

This week's issue...

Felix Editor 📗 Philippa Skett

CONTENTS

Volunteers make the Union go round

News	3-6
Comment	7-14
Science	15-22
Games	23-24
Politics	25
Welfare	26
Culture Pullout	27-70
Elections Special	73-80
Hangman	81-87
Puzzles	88-90
Clubs & Societies	91
Sports	92-95

What's on this week:

Voting opens for the Big Elections

Mar 6th, 12:00, Online

The usual amazing assortment of stats are around too.

Education Day: Students as Partners

Mar 11th, 13:00, SAF

The role of students in education will be discussed by College staff and students. Register online.

MTSoc Spring Show: Merrily We Roll Along

Mar 11th, 19:00, Union Concert Hall

Showing Wednesday to Saturday inclusive, tickets are £6 for students and £8 for non-students, buyable online.

SKETT'S BOX OF SHAME

We got nothing wrong last week, apparently.

This is probably a mistake in itself. Especially in 96 pages of *Felix* this week.

Do email us if you spot anything wrong with *Felix*: *felix@imperial.ac.uk* This week, I've been blown away by the amazing efforts of my editorial team to put together this momentous issue. Issue 1600 has been talked about since the beginning of last term, and how we planned to celebrate this Felix milestone has been constantly evolving. This final form has taken hundreds of hours to do, and we've been in late every night and the weekends to get everything done.

I am especially proud of my Arts Editor, Fred Fyles, who took control of our multi-section pull-out, Culture; without him it wouldn't be nearly as impressive! Fred is a medical student, and has managed to balance hospital rotations with planning and putting together forty beautiful pages; something he's managed to do in a week, but something that took me weeks to do when laying out the Fresher's issue.

I am actually slightly concerned now my editorial team have began to surpass me in skill and dedication; it is only a matter of time before they realise I'm really now just an office accessory, overthrow me and take over *Felix* completely.

Big shout out to Ben Howitt, who has managed to work some sort of InDesign magic into our templates, whilst copy editing like a machine, still finding time to campaign, do his degree and even find some spare time to run all his clubs and societies.

I would also like to praise my dedicated and talented Comment Editor Tessa, who has managed to command eight whole pages this week

eVoting

Login

THIS WEEK'S EDITORIAL

in her own section alone, alongside a great spread in Culture about plus size fashion.

My copy editorial team have been reading, chopping and correcting all day, with only minimal intervention on my part, and my Deputy Editor has also churned out the manifesto layout for this year's Big Elections.

In fact, every member of the team has been outstanding this week: sorry to be mushy but I am so proud of my students that keep me sane and functioning each week, and make my job so exciting and fun and worth doing even when slowly dying.

I literally have no idea how they do it; I've spent the week in a flu-induced haze, and have watched in seemingly slow motion as the office has buzzed around me, bringing Issue 1600 together and in seemingly good time too; I might actually have an early night tonight.

I would like to say a great big thank you to my volunteers that go above and beyond their roles to support me as an editor and keep the paper in check. I could not do this job singlehandedly, especially when knee deep in ibuprofen packets and trying to stop my lungs from escaping from my mouth.

This week, we've been watching the Big Elections with quiet scepticism – with a lot of roles uncontested, it is difficult to take candidates that are likely to win too seriously and scrutinise them properly. However, it's not the Sabbatical roles that should be commanding all the attention – the roles that are done purely by volunteers can be infinitely more challenging and carry more of a direct impact than some of the student sabbatical roles.

It was a group of volunteers that brought together the Meet the Candidates program on Wednesday; it was a complete group of volunteers that ran ICSM RAG week that managed to raise so much money, and it is volunteers that day on day keep our Union ticking.

So if you do decide to vote tomorrow or next week, make sure you spend some time thinking about what people you think would be the best to fill the volunteer roles of next year; choose people who are dedicated, hardworking, but also passionate.

Joke candidates are great for a bit of light relief, but remember that for every joke candidate elected, that is one role that cannot contribute to the wider club, society or project they are a part of.

Volunteers make the Union tick; they run your clubs, your representation network, your sports teams and ultimately your student voice.Vote for someone who you know can do the job, do it well but also loves what they do; they may be rallying for your vote this week, but in the end you'll be thanking them for making your student experience so much more than it would be without them.

Have you voted?

Or are you not going to?

confidential exit poll

www.bit.ly/felix-poll

PHILIPPA SKETT

EDITORIAL TEAM

Editor-In-Chief PHILIPPA SKETT

Deputy Editor PHILIP KENT

Treasurer THOMAS LIM

Technical Hero LUKE GRANGER-BROWN

News Editors CAROL ANN CHEAH KUNAL WAGLE

Comment Editor TESSA DAVEY

Technology Editors JAMIE DUTTON OSAMA AWARA

Science Editors LAUREN RATCLIFFE JAMES BEZER

> Games Editors MAX EGGL CALUM SKENE

Arts Editors FRED FYLES KAMIL McCLELLAND

Music Editors GRACE RAHMAN

Television Editors GIULIA GABRIELLI JOHN PARK

Film Editors ELLEN MATHIESON JACK STEADMAN JOHN PARK

> Web Editor JUNE GAN

Fashion Editor CECILE BORKHATARIA

Food Editors CAROL ANN CHEAH

Coffee Break Editors TESSA DAVEY ELLEN MATHIESON

Travel Editor YUNG NAM CHEAH

Politics Editor JOSHUA RENKEN

Welfare Editors DIBA ESBATI CHANON WONGSATAYANONT

Clubs and Societies Editor BEN HOWITT

> Sport Editor KUNAL WAGLE

COPY EDIT TEAM

Copy Chiefs STEPHEN BALL ELLEN MATHIESON

Copy Editors BEN HOWITT JUNE GAN MICHAEL FAGGETTER JACK STEADMAN CECILY JOHNSON

Felix, OfficesPrintedBeit Quad, Prince Consort Road,Road, CLondon SW7 2BB

If you believe you should be able to stand

Email: felix@imperial.ac.uk Tel: 020 7594 8072 www.felixonline.co.uk

imperialcolegeunion.org/elections

Printed by Iliffee Print Cambridge, Winship Road, Cambridge.

Tell us **who you voted for**, or **why you don't vote** in our

> Registered newspaper ISSN 1040-0711 Copyright © Felix

Front page picture: Wiki commons





News Editors Carol Ann Cheah, Kunal Wagle

Election hopefuls grilled at Meet the Candidates

PHILIP KENT DEPUTY EDITOR

ednesday once again saw the annual broadcast of Meet the Candidates by Imperial College Television (ICTV), where candidates for the various Officer Trustee roles, as well as Felix Editor, Council Chair, and Student Trustees debated live on air as part of their campaigns to win the election.

The production, which was also one of the first collaborations between IC Radio and ICTV in the refurbished media basement, also featured a "pundit panel" made up of former sabbatical officers for the first time in recent history.

The panel consisted of Matthew Colvin (*Felix* Editor 2011-12), Jason Parmar (Deputy President (Education) 2011-12) and Marissa Lewis (Deputy President (Welfare) 2013-14), and was chaired by Mechanical Engineering student George Butcher. The show itself was chaired by EEE finalist Thomas Lim, who also produced the show alongside Pete Brook.

Whilst viewers were treated to a rare glimpse of the ICTV control room in the West Basement of Beit, the main focus of the show was on watching candidates answer questions posed to them. These questions were mostly written by the ICTV team, with a number of other questions submitted by viewers via the hashtag #voteicu.

Whilst a number of the positions had either only one person running, or only one person able to attend the live broadcast, a good degree of debate was had for many of the positions. Candidates for Student Trustee were asked about their willingness to become legally responsible for the Union, while candidates for Deputy President (Clubs & Societies) debated about how the Union interacts with clubs. As part of this, the Union's decision to move a number of club elections into the Big Elections was hotly discussed.

Possibly the highlight of the

evening was with the discussion of Union President, for this is felt to be one of the most prestigious roles at the Union.

Host Lim questioned the candidates as to whether they would live in Woodward Hall in North Acton if they were to win next year – sabbatical officers are allowed to live in College accommodation free of charge during their term. Candidate Lucinda Sandon-Allum confirmed that she would consider moving to Woodward, while Luke Armitage said he would not.

The whole recording is available to watch again online at www. imperialcollege.tv, with separate videos also available for each position.



Thomas Lim (right) quizzes the potential Student Trustees at Meet the Candidates. Photo: Imperial College Television

Do you want to name a satellite?

EMMA WILLS NEWS REPORTER

mperial's Vehicle Design Society are currently in the process of designing and building what will hopefully be Imperial's first ever student satellite.

The type of satellite being built is a CubeSat—a tiny and relatively cheap satellite, just 10cm cubed in volume. Invented in the nineties in America to teach students about the basics of satellites, these tiny standardised units are now making it easy for many more diverse groups to access space at low costs.

This project will in fact be more like a RectangleSat, as it consists of three CubeSats stuck together. Its aim is to put into space a camera with the highest resolution of any CubeSat to date, at 1.5m of the Earth's surface per pixel.

Its ultimate goal is to be able to aid search and rescue missions by detecting and locating distress signals. There is currently a network of satellites to designed for this purpose, but these were developed in the seventies and haven't been updated since. This project aims to show how the existing system can be improved with minimal investment, though it also hopes to test several other engineering ideas, for example an origami-based deployable solar panel, never before tested in small satellites.

"This project is a first-of-its kind in Imperial," said Javier Maurino, the project manager. "Developing a nanosatellite is a unique way to promote space exploration and science, but it is also very challenging. However, when you have scientists and engineers from very different backgrounds working together towards the same goal, the results are simply incredible."

This project has brought together almost a hundred Imperial students from many departments, all with the hope of putting this satellite into space. Money has been secured from the university to design and create a prototype, but the total budget for the project is £43,000. Once the prototype and design have been completed and tested, this summer the project will be pitched to space agencies to gather the remaining funds it needs for completion and launch.

Even at this early stage of the project, it has already taught the students involved much about the processes involved in the real-world space industry.

'This project is fascinating because it enhances the understanding of a real industrial process, and being led completely by students also teaches the importance of internal organisation and teamwork,' said Andrea Vivaldi, head of logistics and finance.

David Cava, systems team leader, said: 'Having something flying around the Earth developed by a group of students sounds to me more as science fiction than real life. Determination and lack of fear are required for this project and that is what I like the most about it.' So far however, the satellite is unnamed. Like the rest of the project, its name needs to be something eye-catching to help the project catch the attention of space agencies. This is why the students have set up a competition to name the satellite. They are asking for people to submit name ideas, from which a shortlist will be picked and then voted on. To enter, simply email your name suggestion to *cubesat@vehicledesign*. *co.uk*.

The winning name will become what the project is called, and will hopefully in a couple of years will be orbiting the Earth!



People are being encouraged to suggest names for the satellite, which is being built by the Vehicle Design Society Photo: Vehical Design Society



Medical Student Union RAG week raises more than £10,000

Philippa Skett reports as the money is donated to local charity

The Imperial College School of Medicine (ICSM) Student Union's RAG week made over £10,000 earlier this term; an incredible figure that pays testament to the amount of work that went into running the week.

ICSM RAG week kicked off with their annual RAG Games, which took place at the Reynolds Bar, Charing Cross campus.

The games involved various challenges students could volunteer themselves to do, before the infamous "FourSkins" head shaving session took place later in the evening.

Second year students from four of the Medicinal sports teams gallantly offered up their hair in return for donations, raising £3124 in total. Several students are picked from Hockey, Rugby, Water Polo and Football and nominated for the head shave, and students can donate money towards individual students – the student that has the highest amount donated for them has to get on stage and is shaved,

On Tuesday, they held a club night at Kona Kai, Fulham, raising around £400 from ticket sales. The Medics RAG Valentine's Ball, located at the Phoenix Arts Club, Piccadilly, also raised around £1250 in ticket sales.

Thursday saw the first ever "I'm a Club Captain Get Me Out of Here!" event take place at Reynolds too, which featured Live bush tucker trials as club captains competed to win £100 for their club. Club Captains from various Sports teams also put together a one-hour special show

that was screened on the night. Entry fees from the door went towards the growing RAG Week total, with £350 raised in total on the night.

Throughout the week clubs also got involved; ICSM Jazz Band performed at Chelsea and Westminster hospital, whilst Music Soc, Light Opera, Dance and Drama came together to put on the Arts Revue 2015 show at the end of the RAG Week, with all ticket proceeds also going to RAG.

Felix spoke to ICSM RAG Treasurer Rhys Smith, about the events they ran and the money they raised. He filled us in on how the week

went, and also the upcoming events that students can still get involved with.

RAG Dash took place last weekend, as 162 students, plus the ISCMSU committee, were let loose across Amsterdam. Said Rhys: "The only stress was really talking to people who ran the hostels our students were staying in, everything else went very smoothly!"

However, the biggest event left in the RAG calendar is the RAG Fashion Show, which takes place next week at Clapham Grand. The show features clothes from local and small designers, all donated to the students taking part. The show sold out its first batch of tickets within minutes, although another 150 will soon be released nearer the date. So far around 300 seats have been sold in total.

