one, nonetheless, that continues to demonstrate the ever-changing nature of political activism. Imperial, however, remains an anomaly amongst institutions as protests continue on (as demonstrated by limited campus action on Wednesday). This is by no means a negative aspect.

If there is one area of life at Imperial College that separates us from a number of other universities, it is the neutrality of our Student Union. The refusal of the sabbatical officers to break ultra vires means that, at least for the immediate future, we will not see them protesting in central London alongside their counterparts from other universities, such as University College London. If anything, officers would be representing only a portion of students' views should they attend. They are, in a way, politicians rather than activists.

As a scientific institution, Imperial prides itself on the search for answers to difficult questions through considered evidence and an avoidance, where possible, of bias. If our Union actively followed one particular political viewpoint, it would provide an opposing message to the aims of the College.

For those who believe that a more politically active Union would lead to a more politically active student body, they would be mistaken. As the student body is largely inactive when it comes to activism of their own accord, suggestions from student representatives would be equally likely to fall on deaf ears.

The fact that our Union does not, for the most part, take a particular political standpoint is something that should be praised rather than ridiculed. If anything, a far greater number of students are likely to stand behind a Union that is neutral and caters to as large a group of students as possible. Such a situation, as it stands at the moment, in no way hinders the potential for the individual student to organise a group to protest for their own political view.

Some may argue that they do not represent the student viewpoint, but the neutrality instead provides a blank slate that can be written on by the individual, rather than the result of dictation by a higher authority. We should not decry our apoliticism, but instead embrace the measured thinking and opinion that we are open to.

Let's talk about Ron Paul

Why Liberty and Democracy don't mix



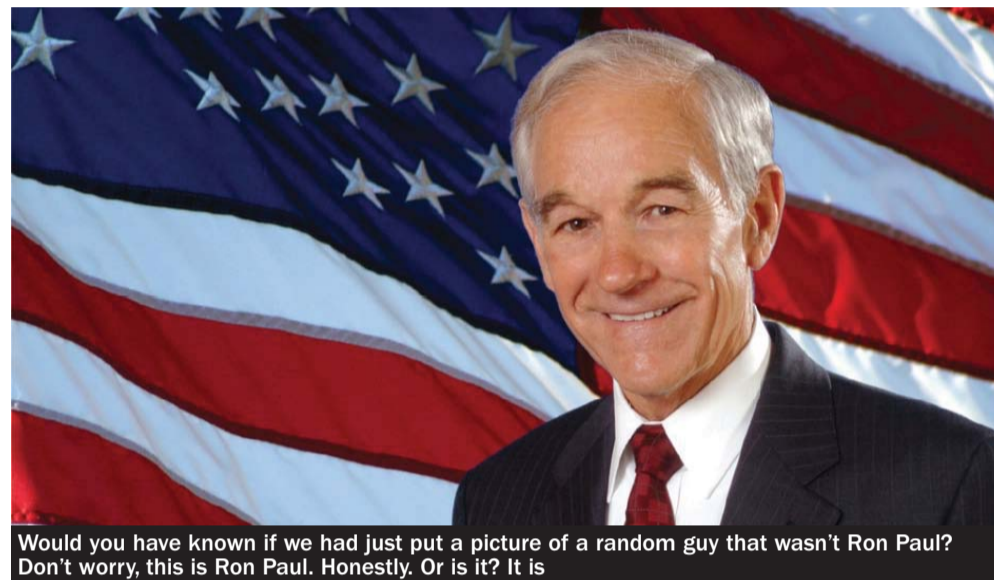
Samuel Horti

If you've been paying attention to the goings on in America in the lead up to next year's presidential elections, you will no doubt have heard many political commentators expressing the view that Ron Paul is the man that everyone has been waiting for. The hero that America needs. What is especially impressive is that this type of praise is happening across the board, regardless of political loyalties or emotional ties.

Now, I'm not going to tell you Ron Paul is a bad presidential candidate. He, in contrast with many in the American political system, is very honest, consistent and forthright with his views. I would whole-heartedly agree with him on many of his political positions, such as his desire to abolish the income tax (and lower taxes in general), and to end the "War on Drugs".

Best of all, he is a Libertarian who wants to reduce the size of the government and decentralise power, something that seems to me, at least in principle, a very good thing. Although not much of an achievement, he is by far and away the best Republican candidate, and seems to be the most viable alternative to another 4 years of Mr Obama. However, as you can probably tell from the title of this article, I find that Ron Paul's ideas are fraught with practical problems to their very core. Some of his more ludicrous views, such as his non-belief in both evolution and the separation in Church and State, are regrettable for a man of his intelligence, but their importance is negated by the fact that Mr Paul won't impose his beliefs on the American people. This, somewhat ironically, is where the main problem lies.

Essentially, Ron Paul wants decisions to be increasingly made at a state level. Whilst this means, thankfully, that his more ridiculous opinions will not translate themselves into law, it worryingly puts power in the hands of the American people. "But surely," I hear you cry, "more power to the people is a good thing, right?" This is the point at which the problems of de-



Would you have known if we had just put a picture of a random guy that wasn't Ron Paul? Don't worry, this is Ron Paul. Honestly. Or is it? It is

mocracy rear their ugly heads.

Anyone who advocates individual liberty (as Ron Paul does) must immediately sense a problem when confronted with a democratic system. Democracy and Libertarianism, in my mind, are complete polar opposites, which are incompatible with one another. Libertarianism, admirably, wants power to be given to the individual, whereas democracy wants power to be given to the majority. The latter establishes a mob-rule mentality, where 51% of the people can completely abolish the rights of the other 49%.

This is the reason that Ron Paul's America is doomed to fail. In an attempt to liberate individual Americans, Ron Paul will no doubt suppress the freedom of minorities in many parts the United States. In more reasonable areas, where the voters are well educated and have developed a good understanding of the purpose of society, there will not be many major problems. I cannot imagine, for example, there being any problem with the issue gay rights in the state of Massachusetts. However, it is when you examine some of the more bigoted states, particularly those inhabited by swathes of evangelical Christians, that you recognise the social problems that Ron Paul's policies (or, to be more precise, his non-policies) may cause.

What hope, for example, is there for the individual liberty of a Texan woman wishing to have an abortion, living in a state where the governor, Rick Perry, is allowed to use tax payers money to fund mass prayer events, like one he organised to pray for a halt America's national decline (whatever happened to the First Amendment?). What hope is there for the liberty of

Anyone who advocates individual liberty... must immediately sense a problem when confronted with a democratic system

a homosexual couple living in the state of Tennessee, where a recent bill, which has passed Senate clearance, will "prohibit teachers from discussing homosexuality in kindergarten through eighth-grade classrooms?" These instances of asinine stupidity are by no means isolated, as those of you who keep up with American politics will no doubt know. The emergence of discriminatory pieces of legislature seems to happen all too regularly.

When Democracy and stupidity come together, nothing positive ever gets done. It is an unfortunate fact that Ron Paul wishes to divulge powers to people that are far more bigoted than he is. As a man who has garnered respect from all corners of his country, Ron Paul could do so much for the freedom of individual Americans. As it is, his ideas are trapped inside a democratic system which, when combined with inevitably self-centred voters, gives us a situation in which the majority are encouraged to do as they please, no matter what the effects on others might be. Libertarianism can never prevail in a Democratic system.

Is shouting at people in real life too much social interaction for you? Well, you can shout in word form on: felixonline.co.uk

Save us from loneliness, send in your articles. Just remember the mantra below.
The views and opinions expressed here are those of the author, and not Felix.

COMMENT

This title has been delayed



Tim Arbabzadah

Reading that title, you can probably roughly guess what this article is going to be about. It's the trains in Britain. I used to think the trains being often delayed, expensive and not running much on the weekend was an Essex thing, innit. It appears that I was wrong in that assumption, and *Mock The Week* panellists must be pleased that it's widespread enough for everyone to appreciate their jokes. I'm just going to go straight for the jugular here: the trains in Britain need to be re-nationalised

I can't pretend to know much about what the trains were like in the past. I also can't really reliably ask anyone: if I ask my mum (who, if she's reading, I'm eating loads of fruit and working so hard that I could technically take Imperial to some sort of criminal tribunal) she runs out of the room to grab her most rose-tinted of spectacles and tell me everything was perfect. So, what I know is what is here at the moment. Obviously, it wasn't always perfect then, it's not perfect now, and it will never be perfect. We should look to improve what we have now. Saying "yeah, well, if you look at it objectively it used to suck so why does it matter if it's awful now" is a bit defeatist. We constantly should be trying to find a way to improve a service.

You may, at this moment, be shouting, "hey look you massive arsehole, we're over two paragraphs in and you haven't made an argument yet". To this I would say that calling me an arsehole is a bit strong, what are you – a YouTube commenter?

Never fear, the 'well thought out' argument is coming up now.

As mentioned above, I live in Essex. I used to get the train to and from school every day. They were average at best, very expensive, and they were not either large enough or frequent enough to have the room for everyone to sit. The trains are privatised and are run by a private company. The idea is that this causes competition and the companies have to improve their service to gain customers. Sounds fine in theory, but there is one massive gaping problem: only one company runs all of the trains on the line. This is where, like a cricketer who was thinking about Scarlett Johansson just as he's about to make a catch, privatisation drops the ball. Even if I wanted to choose a different train company, as the current one wasn't giving me what I wanted, I couldn't. In fact, even if I drove (slightly defeating the point of a convenient train station) to another nearby station it would still be the same company.

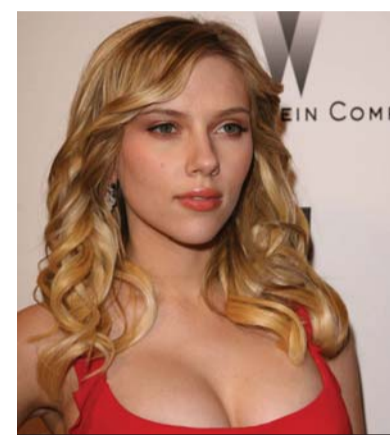
When you fly from, say, Heathrow, you can choose what airline you use (e.g Virgin or BA). You can get to the same destination using either airline. They have to compete in terms of quality, price, or the best compromise of the two for your custom. This gives them an incentive to keep prices low and quality high. How can this be applied to a service where I only have one option? How does the idea of competition meaning better service apply when a company has a monopoly? I concede, perhaps, you could argue that they had to compete for a Government contract, but that's not every year and once they have it they have the

monopoly.

The operator on your line can basically hold you to ransom. They know that you need them and can therefore mess you about as much as they like. An opportunity they didn't need a second invite to take. Ticket prices constantly soaring, less staff around, more delays, and don't even try to get a train on Sunday or you will be banished to hell (replacement bus service – at the same price as a train, of course). Why shouldn't they? They have no incentive to be anything better than the minimum required guidelines. They know any improvement will be wasted, as people have to use them anyway. What can I do? I can't force them to improve by taking a different operator's trains; I have to forgo trains entirely to protest. For many people (not to mention the congestion it would cause on the roads) this just isn't a practical solution.

Another argument, often used for privatisation, is that it takes the burden of the cost of running the train service away from the tax payer and places it onto a company that will use ticket prices to recoup the money spent and make a profit. The trouble being that this hands the operator a no win no fee situation. If the train company goes bust they have to be bailed out, as the trains can't just be allowed to stop running. They won't try to go bust, but they don't have to be that careful as they have a safety net. What I don't understand is why the Government just lets a company reap all the rewards of privatisation and have no consequences. Why don't they just do all the running of the trains in house?

The train service is a public service; it is



The reward for reading this article is a picture of Scarlett Johansson

there to provide you with a cheap, readily available means of transportation. It just makes no sense for it to be privatised. It should be in the public domain, so it can be run in the interest of the public. I'm not saying suddenly everything would be perfect, but it would be a start. I also understand that it can't have a bottomless pit of money to use, but it would be there to run the best service with the available resources, not to make the most money from it.

Private companies are there to make money, but there are just some things where making money isn't the overall objective and they therefore shouldn't play a part. The NHS is another example where a service must be kept as a public service. If you disagree with that, then the other main point is that you don't even get the benefits of competition.

The train service is a public service ... it just makes no sense for it to be privatised

The Occupy Protests are succeeding. Just look at this paper



Padraic Calpin

The Occupy movement, inspired by protest in Spain, made famous in New York and now a global phenomenon, is succeeding. On the face of it, this might seem to be an audacious claim. Indeed, some of you will be reading this and audibly scoffing; "They have no clear goals; what are they succeeding at?"

Actually (though I would firmly suggest you read their statement at occupylsx.org), that question is surprisingly valid. There is no single event that will definitively cause the protesters to say "right, job done", and head home. Though the movement advocates some specific policies, such as the abolition of Tax Havens, the main focus is something more fundamental.

What these protests aim to do is to encourage public thought, discussion and debate over the social, economic and political issues that affect all of us each day. In short, they are trying to effect the end of societal apathy.

What the occupiers have recognised is that a movement will fail without wider support, especially when you seek to erode the concentration of power held by the 1%. As such, they have sought to include as many people as possible from day one. For example, the London protesters have set up Tent City University and the newly opened Bank of Ideas, holding daily free talks and discussions. Even the camps themselves welcome anyone, whether you're a purposeful visitor or a curious passer-by.

For another example, consider the movement's General Assemblies used to decide everything from appropriation of food to writing their political agenda. Totally 'horizontal' and once again open to anyone, the GA reaches decisions via collective agreement, and under the rules any spectator can vocalise their particular opinion or reservations.

When the protests began, many sceptics may have glibly remarked that for "the 99%", the number of people demonstrating seemed somewhat small. But, through this focus on public awareness, it has taken less than three months for a single camp to swell into a global phenomenon.

It is with this in mind that I declare the Occupy movement is succeeding. You need only look to this, the student paper of

a reputedly apolitical institution, to see that it has managed to provoke a public debate. In the past month we've seen no fewer than three comment pieces on the Occupations and two features on public protest.

However, this success marks only the beginning. These protests have become more than simply clumps of tents; they have become an ideology, merging seamlessly with the wider public outcry that saw 61% of British people support the November 30 strike.

As @OccupyWallStreetNYC tweeted, "You Can't Evict An Ideal". Cheesy? Yes. But, in fact, already vindicated: two weeks ago, after 200 people were forced from Zucotti Park, more than 1000 took to the streets of New York, and the demonstrations show no sign of stopping.

Comment Editors: **Tim Arbabzadah**
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COMMENT

“Total policing” not like total football



Luke Sheldon

“Even with the disproportionate scale of police reactions, people still felt it necessary to highlight the issues with the Government’s austerity measures”

After 12 hours of protest, beginning at 7 in the morning at Liverpool Street, the idea of protesters as lazy hippies has simply dissolved. They believe the mantra that the early anarchist gets the worm. We saw electricians, librarians, teachers, council workers and children line the pickets and march in protest against the changes to public sector pensions. However, following on from the November 9 student protest where 4,000 police, 3 helicopters, steel barriers and numerous surveillance techniques were used against 5,000-10,000 protestors, the strike day in London was marked by unprovoked heavy handed policing.

This has now been termed “total policing” and has been created to save face for the Government after last year’s student protests and the summer’s riots. Although people champion this as what the police should be doing to control violence, the knock on effect is that peaceful protest is being squashed. In the morning, police, with dogs, descended on 30 picketers in Hackney arresting them for “blocking a road”. Whilst this occurred I took part in the Occupy London tour of the city raising awareness about the strike during the morning rush hour. The police outnumbered us, getting quickly physical, aggressive and frequently kettling us; they obviously had the idea that nothing would happen today.

Before heading out on the main London march to Victoria Embankment, I joined the public service picket in Brixton. Here people felt angry about bailing out the banks whilst public service workers have greater pressure on their already low pay. They chanted “What do we want?”, “A pension”, “When do we want it?”, “Before we die!” This energy, also present on the march, quickly fizzled out as people were shepherded by lines of police in to almost motionless crowds to allow traffic to continue. The police’s presence flattened nearly all emotion. After 3 hours of constrained marching, we arrived at Victoria Embankment exhausted, and like the people around us, feeling like nothing had been achieved.

As the 2 million workers refused to work today, 92% of London schools closed, and thousands flooded the streets across the country. David Cameron remarked in the House of Commons that the day was a “damp squib” and Boris Johnson asserted that it “won’t make a bean of difference”. The lack of recognition of the protest, its support, and the nearly successful attempts to quash it with the force of police, meant that I left at the end of the march completely disillusioned. Our collective effort has achieved nothing due to the arrogance of the Government, which believes it can ignore the population and its interests without sparking further riots. As if things could not get worse, we witnessed the baseless arrest of people leaving the

protests in Trafalgar Square; and when we gave them legal advice, as the police were ignoring the legal process, we were threatened with arrest ourselves. Democracy is being burned to ashes.

However, a surprise Phoenix of civil disobedience managed to escape from the heavily policed flames. On the authority of Occupy London we gathered in Piccadilly Circus along with considerable riot police, though, as if by magic, hundreds of Greek football fans entered the square celebrating a victory. The police got distracted, the samba band kicked into action and a flare led crowd charged around the corner into Xtrata, the company with the highest paid CEO in the FTSE100. Noam Chomsky criticises football for distracting the masses from political action, though here the distraction served a much-needed purpose.

Today would have passed with no mention of the bankers that have caused this crisis, as the city was heavily blocked. The politicians safely lay behind 12 foot steel fences and the Tory headquarters, ransacked in last year’s student protests, were guarded, even though they lay miles from the crowds. However, by sheer chance, the startling inequality of this country – where the CEO of Xtrata is paid £18million a year as 60% of children in the nearby Tower Hamlets lie in poverty – could be shone in all its disgusting glory. The protesters who peacefully entered the building will now expect up to a year of legal



proceedings to be prosecuted with aggravated trespass – a charge purely created for policing peaceful protest. The night of arrest was also filled with police harassment; the people caught in the vicinity are being placed on police records (hopefully including the suit-wearing man who kicked me), police dogs were brought in to an already contained crowd and I have heard reports of police violence in isolated pens.

Even with the disproportionate scale of police reactions, people still felt it necessary to highlight the issues with the Government’s austerity measures, where the poor are punished as CEOs see their pay constantly rising. And for the moments where the orange glare of the flare guided people into the bastion of inequality that is Deloitte, it was truly beautiful.

We need a new kind of giving



Rory Fenton

“...the aid world needs more scientists getting involved”

If you are a science student at Imperial there’s very little you can do to get involved in international aid. The medics can use their skills to deliver life-saving vaccinations in Mozambique. The engineers can use their skills to build drought-fighting dams in El Salvador. And us scientists? We get to teach English in a random school somewhere.

Of all the skills I’ve gained from my education, being able to teach English isn’t one that ever made it to my CV. And yet for so many of us this is the only way to get involved with charities. This feels like a terrible waste of ability. Fortunately it doesn’t have to be this way.

You see for all Imperial’s students that are involved in charities, there are questions that ought to be answered: just how do we know we’re actually making a difference? How do we measure and improve outcomes? This is where the scientists come in.

I would argue that the state of international development today is much like the

state of medicine two hundred years ago. The patient’s problem may be clear but she finds herself surrounded by various conflicting quack doctors, each offering his own particular brand of tonic to cure-all-ills. It took the rigour of the scientific method with its ruthless reliance on randomisation and evidence to break through the quackery and create what we now call medicine. To be poor in 2011 is much the same. The problems may be clear but solutions are offered from so many different groups, each peddling their own particular cure-all-ills ideology, that any correct answer is likely to be lost among the crowd. The case for a new, rigorous, evidence-based approach to aid couldn’t be clearer. A year ago I had the chance to see how this could work in practice.

Lake Turkana, the largest body of water in Kenya, has been the site of so many important archaeological discoveries that it is termed “the cradle of civilisation”; a title that will strike any foreign visitor as ironic on seeing an area with minuscule literacy,

increasing and devastating drought and a HIV prevalence of up to 25%. It was here that a friend and I had the chance to investigate a fishing program, interviewing fishermen who had received subsidies to help them buy boats and nets. After speaking to around 200 of these fishermen and going fishing ourselves, we took the data back home and ran it through our machines with a statistician. The results were surprising.