Rhys told us how so many students come together to help with the fashion show: "This is such



Photo: Rhys Smith

an inclusive event, with students from a whole range of clubs taking part. From sports students through to those in arts and performance societies, it attracts lots of support from the entirety of the medical student cohort."

Rhys said about the week on the whole: "The committee has become a close knit family as we worked hard planning and running these events. "Everyone enjoyed themselves

and so many students said they had had fun getting involved too, which is great. We hope even more people want to get involved next year as a

Said Dariush Hassanzadeh-Baboli, ICSMSU President: "I am really proud of the students at ICSM for getting so involved in RAG. We doubled the number of attendees to our annual Dash, and we raised a huge amount

fundraiser.

"Despite all the scrutiny the media puts on students nowadays, it is amazing to see everyone putting their money forward for a great cause."

ICSM RAG are donating the money raised to COSMIC (Children of St Mary's Intensive Care), a local charity that looks to support critically ill children and their families who are being treated at the local hospital based in Paddington.



Photo: Rhys Smith





result!"

through our annual head shaving



Imperial College researchers to crowdfund LSD brain-imaging study

CECILY JOHNSON NEWS REPORTER

Scientists from the Department of Medicine are reaching out to the public in an attempt to source the funding required to complete the final phase of their research. The study hopes to generate the first ever images of the brain activity of a person experiencing the effects of the psychedelic drug.

LSD and other psychoactive drugs such as psilocybin, the active chemical in magic mushrooms, have been the subject of a number of recent studies in the UK and US. The drugs are believed to have potential benefits for patients suffering from depression, anxiety and alcohol addiction, but research into these therapeutic properties previously stalled after they were banned in the UK in 1971.

The controlled status of LSD has made clinical research difficult to conduct, requiring a Home Office license and approval from a research ethics committee.

The first of its kind ever conducted, the latest study hopes to investigate the mechanism behind the way LSD works in the brain.

Led by Professor David

Nutt, director of the

Neuropsychopharmacology Unit in the Division of Brain Sciences, the team has already completed the first stage of the project. 20 volunteers were injected with a moderate dose of LSD before functional magnetic resonance imaging (fMRI) and magnetoencephalography (MEG) scans were performed.

The process of analysing the data obtained has already begun, but the full findings cannot be determined until more funding is secured. Funding bodies have historically been cautious to provide grants for research involving illegal drugs. The scientists have turned to the startup science crowdfunding platform Walacea in an attempt to raise the £25,000 required to complete the study.

Initial funding was provided by Imperial College and the Beckley Foundation's Psychedelic Research Programme, which conducts pioneering work in understanding the way psychoactive substances operate in the brain, as well as their therapeutic benefits. The same team is running a study this May into psilocybin and its potential to treat patients with depression.

Recent research has suggested that psilocybin suppresses activity in

certain areas of the brain which might normally play a role in constraining normal processing, enhancing connectivity and communication between different regions of the brain. It is believed that LSD may behave in a similar way.

"We think it's essentially important to understand how these drugs, that are widely used and seem to have this therapeutic potential, work in the brain" said study coordinator Dr Carhart-Harris. "Once we've done that, we want to look at how these drugs can be put to good use".

Professor Nutt, speaking at a briefing in London, spoke out against the restrictive attitude of the government to research involving illicit substances. "Interesting drugs that we've been researching like MDMA (ecstasy) and LSD are relatively low in terms of harms, considerably less even than cannabis and very much less than alcohol. But no research [has been] done on them." "Despite the incredible potential

of this drug to further our understanding of the brain, political stigma has silenced research". If the team is successful in securing the necessary funds, they may be able to share the results of the study by the end of this year. The crowdfunding campaign will run for 45 days from March 5th on *Walacea.com*.



One of the study's participants prepares for a brain scan. Photo: The Beckley Foundation

New Dean of Medicine announced

CECILY JOHNSON NEWS REPORTER

Professor Gavin Screaton has been named as Imperial College London's new Dean of the Faculty of Medicine. He will take over the role from Professor Dermot Kelleher from 1st March 2015.

Professor Screaton is currently Vice Dean (Academic Development) in the Faculty of Medicine. He first joined Imperial in 2004 as the Chair of Medicine, also serving as Head of the Department of Medicine and Campus Dean for Hammersmith before taking up the position of Vice Dean in 2013.

The Provost of Imperial College London, Professor James Stirling, made the announcement in a letter addressed to staff and students. "Since joining Imperial over a decade ago, [Professor Screaton] has made a significant contribution to the success of the Faculty through his leadership within a succession of Campus, Departmental and Faculty appointments."

"Gavin is a passionate advocate of the opportunities at Imperial to improve health and wellbeing by working in multi-disciplinary collaborations across the College and with partners externally. I look forward very much to working with him and his team to advance the academic mission of Imperial College London".

Professor Screaton held a range of clinical academic appointments and fellowships at the University of Oxford and the John Radcliffe Hospital, Oxford, before he joined Imperial. As a clinical investigator, his research focused on the immunology of infectious disease, particularly dengue virus infection.

As chair of the Faculty Board, Professor Screaton has had a significant role in staff recruitment and strategic and financial planning across the College's Academic Health Science Centre partnership with Imperial College NHS Trust.

Professor Screaton stated: "I'm honoured to be appointed Dean of

the Faculty of Medicine and would like to thank Professor Kelleher for his vision, energy and commitment to advancing the Faculty's aims and ambitions, including those with new national and international partners and collaborators." "The Faculty of Medicine at Imperial hosts an extraordinarily talented body of staff and students. It has been a great privilege to work alongside colleagues from all disciplines at Imperial, where we combine our talents to educate the clinicians of the future and use our expertise in basic and clinical science to change lives. I look forward to working with my colleagues to maximise the impact on health and wellbeing that I believe the College can bring to bear".



The St Mary's Campus is one of the many medicine campuses Photo: Imperial College London



Election hustings debate tackles education

JOSHUA RENKEN NEWS REPORTER

The only pre-election debate on higher education that features key representatives from all of the three main parties in Westminster took place on the 2nd March.

The event, which was chaired by Open University Chancellor Baroness Lane-Fox and hosted by Times Higher Education, the Higher Education Policy Institute, the Open University and Universities UK, put questions to the panel consisting of Liam Byrne (Labour shadow minister for universities, science and skills), Julian Huppert (Lib Dem science spokesman) and Greg Clark (Conservative minister for universities, science and cities).

Labour's pledge to reduce tuition fees to £6000 was the biggest talking point in the 90-minute discussion, but other issues such as free speech in Universities and overseas students were reviewed.

In the election hustings debate Liam Byrne confirmed that Ed Miliband and Labour still see a graduate tax as the right "long-term" policy for university funding despite announcing £6,000 fees as their short-term goal.

Mr Byrne said "I don't think the Liberal Democrats or the Conservatives have said definitely that fees will not rise in the next Parliament."

The shadow minister asserted "although we can't promise free education over the course of the next Parliament, we do think the right long-term shift is to a graduate tax."

He added: "I know that there are many people in the higher education sector who would like the current system to stay. But I have to say to you it would be criminally naïve to ignore the time bomb that's about to go off."

Mr Byrne attacked the status quo, claiming that the current £9,000 student loans system would result in £280 billion being added to the national debt by 2030.

Mr Clark accused Labour of adopting an "unprogressive" policy and told the audience that the Institute for Fiscal Studies had said of Labour's £6,000 policy that it "would benefit the highest earning graduates when they are in their 40s" and "put universities back on the dependence of an annual handout from the Treasury".

The minster said: "I'm sorry that we have ended up with a disagreement... because I do think universities have benefitted from the confidence and stability that's come from the fees system."

Mr Huppert declared that ultimately he would like fees to be abolished but admitted, "I simply don't know how to get funding for that" and wouldn't want the taxpayer to pay for higher learning in full "if it meant destroying the quality of education".

The Lib Dem science spokesman argued that the best allocation of the



Photo: Times Higher Education

money would be to "put it towards the cost of living for students...that is the thing that will get rid of the barriers students actually face".

Criticising Labour's £6,000 policy, Mr Huppert said: "The money that is available, I would not use it preferentially to help students who will go on to make lots of money. I would use it to help students at the same time they need it."

The panel also discussed the introduction of postgraduate loans. Huppert explained that: "I did quite a lot of work with NUS and all sorts of others to argue the case for income contingent loans for graduate funding, and we got the first tranche of that in the autumn statement." However these postgraduate loans are not currently available for anyone over 30 years of age. Huppert reiterated that it "should only be a first step" and that if the loan system works well the programme should be expanded.

Although he conceded that "you may have to find a way to adjust the repayment process."

It is clear that higher education is going to be a central element of this year's election campaign and this hustings debate helped to clarify the positions of the three major parties.



Comment.felix@imperial.ac.uk

Is Imperial changing for the better?

Tessa Davey looks back on seven years of Imperial and Felix



TESSA DAVEY COMMENT EDITOR

Yee been at Imperial for seven years, which is quite a long time – longer than most. In that time, I've seen a lot of change. Some of these changes are ones I never imagined happening, like the loss of Evelyn Gardens, which was my home as a fresher, but they're mostly overwhelmingly positive.

Imperial can sometimes seem like a bit of a depressing place. For the vast majority of your time here, you're stressed and overwrought, and, from what I've seen, it can seem like a really negative place to be a lot of the time. When people ask me why I've stayed here so long, and done three different degrees, I often compare it to Stockholm syndrome, and that I've eventually come to love my captors.

But I've really enjoyed my time at Imperial. Some years have been better than others, and I've hit many pitfalls along the way. I've experienced some truly unacceptable things, from blatant unapologetic sexism, to unfathomable lacks of empathy, but I've also seen Imperial change and grow and develop into something far greater than it was before.

When I did my undergraduate degree in physics, the vast majority of the lecture courses didn't supply notes, so if you didn't go to lectures, that was it. We didn't have printed notes (available online), which is usually the case now, and we certainly didn't have the lectures recorded for later viewing. Our tutorials were practically non-existent, and definitely didn't constitute the increased compulsory contact hours that students have now. It gives me a warm happy feeling to see things like Panopto go from crazy ideas to being fully implemented and used. Tuition fees may be higher now, but people are definitely fighting to get more for their money, and it is working.

Universities have such rapid turnover, and it's sometimes hard to feel like anything makes a difference when you come and go so quickly, never seeing anything go from the



This place always has, and always will be my first love.. Photo: Imperial College

concept stage to fruition. The people currently protesting the future closure of Weeks Hall will probably have left by the time it comes to pass, in the same way that most people who ran the #AgainstActon campaign won't be here to see Woodward open in October. But students do make a difference, and if you've stuck around as long as I have, you can start to see that all these little things do add up to a positive, albeit slow, change. Imperial isn't perfect, not by a long stretch, but it's full of well-meaning students who want to make it better, and that counts for a lot.

I used to really dislike Imperial, and being a part of *Felix* has definitely been a huge part of my unalienation. In a way, it's opened my eyes to some of the darker sides of College and the Union, and the injustices that take place, but it's exposed me to so many people who I would otherwise never have met, with nothing in common but a desire to voluntarily give up time to produce something purely for the entertainment of other Imperial students.

I wish I'd been brave enough to get involved with *Felix* years before I did, because now I realise that there was nothing to be afraid of. I used to think that it was an untouchable publication, and that I would have nothing of value to contribute to it. But now I realise that it's not. It's just a bunch of students, sitting in an office, using their free time to write articles, because they enjoy it.

As times change, *Felix* does too. When I arrived at Imperial, copies of *Felix* were distributed to the rooms of every fresher in halls, and right from the moment you arrived, you started reading it. It was an Imperial institution; in Friday afternoon lectures, everyone had a copy open, which is sadly no longer the case as print newspapers fall out of fashion.

If I look at the archived issues from my undergraduate years, I remember so many of the articles in the Comment section starting heated discussions (often had out in whispers during lectures), and none more than those of Angry Geek (or A. Geek, as he was originally known). I'm constantly surprised every time someone hasn't heard of him these days, but of course, he hasn't graced our pages with his impassioned words since 2012, which means that his legacy is beginning to be forgotten.

"I wish I'd

been brave

enough

involved

with Felix

to get

years

did"

before I

But Angry Geek meant a lot to me. He wrote from 2007-2012, which covered my entire time as an undergraduate. He is probably the reason that I've always read the Comment section so avidly, and why I jumped at the chance to edit and write this section. For the 1600th issue, we tried to contact him, on the off-chance he was still checking his old email account, to see if he wanted to write something. What came back was beyond my highest expectations, and I'm honoured to be able to print it.

Angry Geek rejuvenated the Comment section, directly inspiring articles that brought it back from non-existent to overflowing. Reading back through his old articles in the archives, I'm reminded that he wasn't just an angry bastard, but someone who truly cared about expressing opinions, and that is a heritage that I want to uphold. I'm so touched that he still reads *Felix*, and that he's proud of the section as it is today. I'm glad he's still angry, and using his anger for good things. I hope there are still people who remember him around to read; his article has brought me to tears every time I've read it, and I don't think I'm the only one for whom this article will be poignant.

Angry Geek, I still don't know who you are, but if you want to get a drink and bemoan the rising cost of drinks at the Union Bar, I'd love to meet you.

"When people ask me why I've stayed here so long..., I often compare it to Stockholm syndrome."

Comment.felix@imperial.ac.uk

It's time for football fans to reap the benefits

Kunal Wagle thinks that a gesture is due to those of us who care



KUNAL WAGLE SPORTS EDITOR

fortnight ago, the Premier League unveiled their latest deal for broadcast rights in the United Kingdom. In an increase of a massive (and unexpected) 70%, the deal for 2016-2019 is valued at £5.1 billion. This keeps the Premier League comfortably at the top of the revenue charts of football leagues around the world. In fact, its two nearest rivals for that title - the Bundesliga in Germany and La Liga in Spain – will only receive £1.8 billion and £1.7 billion respectively. Sky, who have again bought the majority of the rights, have agreed to pay more than £11 million per game, while secondary broadcaster BT will fork out £7.76 million, and this deal sells only the rights in the United

Kingdom. The Premier League prides itself on being one of the world's most marketable sports leagues. In fact, it's third in the list of most valuable leagues in the world, behind the National Football League and Major League Baseball in America. However, once the international rights are sold, the figure for the Premier League is expected to rise to a humongous £8.8 billion.

When I first heard about the size of the new television rights deal I had two thoughts. The first was that we should be ecstatic that we have a football league that is truly global. It's a league that the whole world is watching. Most footballers speak of their dream to come and ply their trade in English football – and one would suspect that that's not just about the money.

The other thought is the ticket prices.

The BBC run a survey every year – The Price of Football – in which they ask every club in the professional leagues of English football questions about their ticket prices, and the prices at their concession stands. It found that the average price of the cheapest adult ticket at a Premier League game was £28.80. The most expensive ticket was at Arsenal at a price of £97.

If we were to compare this to prices in Germany, there is a shocking difference. The BBC surveyed the top four German clubs from the last season, and the results put English football to shame. The average cheapest ticket price of those four clubs is as low as £12.12, with the most expensive ticket priced at £54.82 at Bayern Munich. The prices in France are even cheaper – the average cheapest ticket from the top four clubs is just £9.79.



Football fans have started to fight back against the increasing ticket prices. Photo: David Price/Arsenal

How does this relate to the latest TV rights deal? It was announced as part of the BBC survey that ticket prices in the Premier League had increased by 13% on average since 2011. That's almost double the rate that the living wage has increased (6.8% over the same time period). As a Manchester United season ticket holder, I have been pleased that my ticket to the Theatre of Dreams has been at the same price for the last three years. and has not increased in price like at other clubs. But I feel it is now time for clubs to make a gesture. A gesture to fans that have been there for their team through thick and thin. A gesture to fans that want to be there for their team, but simply can't afford it. A gesture for those who care.

Last season's bottom club, Cardiff City, was awarded more than £62 million from TV rights and prize money. That's more than the previous season's champions, Manchester United, were awarded for their titlewinning efforts. Given the numbers involved with TV rights and prize money, it is inconceivable to think that ticket prices have to be increased for clubs to survive.

The Premier League rights deal is split into three parts. 50% is divided equally between clubs, 25% is awarded based on a club's final position in the table, and the remaining 25% is distributed as a 'facilities fee' – effectively a fee per match televised per club. Under the deal, the team finishing last each season will earn at least £99 million, whilst the champions will get £156 million as a minimum.

Those numbers make remarkable reading when put in the same context as ticket prices. It is estimated that the windfall from the new television rights deal could pay for a reduction in each and every Premier League ticket by £40 without decreasing their revenues, when compared to this season. Speaking about this exact scenario, Conservative MEP Dan Dalton summed up my thoughts perfectly. He said: "This may be implausible, but substantial cuts for tickets should be a priority. Put simply, clubs can afford to help their fans and communities at this time." It's obvious that Premier League clubs can't decrease their ticket prices by such an amount – they have to use some of the money to create an advantage for themselves against Europe's top clubs (otherwise what's the point?). By this day two years from now, all twenty Premier League clubs will be amongst the world's top 30 richest clubs. They will all be members of an elite set of clubs

at football's richest table. But all the other clubs in those top 30 have significantly cheaper tickets and aren't suffering one bit.

The Premier League will point to attendances (and quite rightly too) to show that the system is working. Premier League attendances are at an all-time high. Despite this, the seeds of discontent are beginning to show through. Manchester United have lost numerous season ticket holders to nearby rebel club, FC United of Manchester, while fans from Arsenal have staged protests against the extortionate prices to see football at the Emirates. Crystal Palace fans unveiled a large banner at Selhurst Park two weeks ago, captioned "£5 billion in the trough yet supporters still exploited. Share the wealth, pigs." And in June 2013, fans from Tottenham, Liverpool, Arsenal and Manchester United descended on the Premier League headquarters in London, shouting, "You greedy bastards, enough is enough." Clubs in the Premier League need to decide whether they'd be comfortable looking into the eyes of their fans as they try to justify increasing prices again in the face of this new deal.

We are at an exciting crossroads in the Premier League. The new deal will bring higher wages and therefore better players.

Let's just hope the fans don't get left behind.

"the seeds of discontent are beginning to show through."

mment comment.felix@imperial.ac.uk

Goodbye Imperial, and thanks for having me The Union and College need to keep working together for the future



GEORGE BUTCHER COMMENT WRITER

've now spent four years studying as an undergraduate at Imperial. That feels like a long time – I don't really remember the anxious teenager who arrived here in 2011, who was unsure of how to organise a weekly shop and do the laundry. I seem to have regressed in my organisation of chores, as my life has filled up with report writing, project work and the whole 'clubs and societies' thing on which I sometimes spend more time than my degree. I've had a great time at Imperial.

It's worked me hard, and caused me stress near exams or when coursework seems to just pile up on top of me. It's marked me down for the most inauspicious of reasons, and some of the lecturers need to be put back in the 1980s from whence they came but after all that it's served me well.

I think back to the worries I had when I arrived, the horrors I'd heard from people back home about coming to London. It'll be too expensive, they'll make you work too hard, there won't be any women, it will be full of international students,

they're all Oxbridge rejects – none of those things have actually come to fruition, certainly not as a problem. People who go on about 'the ratio' are probably boring so it's an easy way to find out if you'd want to keep talking to them. It is expensive, but worth it - Imperial's bursary scheme does a good job of helping those who need it, and I've loved being able to make friends with people who come from completely different backgrounds to me, all over the globe.

It's bizarre to think how different my life would be now if I had gone to a different University. I could so easily have not made the grades and ended up at Southampton, or had an offer from Cambridge and been pressured into going there. The people I know now would be carrying on without me and I'd (hopefully) be with a completely different group of friends, who are now just strangers to me.

But the biggest thing University has taught me is that it's about the experience, not just the grade. The difference between a physical



Imperial is always going to be a place of hard work. Photo: Imperial College

University and an online course is the people. The academics and staff who help me with my projects, the members of the clubs I've been in over the past four years, the lifelong connections.

These are the things that are unique to University and that Imperial somehow manages to get so very right. I learn so much more from working with other people on a project, whether on my course or as part of a society, than I do from any amount of time reading a textbook.

As we build up Imperial West, move students to live in North Acton and become more ruthless with what we fund and how, we shouldn't forget this. We somehow need to get clubs and societies available to North Acton and Imperial West students. We need to keep people working together, and not create a two-tier Imperial. The Union needs to play its role in that, but also College needs to recognise the importance of it and help it to happen, or the students there will not have the experience that they deserve.

Is there inequality in Kensington and Chelsea? Fatima Iftikhar thinks it's time that we get involved with our area



FATIMA IFTIKHAR IMPERIAL HUB PRESIDENT

ou may or may not have seen that Imperial Hub recently ran a social action #Resolution campaign. Well, a couple of weeks ago we were all over campus asking people to come up with a resolution for how they will contribute to making the world a better place in 2015. On the Monday I was running a stall where, in exchange for making a resolution, we gave people a free cup of tea or coffee.

One guy asked for some examples of resolutions that he could make. So I said: "Well it could be about cutting your food waste, starting to do some regular volunteering, learning about inequality in Kensington and Chelsea...," which is where he interrupted with a laugh. "What do you mean inequality? Between the millionaires and the billionaires?"

Now you might be thinking, he's right though, isn't he? Doesn't every other car driving around this place seem to be a Lamborghini? About a year ago, before I got involved with Imperial Hub, I probably would have been nodding along with you.

Studying at Imperial, it is easy to enter a bubble and not leave until you graduate three years later, when you will probably join a high-paid

graduate scheme in the City and enter an even bigger bubble. However, once you pop the Imperial bubble you'll the most serious challenges and social

most Northern wards of the Borough, properties owned by millionaires. The average income can go from £13,500pa to £100,000pa as you cross a road. There is a discrepancy of eleven years in the life expectancy of residents in the North and South of the Borough. Enough facts? I could keep listing them for quite a while.

I hope by now I've convinced you that there is a problem that needs to be addressed; if not, just google, 'inequality in Kensington and Chelsea' for some further reading material.

The fact is that as a University, we've been given a home in a place that we just aren't giving enough back to, a home that frankly deserves a whole lot better than us.

How is it that so many young people from all around the world, with amazing skills and experiences, have come, lived in, and left Kensington and Chelsea, without even knowing about the serious problems that it faces? Students around the world have proved over and over again that they have such amazing potential to make a difference in their local communities, and I know that Imperial isn't any different, so why isn't it happening here?

Is it that students are not curious enough about where they live? Do they feel they have too high a workload to lift their heads from? Is the College not doing enough to get students informed and involved; there doesn't seem to be much on the website other than a rather outdated page about volunteering? Or do students just not know where to even begin and get involved?

Whatever the reason, I think it's time for each and every one of us to stand up, as individuals, and take some responsibility. We all need to take some time to think about how we can use our time at University to make a difference to our local community. People say University will be some of the best years of your life, and this is your chance to make them some of the most meaningful as well, so don't let it pass you by.

"What do you mean inequality? Between the millionaires and the billionaires?" quickly realise that your university is situated in a Borough facing some of inequalities in London. On one hand you have 45% of children living in poverty in the four on the other you have rows of empty

difference'

around the world have proved over and over again that they have such an amazing potential to make a

"Students



Comment

Comment Editor Tessa Davey

Who wins these head-to-heads from Imperial College Union Debating Society?

Do you agree or disagree? Tell us which argument you think is most convincing online, or by using the QR codes below! This House would create an unelected legislative College London of science technocrats



ANITA CHANDRAN

he problem with our Government is that good suggestions, sensible ideas and reasonable policy are lost to populism, the desperation for voter buy-in and the lack of political consensus.

Moreover, the Government is stunted by apathy in wide swathes of important issues, from green policy to parts and segments of the financial sectors: simply put, the voters care about rising immigration levels and the NHS, and our discussions about sensible energy policy never happen

What happens instead is problematic

Firstly, issues such as NHS funding become highly polarised, with disproportionate amounts of funding going to certain, emotively appealing sectors (such as cancer research), leaving others (stroke and emergency pathways) in the lurch.

Secondly, it becomes much easier for politicians never to be challenged on their more subtle policies. especially in 'unpopular' legislative areas.

Lastly, political parties are able to make attractive sounding but potentially economically terrible pledges ("we're going to fix all energy prices" – sorry Labour, I love you, but I don't buy it).

These problems could be mitigated by including a technocratic authority in our parliament. These technocratic bodies would be comprised of respected scientists, selected from a wide range of disciplines and universities around the country

Individuals on this body would have to be knowledgeable about the political system and would face periodic review. They would be allowed to veto policy and legislation. as well as proposing their own



alternatives.

strategies

discussion.

decisions

to look

Coming from a wide range of

able to make decisions which are

grounded in research and evidence-

based methods. They can, therefore,

choose cost – and energy – efficient

Furthermore, they are more able to

look into the nooks and crannies of

policy, while prioritising their areas

of research, instead of pandering to

policies which get very little public

maintain their own credibility, they

are self-regulating, and best placed to

understand highly technical policy

In as much as each of these

scientists has an incentive to

This is especially effective for those

solely political agendas.

legitimate research, these bodies are



NIALL JEFFREY

Cience is above politics. That is not to say that the results Of science don't have political ramifications, but the results themselves are true or false, whether or not they affect the world. For each of the issues we are liscuss – climate change, drug policy or reproductive medicine it is important that the science is deliberated in a setting with as little interference as possible.

By giving an unelected body of scientists power over people's lives, we irrevocably destroy the impartiality of science. This takes away the little influence that science has in policy, by politicising scientific \equiv fact.

Under the status quo, scientists act as advisors, and can affect policy by telling the government the correct



But will change be for the better? Photo: John Ditchburn

OPPOSITION



can, of course, ignore this advice. but the scientific community can then publicly campaign against the government. Voters can therefore trust that scientists are not changing the facts for political gain, and so are unlikely to support politicians who actively oppose the scientific mainstream

This balance of power is not true in the US for many potential reasons, but the effect is that science becomes a topic for political debate. Politicians have confidence to argue the scientific case rather than the political. When unelected scientists in the UK become part of the political decision making process, British politicians are forced to engage on these kind of terms.

The public will now no longer see the difference between the politics and the science. When people understand the political incentives that could be affecting the decisions of these technocrats, they no longer trust in the scientific opinion.