It seemed that boats were bad, expensive investments compared to nets. Boats served more as a status symbol than an economic investment. But this was good news. It meant that the charity funding the subsidies could shift their focus onto nets, saving them money while increasing the number of fish caught. They are currently working on how best to implement this strategy.

The power of what was essentially a lab report level analysis was surprising and exciting. But the role that the scientific method can play gets so much more sexy with Randomised Control Trials, or RCTs.

To overuse a metaphor, they work just like medical trials – properly randomised with control groups receiving no aid and a test group receiving ‘treatment’ such as a particular microfinance program or school system. Carrying out this kind of trial takes exactly the skills required in a science degree.

The ability of the scientific method to shine a light on a hitherto murky world of guesswork and quackery has been proved over the centuries, but its role in aid is just starting to be recognised. Some at Imperial have taken a lead in this – Sir Alan Fenwick will be talking about his experience in just this work today at 6 in SAF. It will likely be today’s graduates who will help shape an aid debate in which evidence truly triumphs over ideology. For this to happen the aid world needs more scientists getting involved. Looking to make a difference? A career in development may be an unexpected use for your degree, but it’s much more effective than teaching damned English. Who’s with me?

COMMENT

IC Debating Society are always up for an argument. Sometimes they send them to us to put in here. Unfortunately, this week, they got sidetracked for two hours debating the meaning of debates. Then they started arguing about if they were even really there or not. Luckily, they got round to debating Greece as well. Here it is...

“Should the Greek Economy be allowed to fail?”



Yes – James Clough

“Let Greece have its own currency, let them devalue it, and let them sort out their problems”

Greece has serious problems. Essentially they have run out of money, and lending any to them is seen as a very risky business. As such, the lenders are only willing to offer high interest loans; this worsens the problem as Greece’s interest repayments increase and their budget deficit gets ever bigger.

How did they get into this mess? It’s this simple: the Greek government spent too much money. “But we’re in a recession,” you say. “Keynes says that we need to spend our way out! Increase government spending – boost aggregate demand” you cry. Keynes does say this, but he also says that you must save during the good times, during the boom, so that you can afford to spend your way out of the bust.

Greece didn’t do this – they even managed to lose money during the boom years. And thus, the seeds of disaster were planted. Because they didn’t save when they had the money, and because they have been borrowing too much for too long, Greece simply can’t just borrow and spend their way out of this mess.

What normally happens in this situation? Well, usually governments have another trick up their sleeve. They print more money; they devalue their currency, and their debts are worth less. It doesn’t do the country much good, but it helps get rid of the debt. But Greece can’t do this because they are part of the Euro.

They don’t get to choose when their own currency is devalued. Political problems arise, because the rest of Europe, who still have money and are still trusted to borrow (mainly Germany and France) have to bail them out. These countries promise that they will guarantee the Greek debt. And of course, Greece has to cut its spending to ensure they don’t get into the same mess twice. There will be years and years of harsh

austerity as future Greek taxpayers are forced to bear the burdens of older generations who earned too little and spent too much. And what of the next in line: Italy? Too big to fail, but also too big to bail. Italy’s debts would swallow up the entire bailout fund, and maybe more. Not to mention the fact that Italy is supposed to be one of the three countries who are guaranteeing the bailout fund. We can’t afford to bail out big-spenders forever.

There is another way, though. Let Greece fail and let the Greeks accept that the Euro has failed them. Having one currency for multiple governments has meant that they could not fully control their own financial system and deal with the crisis. Getting help from Germany means surrendering political freedom: Greece will have to do whatever its masters tell it.

If they leave the Euro and return to their old currency, the Drachma, they can recover. Yes, it will lose a lot of its value at first. Many Greek civil servants, once part of a bloated bureaucracy, will have to get private sector jobs. But weak currencies can be the catalyst for future growth. Greeks will struggle to afford the import of foreign goods, but they will be able to sell products for lower prices. Imports fall but exports rise. Money will flow back into the country. Slowly but surely the tide will turn and Greece can experience true growth, unlike the dangerous debt-filled bubble they resided in before.

Let Greece have its own currency, let them devalue it, and let them sort out their problems. It is the only way to save Greece and save Europe. Bailing out the countries which spend all of their money may seem like a good idea now, but one day Germany will run out of money to help with these bailouts, or its voters will just say no. And when that happens, this crisis will look very, very small in comparison.



No – Ed Middleton

“it is practically important that Greece... continue as a functioning, participating member of the Eurozone”

When, in 2001, Greece joined the Eurozone, it signed a treaty that certified its membership of this group indefinitely. There was no clause that permitted the secession or expulsion of a state from this particular community. This would make it very difficult for Greece to decide to leave or, equally likely, to be thrown out. Granted, it would not be impossible to create a pathway by which states may leave the Eurozone, but this would become problematic in the future. The same problems would form that drove Abraham Lincoln to declare war with, and reunite, the confederacy of the United States in 1860. If members of a group are free to come and go whenever they please, the authority of the community is undermined; without unanimity, it is very difficult to achieve anything. If a state feels that a policy is not in their interest, they can simply leave. This makes it impossible for strong community-based governance to occur and makes the community indecisive, stagnant and slow to implement change. It also adds an internal political element to the decision, where leaders of member countries can gain political capital by threatening to exit the Eurozone unless their state’s demands are satisfied. This would be in nobody’s interests, since it makes it very difficult for the community to fulfil its goals and aid co-operation of member states.

The main danger with Greece is that of disorderly default. This would occur if Greece could not meet its financial obligations and so decided to simply give up. In this instance, there would be huge losses for investors, not just within Greece but across the world. Many French banks would be heavily hit, as they hold large numbers of Greek Government bonds. This would generate a wave of instability that would threaten to shatter both fragile and more secure economies in Europe. Even if it wasn’t possible to prevent a default in Greece and the levels of bailout were not sufficient for Greece to meet all of

its obligations, a public attempt is important. If other European nations make a clear and public demonstration to Greece that they are supporting it in its hour of need and attempting to shore-up its fragile economy, Greece will be much less likely to turn around and give up on Europe and its payments. A strong partnership between Greece with the rest of Europe is likely to mean that Greece can be kept on track and any default, should it occur, can be rigidly controlled to minimize the damage and risk of spread.

This element of contagion is also important with respect to global investor confidence. Many foreign investors have been wary of investing in Southern European economies – as well as Western European economies to some extent – since Greek financial woes came to the fore. If Europe is seen as being decisive and clear in its support of Greece, investor confidence in other European countries will be sounder. This is important as it has consequences in terms of borrowing for government bonds, such as interest rates. An amputation of Greece from Europe would mean a long period of instability in Greece (see Argentina from 1999 onwards) and likely a disastrous return for foreign investors: who, if they feel that countries will be allowed to fail and then jettisoned from the community, will be much more wary of Europe as a whole.

To conclude, it is practically important that Greece be bailed out and allowed to continue as a functioning, participating member of the Eurozone. Precedent for secession would cripple any executive fiscal power of the Eurozone, reducing it to a meaningless association. Unmanageable debts would also increase the likelihood of disorderly default, a catastrophic global economic event. More importantly, however, is the need for Europe to be seen to publicly support Greece for reasons of global confidence and internal feelings of security and community by Eurozone nations.

ARTS

Arts Editor: **Eva Rosenthal**
Will Prince

arts.felix@imperial.ac.uk

The Poet's Column**Essence of Heaven's Soul**
by Pavitar Devgon

Summer's shine and winter's sleet
Autumn's crisp and spring is sweet
Ready for the haul ahead
Acting on impulse and beat
Hardly there yet still a thorn

Innately there to see the dawn

Lending a thousand words unsaid
Open free and shackles torn
Vying for a pedestal
Every shout I return its call

Yawn and itch, my hunger's fed
Only then to jump and fall
Unless of course already said

Felix Arts is constantly looking for new poets. If you want to see your work appearing here, do get in touch. Additionally, those interested in joining Poetry Society, contact Osas, at oo2409@imperial.ac.uk.

Marilyn's back with a new message:

"ICSM Drama's Main Play this coming March is an adaptation of Billy Wilder's classic film 'Some Like it Hot'. To be a part of the most hilarious, scandalous and glamorous play in Imperial's (venerated) history come to the Auditions NEXT WEEK.

Sun 11 Dec	Glenister G1, CXH 13:00-18:00
Mon 12 Dec	SAF Rm G65 17:30-20:00
Tues 13 Dec	SAF Rm G65 17:30-20:00
Wed 14 Dec	Glenister G1 17:30-20:00
Thurs 15 Dec	Sem. Rm 1, Reyn. 17:30-20:00

Ladies, if you reckon you're the next Marilyn Monroe; gentleman, if you have an inner gangster to let out; come and audition!"

Free House Verse**Eva Rosenthal**

The first poetry evening I attended left me with the somewhat sour taste of disappointment, enhanced, no doubt, by the dashed hopes I'd been harbouring all week. Instead of great poetry, I was faced by something resembling slapstick stand-up comedy.

For that reason, I turned up to *Fluent on Paper* with no hopes at all – and was very pleasantly surprised. Hosted in one of South Kensington's nicest pubs, **The Builders Arms**, the atmosphere was warming, perfect for a freezing November night. In front of a dark banner, aspiring poets read their work to an audience of friendly faces; no doubt welcoming in the face of spilling your emotions to complete strangers.

Most of those reading their poetry had never done so in public before. They managed in spite of shaking hands and voices; their courage was inspiring. Ed Spencer in particular, who was the last of the invited poets, established the necessity of 'acting' one's readings. Perhaps his poetry was not what one would call 'first-rate', but no-one noticed or even cared because he proved to be such a fantastic actor; his poems lived and breathed in his interpretation of them.

There were even several poems written on the spot, as people found themselves inspired by the creativity of the evening. Matt Allinson's hilarious poem on the organiser of the event, Kadhim Shubber, certainly had the laughter



To those who read Felix for the witty picture captions, I'm sorry

flowing. Dylan Lowe ended the night with a poem written in ten minutes on the beauty of Bulgaria.

One was never meant to enjoy poetry alone and in silence. Instead, poetry readings were commonplace in homes, public spaces and at the glittering literary salons of the past. It is impossible to translate the nature of these events to our hurried times, but *Fluent on Paper* cer-

tainly tries. From January onwards, it will be a monthly event and I encourage both poets and lovers of poetry to attend. It is a great success for Imperial College students to have a poetry night hosted by one of their own – we can do more than science, it seems!

Fluent on Paper returns on January 22 at **The Builders Arms** in South Kensington

The Old Man and the Movie**Charles Betts**

It was Tuesday and I found myself having a beer in **Brinkley's**, the louche Chelsea eatery and favourite Hugh Grant haunt, and I was surrounded by middle-aged desperate housewives. They were botoxed and dyed blonde and high-heeled. It was then that I became engulfed in a peculiar Hemingwayesque malaise. It was then that I realised just how depressing desperate housewives are. It was then that I noticed there are too many cheerless people busy gold digging and lust searching at the same time when the two appear to be incompatible. They demonstrate that romance is dead in all too many marriages.

It was therefore appropriate that I stumbled upon Woody Allen's latest cinematic oeuvre *Midnight in Paris* on Wednesday. In what has been rightfully hailed as a cinematic tour of

"The artist's job is not to succumb to despair but to find an antidote for the emptiness of existence"



I see why Hugh Grant likes Brinkley's

a golden age of art and literature, the film prominently features Ernest Hemingway throughout. His bold, poignant sentences in stark contrast to Owen Wilson's lead character's somewhat clumsy Californian chat.

The film explores, by means of sharp wit and a stunning Parisian back-drop, that a life without art is a life not worth living. As Gertrude Stein (yes, she's in the film too) observes: "The artist's job is not to succumb to despair but to find an antidote for the emptiness of existence." It is around this theme that we meet Picasso, Matisse, Dalí, Man Ray, Scott Fitzgerald, and many more; each with

their own delightfully attributed clichés. Not least Hemingway, parodied with such gems as "no subject is terrible if the story is true and if the prose is clean and honest."

A couple of years ago I saw Woody Allen play the clarinet with his **New Orleans Jazz Band** in Paris. While his rendition of 'If I Had You' sounded more asthmatic wheezing fox than Benny Goodman, his passion for jazz shone through. His films have consistently played themselves out to the tune of jazz standards and provided the uninitiated with a glut of great melodies. *Midnight in Paris* is no different, with Cole Porter making an appearance as he strokes the ivories to the sound of 'Let's Do' It at a characteristic 1920's hedonistic party.

The movie also argues that lasting relationships are built neither on lust nor love at first sight. Unlike the pseudo-romantic marriages of the aforementioned desperate housewives, they are built on understanding founded on shared tastes. Woody Allen has his critics. They proclaim that the gags are cheap and that the sets are clichéd and that the plots are thin. But I have always loved his films (although best to avoid *Scoop*). Perhaps this love too stems from shared tastes. Affection for jazz, hearty quips, and a belief that life shouldn't be taken too seriously.

A Fairytale Shredding

No Grimm faces at Shamini Bundell's latest MTSoc offering

Matt Allinson

Imperial College's very own Musical Theatre Society consistently puts on hilarity filled shows that mix wild humour, a flair for the outrageous and an almost tangible passion for performance. The first term revue of late has progressively developed into something more elaborate. While still based around a collection of well-known show tunes, the plot element and staging of these performances has become ever more ambitious. The sheer scale of this term's production meant that, attending my preview, I was terrified that perhaps in an attempt to outdo last year's exquisite *Imperial Collage*, the well-meaning folk of one of Imperial's most vibrant and active societies had completely over-reached themselves.

The script, written by Shamini Bun-

"I can't begin to think of where to start chucking the praise"

dell for this performance, sounded completely mental and the cast was huge. Settling down with apprehension, what I saw unfurl before me was beyond what I could have possibly imagined. The animated anarchic explosion of drama and pure, unbridled, and not-a-little-bit camp fun that followed had me either in stitches or semi-rapturous joy.

The general concept of the story line is a pastiche of several of Grimm's Fairy Tales, similar, in a way, to *Shrek*. However, like that perennially re-commissioned children's classic, the use of well-known characters is not overbearing on the plot itself; rather it allows for a familiar background on which the action, concerning a few intertwined love stories and a traveling band of lesbian cat bandits, can take place.

I can't begin to think of where to start chucking the praise in terms of who deserves it most. Ms Bundell has crafted a fantastic script that manages to keep you laughing without wallowing in trying to be funny for the sake of it. Any weaker gags are carried by the strength of the cast, who with such



Rupert Grint turned up to the workshop in 'costume'

a short amount of time for rehearsing have between them managed to build up a spectacular ensemble performance. What is most obviously recognisable to an audience member is that everyone on stage is having an absolute blast. The energy they positively throw into the crowd whips you along in the show's tidal wave. Special mention of course always has to go to Phil Ray-

mond for his stellar performance as the Prince, but also to Rebecca Miller as the villainous Mayor; Chris Witham's debut performance for MT Soc as Buttons was particularly impressive.

I really can't stress enough how much of a great time I had at this show. Fortune favours the brave and this production has levels of bravery akin to someone trying to revise for an end of year

exam the night before. However, unlike my second year Maths module, the results here are spectacularly good, and hell, it's free, so you have no excuse.

Charming: An alternative ever after is on at **The Union Concert Hall**. Runs Monday 5th - Wednesday 7th December, 7.30pm. Tickets are free!

Wraith the roof with DramSoc

A play with more than the average number of sofa-wetting whale references

Will Prince

It's been nearly eight years to the day since the final installment of the Lord of the Rings trilogy hit our screens - eight long years with little but over-sexed vampires and undersexed boy wizards to fill the void. Clearly spotting an audience starved of orcs and elves, Dramsoc's latest productions takes the Dungeons and Dragons out of Beit basements and brings them to the stage.

Written and directed by Al Norman, *Of Dice and Men* takes a tongue-in-cheek look at role playing fantasy games. It centres on five friends, each of varying enthusiasm, and their in-game characters as they quest their way a game of Witches and Wyverns. With astute observations of life in both the real world and in fantasy, the play is suited to novices and level 3 Paladins alike. Encounters with a princess, who is more Miami than Mordor, and a frank chat with Phil the Wraith are the kind of thing that would probably have Tolkien

turning in his grave. Equally, I imagine representatives of Deutsche Bank - the show's sponsors - may find themselves squirming in their seats as the goblins bicker over maximizing teamwork and leadership skills.

Despite its two-hour duration, ODAM maintains its freshness by hopping between Terramundus and the Bowmans' house. Brothers Evan and Drake (played with aplomb by Luke Bullard and Ranulf Kinloch-Jones) clash as the former tries to introduce his girlfriend Kate (the tireless Camilla Nicholson) to the game, much to the disgust of character-hat-wearing die-hard player Drake. Sarah Brand brings a deadpan tone to her role as lesbian witch Ivy and Hassan Choudhury completes the band with a modicum of sanity, playing game master Simon.

Over in the Western Realm, things are more farcical still. James Goodchild struts the stage scantily-clad as Conan-lookalike Teflon, combining dopey delivery with deft comic timing. In the

closest thing I could find to a similarity with the Steinbeck novel from which the play takes its name, Omar Fahmy brings shades of Lenny to his role of the orc poet, Urg, contrasted by the flesh-hungry energy of Zoe Pierre as Gaboosa. Miztli Cardena Neville, as Areya, adds the finishing touch, maintaining a grave voice of reason in the face of the hapless fellowship.

The special effects are innovative to say the least and give ODAM an unpretentious charm, best exemplified when a climactic fight scene is paused as Mrs. Bowman hands out Ribenas. The script, whilst a little long, is well written, with echoes of Monty Python's Holy Grail as well as moments of real original comedy. DramSoc is clearly alive and well at Imperial, and most important of all, it's got a good sense of humour.

Of Dice and Men plays tonight and tomorrow, **Union Concert Hall**, £5 in advance for students, £7 otherwise

Alexander Yip



James took it into his own hands to complain about caption quality

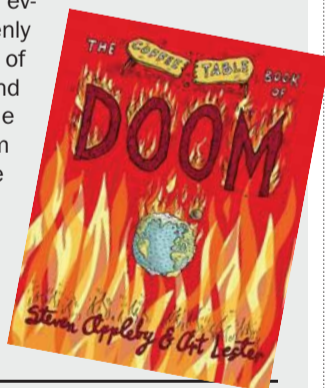
ARTS

DOODLE OF THE WEEK



Doodle of the Week is back! This time, we give you an awesome doodle that possibly a few of you might have been able to get down during one of those lengthy end-of-term lectures. Our winner is Luke Tomlin!

We hope his doodle will encourage some of you to send in your boredom drawings. If this gives you no encouragement, perhaps next week's special prize will: The Coffee Table Book of Doom, Steven Appleby and Art Lester's new compendium that lays out the myriad ways you and everyone else might suddenly cease to exist. Packed full of invaluable information and beautiful illustrations The Coffee Table Book of Doom will steer you through the apocalypse with wit and a wry smile, safe in the knowledge you're an equally capable doodler as Luke Tomlin and Maria Han Veiga!