People will not trust these scientists on the science, whether or not they have been politicised. Any doubt at all will diminish support for things like climate change from the ground up.

So overall we get a collapse of support, and no political capital within Parliament to engage with impending threats like climate change. But what about trust in science?The day that people can no longer support scientific endeavour without doubt will precede the day when science itself can no longer progress. The backlash; funding cuts to destroy the scientific community allowed to exist.

By doing this we would lose both good policy and good science.





its students.

and fear of political bias will continue for as long as this technocratic body is

Comment

This House would accept an offer from Imperial

PROPOSITION





e are all aware of Imperial's academ Imperial's academic reputation. I think the academic benefits of attending Imperial College London are not disputed, so I will instead focus on why I think the College is good for us, and how the problems are just as bad at other Universities. If we were not at Imperial we would be at another Russell Group University doing the same hard degrees.

If we went anywhere else we would be working just as hard, however unlike at Imperial, most people wouldn't be. If half of your flat is going out three nights a week while you have to stay in doing work, that is worse for you than if they're all stuck inside doing problem sheets, because you don't feel anti-social or lonely. In fact, working at Imperial becomes a social experience. No friend is better than the one you make at 03:00 in the library, because you have something

to bond over. The other complaint I often hear is how the College does not care about

Every University has this problem. I have heard about things happening at other Universities that I can't imagine happening at Imperial: lecturers forbidding students from asking questions, ridiculous rules on transferring between courses. The College may be ineffective but at least it seems like it's trying, and that's a damn sight better than most places. Imperial actually stacks up quite well against other Universities. It is no more anti-student than the likes of Manchester, and it's in a beautiful part of one of the most amazing cities on Earth. The facilities are excellent, and it's full of brilliant people doing amazing science. The lecturers are as variable as anywhere

else, but at least here they know their stuff, even if they're not great at explaining it.

I have met some of the most interesting and enthusiastic people I have ever met here. There is a genuine sense of community here because we all have so much in common: we're all nerds, we all love science. Imperial allows us to occupy our weird niche together and we will never get that anywhere else.

Looking back it's clear that the 17 year old me got four out my five UCAS options completely wrong. The one I definitely got right was Imperia



KRISTIAN LENDING

orget 'Education' – what matters is your ability to get a job, be well paid for it, and what you go through to get it. We're told that Imperial is great for this. That's overstated. What's understated is the unnecessarily laissez-faire process to get there. 87.8% employability? That's inflated by the huge Medic population, which, thanks to the NHS, are gifted with 100% employability, both here and at twenty of the other thirty medical schools in the country. In other words, if you're not a Medic the figure is lower, and if you are, you gained nothing by coming here.



Queen's Tower is definitely a plus point. Photo: Imperial College London

OPPOSITION



"Imperial grads get the highest salary". One word: banking. If you came here with a genuine interest in your subject, you can forget that salary. Sorry. What do I say to those who are looking to shuffle code 12 hours a day for Barclays? You need free time to spend money, so my advice is to find a contract that includes some

So the idea that 'Imperial degrees are harder to get but it's worth it in the end,' quite frankly, dies a death Given that you don't get anything from your degree unless you pass, it therefore seems futile to choose somewhere that seems so willing to drop vou if vou can't keep up.

What about societies? Perhaps we can have a great time along the way? It's great that there's loads of variety, but that doesn't make a difference if you only have time for one. But it's nice that you can aspire to the top sporting societies who are welcoming to Freshers, avoid blatant sexism, and reject the "lad culture". Oh wait..

And what do we pay for this? Tuition may be capped, but rents sure aren't. Bear in mind that Oueen Mary students commuting from Stratford pay on average 40% less rent that you do commuting the same distance from Hammersmith, and that's without leaving Central London So you pay loads, work hard, and get a degree that is little better than anywhere else. So if we could go back to when we got our offr? This house would not accept.

"you pay

loads, work

get a degree

that is little

better than

else."

hard, and

If you like these head-to-heads, or if you think you could do better, join ICU Debating Society. They meet every Tuesday at 6.30pm in SAF, and anyone is welcome to go along. Alternatively, email debate@ imperial.ac.uk

"Imperial allows us to occupy our weird niche together and we will never get that anywhere

else."





Religion dupes people into worshipping itself. So does television and the Felix Editor

Comment

death by a pensioner in a bus

"What in God's

name are they

thinking?! My

GP doesn't tell

me not to inject

II these people

have learnt to live with it, and

they feel none

or regret that I wished

upon them whatsoever

of the remorse

stop queue

// We're

couldn't give

a toss about

what's really

world.

going on in the

fickle shits who

Comment Editor || Tessa Davey

11 ... so I did he socially

Have you been reading other columnists behind my back? Tell me they meant nothing to you at anangrygeek@googlemail.com.

We're all f***ed. So what? Angry Geek is all over Dick Prick Nick Griffin

Angry Geek returns... one last time?

been years since I last graced these pages. New writers have to come in, and old ones have to shrivel up and quietly die in the corner under a pile of back issues – it's the way it's always been. It also helps that you're all a fucking disgrace and I probably would've burned several key departments to the ground by now in complete disbelief at the pathetic and cynical way they're run. But mostly it's the new writer thing.

It's *Felix*'s 1600th and so we're reflecting on the past of the publication. Felix has always been a mix of good and bad: it's a place where people can go to be creative in a shitstorm of "I Fucking Love Science" fetishism and coiffured arseholes reading the Financial Times and pretending to be intelligent. On the other hand, it can also give people the opportunity to air harmful views in the name of 'comment' or being a contrarian arsehole. I've seen people defend sexism, spit on the poor and laud the financial sector in columns on the Comment pages over my years - and I've also been part of the problem myself, especially in my early days. You might not know this, but Angry Geek started off as a way to revitalise Felix Comment. We wanted to encourage people to write in, and I figured that a mysterious, polemic

"... a mysterious, writer might help. The first few polemic columns were more or less entirely writer" nonsense trying to get a rise out of people, and looking back on them

everywhere

coffee being cheap, for instance. Fortunately, after a few weeks of not actually getting a rise out of anyone, I took the column over properly. Angry Geek wasn't a character any more: it was me, and I realised just how angry I was. I imagine anyone who remembers those pieces is long gone from Imperial now, but I'm genuinely sorry if I offended anyone. Only for the first three articles, obviously. If you think I give a shit about offending someone's feelings about Canary Wharf then we're

clearly on the wrong page. Imperial is a nasty place, and the longer I wrote this column, it became more obvious to me how nasty it is. After those first few, ill-advised pieces were out of the way. I wrote about the shady influence of the financial sector over graduate employment, the toxic attitudes of superiority among the rich and privileged students, and the uncomfortable state of student loans. Some things don't change, it seems - years may have passed, but Imperial remains the same. I've since become a postgraduate, still working at Imperial, and am still uncovering things I dislike about this place with each day that goes by Mindblowing elitism, short-sighted obsessions with money and rank, and a more blinkered view of the world than a particularly narrow minded horse who's just fallen down a ditch. Imperial's sickening obsession with being the richest and



public

at someone in

undercurrent Imperial's other of sexism side: I will be flowing angry for them" Some whine to go with your drivel? through it.

"I'm happy

to represent

personal life have any bearing on his skills as a footballer? No. He just happens LOL Bush. Am I right folks? to be shit at both"

hundred gallons of ice cold water in through the roof of Sherfield and

a very real

University, the future, the world. Show me what matters to you, the students of Imperial, and I'll give fifty English pounds to the best. Any length, topic, or ione - just make sure it reaches felix@ imperial.ac.uk by noon on Wednesday



Angry Geek asks the Sabbs what the f*ck they do missed people like me, the c**ts who write for felix because ... we have an opinion"

Comment

grab your crotch"

Angst – You are doing it wrong

I can't stand intolerant people Angry Geek is back Hopefully it'll go better than that time Mike Tyson returned "Who needs arts degrees? We've got all the arts we need here ... then

Angry Geek

good at first but the allure wears off and

change is, it feels you'll realise you've been pandering to other people"

vote for them, so are you" "China secretly slaps it's knees whenever Kim Jong II makes a weird speech"

II quoting Marcus

Brigstocke here: "the BNP are

racist, and if you

My point being this -"It really does let dealing drugs to the full horror of the Internet primary school out, resulting in Actually, let's not talk about God

the most respected, at the expense of anyone else-it's an obsession that its students tend to pick up. Mrs. Geek (yes, we're still happily together, holding hands as we bitterly hate the world) still has fondness for Imperial, mind you, She reminds me that it still has lovely people inside, and it still does great things. She's actually what spurred me to write this anniversary piece, because for all the hate I've built up about this godforsaken University, I am reminded that Felix was always a place where good things had the potential for happening. A lot of talented people, working long nights after all their degree work. to do something creative and push out entertainment for thousands of students. Coming back to it now, after a long hiatus, it's heartening to see the state of Felix Comment today – full of pieces talking about domestic violence, climate change and denouncing GamerGate. It makes me ashamed that I tried to get cheap shock responses, but very happy that there are good people writing for such a great paper. I'm also happy that many of these new writers are angry. Anger, as I eventually learned, can be a very good thing. Imperial is an unjust place, full of privileged bottomfeeders who could not care less about anyone else. More than this, it is shaping a generation that will run the world one day, pumping out future politicians, business leaders scientists and policymakers. This is happening in an environment where rampant sexism is considered funny,

Nothing can make it any less

"Anger, as I eventually learned, can be a very good thing."

where the working class are talked about as pathetic subhumans, and where Islamophobia is treated as acceptable japes. It's tempting to be reasonable, to talk and explain your objections, or perhaps to simply say nothing at all. Unfortunately this often doesn't send the correct message, and in a place as set in its ways as Imperial, it never will. Getting angry shouting loud and passionately about things that aren't right, protesting and disrupting and making yourself heard – this is what people need. I hope there are lots of angry geeks among you.

I'm sorry this column wasn't very angry on my behalf; I barely invented any insulting similes. I've not mellowed, but my anger is displaced now: I'm angry at the field I now work in the companies I interact with, the horrific diversity problems that plagues every organisation and event I go to see The world hasn't gotten any less ugly, and I haven't gotten any less angry, but unfortunately Felix's seventeenth century of issues isn't my time or place any more. I might pop in from time to time, like now, and I'll always be reading from a distance, but it's time for new people to take my place. To lash out at everything wrong with this University, this city, and the rest of this planet. I hope you'll be as angry as I am, and I hope you'll continue to support Felix along the way – keep the cat free, its claws sharp, and firmly latched onto the nether regions of everything wrong in the

world. Thanks. everyone.

because I want you to see a vulnerable side of me - you're still all jackasses, don't worry - but because I want you to know that even the coldest bastard bolk a burden computere in their to know that even the coldest bastard holds a burden somewhere in their pack. If any of you out there are af-fected by cancer, and fancy chatting to someone in confidence; indeed, if any of you have areabing to say about my of you have anything to say about my of you have anything to say about my columns at all. I have an email address that was until now reserved for send-ing things to the Editor. I would like to open it to you all: anangrygeek@goog-Thomas Lofthouse died in the early lemail.com. hours of the 12th February 2008. He was a Second World War veteran, a

taxi driver, a metalworker, and an in-spiration. He will not be forgotten.

the traffic lights off...let the cars find their own equilibrium

"this godforsaken university and all of the fashionista arseholes will one day be behind you. But it's harder to get away from Vourself

"It's as if everyone she's met so far at Imperial tried to shag various appendages off her within sixty

One thing that perplexes me, though, is the truth about Mr. Geek's first ini-tial. Where did the Angry come from? True, Angered Geek is a registered blog, but Alphonse Géek's Facebook profile is worth a second glance. Maybe he's not Angry? Maybe he prefers to be known as Apathetic? Anxious? Alone? Afraid? On second thoughts, Angry-probably suits him hest; even though Antagonistic, Alert, and Amusing are equally fitting appellations.

seconds

"There's a tendency with felix to criticise it, mock it and generally laugh at it. People are very unappreciative of the hard work the editors and writers do"

I confess I'm not a huge fan of Europe -I'm English, and so I hate any country whose language has male and female nouns

The bad news is that, as power comes a proportionally higher number of dickheads

Spiderman taught us, with great



Apologies that there is nothing from either A Geek or Gilead Amit this week. Neither submitted anything. Weird that ... eh?

Skett that whining, complaining or being offended is weak and plays into theng othersond its weak and plays into the hands of a sexist culture, is proh-lematic. Women are people. That's the general idea here, right? And people, as we all know, are a mixed banch.

his fair in science and technology. It's a nice idea. It's also very naïve"

Imperial and not feeling like you're part of something"

masturbation as the next student.





Comment Editor Tessa Davey

omment comment.felix@imperial.ac.ul

Comment Editor Tessa Davey

How do you like your tea?

Joshua Renken is really pedantic about making tea

fresh cup of English Breakfast tea is truly something to behold. It is the liquid of the Gods and the chosen tipple of this great nation. Make no mistake; to sip a piping hot mug of English breakfast tea after a parched stretch is to know true pleasure. In the last few years I have picked up a few tips on how to best prepare ones cuppa, regardless of which type of breakfast tea you drink. So, laid out before you is a handy cut out 'n' keep guide to optimising your brew, if you are interested.