TEKUA: CONTRIBUTING

"A Pound for Hope"

Contribute here to be part of the movement against injustice:

<http://www.justgiving.com/projectTEKUA/>
or www.projecttekua.co.uk

TEKUA Art Exhibition

Over 700 pounds raised in just 2 days!
Bring your Imperial Card, come and visit and make your contribution at:

58 Fenchurch St.
London
EC3M 4AB

A better way to

The TEKUA project comes to London in co-operation with Imperial College London to support Tanzanian education

Claudio Emma

From the streets of Manhattan to the crowded squares of Europe, much of the recent media attention has been devoted to the extravagant protest of those who call themselves "Indignados". Thousands have taken to the streets, forcibly occupying major landmarks in protest against financial injustices inflicted on them by the capitalist system. But amidst all of the ruckus, hidden deep in the background, is the persistent call for help of a people who are so often forgotten and largely ignored by the mass media of the Western World. I am talking about the atrocious statistic reporting the 92% of young Tanzanians who cannot afford to pay for secondary school. While the noisy protest aims of the "occupy" group are often sympathised with by Westerners, the silent cry of millions of Tanzanians who are denied an essential human right often falls upon deaf ears. It is to change this gruelling reality that a group of Imperial students has chosen to speak out and take concrete action. Rather than forcibly occupying town squares and pointing fingers at potential culprits, we have decided to adopt a different approach by reaching out to local businesses in search for potential fundraising opportunities. The target of all our efforts is an inspirational education establishment in north eastern Tanzania, called the TEKUA project.

TEKUA is an acronym that stands for the five Swahili words: empowerment, education, initiative, health and poverty. The centre effectively uses education as a weapon to break the crippling chain of poverty which reduces the lives of many young Tanzanians to a mere fight for survival. With education comes the empowerment of women in a society whose patriarchal traditions contribute emphatically to the spreading of HIV/AIDS. With education, the centre takes a concrete stand against poverty by equipping the youths of Tanzania with the skills necessary to find decent jobs. Most importantly, with

"the silent cry of millions of Tanzanians who are denied an essential human right often falls upon deaf ears"



They make art which is sold around the world

education comes the possibility for young students to realise their dreams and make positive contributions to the development of their society. These are goals worth fighting for. These are statistics worth protesting against. There are 92% of Tanzanians who deserve a voice in our world, and we are determined to finally give them one.

Now how do we Imperial students fit into this context and how can we actually make a difference to the lives of these young Tanzanians? The answer is by doing enough work to make the TEKUA centre financially self-sufficient. Unfortunately this is much easier said than done. It would be far easier to ask people for their spare change on street corners and donate all

"TEKUA stands for five Swahili words: empowerment, education, initiative health and poverty"

the proceeds to the centre. This approach however, would make the centre entirely reliant on the generosity of foreigners, thus preventing it from growing and flourishing independently. The way we have chosen to approach the problem is to take the skills learned by TEKUA students at the centre

Arts Editor: **Eva Rosenthal**
Will Prince

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to make a difference

local businesses and Imperial College students in order to raise money towards better



According to the guys at TEKUA, the Western '99%' is not the real 99%

TEKUA Project: The Facts

Established in 2003 in Tanzania

Mission: to aid and empower the underprivileged youth of Tanzania through education

It aims to reduce illiteracy, mental slavery and provide knowledge of HIV and gender-based violence amongst others.

The art projects, as well as providing educational support, help sustain the TEKUA project in the long run.



Illustrations by Huiyen Ong

and use those to generate an income.

The educational centre's curriculum provides lessons in three main subjects: English, ICT and art. While the first two subjects may seem more directly relevant to a young Tanzanian who is aiming to find employment, the study of art has proved just as fundamental to the students. By teaching the students painting and sculpting skills the centre has effectively created a workshop for young artists producing fine and vibrant pieces of art. It is our aim to use the pieces of art as a resource for the centre to fund itself and create a self-sustaining cycle. Practically this amounts to selling students' artwork here in London where the paintings and sculptures are worth far more than they are in

“The educational centre's curriculum provides lessons in three main subjects: English, ICT and art”

Tanzania. Having been priced by a professional art dealer, the works are worth an average of 60 pounds which, if you do the math, works out to a staggering 170,216.696 Tanzanian Shillings! In a country where the price of a kilo of maize is just 20 p, this is obviously a substantial amount of money. With these profits divided equally between the student

artist and the school we could provide a small stipend for the students whilst also supporting the centre.

Success in our efforts would have a dramatic impact on the future of the centre. Having recently undergone an expansion, TEKUA has now opened a second school where it will give its students vocational training in trades such as sewing and mending clothes. Thus our work in financially supporting the centre is more relevant than ever. To intensify our fundraising efforts we have launched a campaign at Imperial under the slogan “A Pound for Hope”. We are asking you to make what is a seemingly insignificant contribution of a single pound in the hopes of reaching our target which would support the centre financially for an

entire year!

As university students we are often condemned for being apathetic towards global issues and criticised for taking part in deleterious movements such as the 99% campaign. This is our chance to prove these allegations wrong by stepping up to a challenge that is highly ambitious

“It is in our power to determine the direction of progress in Tanzanian society”

and needs the attention of the world. It is in our power to determine the direction of progress in Tanzanian society and as citizens of an increasingly globalised world we cannot ignore our responsibility. With this kind of decisive action we will undoubtedly have a dramatic impact on the lives of 92% of young Tanzanians. So if you want become part of our mission come and visit the exhibition to take a stand against a crippling statistic that deserves your time.

The TEKUA Education Centre project presents *Tanzania: Art for Knowledge* at **Chartis UK**, 58 Fenchurch St., London, EC3M 4AB, 10:00-16:00 daily until December 17.





Well this is it ladies and gentlemen, we've had to resort to plain indecency

But seriously, we need you to do a centrefold (clubs, societies or individuals!) Christmas theme anyone? Email centrefolds@imperial.ac.uk if you're interested!

MUSIC

Music Editors: **Íñigo Martínez de Rituerto**
Stephen Smith

music.felix@gmail.com

Kadhim's totally hot album of the week



Youth Lagoon
The Year of Hibernation
 Lefse Records
 2011

On Sunday, I was at a friend-of-a-friend's flat; it was almost completely burnt out. The TV had caught fire and the ensuing blaze had torn up the walls and slithered around the rooms, turning home into hell. Some things had survived: a coating of soot was all the happy family photos had to endure. Other things had been less lucky: a grand full-length mirror had been warped to destruction by the heat and the once-intricate frame was charred and black. I said to him, rather stupidly, "it feels like it was a really nice place". He was kind enough to be patient with me and replied, simply, "yeah, it was..."

When I returned home that evening, to my conspicuously uncharred flat, I listened to **Youth Lagoon's** debut album, *The Year of Hibernation*, and felt transported back to those dark, ash-ridden rooms. I imagined sitting on the miraculously undamaged green leather sofa and thought about the destruction brought into his home; the place where we find solace and warmth eaten up by flames and smoke.

But, more striking than that was the sense of optimism. Youth Lagoon (a.k.a. Trevor Powers, of Idaho disposition) doesn't paint a story of despair. The wistful guitar melodies, ghostly vocals, misty piano keys, and discreet beats (file next to **Washed Out** and **Wild Nothing**) speak of a rebirth, of a phoenix rising from the ashes. Which brings me nicely to why I spent my Sunday in a burnt-out flat: the friend-of-a-friend had decided to do a photo-shoot in the charred remains of his life, and needed some extra hands. There can be no doubt that if life is going to hand you heartache, there's no truer response than to try to make something beautiful from it.

My reputation as "an extra pair of hands" is unimpeachable. If you want to make use of my hands, tweet @kadhimshubber and give me a time, place, and bag of Haribo Starmix. Better still, tweet @YouthLagoon and tell him his music is "too obscure and pretentious", and probably "too underground to be of use to anyone".

Be sure not to miss...

Sun Ra Arkestra

Cafe Oto
 Tuesday 6 - Thursday 8, November

The late Sun Ra's explosive big band return to Cafe Oto for a three day residency, following their previous five day marathon when they were stranded in London following the eruption of notorious Eyjafjallajökull. Don't miss the chance to experience the Arkestra's legacy of spaced out cosmic jazz. **Íñigo Martínez de Rituerto**

Origin of Symmetry

An essential classic for any music lover, says **Clare Cheng**

Back in 2001; the year iTunes was born, **J-Lo** got her first UK number 1 single and George Bush began his war on terror, **Muse** released the amazingly beautiful album that is *Origin of Symmetry*. Although this was the Devonshire band's second album after *Showbiz*, it was the collection of songs that marked the greatness that was to come.

To celebrate this momentous occasion the band played the album in full at this year's Reading and Leeds Festival. The stage was decked out with colossal forks as seen on the album artwork, with Matt Bellamy's glass piano taking pride of place.

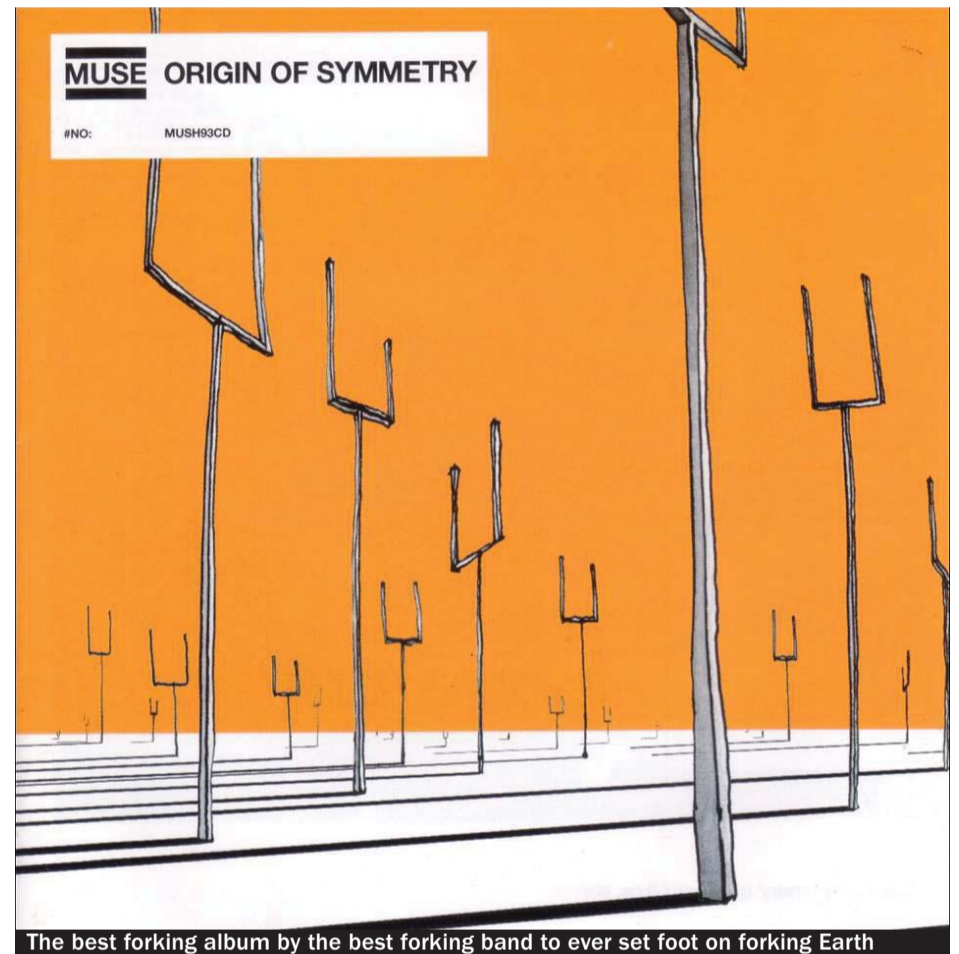
Their set was the best, hands down, all weekend; the opening song 'New Born' being accompanied by flying saucers hurtling across the screen, launching huge inflatable eyeballs into the crowd that burst to release confetti, and shooting fireworks that exploded high above the stage... oh and not to mention the songs were pretty spectacular too.

"Each song has such feeling and emotion woven into it"

What makes *Origin of Symmetry* so different, timeless even, is that it appeals to every music listener. Even my Dad, who loves his classical and jazz, likes listening to Muse rocking it out. The strong bass chords allow the guitar to expand and explore, but still remain restrained enough so as not to scare away the not-so-die-hard rock fans.

Matt's voice somehow manages to infiltrate every cell of the body, being familiar and warming, but at the same time sending a tingle down the spine that leaves us wanting more. His voice makes him the David Attenborough of music.

Matt and his fellow band members even manage to pull off a cover of **Nina Simone's** 'Feeling Good' in this album – such a classic made



The best forking album by the best forking band to ever set foot on forking Earth

even better.

To be honest, if I need to remind/convince you anymore of how amazing Muse is then there is no point in you having ears to hear with.

The album begins with 'New Born' – the gentle building of the piano, the low hum of the bass and Matt's gentle voice all lull the listener into a false sense of security. But then the real fun begins as the guitar chords let rip, after a pause for anticipation. It's a fantastic opener, setting the tone for the ambitious tunes to come.

However, do not be deceived; this is not all they do. The album takes off on a journey,

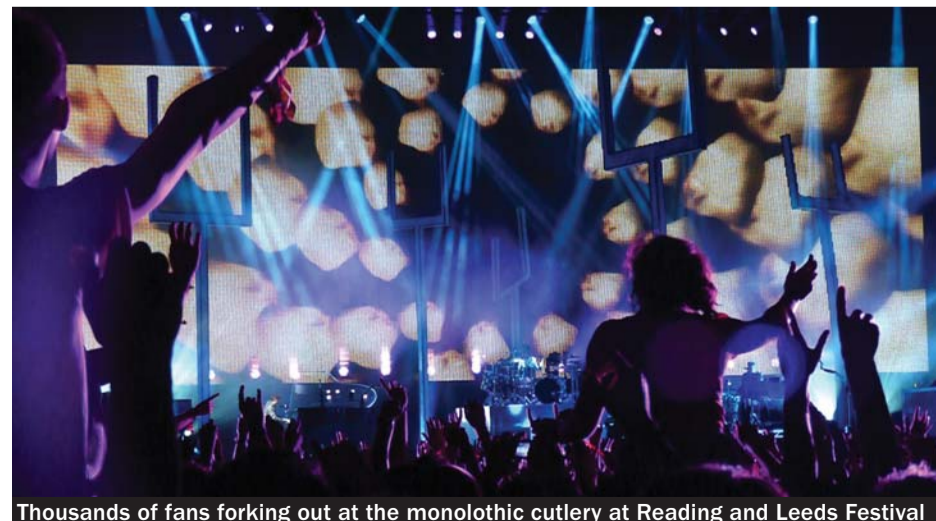
pushing up the heart rate one minute, but then mellowing it down the next. Each song has such feeling and emotion woven into it.

When I listen to the album I am taken on a rollercoaster ride of different emotions. 'Bliss' fills me with such warmth, it makes me smile; 'Space Dementia' and 'Plug In Baby' bring up deep feelings – sadness, passion, joy. These songs make me want to sing my heart out. They are able to spell out my emotions when I have no words to explain them.

"They still have the same punch of emotion"

Some critics consider the songs 'Dark Shines' and 'Screenager' to be downsides of the album, perhaps reflections of the early stage in Muse's career. However, as a die-hard Muse fan I could tell them to sod off. But I'll show some restraint and argue that these tracks still reflect the complexities in their repertoire. Although really quite different from earlier songs in the album, they still have the same punch of emotion and musical brilliance: the trademark of Muse.

This is what makes not only the album but the band themselves an essential for any music lover's collection. I mean, this is what they were producing when they first started out – imagine how amazing they are now.



Thousands of fans forking out at the monolithic cutlery at Reading and Leeds Festival

MUSIC

The best of Heaven

Stuart Masson is impressed by EMA and Zola Jesus

EMA stands for Erika M. Anderson, but she performs with a full band. Her debut album *Past Life Martyred Saints* has been gathering positive reviews from across the music press spectrum, and for good reason. The live performance is something else, though. The whole gig switches between haunting vulnerability and rip-your-face-off intensity. Her lyrics are rarely positive and she doesn't betray that with her stage demeanour.

The main highlight is 'Butterfly Knife', which climaxes in heavy strobing, a monstrous wall of sound, a guitar being smashed apart and its neck being launched into the crowd at concerning velocity. This is followed by the most beautiful section of the set, as she quietly strums through 'Marked', with its slightly disarming refrain of "I wish that every time you touched me left a mark". 'Closer California' is sublimely apathetic and ends with another guitar being thrown to the ground.

She's certainly somebody I'd recommend everybody to go and see, although I'd also recommend taking a hard hat.

Zola Jesus is another female 'solo artist', although she at least has the decency to keep the rest of her band shrouded in darkness and smoke for the majority of the set. Her influences range from industrial bands **Throbbing Gristle** and **Swans** to avant-garde composer **Stockhausen** all the way through to **Tina Turner**. The result is a unique blend of grimy lo-fi noise, ethereal dream pop and a big voice.



If you squint, the bricks behind Zola Jesus almost look like forks

Despite the insistence of a delightful lady behind me, there is nobody that can match her voice. It is massive. She forced her parents into giving her opera lessons as a child, and I'm glad they relented. As a frontwoman, she exceeds all expectations as well, switching between statuesque-princess mode and bent-double-over-her-microphone-flailing-limbs mode. There were even two forays into the crowd and a strobe-lit headbanging sequence.

There are relatively few older tracks but those relatively few are great. The swelling build-up of 'Run Me Out' is particularly pleasing.

The new album tracks also deliver. 'Hikikomori' is a beautiful swirl of synths and wailing vocals and on 'In Your Nature' she gives a performance to match anything I've heard. It's a fantastic show and not one you're likely to get elsewhere. One of the best gigs of my year.

CMYK Vibrations

Katherine Chimenes

James Blake. The face of a dazed little boy, presumably innocent and so melancholic at the same time, with a voice, or should I say voices (oh the beauty of transpositions) so poignant it makes you want to bury your face in your hands and cry – it's OK, don't worry, I won't tell anyone. So finally, I managed to witness the contained and cleanly crafted songs come to life at the HMV Forum for the last show of his tour, and here's the impression I got to carry around since then.

The young prodigies **Vondelpark** opened the show, a one-man act who lately adopted a few other kids. With the looks of one of those scruffy-haired rock bands followed constantly by their horde of screeching groupies, their sound was unexpected in the best possible way, sounding much more electronic and bearing proof of their musical maturity. Coherent with the main act, they were a very pleasant discovery, and less pretentious and 'widespread' (to avoid using that other ugly m-word...) in several ways for the harsher critics out there.

Then James Blake came on, alone, with his traditional highly buttoned-up collared shirt and immaculate hair. A peaceful look on his face, collected and confident, he managed nevertheless to bring an imposing and nearly intimidating charisma on stage with him. The lighting was clearly studied, the stage setting was minimal, and the sound system tremendous. The magnificence of seeing James Blake live in such a context lied in how the music which usually seems to appear so contained manages to gain so much intensity and power, offering a perspective on his music I could have never imagined.

The way objects and liquids vibrate in the video of 'Limit to Your Love' seemed to gain a whole new meaning when, this time, it was my entire body experiencing it. I gave up on keeping my gaze on James Blake. I just let it all carry me away. Eyes closed, every single organ in my body felt the music. The show wasn't meant to appeal exclusively to hearing or sight anymore. It was something transcending what was expected from a gig. A journey through some emotionally charged music, like some of **Antony and the Johnsons'** concentrate of musicality and

classical immoderation blended with the bluntness of post-dubstep beats.

From a faithful take on 'I Never Learnt to Share' to an incredible improvisational dub of 'CMYK' or other sparkling renditions of some more recent songs like 'A Case of You,' he managed to take the last breath away from every one of us standing in that fully packed venue, making us only scream for more.



Under the sea, where the octopuses live

Punk Planet by Douglas Heaven

This week: Argentinian punk



Argentine punk had a troubled upbringing. Though inspired by the notoriety of the **Sex Pistols**, Argentina's pioneers couldn't afford to play the same kind of media-baiting games. The year that brought us punk rock brought Argentina a vicious military dictatorship, and all evidence suggests dictators don't like punk.

One of the most important scene-setting bands was **Los Violadores** (1981-) – the violators, or law-breakers – who despite the heavy-handed censorship established an underground movement of dissent and released an album a year. One way they survived their dangerous early period was by adopting the name Los Voladores – the flying ones – whenever things looked especially dicey. They're still going strong, chastising slightly younger upstarts **2 Minutos** (1987-) for writing unpunk songs about beer and football.