Firstly, try your private best not to add sugar. With sugar, tea is reduced to a sweet solution not fit for man or beast. To those of you who add sugar: I used to be like you. But one fateful day my mother helped me see the matter in its proper light. She told me "Try your tea without sugar for a week and then make up your own mind." This maternal counsel wasn't just diplomatic; it was downright wisdom. After only a few short days, virtue had triumphed. I implore you to try this for yourself.

Secondly, pour the boiling water into the cup before the milk. Here I am assuming that everyone puts the tea bag in before anything else. Some find that the addition of milk detracts from the taste of their tea, but most people are inclined to reduce the strength and bitterness of their cuppa with a modest splash of milk. When it comes to adding milk, always do



What goes in first, the tea or the milk? Photo: silversurfers.com

so after you have poured the boiling water, with the tea bag already in. I cannot stress this point enough. Tea, you see, is a dried herb. And in order for tea to release its intrinsic qualities, it requires to be infused. This infusion will only occur if the water is boiling when it hits the tea. So if you put the milk in the cup first you have removed all possibility of genuine infusion, not to mention that you will almost certainly pour too much. It's difficult to gauge these things. As an aside, I would also recommend using the least creamy

"Don't let anyone tell you we don't cover the big issues here at Felix."

type of milk available in order to prevent the tea from acquiring too much of a sickly taste. But for heaven's sake pour the boiling water in before the milk and don't add any sugar. Grasp only this, and the time I've earnestly frittered away on this article will have been worthwhile.

So there you go, the perfect cup of tea. Apart from everything else, what could possibly be more important than that? Don't let anyone tell you we don't cover the big issues here at Felix.

This purist likes their tea and biscuits kept separate



JEE DARLING COMMENT WRITER

entle reader. I'm certain that am only the latest in a long line of commentators to compare two of the greatest influences in our British lives: tea and sex. While these might initially appear to have as much in common as, say, fashion sense and Islamic State, there's a great deal of common ground. Like tea, sex can be enjoyed alone but is best enjoyed in company. Sex can be delightful when black, white or even Chinese (do try them all!). Like tea, things are surprisingly nice when they get fruity (or even herbal...).

"It is the

liquid of

the Gods

and the

chosen

tipple of

nation."

this great

Now, gentle reader, you may wonder why I am bringing this to your attention. While, as scientists, we know that symmetry suggests common physical laws, in fact I wish to use this to illustrate a problem with a common habit in the teadrinking community. Readers, your commenter is a purist. I enjoy my tea with nothing added and I enjoy my

"Like tea, sex can be enjoyed alone but is best enjoyed in company."

sex similarly naked. When someone proposes dunking

biscuits into my tea, I am aghast! At first thought, to be sure, it seems a happy convergence: are two enjoyable things not more enjoyable together? There are, alas, less happy ramifications: chocolate and the sweat inevitable to bedroom activities are not happy bedfellows. While it encourages licking, it diverts attention and diminishes sensitivity. In short, a chocolate digestive in my tea is like chocolate body paint in my bedroom - surprisingly sticky and an inevitable source of brown mess.

I won't pretend that I don't like tea and biscuits together, nor that I'd kick someone out of bed for bringing chocolate, but I think we can all agree it's better for everyone if the twain never quite meet. Do us all a favour, stop dunking – unless you're prepared to take responsibility for cleaning the sheets (er, table).

"sticky and an inevitable source of brown mess."

Dare to dunk

Deputy President of Crisps and Snacks (DPCS), Abi de Bruin is a dunker. Here are her recommendations.

Digestives Dunkabilitea: 9 Integritea: 4 Tasteaness: 7 Best served with: Earl Grey

Rich Tea Dunkabilitea: 8 Integritea: 6 Tasteaness: 8 Best served with: PG Tips

Hobnobs Dunkabilitea: 9 Integritea: 8 Tasteaness: 10 Best served with: Yorkshire Tea

Chocolate Digestives Dunkabilitea: 10 Integritea: 7 Tasteaness: 10 Best served with: Yorkshire Tea

Custard Creams

Dunkabilitea: 7 Integritea: 6 Tasteaness: 8 Best served with: Tetleys

Maryland cookies

Dunkabilitea: 3 Integritea: 5 Tasteaness: 9 Best served with: Milk, tea just isn't as good.

Ginger Nuts

Dunkabilitea: 3 Integritea: 9 Tasteaness: 7 Best served with: Blossom Earl Grey

Shortbread Dunkabilitea: 5

Integritea: 9 Tasteaness: 9 Best served with: Tetleys

Fruit Shortcake

Dunkabilitea: 9 Integritea: 10 Tasteaness: 6 Best served with: Vanilla Earl Grey

Golden Shortie

Did not complete. All over let down, like Chris Kaye in the bedroom (probably).



Science

Science Editors: James Bezer and Lauren Ratcliffe

Inside: Busting the myths surrounding climate change Robert Winston on three parent babies A new treatment for Dengue fever? Hope on the horizon for HIV Go with the flow: renewable energy on the rise in the EU





Climate Change is like an unwashed dish. Don't believe me?

Lauren Ratcliffe gets you up-to-date and busts some common myths surrounding this global conundrum

Tou guys already know that global warming is not a myth, nor an April fools trick. It's a growing concern that we and future generations are facing. Earth's blood, so to speak, is on humanity's hands and it is our responsibility to acknowledge, understand and find solutions to this challenge. I talk about 'humanity', but in reality it is the actions of every individual, both you and me, which shape the course of our amalgam.

In the last 3.5 billion years, Earth has harboured the lives of 4 billion species in all their myriad forms. 99% of these species have gone extinct and one day, Homo sapiens' time will come. What remains in question though is how will we compare to all those by-gone species. Will we fight to survive? Or will we bury our heads in the ground as we juggle our individual lives around and hope that someone else deals with it?

Popular amongst scientists and politicians, you might hear about a 'safe operating space for humanity' These are nine arbitrarily defined biophysical boundaries that should not be crossed in order to ensure Earth is able to sustain and provide for our persistence and wellbeing. Ones that have already been surpassed are biodiversity loss, climate change and acquisition and alteration of nitrogen and phosphorous cycles, and increasingly we are creeping up and stepping over the limit for habitat destruction and land-use change

Climate change is undisputed but the world isn't going to freeze overnight or be plagued with some terrifying disease, that can all be left for a Friday night in front of the TV with a bag of popcorn. What I'd like to do right now is to bust some myths and give you a low-down on some

2011-2030

major impacts of global warming and what's going on in the world of politics to stop it

Climate change 101

Just so we're on the same page. Greenhouse gases (GHGs) come in a variety of forms, creating a pretty damaging chemical cocktail. This lethal recipe includes infamous carbon dioxide, methane and nitrous oxide as well as some harder-topronounce chemicals: sulphur hexafluoride, hydrofluorcarbons and perflurocarbons. Their emission into the atmosphere is primarily through industrial outsources, car emissions, shipping vessels, domestic appliances and deforestation.

So how do they cause climate change? Well, about ¼ of all anthropogenic carbon dioxide has gone into the oceans where it reacts with water to form carbonic acid, which readily dissociates to create ionising hydrogen ions and bicarbonate which causes ocean acidification. On top of this, increased GHGs in the atmosphere contribute to a thickening of the greenhouse gas laver, which increases re-radiation of heat back to Earth's surface and the lower atmosphere, increasing ocean warming and atmospheric warming. Voila.

Climate change is natural and normal. It's happened before... right?

Yep. Climate change has happened in the past, but it's not been pretty. Also, crucially, it is the undisputed causal link between increased GHG emissions and changes in Earth's climate as well the relative change and magnitude of change that are the issue here.

Around 11.5-13 thousand years ago, as the planet warmed after the last ice age, melt from polar ice caps caused a great ocean circulation current, the Gulf Stream, to shutdown, making European temperatures plummet 6 degrees into another ice age. The Gulf Stream is what's responsible for west Europe's mild climate and recently scientists have found evidence to support the theory that the melting of major ice sheets such as Greenland and West Antarctic due to global warming could make the Gulf Stream shutdown again and ironically cause another glaciation period.

Also, what's interesting is not what's changing but what's staying the same. The North Atlantic Oscillation Index (NAO), a two-way pressure system that partly controls Europe's climate, has two phases – positive and negative. The strength and position of these pressure systems usually changes from year to year. However, since 1970s, as a result of increased GHG emissions, the NAO has remained in the positive phase meaning that both the low and high-pressure systems have intensified

This causes the sea level to rise and increases ocean warming, resulting in reduced nutrient upwelling as well as other things, depriving fish of essential food resources. These fish include species that we expect to see on supermarket shelves and in fishmonger markets. In addition, the NAO controls seasonal variation and its persistent positive phase has caused a shift towards earlier Springs and later Autumns creating phonological mismatches.

It's also important to consider the magnitude of change. Change could have happened in the past but the rate and amplitude varies. The Southern Oscillation is another.

2046-2065



Obligatory photo of a sad looking polar bear. Photo: Zasavki

2080-2099

arguably greater contributor to global climate patterns and is responsible for the periodic El Nino/La Nina climate fluctuations in the East Pacific that are characterised by a 0.5 degree increase or decrease in ocean temperature, respectively. Since the industrial revolution and increased atmospheric warming, the amplitude and frequency of El Nino cycles have increased and if we look back to the 1997/8 El Nino, which wreaked havoc for Peruvian anchovy fisheries, decimated the native wildlife on the Galápagos Islands and cost the US \$20 billion dollars in damage, this is no light matter

So it is true that climate change

changes



Projected changes in surface temperature. Higher latitudes are predicted to be most affected Photo: IPCC, 2007

has happened in the past and it is a natural part of Earth's history. However, the difference this time is that it is us that have caused these

Not all scientists agree

Nope, they do. Well, the majority of them anyway. In 2013 a survey of thousands of scientific papers taking a position on climate change found 97.1% of the scientific community believed that humans were causing climate change. In addition, the latest assessment report from the Intergovernmental Panel on Climate Change (IPCC) stated "most of

the observed increase in globally averaged temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations". Of course there are always sceptics out there. Just this week Senator James Inhofe, a Republican from Oklahoma and long-standing climate denier, threw a snowball in congress to prove that global warming was a myth. His facile argument was that if it's cold enough to snow in Washington, D.C., then global warming must be a hoax. This is not just some nut off the street, he could potentially be a leading controller of environmental legislation, which is

pretty terrifying. This also touches on another myth that should really be squashed flat. Temperatures can go up and down month-to-month. year-to-year, but the overall trend is upwards. It's true, this February has been the capital's coldest in 36 years but that holds no ground as evidence to undermine the argument that greenhouse-gas emissions are warming the planet over the course of decades.

At the end of this January a major survey of around 4,000 US citizens' opinions on global warming revealed that only half the population agreed with the IPCC that climate change was mostly driven by human

activity Most deniers said that there was either no evidence for global warming, or that the recent warming of the Earth was due to natural climate variability. In contrast, 87% of scientists from the American Association for the Advancement of Science (AAAS) surveyed believed that the burning of fossil fuels has caused climate change. The American public's ignorance and the gap between scientists and general society's opinion highlight the need to promote a greater understanding and public engagement in climate change.

Small but mighty

First appearances can be deceptive. So you'll hear a lot of statistics being flown about, such as atmospheric temperatures have increased by 0.74 degrees over the last decade. Perhaps you'll think "so what?". However, these seemingly insignificant changes environmental conditions can have much greater consequences for the Earth and humanity than you may initially think.

Increased emissions of strongly ionising chemicals (nitrous oxides and sulphates) cause ocean and freshwater acidification, which directly impacts biodiversity, destroying coral reefs and any calcified organisms around. A projected decrease of 0.4 units on the pH scale in the forthcoming decade may not seem much but considering that the scale is logarithmic, this translates to a 100-150% increase in acidity which is more than we have seen over the last 50 million years.

The two major ice sheets that are melting at an accelerating rate are Greenland and West Antarctic, contributing an 8 and 6 mm/year rise in sea surface levels respectively Overall the sea level has increased 1.5m in the last decade and is predicted to further rise 0.75-2m during our lifetimes. This may also seem pretty puny but will have huge consequences for regions such as New Orleans and Miami. None of the Maldives is more than 18m above sea level, and according to IPCC predictions the island will be rendered uninhabitable by 2100.

So, what's being done?

Climate change is now taking more of the limelight within international political agendas. Obama wisely said "this isn't something in the distant future, climate change is already affecting us now." Compare that to 2002 when former president George

Bush rejected participation in the Kvoto protocol and vou can see we're going in the right direction. Obama here also hits on something that is very important. Historically humanity cannot be trusted with the future tense, trading shortterm gain for long-term pain. So international agreements are needed that emphasise the effect of climate change to us now, rather than in some distant future.

One of the most important international actions against climate change in recent times has been the Kyoto Protocol, which binds member states to reducing GHG emissions. This international agreement recently evolved during the Lima climate change conference back in December last year. Ever since the UN Framework Convention on Climate Change was signed in 1992 countries' obligations have been defined according to their level of development in that year. The rich so-called 'Annex 1' countries have had compulsory obligations, while poorer 'non-Annex 1' were required to attempt voluntary efforts.