Just as Argentine punk was escaping its oppressed childhood and coming of age, the Falklands War made everything associated with the UK, well, let's just say uncool. **Sumo** (1981-1987), one of the most influential scene-setters, never wanted to be a punk band in the first place, and peppered its sound with everything from reggae to tango. Luca Prodan, Sumo's frontman, was born in Rome but grew up in Scotland, where he went to Gordonstoun – the famously cold and character-building boarding school that counts both the Queen's husband and eldest son among its alumni. But unlike our heir to the throne, Prodan then befriended **Joy Division's** Ian Curtis in Manchester, suffered from heroin addiction, and moved to a friend's farm in Argentina's backwoods to kick the habit. There he recorded a few songs in a small studio, eventually moved to the big city, and ended up fronting one of the biggest bands in Argentina. As heritage stories go, Sumo's beats the usual Peter-meets-Jane-at-art-school.

But let's end with the fine example of **Fun People** (1989-2000), a converse-wearing, pogo-jumping punk band in the same bouncy vein as **Bad Brains**. Originally called Anesthesia after a famous **Metallica** song, they eventually wisely promoted their music as antifascist gay hardcore to distance themselves from the moshing boneheads they were attracting.

All these bands want you to visit their websites, except Sumo who might not have one. Los Violadores: www.violadores.com, 2 Minutos: www.2minutosweb.com.ar, Fun People: www.funpeople.com.ar.



90's

Friday 2 December / 20:00 - 02:00 / £3.00

Metric is going back in time to the 90's for an eclectic mix of all the classics. Everybody loves to dance to "Saturday Night" by Whigfield and Mark Morrison "Return of the mack"

It is going to be massive!!!

imperialcollegeunion.org/metric

Bonkers

LiMITS
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college
union

Television Editors: **George Barnett**
James Simpson

tv.felix@imperial.ac.uk

TELEVISION

Louie: like Seinfeld, but with swearing

Tim Arbabzadah tries to not look like a hipster as he reviews a slightly obscure show

Louie is directed, written, edited by, and starring Louis C.K. The show is basically him; in fact, I've heard an interview that says he helps with the cinematography as well. I'm not exactly sure how to describe the look of the show, but I'll give it a go. It's shot as a single camera show in the same way as *The Thick of It* is. That should give you an idea of the sort of visual style to expect, hopefully.

Louie centres around a fictionalised version of Louis C.K. (don't ask about the discrepancy in name spelling, as I have no idea either). Louis C.K. is, in real life, a comedian's comedian, who is very well respected in the comedy world. He's also got a style that is very funny and accessible. It's not all pretentious 'clever' humour of deconstructing the joke style comedy. I say that because I fear the other sentence made it sound like he was, like, so underground and non-mainstream, man. He really does have jokes that many people will appreciate. In case you haven't noticed, I'm trying hard to not sound a bit douchey. I'm probably failing. Anyway, in the show, Louie is a comedian who is well respected and doing okay, but not exactly thriving. He has two daughters and is divorced. It's difficult to say what the overall plot of the show is, as there isn't one in the traditional sense. One of the reasons for this lack of a central theme is that Louie is basically the only main character. All other characters make appearances every now and then, but couldn't really be described as main characters. There is a woman that he likes that doesn't like him back, but it's not your traditional sitcom will-they-won't-they although they-obviously-will-eventually vibe. It's a bit more tragic as he tries a couple of times to go for it and gets batted away each time.

If you can pretend that this is a seamless segue; I want to point out that way too many shows have a fairly predictable basic premise and central plot line: the main character has feelings that are not reciprocated. That's fine, it's a common life occurrence that is relatable and can be used to derive



humour or drama from. My problem is that most shows play that ultimate they-get-together card too early. The guy gets the girl, then, the show thinks "oh, fuck, hang on, that was our main plot and we've been renewed and need to stretch this out into another season. Right, let's now have something happen and it goes badly, then we can get them back together later on. Oh, here's a good idea, she gets back together with her jerk, jock boyfriend". If the guy has got the girl once, the whole 'she's so out of his league and is his dream girl' aspect is like David Cameron's social conscience: lost.

Every episode of *Louie* is split into two parts, each being fairly self-contained (absolutely seamless segue back into review mode, right? No, yeah, fair point). This is interspersed with scenes of him doing stand-up in a comedy club (think *Seinfeld*, but with swearing). Actually, *Seinfeld* isn't too bad a comparison, it's 'mundane' in the fact that

it's just about a guy's life and 'stuff' happening. It differs in that it's occasionally a bit odd. At times it can be bleak, but sometimes the show is, surprisingly, heart-warming. There was an episode where he goes to perform to troops and that has a very uplifting ending. I don't want to give it away, but it really did make you feel good afterwards.

Louie is also littered with guest stars. Considering the low budget, the quality of guest stars is amazing. I think this shows just how popular Louis C.K. is with comedians. Everyone from Amir and Amir fame to Chris Rock, Dane Cook and Joan Rivers has made an appearance. These guests are always used well, and aren't just there to show off that he knows famous people.

Basically, *Louie* is funny, well written, and worth a watch. It may not be everyone's cup of tea, but I think the stand-up routines are something that we can all enjoy, even if you don't like the rest of the show.

Modern Family – A Family Portrait

Marie-Laure Hicks

I have a completely insane family. So when I heard about *Modern Family*, I didn't think much of it. The advert on TV just made me cringe. That was until I watched an episode. American comedies can sometimes disappoint, but this show is fantastic. I would venture to say it's because it has a hint of British humour to it, with a lot of the slapstick and puns that we love so much.

This Emmy-winning "mockumentary" is a window into the Pritchetts' and Dunphys' everyday life. Jay Pritchett (Ed O'Neil) is the patriarch of the family having a second go at fatherhood with his new, much younger Colombian wife Gloria (Sofia Vergara) and her son Manny. Right from the start, the stereotypes come rolling out: old guy with a younger wife who says "djes" ("yes" with the cutest Colombian accent) and it keeps on going. Manny is a grand romantic, writes songs and poetry, wears silk shirts and cologne. He's an

eleven year old child.

Jay also has two children from his first marriage: Mitchell and Clair. Mitchell (Jesse Tyler Ferguson) is gay and lives with overemotional, over dramatic partner Cameron (Eric Stonestreet) who enjoys dressing up as a clown during his spare time. Together they have adopted Lily, a Vietnamese baby.

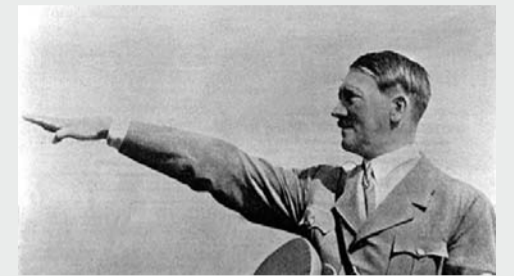
Clair (Julie Bowen, Kevin Spacey's sexy wife in *Horrible Bosses*), a complete control freak, is married to Phil Dunphy (Ty Burrell). Phil believes he is the coolest dad ever (he can sing and dance to all the *High School Musical* songs) and has a tendency to act like a child. They have three children: Haley, the popular high school teenager hooked to her phone, Alex the nerd and Luke who probably has ADHD or some obscure syndrome and is unbelievably accident prone. In addition, the cast includes appearances from Jay's crazy ex-wife and Haley's boyfriend Dylan who has a talent for writing brilliant but inappropriate songs

(and performing them in front of his girlfriend's parents).

Throughout the series two characters gain in importance and screen time. I'm talking about Gloria's breasts. Approved of by arse-men, leg-men, tit-men, women and gay men, they provide voluptuous huge peaks to the scenery. Frequently clad in tight and plunging fabrics, there will always be an occasion to glimpse at the view. Subtlety clearly isn't the producer's policy.

The genius of this comedy lies most certainly with the script, the actors' talent at its service but also in the simplicity and the everyday quality of the plot. The show is based on the families of the creators – Steven Levitan and Christopher Lloyd – supplying it with its realism, a beautiful comedy source. Your family may be dysfunctional but nowhere near as much as this one. You will laugh, cry and smile. So sit down with these hilarious and loveable characters and simply enjoy the beauty of modern family life.

Pick of the week



Saturday | 1700 - 1800 | Quest
Hitler's Henchmen

The life of Hermann Goering – founder of the Gestapo and a man of extravagant tastes – is examined in this documentary.

Monday | 2030 - 2100 | BBC1
Panorama

Sophie Raworth explores whether or not supermarket money-saving offers actually save you money.

Monday | 2200 - 2300 | E4
Desperate Scousewives

Scouse based semi-reality show. This week DJ Danny attends Debbie's fashion show with a very public gesture to prove his love for her.

Tuesday | 2100 - 2200 | ITV4
Billy Connolly's Route 66

Last in series. The Scottish Comedian completes the last leg of his motor-trike journey visiting a meteorite crater in Arizona, before heading to the Grand Canyon and finally finishing in Santa Monica.

Wednesday | 1900 - 2000 | BBC HD
Michael Wood's Story of England

Michael Wood explores how the great famine and Black Death affected Kibworth during the 14th century.

Thursday | 1900 - 2000 | Nat Geo
Area 51: I Was There

Documentary explaining the work carried out at the alleged UFO storage facility. Insiders reveal what projects they worked on in the Nevada base.

Friday | Anytime | 4oD

True Stories: Wikileaks - Secrets and Lies

Patrick Forbes presents an in-depth study of the Wikileaks affair. Including interviews with Julian Assange and business partner Daniel Domscheit Berg.

Friday | 1700 - 1800 | ITV1

Britain's Best Dish

Salvation in audiovisual format. The Midlands and East of England final.



FILM

iCU Cinema All-Nighter
Tuesday 13 December



Have you got what it takes? Simple question; it's a 'yes or no' question. To make it through the iCU Cinema All-Nighter, you're going to need to sit back and enjoy over 12 hours of the latest films. Does that sound like something you can do, Imperial?

Simply put, the All-Nighter is six of the latest films back-to-back on one spectacular night of cinema, caffeine, and tub after tub of Pot Noodle. It's a cinematic journey that begins with *Johnny English Reborn*. Don't scoff, a friend of mine works at Vertigo, the production company that makes *Johnny English*; it's basically one of the most profitable truly-British films in recent history.

Then we have *Drive*, the stylish action/thriller starring "OH MY GOD HE'S SO HOT" Ryan Gosling (don't tell my mother I wrote that...)

After this? *Real Steel*. Hugh Jackman acts alongside some robots. Or something.

Then we have *Paul*. Like all Edgar Wright & Co films, *Paul* is hilarious and intelligent, unlike oh so many Hollywood stoner flicks. It's a true tribute to the science fiction genre and you'd be mad to miss it. To run down the night we've got style, action and good old troll whacking.

First we're straight into *Contagion*, a film about a global pandemic that's genuinely described as a "medical thriller". You can imagine the pitch for this film: "What if, like, fear... yeah? Spreads faster, yeah? Than the, like, virus?" I'm probably being too cynical, Rotten Tomatoes gives this film 84%. Then finally ending the night we have *Troll Hunter*. If you've made it this far then you're a true trooper and could probably do a fair bit of troll bashing yourself.

So there it is. Six films, one night, and a whole lot of caffeine. See you there, if you've got the ovaries for it... (What? Is it not ok to say that?)

Kadhim Shubber

Lineup:

6.00pm Johnny English Reborn

8.15pm Drive

10:30pm Real Steel

1:15am Paul

3:30am Contagion

5:45am Troll Hunter

7:30am End

Tickets:

For the whole night, £10 online (£12 on the door)

All-you-can-eat Hot Food and Drinks (including Tea/Coffee, Hot Dogs, Toasties, Noodles and more) £5

Tickets for individual films are £3

each and available on the door.

Drinks available all night courtesy of the Union Bar.

Cure for teen pregnancy



"Edward, I'm pregnant..." "Bella, I'm leaving you..."

The Twilight Saga - Breaking Dawn Part 1

Director Bill Condon
Screenwriters Melissa Rosenberg, Stephanie Meyers (novel)
Cast Robert Pattinson, Kristen Stewart, Taylor Lautner

Lucy Wiles

Thousands of hormonal Twihards queued for days for the much-anticipated arrival of *The Twilight Saga: Breaking Dawn - Part 1*; the fourth film in the hugely successful vampire love story franchise was released last week, setting the scene for the big finale next year. An emotionally fraught, dramatic tale, this latest film shows that the structure of the *Twilight* franchise – that of surging adolescent emotions quashing rational thought, and the resulting arguments and tantrums – is still foolproof.

The first three films weren't epic, but despite the somewhat crammed-in storyline, the filmmakers did a pretty good job with them. However, the story for *The Twilight Saga: Breaking Dawn - Part 1* is getting slightly ridiculous – Bella gets pregnant with a vampire-human hybrid that rips its way out dramatically – and even director Bill Condon and his ace team can't make it perfect.

Having said that, while the filmmakers have taken a lot of flack about their choice to take what has been dubbed the 'Harry Potter gameplan' and splitting the final novel into two films, when it comes to profits the decision was a definite win for the backers. The three-day opening here in the UK bagged a rather impressive £13.91m, and is expected to go straight to the top of the UK Box Office

chart, having shot to the top of the USA's with a whopping first weekend take of \$138m.

The story follows on from the previous *Twilight* Saga films; after a beautiful wedding, Edward Cullen (Robert Pattinson) and Bella Swan (Kristen Stewart) set off on a romantic honeymoon to Brazil. However, the trip is cut short when Bella discovers she is pregnant with a half-vampire half-human baby, which is fast mutating and crushing her weak human body. To add to the problem, when they get home there are a few pretty angry werewolves who are really not keen on the arrival of this mutant child waiting on their doorstep. Can Bella's werewolf friend Jacob (Taylor Lautner) help sort things out? And how will Bella and Edward cope with their new species of child?

The acting is as it always has been – fine, but hampered by a rather miserable script. A reasonable supporting cast is held up by Pattinson still credibly portraying hurt soul Edward, but while the intensity between him and Stewart is genuinely convincing, for a teen flick there are very moody faces all round. Even in the rare moments of attempted humour, the actors can't seem to get it across. Lautner does a good job with angry, angsty Jacob, but even he has his moments of childish tantrums and storming off. Nevertheless, the whole cast do a good job, and it is clear that a lot of effort has gone into pushing the mood of the film towards 'dark and disturbing' in the set-up for the final part.

If you watch *Breaking Dawn Part 1* as a prequel to the total hell that is about to break loose in part two (you know what I mean if you've read the book, Twihards) then it's ok. But if it is viewed as a stand-alone film, the unnecessarily slow pace and extended length of the film can make it a bit dull. There's enough to keep it

all moving along, especially in the second half, and there is a lot of tension created by heart-broken Jacob's doubts, torn desperately as he is between love and vengeance. But there is a serious lack of fight scenes and action, other than the threatening pack of werewolves who really only remain on the periphery. The only minor action shows the wolves leaping a bit as the vampires move really fast, which gets a bit tedious after a while.

Possibly the best thing about this film is the effect it's having on men across the world. As mentioned, the film portrays Bella's difficult pregnancy as she carries the child of her vampire husband, culminating in a graphic scene of the baby's birth. Viewer Brandon Gephart, from Roseville, California, was reportedly taken to hospital after suffering what seemed to be a panic attack during the birthing climax. "He was convulsing, snorting, trying to breathe," said his girlfriend Kelly Bauman. That particular screening had to end early when the paramedics arrived. Other cases of men freaking out have been recorded, such as an unnamed man from Utah (as reported by ABC4) who also had some sort of seizure during the same scene. "I didn't really remember what happened," the man told the news crew. "I think I blacked out. According to [my wife] I was shaking and mumbling different noises."

The ending naturally gears us up for the final part of the *Twilight* Saga, and – alongside a sneaky mid-credits teaser – sets the stage for a very different Bella and the battle for her new family's safety in 2012's concluding installment. All in all, despite the Rotten Tomatoes rating of just 28%, this is a reasonably enjoyable, easy film to watch – one to drag your boyfriend to... unless he's squeamish about pregnancy.

Film Editors: **John Park**
Lucy Wiles

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Michelle's mesmeric Monroe



My Week with Marilyn

Director Simon Curtis
Screenwriters Adrian Hodges, Colin Clark (novel)
Cast Michelle Williams, Eddie Redmayne, Kenneth Branagh, Judi Dench, Dominic Cooper, Emma Watson

John Park

Marilyn Monroe is without a doubt one of the most celebrated, well-known figures of the 20th Century. *My Week with Marilyn*, as its title may suggest, only explores a brief section of the icon's life, but since she has accomplished so much, even the smallest slice in her showbiz-surrounded life is full of fun, romance and charm which is exactly what the film offers.

The Prince and the Showgirl, shot in England, (in)famously united Monroe (Michelle Williams) and Sir Laurence Olivier (Kenneth Branagh), where the production was plagued with delays, miscommunication, and great discontent from Olivier, as he was far from impressed with Monroe's notoriously erratic behaviour on set that included tardiness, alcoholism and drug use. Whilst *My Week with Marilyn* does focus on the filming aspect, caught in the middle of this is in fact Colin Clark (Eddie Redmayne), the third assistant director, whose job is to do all the grunt work. Captivated by Monroe even before her arrival in London, Clark's boyish enthusiasm and warm personality bring the two close together. Trapped in a less than satisfactory marriage to Arthur Miller (Dougray Scott), Monroe finds comfort and solace in Clark's arms.

Milton Greene (Dominic Cooper), Marilyn's business partner, warns Clark to not get involved: "She breaks hearts, she will break yours too." But what they share has very little to do with sex or lust. It's a strong friendship built on trust, with the occasional moments of passion that build up from spending so much time together. Although there is unavoidable tragedy lurking around the corner, director Simon Curtis makes sure the atmosphere is always light enough and the breezy script supports this. As the infatuated Colin, Redmayne is a wholly likable central character, with his wide-eyed, somewhat childish fascination towards everything that is going on around him. He is a tall, handsome actor with immense appeal, with enough cheek and confidence that he convincingly adds to his initially clueless character.

Success brings luxury, fame and infinite love from crowds, but for a price. The pressure she faces in Pinewood Studios starts to build up. Despite her

acting coach Paula Strasberg's (Zoë Wanamaker) supportive words, Marilyn finds her confidence shaken every time she stumbles on a line, further infuriating the already heated Olivier. Dame Sybil Thorndike (Judi Dench), is more understanding, and as a woman of principle and disciplined manner, she exudes warmth as well as firm maternal presence to anyone who unreasonably crosses the line.

No words can describe just how superb Williams is in the role of Monroe. She has the looks, the voice, the swagger, and the sassiness, but there is something so much more to her portrayal than what is visible on the surface. The behind-the-scenes Marilyn, the insecure, vulnerable and troubled superstar longing to be taken seriously, to be loved, and not quite ready to cope with all the uncomfortable sides the glitzy Hollywood life brings with it, Williams makes sure that Monroe is a human being after all, and that she is someone worth caring about. But she's not all about the depressed Marilyn, as when her character gets her vibrant energy, she is delightfully glamorous.

As for the invaluable supporting players, Cooper's wonky American accent aside, everyone stands strong in their roles, with two of the greatest English actors, Branagh and Dench, living up to their usual high standards. Wanamaker, as Marilyn's coach who wants what is best for her most talented student, is stubborn and relentless, clashing with Olivier regarding Marilyn's acting style. She believes in method acting, he doesn't. Emma Watson, in her first post-Potter role, has an interesting role of Colin's could-be girlfriend, and the two share a warm enough chemistry to show the audience a glimpse of possibility that Colin may be better off settling down for someone more to his standard. Although looking nothing like the wife of Laurence Olivier, Julia Ormond does an admirable job as Vivien Leigh, in a crucial scene that she hints at her jealousy towards the much younger, sought-after Marilyn.