However, this division has grown ever more obsolete as developing countries such as Brazil, Russia, India and China are getting more industrialised and becoming major emitters of GHGs, so they are all now being committed to compulsory obligations. In addition, the ubiquitous limit to global warming of 2 degrees above pre-industrial level has been agreed on. It's worth knowing that this threshold has not actually been agreed by scientific advisers but by politicians.

We've also seen the disinvestment movement grow from strength to strength in the last few months as environmental policy changes threaten to render fossil fuel investments worthless in the forthcoming years. One to watch out for this winter is the next United Nations Climate Change Conference; it will be interesting to see how different nations will agree to limit their greenhouse gas emissions. So watch this space.

Climate change is like an unwashed dish, left in your bedroom, pushed under a bed and forgotten about. Tackle it straight away and you'll save yourself a lot of trouble in the long-term. Leave it and surrender to blissful ignorance and you'll find vourself with the marigolds on. disinfectant in hand, scraping away fungal growth or throwing out the dish altogether.



Science Editor James Bezer & Lauren Ratcliffe

"This does not threaten the fabric of our society"

Professor Robert Winston talks to James Bezer about the vote to allow 'three-parent babies'

CC his does not threaten the fabric of our society in any way whatsoever: it's an individual choice for someone who's watched a child die of a horrible disease"

For Robert Winston, a pioneer of IVF and one of the country's most famous doctors, the recent decision by the House of Lords to approve the creation of babies using donated mitochondria was an emotive one.

"Most children with Leigh's syndrome, for example, go floppy, go blind, have fits, have steady brain deterioration and die by the age of 2. The few that survive will have muscle weakness and muscular dystrophy and blindness

"The one thing worse than losing your own child is losing your own child after a hideous disease."

Mitochondria are structures in every cell that produce ATP, the molecule that powers chemical reactions within the body. Genetic mutations, however, can cause mitochondria to work ineffectively, causing these severe illnesses.

In the new technique approved by parliament, the nucleus of a fertilised egg is removed and implanted in the cytoplasm of a donor egg from a healthy woman.

It's been described in the media as creating "three-parent babies", but it's not a term Winston especially likes. "When I've had a blood transfusion

I got far more foreign DNA in my body than any 'three-parent baby' would have, so the name is nonsense, obviously. Admittedly, it's permanent, but it's a permanent cure, unlike my blood transfusion, which will only cure my anaemia for a few weeks"

"The one

worse than

losing your

own child

them after

a hideous

disease"

is losing

thing

The vote enjoyed broad support in the Lords, passing with a majority of 232. The decision has been severely criticised by the Catholic church, however, and in the preceding debate, several members criticised the treatment for ethical and safety reasons, as well as for the speed with which the decision was being made.

Lord Winston was one of the most vocal supporters of the treatment in the debate, and was particularly

critical of those opposed on religious grounds, and was keen to emphasise the ethical principles that had influenced his decision

"I think that in a pluralistic, democratic society, responsible individuals should have their autonomy respected, and I don't think it's any business of parliament to say: "yes, you should have this treatment" or "no, you can't have this treatment".

"My impression of the women who want this treatment was that they were requesting it because they did not want to have a termination of pregnancy, because they thought this was morally wrong, so it seems to me to be utterly wrong for a parliamentarian who's opposed to abortion, for example, to get up and impose their view about somebody. who doesn't want abortion either, but actually wants something which is a lesser injury, which is to get rid of the damaged egg.

"The mitochondrial diseases that affect child-bearing families are actually pretty rare, so this regulation would only apply to a few families. "Essentially, I think there are

four principles we must consider ethically: one is the respect for the autonomy of the individual, who's requesting something, and that means informed consent, so you listen to their problems and you explain the difficulties and the dangers to them, and that you respect their confidentially, which is quite important, and you respect their opinion. Now occasionally, of course it might be that, for example if I was a religious Catholic, I might disagree, in which case, the correct thing for me to do would be to send them to another doctor

"This is not a diatribe against Catholics. I deeply respect Catholicism, but I think nonetheless. it's important that we don't try and impose our minority view. I'm a Jew, and I wouldn't dream of imposing a Jewish view on someone with mitochondrial disease. Actually the lewish view would be to treat them, although I don't think many rabbi's have really spoken about it

particularly

"So the first thing is the autonomy, the second thing is that it is encumbered upon us to be beneficent, to try to do good, and to my mind, if you can prevent a child dying horribly, and having a healthy life in consequence, that's beneficent. The main thing is not to do harm, so you've got to look at the side effects, and after the extensive research done in Newcastle, I'm fairly happy that the chances of serious side effects are much less than the benefits.

"Lastly is the issue of justice: what's the just solution for these people? The just solution for them is to have the treatment they think they need" Despite the vote, Winston says the first baby born in the UK through

this method is still a long way off. "What will now happen is that any person who thinks that they may have mitochondrial disease and doesn't want to watch their baby die can apply to a unit that's prepared to do this treatment, and this unit can then apply for a license to the regulatory authority, the HFEA (Human Fertilisation and Embryology Authority).

"That authority will take into account a whole range of things including their expertise, the kind of research they've done, the kind of precautions they've taken and they may or may not grant a license, but it will probably be done on an individual case by case basis."

In the late 90s, Jacques Cohen and his team in New Jersey developed a similar technique to implant healthy mitochondria into embryos. They were trying to allow older mothers who had struggled to conceive a way to have healthy children. 17 babies were born, and while two had chromosomal defects, this may have been due to the age of the mother. rather than the treatment.

Despite the early promising results, mitochondrial replacement has been banned outright by the US Food and Drug Administration since 2002 because of safety and ethical oncerns

"The name

'three-

parent

baby' is

nonsense."

"I don't know whether it was the right decision," says Winston. "I

think since then there's been a lot more research into trying to do nuclear replacement and spindle replacement in human embryos. The problem, of course, is that there isn't an animal model for mitochondrial disease, so you can't test this in a cow, for example, and see whether it will have an effect

"One of the issues I think about mitochondrial disease is that there may be a nuclear DNA component, so these people with mitochondrial disease might not only have mitochondrial mutations, but also mutations in the DNA of the nucleus, which you're not treating. So it could be that they may be still affected by the disease, but less so.

"Of course there's a risk of something going wrong with any that



Science Editor 📗 James Bezer & Lauren Ratcliffe

The media coverage of the decision has highlighted the important relationshiop between science and politics, and raised questions about where genetic treatments could lead. In the future, germ-line gene

therapy could treat diseases such as cystic fibrosis, by replacing faulty segments of nuclear DNA in the genome of a fertilised egg. The research is at a very early stage at the moment, and concerns over safety and ethics are much more profound than for mitochondrial transplants.

"I wouldn't be happy with germline gene therapy, because I think the problem with that is that you are very likely to have an effect on other loci in the genome, which may start to perform differently from what you expected, because, as we know, upstream and downstream of any mutation, there will be other signalling areas of the genome, micro RNAs for example, which may actually end up producing something which is completely unexpected. The likelihood with mitochondria is that because their role is so specialised (they're really just concerned with energy metabolism) that it's a reasonable gamble, if you like.

"I don't see anything wrong with playing God. To my mind, if you are religious, playing God is what you should do, because actually what I believe is that if you are playing God vou are actually imitating God, using your God-given intelligence to try and better the world.

"The issue then is not playing God, but trying to supplant God, which becomes much more an issue of how vou use wisdom and judgement to make a good choice rather than a bad choice, and I think that's what we all do as scientists all the time, which is a universal concern for all of us at Imperial College.

"If you're doing physics, for instance, there's all sorts of implications, medical physics is a good example, nuclear physics would be another one. There are times when physicists have stood back and said. well actually this may be going in the wrong direction, because we're doing something which we feel very uncomfortable with

"So I think making a wise choice is right. Now of course with hindsight you could say that perhaps Oppenheimer, say, made the wrong choice in making the atomic bomb, but of course that was at a time of conflict when there were very different issues going on

"In peacetime, during the normal workings of a democratic society, that wisdom of how to make the best choice is part of what we have to do as scientists: that's why I think we need to be very much more aware of a breadth of knowledge, not just knowledge of a narrow area of our own discipline, and to my mind. one of the things we have to do as scientists is to keep aware of the broad implications of the work we do."

"I don't see

wrong with

anything

playing

God."

One of the pioneers of fertility treatments, Robert Winston was a key figure in getting the vote through the House of Lords. Photo: essentialparent.com

"I think

the media

coverage

has been

pretty

gentle"

treatment, and don't forget that when we did IVF for the first time, we were actually standing on the edge of a precipice: we had no idea for certain that we were going to have a normal baby, although all the experiments that had been done would suggest

"Our lab at Imperial did the first pre-implantation diagnosis, actually biopsying a cell, taking cells away for genetic analysis. That had never been done before, so, even though we had tested it in various animals, again, it's a leap in the dark, but you know you had done the best you could." The decision has generated a huge amount of media coverage, much of which has been focused on the ethical criticisms levelled by many opponents and religious groups.

been pretty gentle really," said Winston. "The 'three-parent family level was inevitable, and it's a silly label, but it's a convenient piece of shorthand. But actually, very few journalists produced shock horror. and I think journalists talked it up because they thought it was going to be very big.

"I think the media coverage has

"To tell you the truth, I think the media coverage for a huge number of scientific things has improved massively in Britain over the last 5-7 years. You see it even in the biggest comic of all, the Daily Mail, which is classically the one newspaper you would not regard as scientific journal: don't forget that when the Japanese nuclear accident happened, Mike Hanlan, the chief scientific

correspondent of the Mail was very measured in what he said about Fukushima. He said this was not a cause for abandoning nuclear fission. this was an aberrant response to an aberrant piece of building, and even beforehand we could have realised we were doing something that was probably not wise.

"I think actually, Mike Hanlan's response in a tabloid newspaper was highly refreshing, and is somewhere I think even 10 years ago, we would have had a much more aggressive, much less measured view. I think British scientific journalism has improved immeasurably and I think, actually, to some extent, that's had a knock on effect right through to the sort of journalism that you do in Felix'

Science.felix@imperial.ac.uk

Hope on the horizon for HIV

Nefeli Maria Skoufou Papoutsaki asks whether the virus could be eradicated

IV (the Human Immunodeficiency Virus) is one of the most lethal viruses. Since the first case in 1959, 39 million people have died from HIV related diseases (including AIDS, the disease caused by the virus, and other co-infections such as Hepatitis C). However, much progress has been made in both the detection of the disease and in developing some potential treatments or vaccines. There are also reasons to believe that the virus will become less lethal in the coming years.

The HIV virus targets the cells of the immune system. More specifically it targets the T cells, white blood cells that have as a primary role to kill infected cells and develop memory cells that can be quickly formed if the same virus/bacterium infects the body again. The virus is sexually transmitted and causes the widely known disease AIDS. The final stage of AIDS is the loss of immunity, so patients can die even from a common flu, this is why the HIV virus is related with other co-infections.

Fortunately, leading researchers are working on the HIV and AIDS problem. One of the most important discoveries was the understanding of how HIV replicates. David Baltimore, an American biologist, along with his colleagues, discovered the enzyme reverse transcriptase that can make DNA from RNA, for which they won the Nobel Prize for Physiology or Medicine in 1975.

This is the enzyme that retroviruses, such as HIV, use. They do so because after entering a host cell, they need to add their genetic material into that of the host cell, which is in the form of DNA. Many antiretroviral therapies (ARTs) can inhibit the replication of the virus, now that the mechanism is known.

At the Conference on Retroviruses and Opportunistic Infections (CROI), which took place this February in Seattle, many important research findings were announced including improvements on current treatments as well as scientific breakthroughs.

Focus was given on the improvements in care of both AIDS and Hepatitis C, an infectious disease affecting the liver. HIVpositive people are also susceptible to Hepatitis C due to common routes of transmission, such as sexual intercourse.

"When

people

virus."

have been

diagnosed,

they are 94%

less likely to

transmit the

The relationship between the Ebola outbreak and the effects on the HIV treatment were also discussed. It has been observed that in certain



HIV under the microscope: New treatments in the past 20 years have significantly reduced the number of people dying of AIDS. Photo: imgkid.com

hospitals in Africa, there is a 50% drop in HIV testing, treatment and entry into care, since doctors focus more on the Ebola infection. This may create the need, now more than ever, for a simple and quick diagnosis that people can even conduct on their own.

Generally, when people are diagnosed and under medical care they are 94% less likely to transmit the virus: something that underlines the importance of an early diagnosis. A group of researchers at Columbia University have developed a low cost smartphone accessory that can detect in 15 minutes from a blood sample whether the patient is HIV-positive or whether he has syphilis. The next step is to bring the accessory to developing countries, after modifying it, since most people there do not possess a smartphone.

Concerning the treatment of HIV, there is a substantial problem that may have been overcome recently by a group of researchers in the University of California Technology: why natural antibodies don't work in the treatment of HIV.

the treatment of HIV. Antibodies are Y-shaped proteins that attach to the surface of viruses in the receptors or spikes they have in order to destroy the viral cells. This process is more effective when both "arms" bind the spikes. In HIV cells these spikes are fewer and in much larger distance so the "arms" of the antibodies cannot reach two spikes at once.

What this group did was to develop antibody based molecules that can bind both their arms at a single spine. The successful molecules managed to neutralize the HIV 10-1,000 times more effectively than the naturally occurring antibodies.

Recently a drug candidate has been observed that could be potentially used as a vaccine for HIV, since it is the most effective inhibitor found so far. It can block every strain of HIV-1 and HIV-2 that has been isolated from humans.

Another point of the HIV cycle that is usually targeted by drugs is to prevent the entry in the host cell. This drug can bind to two points of the HIV simultaneously to more effectively prevent this entry. Also, if an adeno-associated virus that can easily be weakened is injected, it can turn cells into factories that produce this drug candidate that can last for years; even decades.

As well as its effects on the immune system, HIV can also have effects on the brain. There are many HIV

"HIV can also

have effects

on the brain."

associated neurocognitive disorders (HANDs), usually found in patients over 50 years old.

The virus prevents the cell from clearing its damaged proteins, in a process known as autophagy. Disrupting autophagy can cause the death of the cell when all these damaged molecules accumulate in high concentrations. The cancer drug rapamycin that enhances autophagy has been tested in HIV patients and indeed reduced damage of neurons was observed.

Hope is also seen on the horizon for the HIV pandemic since the virus has been found to evolve in less aggressive forms in Africa. One reason for that may be because of the wide use of the HIV drugs which can decrease the possibility of transmission.

Another reason for that may be that the virus is evolving in a form that would result in a slower infection so that the hosts can survive for longer and thus make it more likely for the virus to be transmitted to others. Although this is may not be the case of the evolution of virus in the Europe and the US, at least patients there can benefit from all the other advances in treatment and diagnosis mentioned before, if all these actually work in vivo. Science

<u>ence.felix@imperial.ac.uk</u>

Go With the Flow: new EU policy supports renewable energy

Joshua Emden discusses the impact of flow-based market coupling

his article comes with a health warning. We will be discussing EU legislation and, as with all things EU, there will be a wealth of unhelpful acronyms and terminology fired at you, none more so than those forming the Commission's new 'Energy Union Strategic Framework', officially revealed last Wednesday. Briefly speaking, this hugely ambitious plan intends to unite gas and electricity markets in the different regions of Europe and, eventually, Europe as a whole whilst facilitating the growth of renewables at the same time.

It must be said that the process of integration is complex, from physically connecting all countries together with big cables, to wading through the minutiae of new trading rules and regulations that will have to be implemented. But this process, a once in a generation infrastructure upgrade, is also fascinating. I will spare you every tiny detail; I don't know half them myself. But I will pick up on one particular morsel of policy: that of the obscure, but rather wonderful Flow-Based Market Coupling (FBMC – acronym number 1).

Coupling Countries

First, let's put this all into context, one of the cornerstones of the Commission's Energy Union is the idea of 'price convergence' via market 'coupling' between countries – essentially making sure electricity prices being traded across borders are the same or very similar. To achieve this you can do two things: build more interconnecting cables and manage those interconnections better. The first option is, for the purposes of this article, relatively straightforward. Build more cables between countries and you can trade more electricity back and forth, meaning you get closer to an equilibrium price in both countries. In Germany and France for example, wholesale electricity prices were the same 67% of the time in 2011

But how do you pursue option two and go about managing interconnections better? More importantly, what is so problematic that it requires management to be better in the first place? When you want electricity, doesn't it just flow through the cables without a hitch? Well not exactly.

Loop Flow

It is true that electricity will always flow along a cable. But if you have a lot of those cables in your network, it may not flow exactly where you want it to go, choosing the path of least resistance over a 'busy' line. This phenomenon in the networks is referred to as a 'loop flow'.

Somewhat unhelpfully, loop flows are sensitive to the variability of solar and wind generation, where the more renewables that come onto the grid the more likely it is these loop flows will occur. This is because if a grid operator is forecasting anticipated demand for the day ahead, the realtime situation on that actual day may be quite different if, say, the wind blows more than expected.

If the day-ahead prediction is indeed inaccurate, the extra electricity generated can 'flood' transmission lines in neighbouring countries that might be less congested. Since the bulk of market trading occurs within national borders or cross-border markets that do not correspond with the transmission lines through which this electricity may travel, these forecasting errors can create price imbalances within and between countries.

From an EU perspective, this is potentially disastrous as it drives a wedge between the Commission's work on market integration and their push for renewable growth, two things which the Energy Union Strategy would dearly like to see as compatible. Yet it does not matter how well designed your market system is, you cannot tell electrons to follow price signals if they have a perfectly free transmission line to go down.

Going in the Wrong Direction

To highlight the problem, between 2011-2012, according to Thema Consulting, out of all of the electricity flowing between Germany and the Netherlands, some of it was physically flowing in the opposite direction to its destination 74% of the time. Between Switzerland and France, this happened 95.5% of the time. Whilst the quantity of energy wasted in these cases varies, with renewable growth being promoted by financial support in different



Uniting gas and electricity markets, a new challenge for the Energy Union Strategic Framework. Photo: Shutterstock

countries (e.g. Feed-in Tariffs in Germany) the situation is only likely to get worse.

It is in this light that FBMC becomes so critical. In very brief terms, FBMC replaces the old notion that Available Transfer Capacity (ATC) should be calculated separately to the price at which electricity is traded. In this way there is a much closer alignment between the direction of prices in the market and the direction of the electricity across the cable itself. As such, through clever algorithms that I will not even begin to unveil (or understand) in this article, FBMC is even able to manipulate the flow of electricity to suit those market prices

Through such a method, the IEA predicts that price convergence within the Central Western European (CWE) region could increase from 58% to 90%. Researchers have even gone further, to suggest that if by 2050 FBMC is not fully implemented, the EU could end up paying €590 billion more than it would need to.

Plain or Intuitive?

FBMC is not without its demons. In some circumstances, the algorithm on which FBMC is based can end up sending electricity from a high price area to a low price area in order to maximise overall welfare across a region. As a response to this, there is currently a great deal of discussion within the CWE region regarding whether or not FBMC should be 'plain' or 'intuitive'.

In the latter instance, rules would be set such that prices would always flow from low to high across borders, but recognising that there may be a loss in overall welfare. Ultimately, FBMC is problematic if only because of just how complicated it is. Having first been proposed and agreed by grid operators in 2007, it is only now being approved as we speak. Assuming no further delay, FBMC is expected to be implemented in CWE in 'early 2015'. The computational ICT needs, depending on the scale of future implementation, are astronomical.

Smart Grids

When people talk about 'smart grids', I often find myself struggling to describe exactly what one might look like, let alone what the technologies involved might be. With FBMC though, the notion that electricity can be controlled by a computer, sent in different directions all across different borders, and produce lower prices as a result certainly seems very smart.

Even better from the Commission's perspective, FBMC is exactly the sort of methodology that could adapt to the variability of renewables as their proportion of generation throughout the EU increases and the movement away from fossil fuels combustion for energy production commences. Of course, as with most EU 'packages', FBMC will be just one of a number of complicated reforms in the grand Energy Union plan.

But when we paint a picture of the future of Europe's grids, it just might be the smartest.



New antibodies could treat dengue fever

Utsav Radia on Imperial research that could lead to the first vaccine

Researchers from the Department of Medicine at Imperial have identified a new class of antibodies that is effective against the virus that causes dengue fever.

Dengue is a mosquito-borne viral infection found primarily in tropical and sub-tropical regions around the world. However, in recent years, transmission has increased predominantly in urban and semi-urban areas leading it to become a major international public health concern with an estimated 400 million infections occurring annually.

Over 2.5 billion people (over 40% of the world's population) are now at risk from dengue and the World health Organisation (WHO) estimates there may be 50-100 million infections worldwide every year.

The primary vector of dengue is the Aedes aegypti mosquito, which lives in urban habitats and breeds mostly in man-made containers. Unlike other mosquitoes, Ae. aegypti is a daytime feeder, with the females biting multiple people during each feeding period. Initially, the virus is transmitted from infected humans to uninfected mosquitoes, the virus subsequently incubates for 4-10 days in the mosquito, after which the infected mosquito is capable of transmitting the virus for the rest of its life.

Patients who are already infected with the dengue virus can transmit the infection for usually 4-5 days (max. 12) via Aedes mosquitoes after the onset of symptoms; the virus cannot be transmitted from person to person.

Dengue fever is a severe, flu-like illness that can affect people of all ages, but seldom causes death. It is suspected when patients have a high fever accompanied by two of the following symptoms: severe headache, pain behind the eyes, muscle and joint pains, nausea, vomiting, swollen glands or rash. Symptoms usually persist for around one to two weeks.

Occasionally, dengue fever can develop into a more aggressive form called severe dengue (also known as dengue haemorrhagic fever) which is a fatal complication as it can lead to shock (a sudden drop in blood pressure), bleeding and organ failure. As there is no vaccine as yet for the dengue virus, the best way to prevent infection is using common sense precautions – such as hand washing, wearing protective clothing and using mosquito repellent – whilst travelling to high-risk areas.

"Over 2.5

people are

risk from

dengue."

billion

now at

The dengue virus has four differnt strains, called serotypes, which are



The Aedes aegypti mosquito: dengue fever causes severe flu-like symptoms, but no vaccine currently exists. Photo: Wikimedia Commons

distinguished from each other by their surface antigens. Recovering from infection by one provides lifelong immunity against that particular serotype; however, if an individual were to be infected by another serotype, cross-recognition by the immune system of the other one may only be partial and temporary, increasing the risk of

developing severe dengue. Fortunately, researchers from the Department of Medicine at Imperial, in collaboration with scientists from the Institut Pasteur in Paris, have identified a new class of antibodies that is effective against all four serotypes of the dengue virus. Antibodies are proteins produced by immune cells (B-lymphocytes) that can recognise and selectively bind to specific parts (called epitopes) of foreign objects called antigens.

The binding of the antibodies to antigens on microorganisms such as bacteria and viruses are what help our immune system recognise them "This new class of antibodies points the way for a new approach to a dengue

vaccine."

as being foreign, so it can attack them and neutralise their harmful effects on our body.

In the study, published in the journal Nature Immunology, the scientists analysed blood samples of infected patients in Southeast Asia to examine the antibodies produced by their immune systems. In the process the scientists identified a previously unknown epitope, referred to as the "envelope dimer epitope" (EDE) which 'bridges' protein subunits on mature virions (the infective form of the virus, as inside the body) and is common to all four strains. Monoclonal antibodies, characterized in the study, to the EDE showed a strong response across all four strains of the dengue virus.

These antibodies could potentially be used either directly in the prevention and treatment of dengue infections or in the development of subunit vaccines that could be used to stimulate the immune system to produce antibodies to the EDE. In a second paper, published in Nature, the researchers analysed the structure of the antibodies, which forms the basis of developing a vaccine.

Professor Screaton, lead of the study, expressed that "current vaccine trials [for dengue] have shown some promise but do not fully protect from infection...this new class of antibodies points the way for a new approach to a dengue vaccine design which we are pursuing".

Up till now, there was no specifically directed treatment for dengue apart from paracetamol, replenished fluid intake and resting; this new antibody approach has opened many further treatment avenues for exploration. So it seems like we may not be far off from being able to greatly enhance our armoury in tackling the rising incidences of dengue virus infections and complications in the near future. DOI: 10.1038/ni.3058; 10.1028/naster 14120

10.1038/nature14130



Why don't more young people vote?

Off his tits on politics, Joshua Renken tackles the issue of low voter turnout amongst the millennial generation.



Left: Comedian and political activist Russell Brand has been encouraging young people not to vote and has written a book on modern politics titled *Revolution*. Right: TV Presenter and political activist Rick Edwards works with the Swing The Vote initiative and recently gave a TED talk called 'How to get young people to vote' Photos: 2014 Getty Images

ith just 61 days to go until polling stations open across the United Kingdom, party election campaigns are well under way. In 2010, voter turnout was at 65%. The over-65's demographic had an overall turnout of 76%. Amongst 18-24 year olds, however, turnout was only 44% and recent polls indicate that number will be even lower on 7th May.

This is a big problem in UK politics, and a relatively recent phenomenon, with only a 4% difference in turnout between the young and old in 1987. In our democracy politicians have to focus their efforts to maximise votes, so they will inevitably dangle more voting incentives to the segments of the electorate that are more likely to get out and vote.

When you look at the disparity in voter turnout between the young and the old, it's no surprise that in this government University tuition fees have increased when the welfare entitlements of pensioners have been steadfastly protected. Young people are being disproportionately neglected because there aren't enough votes to persuade those in power to shift their focus towards them. The silver vote gets courted while the youth of today get hit hardest. And it is a worrying reality that this only makes young people even less likely to cast their vote on 7^{th} May.

The Shadow Secretary of State for Justice, Sadiq Khan, recently summed up the situation: "If you have got a candidate with an hour spare and a choice to go to an old people's home or a sixth form college, 99% of campaign managers will say you've got to go to an old people's home."

There is an asymmetry of voting influence on our representatives and it's only getting worse, with an aging population and fewer young people voting.

Politics is where principle clashes with pragmatism, and young people are the victims. And this is simply due to politicians responding to incentives. There's no conspiracy here. No evil plotters behind the scenes. But that almost makes the situation even more depressing.