It's a light trek that gives us plenty of insight into the complicated life of Marilyn Monroe. We will never know the full extent of just how frightened she was of failing those around her, and just how lonely and isolated she must have felt. The film tries to show as many variations as possible, which can lead to quite a few repetitions. Marilyn is troubled, she calls for Colin's help, he comes, calms her down, and she feels better. It's a routine that is both predictable and slightly tiresome after a while, but it's a film to watch simply for the flawless performances. Nominations should be flooding in towards the end of this year for Williams, and rightly so.

Top 10 Box Office films in the UK this week



1) The Twilight Saga - Breaking Dawn Part 1 - 12A - Robert Pattinson, Kristen Stewart, Taylor Lautner

2) Arthur Christmas - U - James McAvoy, Jim Broadbent, Bill Nighy

3) My Week with Marilyn - 15 - Michelle Williams, Eddie Redmayne, Kenneth Branagh

4) The Adventures of Tintin: The Secret of the Unicorn - PG - Jamie Bell, Andy Serkis, Daniel Craig

5) Immortals - 15 - Henry Cavill, Freida Pinto, Mickey Rourke

6) 50/50 - 15 - Joseph Gordon-Levitt, Seth Rogen, Anna Kendrick

7) Dream House - 15 - Rachel Weisz, Daniel Craig, Naomi Watts

8) In Time - 12A - Justin Timberlake, Amanda Seyfried

9) Desi Boyz - 12A - Bruna Abdalah, John Abraham, Rajat Barmecha

10) Moneyball - 12A - Brad Pitt, Jonah Hill, Philip Seymour Hoffman

Games Editor: **Laurence Pope**games.felix@imperial.ac.uk

GAMES

(A return) to Web Games

You call it stealing, I call it a tribute. This week, and this week only (maybe...) we're going to offer you up two totally awesome web games that you can play right now in your web browser. In order to enjoy these you're going to need the Adobe Flash Player plug-in which can be installed from <http://get.adobe.com/flashplayer/>

Top Defense

<http://www.newgrounds.com/portal/view/573681>



Don't you just hate it when you awaken from artificial hibernation to find yourself as the only survivor on a military starship, immediately tasked with defending an entire planet?

Top Defence is a tower-defence game, only without the towers. You have a variety of upgradable weapons to manually attack the invading forces with, including your basic missile strike, a slowdown effect thingy and an armour-eating nano-cloud. Choosing what to upgrade with your limited 'energy' (the game's upgrade points) is a challenge, and will certainly keep you from that piece of coursework due in at 2pm today.

Oh yeah, and the music's pretty boss as well.

Culmination

<http://www.newgrounds.com/portal/view/584398>



Culmination is more an art-piece than a game. The music is both beautiful and calming, the art design pure and simple. You play as the double-jumping fallen Hero of the Earth, seeking revenge against his King.

The combat is sword-based, easy to pick up and fun to use. As you rack up more strikes on enemies you temporarily gain more advanced strikes, culminating in an attack that demolishes all on screen. Go play it now, you won't be disappointed.

Smack it down to the ground, WWE style

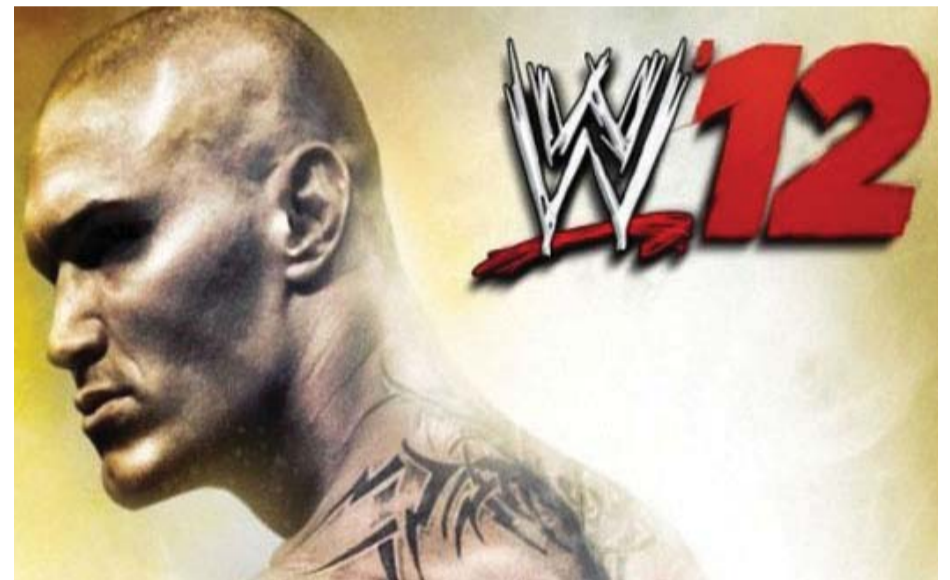
Edward Bals tackles THQ's latest professional wrestling game, *WWE '12*

THQ promised that *WWE '12* would be the game to reinvent their tired series, and it seems that with this new entry they have succeeded, at least in part. This is a game which recreates the almost absurd dramatics and stage-play that wrestling is famous for: from The Undertaker's chilling entrance to some of the, sometimes hilarious, match modes.

The 'campaign' within *WWE '12* is the 'Road to Wrestlemania' which puts you in the shoes of three different characters: Sheamus (the villain); Triple H (the outsider) and Jacob Cass (the player-created rookie wrestler). The Road to Wrestlemania occupies a fairly sizable chunk of the game (roughly twelve hours) but it is at times frustrating. To mimic real life pro-wrestling this game mode has backstage fights, promos and even scripted events in the middle of matches. These scripted events can often be the most frustrating element of this mode as quite often I found myself fruitlessly trying to pin an opponent, when all that was required was a contextual button press.

"To mimic real life pre-wrestling this game has backstage fights, promos and even scripted events in the middle of matches"

Gripes about Road to Wrestlemania aside, the other single player mode, WWE universe, should provide many hours of enjoyment. This mode provides a section of the game without a story, allowing the matches to be shown in



a calendar format allowing almost complete customisation and allowing for what the game should be mainly about (the wrestling) to come to the fore. Feuds and alliances will be formed in this mode and should keep you coming back for more.

The multiplayer mode is great fun as playing against a human opponent is much more enjoyable than competing against the AI opponents in *WWE '12*. When against the AI the difficulty occasionally spikes with the only reason seemingly being to punish the player for having become better at the game. However, the AI can be easily tweaked using a large range of customisation options. Competing against a human opponent is still the best experience for a match in *WWE '12*, and the almost lag-free online multiplayer makes it even easier to enjoy this.

In terms of controls the game is very easy to pick up with its intuitive control system. The A button is used to grapple, B is used for

punches, kicks, Irish whips and pins, whilst the Y button controls the wrestler's signature and finishing moves. The game also supplies button prompts for countering moves but these flitter onto and off the screen at such a speed that the countering system is somewhat down to chance, unless you have lightning-fast reflexes. The ability to target specific limbs is also a welcome addition as it adds an almost tactical and strategic feel to the gameplay.

"The vast customisation options in *WWE '12* really give the game a unique touch; you can create your own character from scratch"



The customisation options in *WWE '12* are vast. You can create your own character from scratch, altering their appearance, entrance, move set and finishing move. There is also an option for creating your own arena for use in the game. These customisation options really give the game a unique touch when you watch your wrestler come on using their own entrance rather than a stock one.

As a complete package *WWE '12* is worth your time. The impressive customisation options, the large roster of over 60 characters and the solid core gameplay make this game a tempting package for anyone with the slightest interest in wrestling.

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FASHION

Interview Dressing: Womenswear

Dress code etiquette is key for formal events. **Saskia Verhagen** shows us how to make the best first impression

Getting dressed for your interview needn't be the looming and perilous task that it may seem. As for men, the main principal for a good interview outfit is simple: the keyword is subtlety. Appropriate but not boring, chic but not trendy, classic but not frumpy, feminine but not girly, and most of all, memorable – but never quirky. This is an exercise in that which to women, comes as second nature: subliminal manipulation. We do it all the time, with a turn of phrase, a certain look – it's all in the touches which aren't obvious, but get the job done. Each piece, each accessory is clearly well-chosen, sublimely chic and perfectly appropriate. The most crucial thing to remember is to buy the best quality you can afford, look for great cuts and fabrics that fall well on you (Lord knows poly-blend doesn't fall well on anyone) and quietly sophisticated detailing.

So don't fret; whether you're gunning up to meet the head honchos at a slick media firm or battenning down the hatches in preparation for the endless rounds of interviews at the corporate finance firms, the below guide should sort you out for whatever Careers Services throws your way. And by the way, looking stylish is never about what you wear, but always about how you wear it: confidence is key.

Informal Interviews

Here we're talking about a company dinner with a few executives, or perhaps a casual interview for a cool media post somewhere you'll find yourself fetching everyone's tea order for your first six months of employment. This type of interview means deciphering the impossible oxymoronic 'smart/casual' dress code – but fear not: this is not the Everest climbing mission that it might seem.

An easy ensemble that never goes out of style is the simple pairing of a high-waisted trouser, belted over a silk shirt (Equipment is the perennial classic, but Miss Selfridge does the job too), keeping your colours muted and neutral: navy, camel, taupe, black, white, maybe maroon or forest green if you're feeling adventurous. Top this with a tailored brass-buttoned blazer which nips in at the waist, a smallish square handbag over the shoulder and a pair of modest-height heels to complete the look.

For these pieces on the high street, Zara cuts a wicked jacket and their handbags are excellent too. Think Grace Kelly during the day, or classic Katharine Hepburn. The look graces runways season after season (see last season's Paul Smith and Michael Kors shows for well-styled examples) and always looks elegant and effortless, yet fabulously stylish.



Formal Interviews

There are a few directions a girl can go here: full on skirt suit, coordinating skirt and separates, or a dress. The choice obviously depends on your personal taste and the company you're interviewing with, but most often, trousers are not the right choice here.

If you are, indeed, a woman entering a man's world, the best thing is to own up to it: look feminine and beautifully put-together, with a CV as enviable as your innate sense of style. The safest and most perennially stylish dress is the wrap dress, made famous by Diane von Furstenberg but which you can find good copies up and down the high street. If you're going for separates, keep the colour palette edited down to a maximum of three shades, and never monochromatic – the funeral rule applies to women too. Try white, camel and navy; cream, black and maroon; pale blue, mustard and navy blue.

As mentioned before, fabric choice counts: look for cashmere blends for your sweaters, light wool blends for skirts and jackets and crisp cotton for shirts. Avoid anything too stretchy or acrylic like the plague: it feels cheap, looks cheap and fits badly.

Skirts should hit just below the knee and sweaters, shirts and jackets should be tailored but not tight. If you're going to go for a pattern (a subtle check, houndstooth or stripe is acceptable), keep it to one item only, including accessories.



Grooming

It is not quite clear why some girls find it so difficult to look properly put-together at interview, the simplest things make the biggest of differences. Make-up should be kept as natural as possible: after a proper cleanse, go for a tinted moisturiser and a touch of concealer with the lightest flush of blusher on the cheeks. Take note: no bronzer, no fake tan and no full-thickness foundation. Beyond anything else, it looks like you've tried too hard and with all that effort, all you've managed is to look entirely ridiculous. A neutral eye shadow with a touch of eyeliner and a lick of mascara is all you should need.

As for hair, wearing it up or down is a matter of how you feel most confident. It should look neat and you should not feel the need to fiddle with it. Perfume, if you usually wear it, should be fresh and never overpowering.

Accessories

Your shoes and handbag should be good-quality, clean and tasteful, leather (not patent) or suede, in a co-ordinating shade to the rest of your outfit. Shoes and handbag needn't match; indeed, it can look rather contrived and frumpy if they do. Avoid any designer-emblazoned anything, and worse than that, any designer knock-offs – beyond terrible.

Shoes should be kept to a modest (less than 3") height and your handbag should be appropriately sized and smart. Jewellery ought to be kept to a bare minimum (sleeper earrings, delicate necklace, inconspicuous watch) and colour-appropriate tights or stockings are an absolute must: going bare-legged with a skirt on to an interview is a total faux-pas.

FOOD

Food Editors: **Anastasia Eleftheriou**
Michael Krestas

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Lady's Fingers

What a lovely name for a food! Ladies' Fingers or Okra (it has various different names around the world) is one of the most popular vegetables among West Asians, North Indians and Pakistanis, where it is known as bamia or banya. The following recipe is very common in Palestine, Syria, Greece, Cyprus, Tunisia, Egypt, Iran, Iraq, Jordan, Lebanon, Turkey, Yemen, and Israel.



Ingredients

1 kg okra
2 onions
2 tomatoes
1 stock cube
1 ½ glass olive oil
1 glass of vinegar
A pinch of salt

Preparation

Wash okra and put it in a bowl. Pour the vinegar on it and leave it for 4-5 minutes. Then fry it in the olive oil until it becomes 'withered' and put it in the pot. Fry the onions until they become brown and add them in the pot. Remove the oil from the frying pan and fry the tomatoes with the stock cube. Put them in the pot, add enough water (until it covers everything) and boil until the water is absorbed.

Anastasia Eleftheriou

Preparing the Christmas table this year? Cooking the turkey or pudding?

Send us an email at food.felix@imperial.ac.uk with your recipe and/or any other food plans you have for Christmas!

Interview: Mark Pitts-Tucker

Shooting the Bries with Cathedral City's very own 'cheese grader'

Anastasia Eleftheriou

A: You are the cheese grader for Cathedral City. What does Cathedral City Cheese have different from other cheese brands?

M: All of the cheese used for Cathedral City is made at the award winning Davidstow Creamery on the north Cornish coast. The meadows are lush and the milk is creamy. All these factors combine to deliver a highly consistent product with a wonderful flavour profile.

A: I've read that you often grade 500 cheese samples a day. If I ask you to choose the best cheese product that you have ever tasted, which one would it be?

M: It is correct that on a busy day I can grade in the region of 500 samples. Davidstow is a large producer by any measure and there are a lot of cheese to be assessed. My two favourite cheeses are Cathedral City Vintage-20 and a nice gooey, cabbage smelling Brie.

A: What knowledge and skills are needed to be a cheese grader?

M: First the ability to taste accurately and consistently, secondly a good understanding of the manufacturing process, thirdly focus and concentration, and finally a thick skin if you need to reject product.

A: Do you enjoy your job? Are there any moments when you simply don't want to eat any more cheese?

M: I do enjoy my work and it is one of those jobs that if you didn't you would soon be found wanting. There are times when I have certainly had enough cheese but never too much and I often eat cheese in the evening even after a full days tasting!

Davidstow Cheddar



Tuition Cheese - Mark Pitts-Tucker shares his cheese-based experiences

A: Can you suggest any simple cheese-based recipe to Imperial College Students?

M: There are so many easy 'twists' to cheese on toast - cheddar with Stilton sprinkled on top then grilled, mushrooms, tomatoes, something hot and spicy? Use your imagination, I often use it as a way to use up some odds and ends from the fridge. Very cost effective too!

A: What would you have on your ideal Christmas cheeseboard?

M: I'd go British all the way - Cathedral City Mature as the broad appeal cheese, M&S Cornish Cruncher for some real character, Cornish Brie for super creamy texture, Red Leicester for the splash of colour and regionality, and a soft goats cheese for a change of taste and texture.

A: Are there any general tips to enjoy cheese at its best?

M: Always store cheese in the fridge. When it comes in a re-closeable pack then keep it in that pack, If not ideal tightly wrap in grease proof

paper rather than cling film (it can go sweaty) and finally take out of the fridge approx 15 mins before use if not for cooking.

A: Is Cathedral City currently in the process of producing a new product?

M: We have just launched the kids snacks 'Chedds' which was a big project launch for us. In recent years there has been our Mild, Lighter and Vintage-20 cheeses and, yes, there will be more to come. Consumer trends change and develop so standing still is only an option for the foolish!

A: Which restaurant or café in London do you recommend for delicious cheese-based dishes? Any favourite dish in particular?

M: As much as I love a great restaurant meal I really enjoy what I would call 'great cafe grub' and on that theme the simple done really well is such a treat. Hot cheesy quiche with a non-soggy base is a simple pleasure.

On the chef front look out for a guy called Nathan Outlaw - fantastic!

Recipe of the week: Thai Green Chicken Curry

Straight from the kitchens of Covent Garden's **Tamarai** comes this dish

With Christmas quickly approaching, prices are only bound to go up everywhere but **Tamarai** are trying their best to offer their award winning Pan Asian Food at an extremely pocket friendly price so all of your extra pennies can go towards those highly awaited presents under the tree.

Ingredients

Chicken slices (Breast)	120gms
Egg plant Slice	5gms
Pea eggplant	4gms
Kafir lime leaves	2gms
Basil leaves	5gms
Bamboo shoot	10gms
Green curry paste (readymade)	30gms

Sugar	5gms
Canned Coconut milk	400ml
Fish sauce	5ml
Oil	5ml

Method

Heat oil in a thick-based sauce pan. Add kafir lime leaf, pea eggplant, sugar and green curry paste and sauté it. Stir occasionally and ensure it does not stick to the base. Add 100ml coconut milk, chicken slices and simmer until the chicken is cooked. Add the rest of the coconut milk and bring to the boil. Season with fish sauce and heat well. Finish with basil leaves. Serve hot. **Manish Mehrotra - Chef**



Tamarai 167 Drury Lane, Covent Garden, London, UK WC2B 5PG; 0207 831 9399; <http://www.tamarai.co.uk/>

Home & Garden Editors: **Tim Arbabzadah**
Charles Betts
Navid Nabijou

HOME & GARDEN

DIY: Whiteboard Station

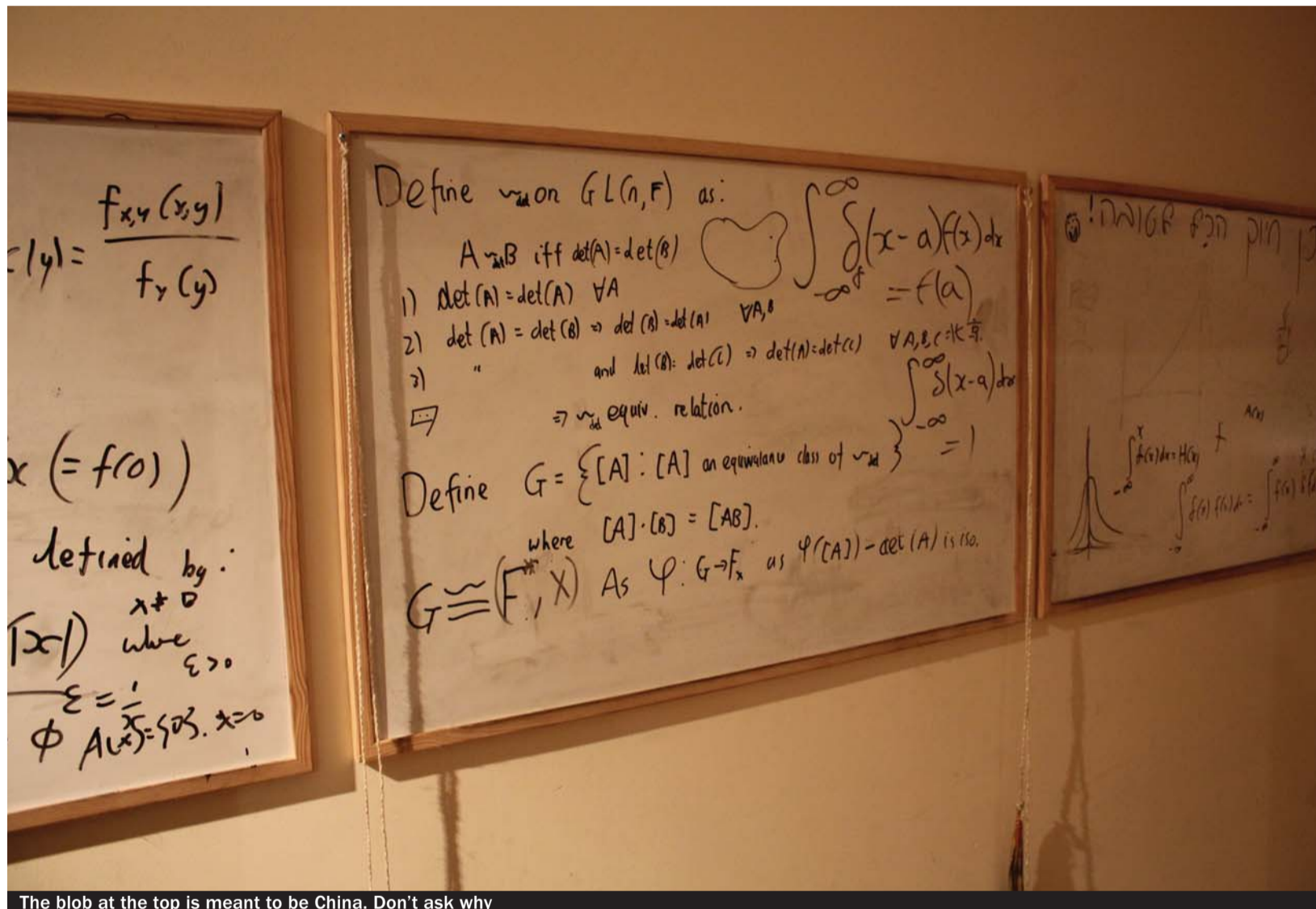
Navid Nabijou helps you to experience the fun of lectures in your own home

As a mathematician living with a group of other mathematicians, I like to think, at least some of the time, that our conversations relate to something beyond our chosen subject. But let's face it: we're Imperial students. Inevitably, the moment does come when normal discourse collapses into a frenzied exposition on Graph Automorphisms and the implications of Zorn's Lemma.

In the heat of the moment, having everyone jostling around the puny Pukka Pad on the kitchen table can be pretty frustrating. It disrupts the flow, forcing everyone to be louder and more violent as they try to get their point across.

The solution to all this? A whiteboard station. The equations are up there on the wall in nice, big letters that everyone can read, there's enough space for everyone to stand around, and, with multiple pens, people don't have to fight each other for scribbling rights. On top of all this, there's the added bonus that anything you write will seem instantly important – simply by virtue of being scrawled up on a board.

And the boards can be put to a lot more use than you first might think. Ours have been used for games of Pictionary; language lessons; even just leaving messages for each other ("pay rent" being the most common). It functions as a nice little communal place for people to gather around. You might never have thought of making one, yet once you have it it somehow seems indispensable.



The blob at the top is meant to be China. Don't ask why

How to do it

The size of your station will depend on a few things: the number of people living in your flat, the length of uninterrupted wall space you have, and what your budget is. We have three whiteboards side-by-side, spanning about three metres in total.

While this guide will be for a three-board set-up, you can easily tailor it for more or less boards as you see fit. (Do be warned, though, that while the boards

might look big in the shop, once they're up on the wall you'll quickly find yourself running out of writing space.) Here's what you'll need:

- Whiteboard: 30" x 90" (x3)
- Pack of sticky fixers
- Board markers (x3)
- Cloths for wiping (x3)
- String
- Nails (x3)

Most of these can be picked up at an ordinary stationery shop. The bulk of the cost will, of course, come from

the boards. They're usually around £15 a pop, but if you're lucky enough to catch a sale at Ryman's you can get them for half that.

Once you have all of the above, it's time to get down to business. First thing to do is hammer a nail into the top-right corner of each board. We'll be using this later to hang the markers and wiping cloths.

We're going to use the sticky fixers to attach the boards to the wall. You could use nails, but your landlord might not be best pleased about this; in fact, on the subject of pissing

off landlords, if you cheap out on the sticky fixers there's a chance they could leave some nasty marks on the wall when you eventually remove the boards.

Now that I've cleared myself of any legal trouble: apply the sticky fixers liberally to the back of each board (i.e. use at least 15), and attach the boards to the wall in a line (if you're really anal about this, you could use a spirit level to make sure they're perfectly straight).

With the main task done, you're going to need something for writ-

ing and erasing. Tie each of the board markers and wiping cloths to a piece of string, ensuring the string is long enough to fully cross the diagonal of each board. Put a loop in the other end, and hang one board marker and one wiping cloth on the nail in the corner of each board.

And voila! You're done. Months of merriment await you and your flatmates. If the board gets too dirty, give it a spray with some cleaning fluid and it'll be good as new. Enjoy!

Next week is the last issue before Christmas! Please, please, send in your Home & Garden stories. If you do, Navid can stop writing the kind of nonsense you see above. If we don't get any submissions, next time he'll be teaching you how to make a scale model of Santa's sleigh. I'm not joking. Email us at felix@imperial.ac.uk

WOMEN IN SET PRESENT

GIRLS

GIRLS

GIRLS

IMPERIAL'S BEST LOOKING  NIGHT

£3 EARLY BIRD

WIKIPEDIA RACES

sign up on Facebook for prizes

08-12-11 ●● 7 till 11pm

BELLY DANCERS AND JUGGLERS INCLUDED!

CLUBS & SOCIETIES

Volunteer for Nepal

Project Nepal needs you for their charitable projects

**Cai Heath
Kevin Moulton
Jing Tang**

Dear Imperial Students!

We are announcing the new Project Nepal group at Imperial College Union, we have now been officially registered as an ICU project and we have been overwhelmed by the positive response that the project has received so far from students. We now need volunteers both on our project committee and for next summer's international trip so please read on for more details.

“We need volunteers for our project committee and international trip”

Project Nepal is partnering with two organisations to make our goals a reality next summer, we will be working with the UK charity, InterVol (<http://www.intervol.co.uk>), who will support the UK side of our work and the Nepali organisation, Partnership for Sustainable Development (PSD) Nepal (<http://www.psdnepal.org>) who we will work with during the summer project. The project aims to improve education in rural Nepal through providing funding and volunteers to construct school buildings and to teach basic lessons in primary schools. These schools

flickr/bckeenan



struggle to get by and often have far too many children due to Nepal's growing population and levels of poverty. PSD Nepal work with the Nepali government to target some of the worst off schools who really need assistance and then target those schools with projects such as this one. Volunteers will raise money as a team through fund-raising events in the UK to support the project. Volunteers from a number of UK universities, such as Oxford, Birmingham, Bristol and Edinburgh, take part in the programme currently and Imperial College will be the newest addition!

Project Nepal has been accepted as an official charitable project by Imperial College Union and we are now looking to increase the size of our committee. Please get in touch with us if you would like to be involved at this stage, especially if you already have experience of being on a committee at ICU. Our current volunteers need support with planning our applications process, starting fund-raising and arranging the upcoming meetings, being an official part of the committee is great for your personal development and you will develop skills and experience in project

co-ordination with a registered charity that are hard to get during university. Dedicated committee members will also have a better chance of securing one of our international volunteer positions for next summer.

Now that you have had a chance to settle into university for the year we are planning on hosting an information meeting from 12-1pm on Friday the 2nd of December in Room G39, Royal School of Mines Building (RSM), Prince Consort Road, Imperial College Union. In this meeting, we will talk more about the ins and outs of the proj-

ect, discussing the dates, budget, fund-raising target, and other related issues. One of InterVol's trustees, Cai Heath, who set-up and took part in InterVol's first Nepal project in 2007, will be giving a talk on his experiences in Nepal and we will be answering your questions.

“The project aims to improve education in rural Nepal through funding and volunteers”

Do bear in mind that volunteers are expected to cover their own flights, accommodation, food and insurance. There is no cost however to volunteer with PSD Nepal or InterVol, both organisations make sure that as much money as possible goes into the community. There are 6-8 places available for international volunteers next summer. Please see the 'Nepal' project page of www.intervol.co.uk for more information and a powerpoint presentation from last year's Birmingham University team. Please join our Facebook group, search 'Project Nepal - Imperial College London' or go to <http://www.facebook.com/groups/projectnepal/>.

We look forward to hearing from you and seeing you at the meeting next week!

CGCU does it again!

Engineers report on busy club night at High Street Kensington's Archangel

Will Seez

On Thursday 17 November, the CGCU hosted their annual club night at Archangel on High Street Kensington. After a highly successful Welcome Dinner at Café de Paris, there was a huge amount of pressure on the CGCU exec to see if they could pull it off again. With their reputation somewhat dwindling over the last few years, Jacky Kwan and his committee really seem to be stepping up to the plate this year.

The club was full to the brim on the night. The crowd was a good mix of freshers and slightly more mature stu-

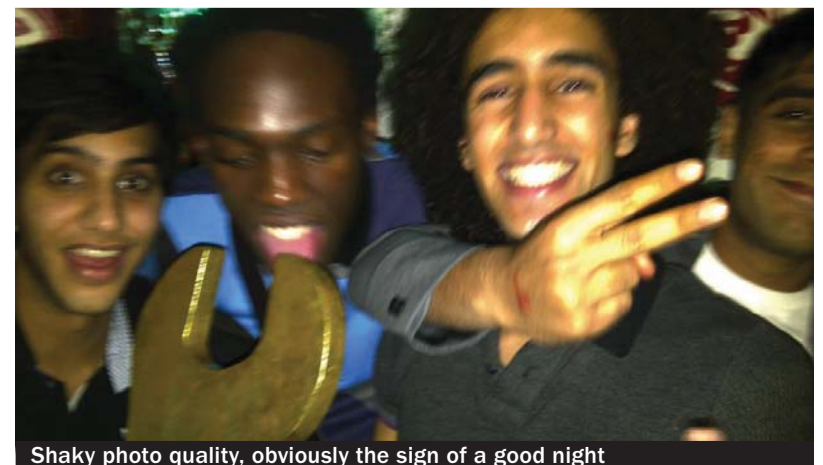
dents, but more surprisingly, of males and females. The music was great and the atmosphere even better. Deals that rivalled those at the Union kept the masses in good spirit. Add to this

“Deals that rivalled those at the Union”

the fact that some free drink vouchers seemed to slip away mysteriously, and you get the levels of amusement that the committee were hoping for.

Clearly people enjoyed the night. Highlights include an unnamed fresher turning 18 in style, an unnamed senior student getting furiously slapped around the face and some serious love given to Spanner (see photo). So all in all, a resounding success.

What does CGCU have to offer next? Leaving Christmas Dinner plans to each respective engineering society, CGCU can save for more events next term. In the near future there will be an Ice Skating Evening at Winter Wonderland and in the Spring term there can be more club nights expected!



Shaky photo quality, obviously the sign of a good night

HANGMAN



hangman.felix@imperial.ac.uk

The Hangman Text Sound Board

Politicians sometimes sound like a broken record. Here's the David Cameron text board. It's like a sound board, but it's in your head. Use it to make up your own fully formed sentences! You may even form an actual policy from them. If you do, please send them into the Coalition Government. They desperately need them. **Blue = what he says** **Green = what he means**

I once met a black man

I think I saw a film with that Wesley. L. Jackson chap the other day

We're all in this together

You're all in it together, good luck

We have no intention of privatising the NHS*

I intend to privatise the NHS, but know that it would be incredibly unpopular to do so in a direct way. So I'm finding a way around it.

* Note: said while privatising the NHS in an underhand way

We must cut the deficit. Imagine if you had a bill to pay, would you pay it or just wait...

I'm definitely sticking with this plan, so here's an oversimplified analogy for you povvy plebs

Send in your drunken mate of the week photos to:
felix@imperial.ac.uk

These strikes are damaging

These strikes are irritating, just sit down and do as you're told like the working class used to



It was a momentary lapse in judgement

It was a prolonged, active decision that I took

I'm a conservative with a small "c"*

I'm media savvy enough to know that Thatcher wasn't long ago enough to make her policies electable again

* can anyone think of another word beginning with "c", though?

Remember, it was the LAST LABOUR government that put us in this mess in the first place*

Please don't remember that before I wasn't screaming for regulation of the banks and didn't say anything like this could happen

* used to justify doing something that he claims Labour did, so it's okay to keep doing it then

We're making tough decisions

We're making really easy decisions, for us

That's what the Big Society is all about

How did someone actually manage to sell me on a policy that is basically just "well, we aren't going to bother helping you. Do it your fucking selves."



For Nick Clegg, just reword it all, adding in the words "equal partners" and "fairness".

HANGMAN

THE NEWS WITHOUT THE NEWS

Misguided protestors campaign against haircuts



DRUNKEN MATE OF THE WEEK

Their next act: walking into an operating theatre and scaring the shit out of the patient

Do you like books but can't be bothered to read? This section is for you: it condenses paragraphs, themes and narrative style into a hypodermic syringe for you to inject into your bloodstream. The perfect antidote to ignorance for the lazy.



Eric Hill

This book concisely addresses the existential crisis of the main character – a dog that has had to live and cope with a congenital skin defect that has ended up defining him. The story starts with rebellion against his oppressors, who force his “dinner” upon him. In response, Spot goes into hiding, fearing for his life. Eric Hill’s portrayal of this one dog’s struggle is powerful in its graphic detail of the various places his owners search for him in, keeping the reader on edge whenever a cupboard is opened. How long will Spot stay one step ahead? What is Spot willing to do in order to escape? And if he gets caught, what will he have for dinner? Despite the gripping narrative, at 24 pages there is little room for plot development, leaving many plot holes unanswered – such as the cover: the protagonist is clearly looking for something despite the story hinging around the search for Spot.

Horoscopes*

* I bet you they can't even be arsed to change this fucking caption

Aries

This week you snort a line of coke, pick up your son from his father’s house and get on a tram in Croydon. You decide to start airing your concerns about demographic changes in South London. Turns out your views are unpopular.

Taurus

You’re a medical student. After watching a morbidly obese patient die of a heart attack: surrounded by strangers and shitting themselves; you realise that you hate humanity. Upon expressing this belief, all the qualified doctors burst into applause and you’re handed your degree on the spot.

Gemini

This week you are required to write a circular email to the Imperial College RAG committee, as an opening gambit you decide to start airing your views on the comedic merit of a university publication. Turns out your views are unpopular.

Cancer

This week you go on strike. Your pension is being sold down the river, which is completely outrageous because it’s not your fault that the world economy is down the shitter. Unfortunately, but unsurprisingly, the strike achieves nothing. Politicians inexplicably call you Greedy.

Leo

This week you’re doing bong hits with Eliza Manningham-Buller outside of Queen’s tower when Keith O’nyons rocks up and starts getting all whiny about respectability and bullshit like that. Just when you thought your high had been crushed forever, Prof. Nutt turns up with his special cookies and everyone mellows back out.

Virgo

This week you decided to write for Felix. Tentatively opening the office door you can’t help but scream at the sight of skin-blانched malnourished urchins slumped at computer desks. “News?! From the Outside?!” croaks what looks like the ring leader, blinking in the unfamiliar light. They make you their king.

Libra

This week you’re a blade of grass in the union quad, gently photosynthesising in the crisp, winter sunlight when BOOM: an investment bank put up a massive inflatable portable recruitment bouncy castle on you. Still, better than what those dicks at sports night pour on you.

Scorpio

This week as King of Felix, you train your underlings of malnourished urchins in the art of swordsmanship and lead them out to war against RAG. Unfortunately no one on campus can tell you where RAG is based, and very few have even heard of them. You regroup in the JCR to plan strategy.

Sagittarius

This week your girlfriend doesn’t love you anymore. Unfortunately, girlfriend is the name you gave the programme you made for your computing coursework, designed to send you banal, cute small-talk filled text messages at 2 hourly intervals. To add to your broken heart, you get a 2:2.

Capricorn

This week you decide to lead your Felix Army on a campaign to conquer IC Radio. However, when you get there, you find the station manager being bundled into a police van and the Union President in what appears to be a Stasi uniform setting alight to their server. Foiled Again!

Aquarius

This week, in a fit of loneliness you buy a hamster. You very quickly realise that the companionship derived from a creature that primarily just eats and shits a lot isn’t huge. You decide to name him Virginitly and deliberately lose him. Now all the lads will think you’re a real man.

Pisces

This week you are the girl in the yellow jumper with gold studded black gloves smoking in the entrance to Sheffield at 2pm on Wednesday, you’re so hot you ruin every guys’ day. Call me 020 7515 789715, from 6pm to 4am on weekdays.

Stuff Imperial students hate



Male

Female

Women

“Ooh, look at me! Just because I have a vagina I think my opinions and general existence are suddenly 100% more relevant.” Newsflash: the moment you step out of the confines of Imperial you will suddenly depreciate in value like a kebab once you’re sober. Deal with it. It’s fair enough when the girl in question is actually pretty fit and someone that would actually get bought drinks in a bar. A REAL legitimate bar, that people who can’t integrate attend (and not just medics). But when it’s some dumpy short bitch who wouldn’t even get a second look if she went to UCL, you just shake your head at all the saps that surround her like bees around honey. Flies around shit would be a more accurate metaphor.

Men

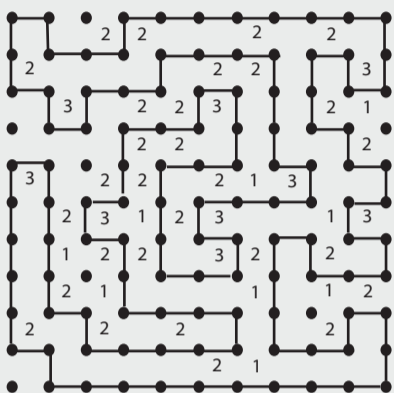
God, you are all so unattractive. None of you seem to give a damn about your appearance. Your wardrobe consists of two hoodies, two pairs of jeans/trousers, four t-shirts and maybe one long-sleeved shirt for when you want to impress the ladies at the Union. Except, once you get there, you just stare creepily at them because you’re too damn scared to say anything to them. You’ve made it through school scoring straight A’s, so you’re so bloody scared of failure that you will go out of your way to avoid eye contact with the girl you like at the bar. That time you got rejected from Oxford was almost too much to handle – if you ever fail again you will probably die.

PUZZLES

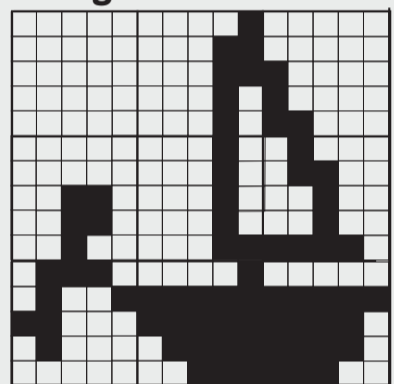
puzzles.felix@imperial.ac.uk

Last Week's Solutions

Slitherlink



Nonogram



Crosswords

QUICK(ish) - Across 1. Casar 4. Achilles 10. Transform 11. Ensue 12. Colonel Mustard 14. Appal 16. Teddy bear 18. Lend an ear 20. Comma 21. House of Commons 25. Prior 26. Economise 27. Seesawed 28. Desert **Down** 1. Cat's Cradle 2. E-mail 3. Arsenal 5. Cymru 6. Ineptly 7. Laser beam 8. Seed 9. Roulette 13. Broadsheet 15. Pantomime 17. Director 19. Austria 20. Compote 22. Obese 23. Olive 24. Opus

CRYPTIC - Across 1. Bechance 5. Unwrap 9. Lay 10. Tape Measure 12. Automating 13. Bath 15. Global 16. Crowbar 18. Impulse 20. Nearly 23. Elan 24. Strip Poker 26. Countersign 27. Bee 28. Rascal 29. Influent **Down** 1. Ballad 2. Crystal 3. Automobile 4. Capital Letter 6. Neat 7. Rhubarb 8. Plethora 11. Mint Condition 14. Solar Panel 17. Silencer 19. Peanuts 21. Likable 22. Ardent 25. Etna

Chess

Black simply wins at least the exchange after 1...Bd4!. After this white has no good way of defending the threat of Bxe3+. The best defence to this is 2. Re1 Bxe3+ 3. Rxe3 Nxe2 4. Qxe3 Qxe3+ winning

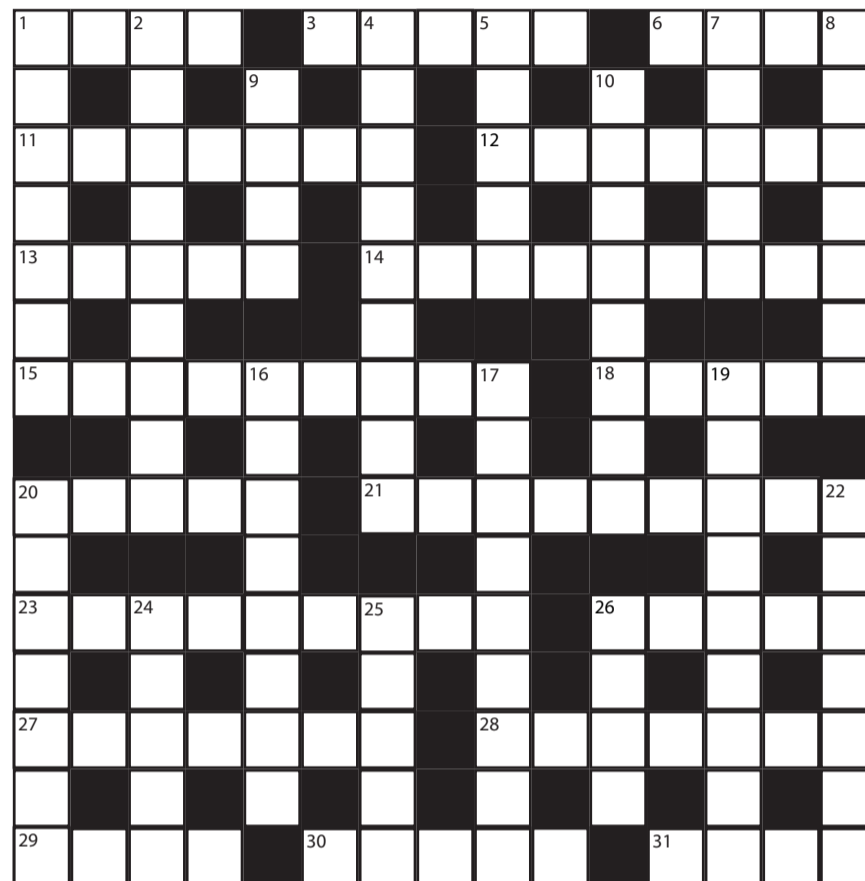
Crossword

Across

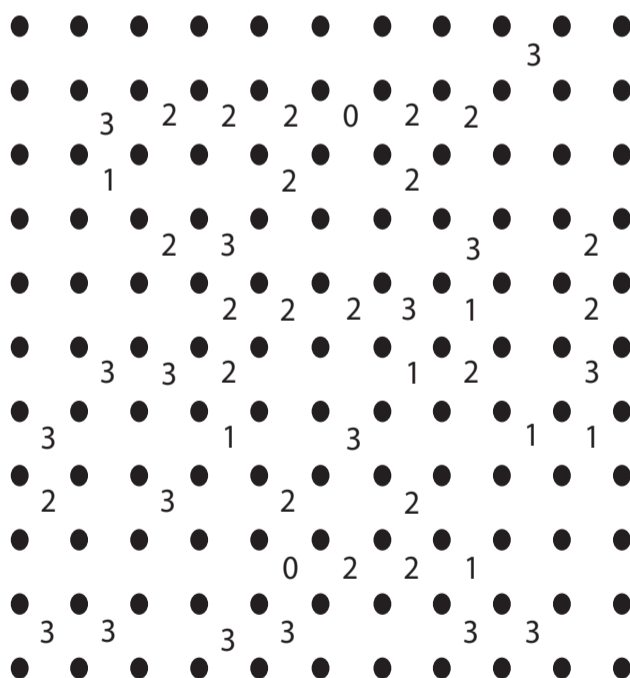
1. Chief; curved (4)
3. Let go (5)
6. Throw; actors (4)
11. Hard stuff; Neil ____, American singer-songwriter (7)
12. Art or literature intended to arouse (7)
13. Wretched, shabby, nasty (5)
14. Procession of vehicles (9)
15. Military weapons and equipment (9)
18. Covered in green appendages (5)
20. Reddish-yellow stony fruit native to India (5)
21. Sirocco (9)
23. German military symbol and award during the World Wars (4,5)
26. Segment of a flower's corolla (5)
27. Insects, order Coleoptera, with hard casing to protect their wings (7)
28. Outdoors (4,3)
29. EM wave (1-3)
30. It's capital is Sana'a (5)
31. Testing stage of software (4)

Down

1. Pyrenean country (7)
2. Artisan (9)
4. The basics, fundamental facts or principles (9)
5. May describe one looking at 12 (5)
7. __ Dobson, plays Angie Watts in Eastenders (5)
8. e.g. Hamlet, Othello, not Twelfth Night (7)
9. Scrawny (4)
10. Without unnecessary extras (2,6)
16. Foolish person (8)
17. Sedimentary rock with quartz grains (9)
19. Command to turn around (5,4)
20. Place to store post (7)
22. Parasitic disease (7)
24. e.g. Don Giovanni, The Flying Dutchman (5)
25. __ Ardiles, World Cup Winner and ex-Tottenham manager (5)
26. e.g. A Dream Within a Dream, The Raven (4)



SLITHERLINK



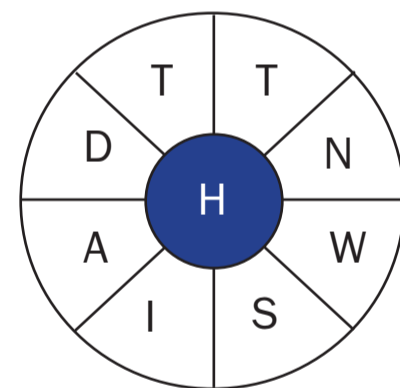
The aim with Slitherlink is to make one continuous closed loop by connecting the dots. The numbers in each square indicate how many edges of the square are part of the loop, so if it contains a "2", you know that two and only two out of four edges have lines. That's all the info you need to get the one logical answer (though waiting a week to see the solution will also do). Answers to **puzzles.felix@imperial.ac.uk**, as the puzzles team receives one shaved moustache per correct solution.

Contributions wanted!

If you'd like to contribute by sending in puzzles, comics or even some editing, e-mail puzzles.felix@imperial.ac.uk. Be they horrendously complicated things or funky picture puzzles you think readers would like, do get in touch. General suggestions are also welcome.

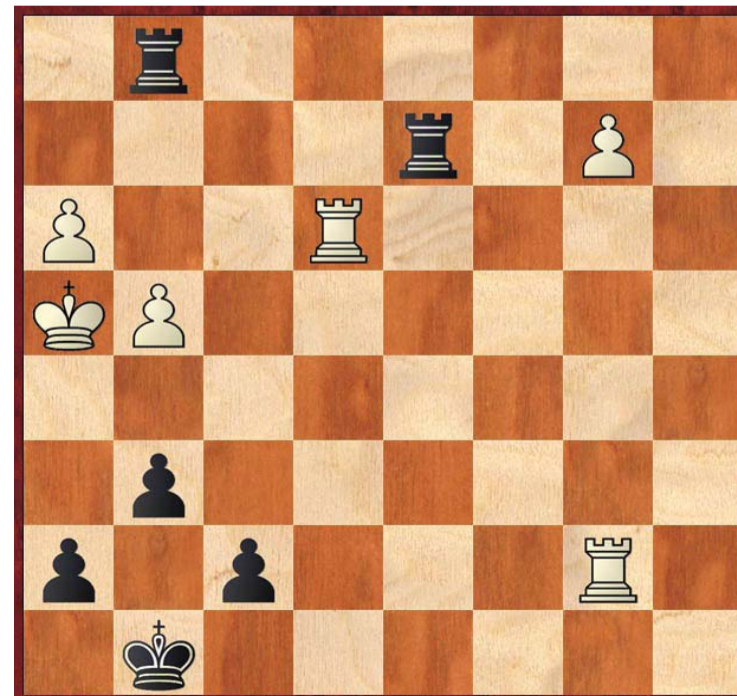
Word Wheel

TARGET: 15



Make as many words of at least 4 letters as you can, always using the central one. **NO** plurals, conjugated verbs, comparatives or superlatives, because I said so.. There is always at least one 9 letter word.

ChessSoc Chess



Black to play and win

SPORT

Sport Editors: **Indy Leclercq**
David Wilson

sport.felix@imperial.ac.uk

Hockey: Men's 3rds with 1st win of the season versus Sussex

Kesh Murthy
Hockey

Men's 3rd	2
Sussex 2nd	1

To say that it has been a disastrous start to the season would be an understatement for the IC Hockey Men's 3rd XI.

By losing their first four games they had already lost more times this season than in the entirety of the last. With relegation a shocking possibility, the team knew that they needed to register a win soon, which is exactly what they did against a shell-shocked Sussex 2nd XI.

Playing 4-4-2 with a diamond had not been working for IC who have been lacking an attacking edge all season. So with drastic times calling for drastic measures, the team changed to a 4-3-3 and within minutes of the push back this change almost reaped immediate rewards with SCID almost knocking in a loose ball but for good work by the Sussex keeper.

IC kept up this pressure throughout the first 10 minutes of the half, but after this period, the game started to turn. A break by Sussex into our D saw goalkeeper Sifter run out to make a fine goal-saving tackle, but severely injure his neck in the process.

After a lengthy injury time out, IC took too long to get back into the game and found themselves a goal down when the Sussex forward snuck in behind the otherwise excellent Eager Beaver and Fritzl to slot coolly past a helpless Sifter. Some more poor play from IC offered Sussex plenty of opportunities, but thankfully poor finishing kept the score at just 1-0 when going into half time.

An inspiring half-time team talk from Sifter rallied the troops, reminding the team to play simple hockey and show that they were better than their Sussex opposition. This, combined with the thought of losing all of the first five games of the season and the exuberant support of the Ladies 2s, saw IC push hard from the off in the second half.

Everything just seemed the click after half time. The midfield dynamo of Fresher Hemal, Designer V, and Aquaman dominated the opposition, leaving Cockerel, Fresher Ed, Pappity-Boopity-Popitty and Munter Gatherer to exploit the spaces behind the defence and provide golden opportunities for SCID.

It didn't take IC long to draw level, when a surging run down the right by Cockerel found the stick of Designer V who laid the ball on a plate for SCID to

finish off. With that equaliser going in, IC were very much on top, and had Sussex reeling. Wave after wave of IC attack failed to produce a goal until Bum Tablet caught one of Sussex forwards napping while on the ball, and produced a scintillating run, fluking his way past two defenders before getting barged off the ball and winning a short corner. From the resulting short, Fresher Hemal smashed the ball into the goal putting IC ahead.

Sussex were stunned and try as they could, they failed to muster much of a response with the IC defence pushing up high and snuffing out attacks before they could develop. It was a nervy end to the match though, as Sussex were awarded a short at the death but Gingsy-pops stood up to the test and pressured the Sussex forward into a mistake.

2-1 the final score and a thoroughly deserved win for the Men's 3s who hope to extend this one match winning streak against the RSM next week.



The medal-winning Imperial judokas pose for the camera, with smiles all around. Of course, they could kill you in the blink of an eye

Selected results

in association with
Sports Partnership



Wednesday 30th November

BADMINTON

Men's 2nd	2	Men's 1st	6
Chichester 1st		Queen Mary 1st	

BASKETBALL

Men's 1st	69	Men's 2nd	37
Hertfordshire 2nd		Men's 3rd	39
		Surrey 3rd	58
Men's 2nd	39	Essex 2nd	58

FENCING

Men's 1st	135	Men's 2nd	81
Keele 1st		Royal Holloway 1st	

Men's 2nd	102	Women's 1st	127
Aberystwyth 1st		Oxford 1st	

Women's 2nd	w/o	Oxford 2nd	
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Women's 1st	133	UCL 1st	96
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NETBALL

Women's 1st	35	Women's 1st	37
St Bartholomew's 1st			

Women's 3rd	8	Women's 2nd	24
Brunel 6th		St George's 2nd	1

Medicals Women's 2nd	29	Reading 2nd	2
Medicals Women's 4th	32	Kingston 3rd	w/o

RUGBY UNION

Men's 1st	4	Medics 1st	0
Medicals Men's 1st	1	Cardiff 1st	8

Men's 2nd	1	Medicals Men's 2nd	20
South Bank		Roehampton 1st	

Men's 3rd	w/o	Royal Holloway 1st	
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25 SQUASH

Women's 1st	31	Sussex 1st	24
Men's 2nd	29	UCL 2nd	24
Men's 4th	32	Royal Holloway 1st	16
Men's 3rd	5	Surrey 2nd	0

18 TABLE TENNIS

Men's 1st	22	East Anglia 1st	34
Men's 2nd	w/o	Nottingham 2nd	1st
Women's 1st	23	Cambridge 1st	24

TENNIS

Women's 1st	20	Reading 1st	0
Men's 2nd	6	Reading 1st	6

Interested in sport?

We need contributors!

Drop by the office or email us:

sport.felix@ic.ac.uk

SPORT

Football: Men's 7s make light work of Heythrop

Ed Lambourn
Football

Men's 3rd	2
Sussex 2nd	1



Darren Ambrose, eat your heart out

A fine afternoon in Fulham yielded an impressive 4-0 away victory for the Imperial football 7th team against a strong Heythrop side whose Kensington location made it as close to a derby game as any possible outside Varsity week.

Equipped with armfuls of food from some of Gloucester Road's most reputable food outlets, the ever-professional 7s proceeded to the tube, soon arriving at Putney Bridge to meet the rest of the players. After an accidental and brief detour via the private Hurlingdon Club, which was met with stern and disdainful looks from the gatekeepers, the pitch was found in nearby Hurlingdon Park. The team quickly found the changing room (whose size suggested it had actually been designed for 18-a-side Aussie Rules Football) and pulled on the (literally) hole-filled rags which were masquerading as the 7s' kit for the season.

The rare presence of a referee for the first time in the season was a welcome one, and he quickly got the game underway with Heythrop losing the toss, leaving the 7s to kick off. Talismanic left-winger Ed Lambourn had been self-diagnosed with a severe pulmonary embolism, and was therefore unavailable to play for the first time this season – a game in which his devastating pace would surely have been useful, against a defence which exhibited about as much speed as a paralysed snail. His place was filled by Mikkel Kranker, who had an excellent match in his first game for Imperial. The lack of a natural goalkeeper in the squad prompted tough-tackling midfielder James Davies to offer his services between the sticks.

After a largely even start, both teams were pressing and it was Heythrop who came closest with a shot powerfully struck against the post in the first 10 minutes. Imperial's three in central midfield seemed to be working, with Ben Ganesh, Chris Gunasekara and Sergei Palmer passing with precision and tackling with vigour. The referee's decision not to use linesmen was a poor one, and lone striker Mo Alsagoff was called offside a couple of times when the spectators' opinions suggested otherwise.

The deadlock was broken on the twenty minute mark, with winger Ephraim Haffner-Staton, who had looked dangerous on the right, cutting inside past two defenders and hitting a powerful shot into the bottom left corner past

the keeper. Shortly after, an accidental kick in the head forced solid centre back Steffan Schulz to be substituted for Ross Maske, making his first appearance for Imperial. The injured German had been one of the team's most consistent performers so far in the season, with his commanding defensive play alongside Dom Wood combining smartly with surprising attacking ability in front of goal – he went into the game with two goals already to his name.

It took just a few more minutes for the second goal to come, with Ben releasing Ephraim on the right hand edge of the box who took a few touches before finishing coolly with a Robin-van-Persie-versus-Norwich-esque chip, his second of the game. As the first half came to an end, there was time for yet another goal to give Imperial a 3-0 lead into the break. A through ball from the midfield released Mo who easily outpaced the static Heythrop back line only to be met with the onrushing keeper. A smart sidestep to the right and a few subsequent touches left the keeper stranded and the delightful chipped cross that followed allowed Mikkel to fire home from virtually on the goal-line – a debut goal for the stand-in left midfielder.

The only other incident of the first half was a rare yellow card for right back Duncan, as he committed an excellent foul on a Heythrop midfielder on the edge of his own box to prevent an incisive counter-attack. The two full-backs, captain Alex Meyer-Forsting (a.k.a. Major Foreskin) alongside Duncan himself had both been excellent all game, preventing any kind of threat

from materialising down the flanks.

Any fighting spirit from Heythrop which had seemed to be absent for most of the first half seemed to return at the beginning of the second half, as the game took a more even stance. Winger Bhavik Bhatt replaced Chris and took up a left midfield role, with Mikkel moving into the centre. The fourth and final goal came midway through the second half, as another punishing through ball down the right flank released Mo on the halfway line, who promptly outran the haggard Heythrop defence and fired confidently across the body of the keeper low into the corner of the net – his third of the season.

For the final ten minutes, Sergei took up position in goal, allowing James to inject some of his tough-tackling and enthusiasm into the centre of midfield. After being unsure of his own ability in goal, James had looked every bit the professional keeper, with a confident performance. The only incident in the last few minutes was a penalty for Imperial being waved away by the referee after talking to Ben, who proved the 7s' sportsmanship, even though a penalty would surely have led to a fifth goal.

Soon after, the final whistle blew, signalling celebrations from Imperial to accompany their most convincing result of the season. Ephraim was given man of match after his sterling performance, which had resulted in two goals for the right winger. With performances like this, the 7s are sure to quickly rise up the table – form which could not have come at a better time, as more challenging matches lie in the weeks to come.

Imperial Surfers go to Devon: Westward ho!

Alexander Karvelas
Surfing

The first weekend of November saw 28 Imperial students hit the coast of north Devon for a weekend of surfing and initiation activities.

The trip was the first of the new academic year and saw 16 newbies join the surfoc veterans to hit the November swells.

The trip down was an unexpectedly long one due to the crash on the M5 which added 6 hours on to what should have been a 5 hour journey. A few light beers to get over the journey on the Friday night were followed by an early start on the Saturday where the club kitted up into their tight smelly wetsuits for some surfing action.

The waves on the Saturday weren't as huge as the 50ft waves which battered the Devon coast a fortnight before; however, they did still provide enough force to keep the beginners and (self-claimed) pros happy.

The night following the Saturday surf session was arguably one of surfoc's finest to date. Following the initiations which saw newbies consuming beverages through the surfoc boot of grief, the club continued to play the usual surfoc marathon of games. The usual victims of the boot never failed to entertain the

crowd, with certain committee members prowling on innocent newbies in search of some early swell white wash for the Sunday session.

The Sunday saw the final surf session of the weekend. The waves improved in quality becoming less choppy than the previous day, allowing everyone to improve on their skills/ faceplanting. Some members decided to sit out this session feeling a bit dodge from the night before. After a Sunday roast overlooking the beach, the surfers loaded the minibuses and hit the road.

The journey back to the grindstone was considerably better with the travel time halved...for the one minibus. The second bus decided to re-join some traffic, and are due to come back next week...

The continued success of surfoc over the last year has allowed the club to up attendances on trips to 28 per trip. With sponsorship, and a larger committee the club is continuing to grow and are open to any Imperial students joining the club...provided you can swim!

*Interested in surfing?
Surfoc welcomes beginner/intermediate/Kelly Slater quality surfers.
To be put on the mailing list and learn more about surfoc simply email:
surfoc@imperial.ac.uk*



Everybody goes surfin', surfin' Devonshire (set to the tune of the Beach Boys song. Obviously)

SPORT

Felix Sports League

...where do you stand?



Team	P	W	D	L	F	A	Diff	Index
1 Fencing W1	5	5	0	0	403	233	40	5.00
2 ICSM Football M2	3	3	0	0	11	6	55	5.00
3 ICSM Hockey W2	2	2	0	0	10	1	-2	5.00
4 Lacrosse W2	1	1	0	0	7	2	-7	5.00
5 Tennis M1	4	4	0	0	38	10	-84	5.00
6 Tennis W1	4	4	0	0	44	4	-18	5.00
7 Ultimate Frisbee 1st	3	3	0	0	45	9	-20	5.00
8 Hockey W1	6	5	1	0	15	3	2	4.50
9 Badminton W1	5	3	2	0	25	15	0	3.80
10 Rugby M1	7	6	0	1	201	134	-103	3.71
11 Fencing M1	5	4	0	1	585	460	9	3.20
12 Hockey M2	5	4	0	1	23	10	85	3.20
13 Lacrosse W1	5	4	0	1	78	28	-9	3.20
14 Table Tennis W1	5	4	0	1	19	6	13	3.20
15 Basketball M1	7	4	0	0	465	380	0	2.86
16 ICSM Badminton W1	4	3	0	1	18	14	45	2.75
17 Badminton M1	5	3	1	1	27	13	0	2.60
18 Squash W1	5	3	1	1	11	9	-11	2.60
19 Tennis M2	6	3	2	1	40	32	-35	2.50
20 Fencing W2	6	4	0	2	564	585	36	2.00
21 ICSM Hockey W1	4	2	1	1	23	9	-20	2.00
22 Netball W1	6	4	0	2	240	195	-3	2.00
23 Football M1	7	3	2	2	12	10	12	1.57
24 Badminton M2	5	3	0	2	13	19	0	1.40
25 Basketball W1	5	3	0	2	278	223	5	1.40
26 Lacrosse M1	5	3	0	2	51	27	24	1.40
27 ICSM Badminton M2	4	1	2	1	15	17	14	1.25
28 Football M3	7	4	0	3	13	14	67	1.14
29 Hockey W2	6	3	1	3	6	26	8	0.83
30 Football M2	7	3	1	3	17	19	10	0.71
31 Fencing M2	6	3	0	3	697	683	5	0.50
32 Futsal M1	4	2	0	2	18	27	13	0.50
33 ICSM Football M1	2	1	0	1	4	6	-6	0.50
34 ICSM Netball W1	2	1	0	1	82	72	-9	0.50
35 ICSM Netball W2	2	1	0	1	52	50	-2	0.50
36 ICSM Netball W4	2	1	0	1	47	50	2	0.50
37 ICSM Rugby M3	4	2	0	2	88	90	-9	0.50
38 Rugby M2	6	3	0	3	68	106	-20	0.50
39 Squash M3	6	3	0	3	10	19	-69	0.50
40 Netball W3	5	2	0	3	99	75	-52	-0.40
41 Table Tennis M1	5	2	0	3	38	47	-160	-0.40
42 Table Tennis M2	5	2	0	3	39	46	-12	-0.40
43 Golf Mixed 1st	3	1	0	2	7	10	9	-1.00
44 ICSM Badminton M1	3	1	0	2	10	14	-21	-1.00
45 ICSM Rugby M1	3	1	0	2	52	104	-2	-1.00
46 ICSM Rugby M2	3	1	0	2	32	135	-38	-1.00
47 Rugby M3	7	2	0	5	100	120	-21	-1.43
48 Hockey M1	7	1	0	4	9	30	13	-1.57
49 Football W1	4	1	0	3	4	35	125	-1.75
50 Squash M1	4	1	0	3	3	17	-31	-1.75
51 Netball W2	5	1	0	4	95	164	-4	-2.20
52 Squash M2	5	1	0	4	9	15	-14	-2.20
53 Hockey M3	6	1	0	5	7	18	4	-2.50
54 ICSM Netball W5	4	0	1	3	25	185	-3	-2.50
55 Squash M4	6	1	0	5	3	15	-6	-2.50
56 Basketball M2	2	0	0	2	90	154	170	-4.00
57 Fencing M3	4	0	0	4	437	521	28	-4.00
58 Hockey M4	5	0	0	5	3	38	14	-4.00
59 ICSM Basketball M1	1	0	0	1	46	64	2	-4.00
60 ICSM Hockey M1	3	0	0	3	6	26	24	-4.00
61 ICSM Hockey M2	3	0	0	3	3	19	-2	-4.00
62 ICSM Hockey M3	1	0	0	1	0	3	-1	-4.00
63 ICSM Hockey W3	1	0	0	1	0	7	14	-4.00
64 ICSM Netball W3	3	0	0	3	26	106	10	-4.00

5 points for a win | 2 points for a draw | -4 points for a loss

IC Immortals crush Reading but succumb to Portsmouth



Kill it! Kill it with fire! Or with a brutal tackle

Mike Peacock

American Football

Imperial Immortals	27
Reading Knights	6
Imperial Immortals	7
Portsmouth Destroyers	24

The 20th was the first home game of the season for the Imperial Immortals and they were determined not let Reading walk away with a win. The day of the game was incredibly foggy; almost causing the game to be called off. Thankfully, it cleared enough for it to continue, but visibility remained low. This was lucky for Imperial as the Knights famously relied on their passing game; which was difficult in the heavy fog.

The first half was an eventful one; the Immortals almost scoring on their first drive but were stopped just ten yards from the Knights end-zone. On the second drive the Immortals line began barging through the Knights defence and leading Tino Millar in to the Knight's end-zone for the first score of the game; which with the conversion took Imperial into a 7-0 lead.

Reading retaliated; using an incredibly quick quarter-back they were able to run the ball against the Imperial defence. The ball in Imperial possession was forced up the field straight into the Knights end-zone, with Quarterback Rob Wolstenholme carrying a QB sneak in for a touchdown to make the score 14-0 (after the successful conversion) at the half.

The start of the second half saw Reading have to start their offensive drive on their own 20 yard line as the Immortals kick-off and kick return teams had absolutely outstanding performances all day. The Imperial defence forced a number of mistakes and got a few

sacks and big tackles; forcing Reading to punt yet again. The immortals offense again carried the ball almost to the Reading end-zone; but lost momentum and were stopped by powerful defence by the Knights. Reading adapted to the Imperial defence and changed their offensive formation; suddenly finding they could run the ball.

On a 4th down, the Immortals had the chance to stop the drive but made more mistakes which allowed the Knights to score. After a failed pass for the two point conversion; the score was 14-6 with the Immortals suddenly having a game on their hands.

The ball was traded back and forth, the defences of each team containing the struggling offenses. However, the Immortals, on a 3rd down decided to go for the same play which worked so well against the Bears the week before. The Reading defence allowed the ball to be thrown a solid 40 yards to hit the free receiver Max Stubenvoll who managed, despite tripping over his own feet, to keep hold of the ball for an Immortals touchdown at the end of the third quarter, making the score 20-6.

Reading were forced into their original formation in an attempt to successfully pass the ball up the field as they needed to score repeatedly. A fine defensive performance by Arjav Trivedi meant that the Reading run-game had no chance as he made a number of essential tackles, forcing the Knights into desperate passes.

One of these desperate passes was thrown into the chest of an oblivious and unattractive Rob Wolstenholme (who had stepped in as a Defensive safety) who barely managed to drunkenly stumble into the Knights end-zone for the final score of the game; finishing 27-6.

This was known to be the hardest game of the season for the Immortals. Portsmouth were

the defending National champions and were notorious for their size and cheap tactics so Imperial would have to fight hard but were hampered by a number of injuries. However, both teams were coming into the game with a 3-0 win streak so there was everything to play for.

The first half was a wake-up call for the Immortals; Portsmouth had a team full of heavy guys who were powerful and fast. Imperial were used to having a strong kick-off The Destroyers are known to have the best defence in the country and the Imperial offence struggled to move the ball at all; a theme that continued throughout the day. With Portsmouth in possession the defence started making the big hits that have been a theme for the season so far.

Unfortunately, over commitment to particular blocks meant on Portsmouth's second play a Running back was able to break free of a tackle and run the 40 yards into the Immortals end-zone, but failed to convert. The next offensive passage of play ended abruptly, and the defence were soon back on the field. But this time no mistakes were made and on 4th down a Portsmouth punt went awry after some heavy pressure; the Immortal's offence took the field with the ball 1-yard away from the Portsmouth end-zone.

Rob Wolstenholme easily carried the ball for a touchdown with a QB sneak as the Portsmouth players were unable to approach someone with such an overpowering body odour; meaning the first quarter finished with the Immortals leading 7-6.

The second quarter was where the Immortals fell apart. First with the Portsmouth defence sacking the Immortals in their own touchdown area for a safety; and then the Destroyer offence scoring two long yard running touchdowns through a shambling Immortals defence. Imperial looked as if it couldn't wait for the end of the half, as a team wracked with injuries from earlier games hobbled off the field to a score of 24-7. With their heads down, the Immortals were in real trouble, but thankfully Mike Peacock was able to bring life back to a suffering team with his inspirational words

The second half was not particularly eventful; the Destroyers clearly assuming they were going to score a lot more points had their offence destroyed thanks to some powerful play by Temi Ladega and Jordan Douglas.

The Immortals defence failed to capitalise on the struggling Portsmouth offence, however, barely managing to move the ball against the best Defence in the country. Instead the Immortals had to console themselves with a scoreless half against the reigning national champs; finishing the game with their first loss of the season so far.

Starting the second half of the season at 3-1 with the only loss being to the national champions is something the Immortals, barely 4 years old, can be incredibly proud of. Hopefully, with hard work and time for injuries to heal, a full Immortals team can take the rest of the season head-on, maybe even fighting their way to the playoffs. Good luck Imperial Immortals.

Sport Editors: **Indy Leclercq**
David Wilson

sport.felix@imperial.ac.uk

SPORT

Captains' Interviews: Dodgeball Club Captain



Essential info:

Alan Soltani, 20, Physics 3rd year

1m83, 76kg, throws with right arm

3 years' dodgeball experience

Likes: toe-snapping shots, wrenches

Dislikes: Minotaur dodgeball, wrenches

Indy Leclercq Sport Editor

As we roll into December, the Captains' interviews just keep on coming! This week, we have one of the quirkier Imperial sports on display: Dodgeball. Alan Soltani, a 3rd year physicist and Dodgeball club captain, is the man of the hour. We meet up in Beit quad to talk about balls, wrenches and more.

I'm not quite sure what to expect coming into the interview – what would the 'dodgeball type' be? Very friendly, as it turns out. I kick things off by asking a bit about the structure and organisation of the club, and where Alan fits in. "I'm club captain, as well as being first team captain – we also have a president though. My role involves organising the competitive side of the club, the matches, coaching and training." How many teams do Dodgeball have? "This year, we've got three teams, which is the most we've ever had. Teams are mixed, with the game played six-a-side. We took twenty-one people to the university championships a few weeks ago."

As I don't remember anyone from dodgeball sending in a report about that, I ask him to tell me more: "There were thirty teams competing at Cranfield university, in the 'experienced' teams category. The first team did pretty well, getting to the quarter finals and losing to eventual winners Warwick – who are one of the strongest teams in the country." Promising stuff, I think.

So what is the competition structure for the sport? "The UK dodgeball teams

are divided into leagues of eight teams, with the Premiership being the top one. We're in the league below that, but we haven't played any of our matches yet, our first fixtures are this Saturday. One thing to point out is that the leagues aren't run by BUCS: there is a mix of university and non-university teams." What are the team's objectives for the

"I thought, 'I'll give it a go', and then just ended up loving it"

season, I ask. After your result at the championships, are you the favourites to get promoted? "We weren't at the start of the season, but we have beaten some premier league teams in warm-up open tournaments and people have started to take notice. Hopefully we can keep playing like this and go up."

I'm curious about the club's history – surely it was founded pretty recently? "When I joined as a fresher, in 2009, the club was in its second year of existence. As far as I know it was formed by a group of medics who aren't here any more...but the club has continued."

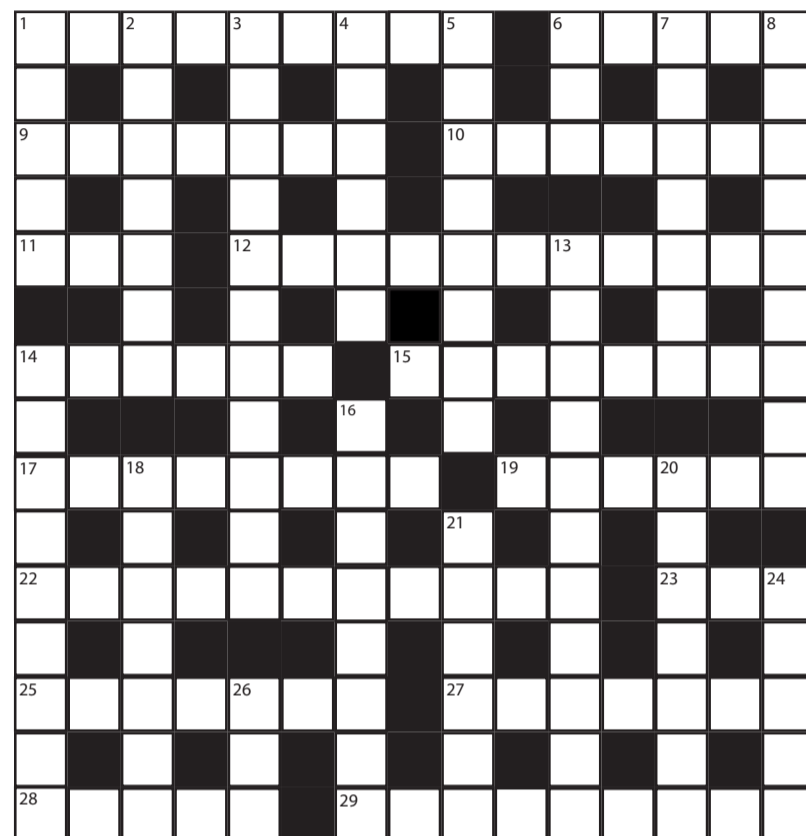
How was the fresher intake for this year? "Really solid. We started having training sessions in Ethos just this year, before that we would use the Union concert hall – which is surprisingly good for dodgeball. Training at Ethos makes it easier to draw in newcomers or people who want to give it a go, though, and I'd say we have about 35-40 people per training session."

Do they have official dodgeball balls and everything? "Yeah, of course! It's not rubber, actually, but inflatable with a soft outside layer." He shows me one, and what immediately comes to mind is a Volleyball, but a bit lighter and slightly padded. Alan tells me it's soft enough that head shots are allowed...perhaps with a bit too much of a grin on his face.

Now for the serious stuff: how did he get into Dodgeball? "actually, when I was at school, I used to watch this programme called Extreme Dodgeball that was on Sky. It just followed a bunch of American players around, and introduced the world of dodgeball, but it was awesome! When I got to uni and saw the dodgeball stand at fresher's fair, I thought 'I'll give it a go', and then just ended up loving it."

It seems to be a recurring theme, this, of people picking up a sport at university and becoming the captain a few years down the line...So how easy is it to progress at dodgeball? What skills are needed? "It's essentially a throwing and catching game, and those are the things you need to work on – along with speed, reflexes, that sort of thing. It's pretty easy to progress rapidly, if you're shown

Cryptic Crossword 1,504



Across

1. Puppy - round, overweight, belonging to female crime boss (9)
6. Make babies. Somewhat compelling after night on the lash! (5)
9. Repugnant commercial jingle (7)
10. Message for girl with 4 Easterners (7)
11. Finish without starting to fix (3)
12. Excellent Christmas firework, mate! (11)
14. "Sell foot-operated lever" it is heard (6)
15. A fraud hidden inside, also a snake (8)
17. None bar Lee missing from lecture on romantic composition (8)
19. Strength of computer class is tough (6)
22. Correction following sloppy odd coppers (5,6)
23. Launch "Lo and Behold!" first (3)
25. Contemporary bizarrely cured with gene activator (7)
27. Believed they firstly should... (7)
28. ... fight a bit (5)
29. This involves running and jumping from hot candle mixture (9)

Down

1. Happy lane ends in meadow (5)
2. Miliband brothers - one displaces another one in Opposition (7)
3. Curtail urge to process land? (11)
4. Expression of laughter describing upset disabled one - it relates to the blood (6)
5. Adapting film of Henry V perhaps after period of sleep (8)
6. Several blows to area of Greece (3)
7. Intellectual having technology in this great land (7)
8. Looks like you're food - disperse quickly! (9)
13. Disturb and subject to loud music on ship? (4,3,4)
14. One may suffer these during finals if still drawing after time's up? (9)
16. Stuck on one task/day (8)
18. Chairman for what reason sent back tomato soup? (7)
20. Violating sick bird, reportedly (7)
21. Content when a tick's on mother's side (6)
24. Nocturnal mammal on staff (5)
26. Company quiet about policeman (3)

what to do. We [the people who joined at the same time as Alan - Ed.] took ages to progress, though, because at first we had no idea what we were doing, and no-one was really there to show us the ropes. The new lot are picking it up really quickly as they have us to teach them."

Finally, the question I have to ask: was DodgeBall, the film a blessing or a curse for the sport? "Definitely a blessing. UK dodgeball didn't kick off until the film came out – there was a guy in Leicester who saw the film, thought 'this is wicked' and started the UK dodgeball

association".

To be very honest, most people had a bit of a laugh when I told them I'd be interviewing the dodgeball captain. I tell Alan this, and he concurs. It's not always the easiest sport to admit to playing seriously. "I've had quite a bit of stick over the years, especially when you say you play dodgeball competitively...but I'm used to it!" As the great Patches O'Houlihan once said, "If you can dodge a wrench, you can dodge a ball." You just have to be prepared to take some stick for it.

SPORT

Immortals Round-up

Mixed results for Imperial's gridiron gang: page 42



14-Medal Haul for IC Judokas

Jake Woods
Judo

Imperial's team of elite and not so elite judokas trekked to the edge of civilisation last Saturday, to the point where electricity is limited to 4 hours a day and counting to six on one hand gets easy. It was time for the London Open Championships in Uxbridge and the second biggest competition on the judo calendar.

Despite the 5:00 am start, Imperial was in high spirits after collecting 9

medals this time last year, a feat that everyone was hoping to better now that our ranks included a high number of beginners who had come through our dedicated beginners' course and were entering the category specifically for those who have started judo this year. We practically ran towards the dreaded weighing scales to be informed if 3 weeks of dieting and the self-torture of abstinence from drinking had paid off. All made it and could finally eat some breakfast apart from one fresher who

was so confused about not making his weight category...until he remembered the Pizza Hut All-You-Can Eat eating competition he'd had the night before. Gabriel, shame on you.

Fresher's and advanced players alike, Imperial put on an impressive display of foot sweeps, shoulder throws, drop throws and strangles to beat their way to 6 finals and 8 semi-finals. Spectacular fights included several Imperial friendly fire situations, notably Thanos who beat 3 other Imperial players to

claim a bronze medal and Thore Bucking who beat not only everyone in his own weight category but everyone in the category above! One of our black belts was even awarded "Fastest Throw of the Day" winning a fight in just 5 seconds!

Going into the final fight of the competition was Imperial Dan grade (black belt) Jusso, Imperial and Brunel University were neck and neck for overall points scored, if Jusso won his last fight not only would he win the team's 4th

gold medal but Imperial would win the competition overall. 2 minutes of nail-biting judo and Imperial lay the smack down with a flawless throw that saw his opponent's feet flying higher than his head before crashing into the mat. Imperial win the fight and the championship.

Total competition board: 4 gold, 2 silver and 8 bronze medals and one massive shiny team championship trophy. Roll on BUCS.

Turn to p.40 for a picture of the team!

MUSIC



Muse-ing on a classic album
Page 24

TELEVISION



Louie: it's not Seinfeld
Page 27

FILM



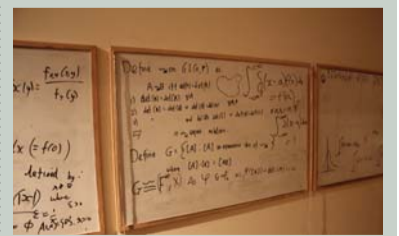
Twihard with a vengeance
Page 28

FOOD



The world of cheese graders
Page 32

HOME & GARDEN



Whiteboard mania in the home
Page 33