So why don't more 18-24 year olds vote? Many reasons have been put forward. Some believe that young people are simply too lazy to participate in politics. They think that we are too busy texting, taking pictures of our food and ogling Kim Kardashian's arse to look up and think about who runs our country. But this explanation is a lazy stereotype and completely untrue. It is abundantly clear that across the country there are young people who are fiercely passionate about social action.

It could be argued that young people don't vote because they don't yet feel as though they have a stake in wider society, and that it is only as a person begins to settle down and have children that they sense that they have a direct interest in issues such as affordable housing, taxation, healthcare, education, the job market, transport and childcare – the bread and butter subjects of politics.

One reason why lots of young people don't vote is that many of them are not exposed to political discussion. There is very little, if any, formal political education in schools. This means that if a child's family does not discuss politics at the dinner table then there is no initial stimulus for that child to even think about it. And there's evidence to suggest that if people don't engage in politics early on, they never will. If this continues then a few decades down the line we might live in a society with a passive majority who don't vote or even voice their opinions about the issues that affect all of our lives.

Russell Brand has tapped into the public's widespread disenfranchisement and frustration with Westminster and the 'political class', and has done a good job of drawing people's attention to causes that would otherwise be overlooked by the mainstream media. But for all his well-meaning intentions, Russell 'fuck-the-system' Brand is not helping the situation when he encourages people not to vote. He talks about bringing down our current democracy without offering a viable alternative and argues that people shouldn't bother voting until he gets his revolution.

What's so alarming here is that the people who agree with Russell about not voting are not doing it out of apathy, but out of anger. Russell undoubtedly has some good points to make but in the time between the upcoming general election and his desired parliamentary revolt he must urge people to express their political preferences in the current system. Discussing political, social and electoral reform is imperative and there are huge problems that need to be addressed, but change will never come about if people do not organise. Otherwise they lose their influence.

Politics is far more interesting than it sometimes appears to be, and the decisions made at the top make huge differences to the quality of people's lives.

Politics is also very complicated, and large sections of the mainstream media have done a poor job of untangling the issues and informing the electorate, which is vital for a healthy democracy. After all, the first step in solving a problem is recognising there is one.

Politicians could certainly do more to bridge the gap between themselves and young people, but we can only place so much blame on the media and public officials. Now we have to deal with the problem ourselves and get young people engaged in political discourse, because the problem of voter turnout amongst the millennial generation is self-perpetuating. The less young people vote, the more politicians will be able to ignore their concerns without being punished at the ballot box. The less politics has to offer young people the less likely they are to turn up to polling stations the next time round. It's a circle, and it's vicious. Which is why they call it that.

This May millions of young people will have their first opportunity to vote in a general election. There are 5.6 million 18-24 year olds in the UK; that's 11.3% of the population. If the opportunity is seized, the millennial generation could make a decisive difference in what is a very tight race. 18-24 year olds represent a huge amount of latent political leverage that could tip the balance strongly in their favour. Politicians would have no choice but to respond by catering better to the needs of this demographic and real change would be made.

Most young people are not apathetic. They are angry and alienated. We are disproportionately ignored by the powers that be and those that do vote feel demoralised under this administration, but the only way to change that is for young people to start flocking to polling stations en masse.

To those people who have problems with the status quo in this country but don't vote or get organised: you have limited scope to complain. Because, and there's no easy to way to say this, you are part of the problem. Despite what some people say, it matters who is in power. We have the collective ability to decide who determines the future of the United Kingdom but if people do not get out and vote the government will never receive a proper mandate from the people. The millennial generation needs to vote, for all our sakes.

You can register to vote in the constituency of either your home or term-time address. Make sure you're on the electoral register before the April 20th deadline.



Games Editor Max Eggl & Calum Skene

The Magical World of RPGs

The expert himself, Sanchit Sharma, introducing you to a world that you definitely want to join

P*G* is an arguably misleading term, which stands for "Role-Kterm, which stand 211 Playing Game". The reason I say it is arguably misleading is that there are very few games, both tabletop and otherwise, in which the player does not take on a role. Yet the term roleplaying game nevertheless has a very precise definition. An RPG is, specifically, a game in which the player takes on the role of a specific character and controls that character through various encounters. Often, the character is represented by various numbers and statistics, but the key part is that RPGs are about each player controlling a single character.

Broadly, I split RPGs up into three groups: cRPGs, MMOs, and tabletop RPGs. cRPG is a term used to mean computer RPG – that is, any roleplaying game that is a video game. In these, stats are very important and you have a fixed goal to achieve. Examples of cRPGs are Neverwinter Nights, the Elder Scrolls series (of which *Skyrim* is the latest), and the Final Fantasy series. MMO stands for Massively Multiplayer Online, and MMORPGs are very similar to cRPGs (technically being a subcategory of them). But the difference is that where



"Broadly,

RPGs up

into three

MMOs, and

groups:

cRPGs.

tabletop

RPGs."

I split

RPGers Heaven: Orcs Nest

the former are normally one player and have a single storyline, the latter focus on player interaction and often have ever-changing storylines where each player can have an impact on the game world. Tabletop RPGs are a completely

different beast. In a tabletop RPG, one player takes on the role of the "Games Master", or GM, which is effectively taking on the role of the computer in the other types of RPGs. The GM controls any characters not controlled by the players, the world around them, and sets the difficulty of tasks – it's not an easy job to do! Often, these tasks have a randomisation element to determine whether or not the player succeeds. The simplest version is to roll a die, add a number representing the character's ability, and compare this to a number set by the GM representing the difficulty of the task.

There are a few things you need to do if you want to get started with RPGs. You should be aware of the role of the GM, and decide whether or not you'd be willing to take that role on (remember that a GM is an arbitrator, not an opponent!), you need to find people to play with, and you've got to have an idea of what sort of game you want to play. RPGs can be split into three categories (as well as combinations of them), and this can really help narrow down what players like in a game.

The first of the three categories is 'gamism'. In essence, these are the RPGs where there is a strategic choice to make in what you do – most commonly in combat. Gamist RPGs often have combat 'minigames', which make up a decent chunk of any given session. Rather than encouraging a player to play true to a character, games in this category often encourage players to create characters in an "optimal" way, which don't necessarily line up with choices that make narrative sense, but instead allow the character to perform better. If you like to be able to 'win' an RPG, gamism is for you

Simulationist RPGs focus on what would be realistic (within their universe) in any given situation. These are the games where you can argue with your GM about the physics

"Gamist **RPGs** are where there is a strategic choice to make in what you do."



to, clockwise left to right: g

nvolved in the scene and where they might actually change their plans based on what you say. Simulationist games often have very large rulebooks, as they have to account for a large number of possible situations even if they take place in very specific settings. Don't be put off by this – you don't need to read these books cover to cover! If you want your RPG to be realistic, simulationism is for you.

The final category is narrativism. With narrativist RPGs, the plot is the most important thing. Where gamist characters often have optimal setups. narrativist ones don't – and people who play narrative RPGs a lot might even choose to create characters that give them disadvantages relative to everyone else (not in terms of stats. but in terms of plot) because they find it more fun to play games where their

james

ning, rpggeek, board

characters do badly. Additionally, pure narrative games are sometimes GMless (or GMful) – where the role of GM is either not needed, is shared by all players, or done by the game itself using some sort of simple algorithm. If you enjoy realising that vour character is not about to die. but rather that events have conspired to create a situation so horrific that death would be greatly preferred (or

in general if you like making stories), narrativism is for you.

Here are some examples of each of the combinations of style, with a bit of info on each one. Each RPG I mention here is either widely available, or I have access to it personally (if the latter, feel free to contact me to borrow my copy).

Pure Gamist: This is a difficult one to place, because most RPGs that

are pure gamist are closer to board games than RPGs. But the one that I know of which fits this criteria is Warhammer Quest - it is essentially standard Dungeons and Dragons in the Warhammer universe, but with the focus on going into dungeons and beating up monsters. It is also, apparently, incredibly difficult to progress. Sadly, Warhammer Quest is now out of print, but the Dungeons and Dragons (see below) board games often give a similar feel, if you want to try these out

Pure Simulationist: The best example of this is probably the Battletech/Mechwarrior series of RPGs, in which players take on the role of mech pilots in the 31^{st} century. Another (arguable) example is GURPS, the General Unified Role Playing System, which makes different abilities more or less difficult to gain and thus involves a lot of looking things up. The best thing about GURPS is that the books give such detailed setting-creation information that it can be adapted to any system.

Pure Narrative: This is my thing, so I've got a few examples for you. Itras By is my personal favourite, which is a 1920s surrealist game, but the system is so neat and concise that it can be adapted to any setting with very little difficulty. Mystic Empyrean is your standard sword and sorcerv setting. but the system prevents character optimisation by giving other players control over how your character improves. The idea is for it to be based on how you play. Finally, *Fiasco* is a GMless game designed for single sessions in which every character sets up an elaborate plan to get their way, and it all ends up in (you guessed it!) a fiasco.

Gamist-Simulationist: The most common is Dungeons and Dragons, widely considered the first ever RPG. It's a standard swords and sorcery type game. It is worth noting that the latest iteration of this game is an attempt to switch it to a Narrative-Gamist RPG, which is an interesting change. However, another popular game in

"Welcome to the wonderful world of tabletop **RPGs!**"



hoto: Sanchit Sharma

"If you like

narrativism

is for you."

making

stories),

Games Editor Max Eggl & Calum Skene

this category is the Warhammer 40k series of RPGs (starting with Rogue Trader), which take advantage of the rich backstory of the Warhammer universe to create a sci-fi compelling universe for the players to explore

Simulationist-Narrative: This is a difficult combination to pull off. *Eoris* is an example of this kind of game, but it isn't well executed. Whilst it provides a rich and compelling universe in which magic is consistent with modern science, the rules are messy and incomplete. There are a lot of criticisms of the game and most are valid – but it is nevertheless a salvageable system. However, this combination hasn't yet been done well as far as I am aware, and so I would personally recommend that if you like both simulationist and narrative styles, pick one or the other (or play single session games and switch between the two).

Narrative-Gamist: A big example is the FATE system, which combines action-RPG combat with a heavy focus on character development and plot. It's a very fluid system, but puts a lot of stress on the GM relative to other games. There is no fixed setting.

Now that you have an idea of what kind of game you want to play, you need to find people to play it with! There are three major RPG groups in Central London – Darksphere, the London Indie RPG meetup, and (of course), the Imperial Tabletop Gaming society. Darksphere is a store that takes about 20 minutes to get to by tube. The focus in the store is Magic: The Gathering, but they run Dungeons and Dragons games every wednesday evening. The Indie RPG group meet up a few times a month near London Bridge, and focus on single session, narrative games. They're a great place to go if you enjoy narrative games!

Finally, if you're interested in playing RPGs at Imperial, we run single sessions on alternating Fridays and Sundays. Send me an email for the details

And welcome to the wonderful world of tabletop RPGs!



How to live in an international flat

Chanon Wongsatayanont offers advice on peaceful coexistence

Wou've probably had a flat mate who's from a different culture. For some of you, it might have gone like this. Day one, things were going well. Day seven, tensions began with unwashed dishes. Day twentyfive, both sides mobilized for war over a party that had turned the corridor into a disaster-ravaged scene.

When people from different cultures live together, standards of how to live clash head on. What's OK and not OK for each culture will be tested and challenged, and everyone will have to adjust. Eventually someone will have to give in and accept that's the way things are going to be. Settling on who's going to do that without making things blow up is the tough part, especially when you both started off as complete strangers.

Flat mates coming from the same country would know that conflicting habits are frustrating, to say the least. I mean, some people are used to 'borrowing' milk at home but if you've been living alone for a while, your stuff is your stuff. When these two people meet, it can start off irritating, but it can also make life hell for the whole flat if they decide to make it personal. We're students; I'm sure you've heard horror stories of flats that have become warzones.

Now add cultural differences to the mix. Wacky food smells, strange condiments lurking around the kitchen, language barriers, they add whole new dimension of things you'll have to cope with. Worse, racial stereotypes aren't going to help with understanding each other either. Once you begin labelling another person as 'that typical anti-social Asian' or 'that noisy Westerner', chances are they'll stay that way for the rest of your time together. You might have just misunderstood then, but more on that later.

Here are some of the ways to smooth out the ride with your international flat mates:

Address different expectations

This is the easiest way to get to the root of the problem. You'll have to remember that being from different cultures means that you have different assumptions about how things are done. So sometimes, the annoying neatness or messiness of people can be a matter of culture.

For example, in Asian countries, usually under the guidance of demanding parents, dishes have to be cleaned immediately and the table can't be messy when you're done using it. After being enforced enough



If you see this in your kitchen, you know there's an international student (most likely Asian) living with you. Photo: Creative Commons

times to do that, it often becomes an unspoken way of doing things. That's the origin story for the super-neat Asian stereotype.

Meanwhile, the Western parenting method is usually more laid back, where cleaning up can be left for tomorrow morning or later, depending on the home. You can see how the habit would clash against how an international student has been brought up.

Being brought up in Thailand myself, I've been through some adjusting. I used to live in a flat with three other British students and I remember how my flat mates would soak dishes in soapy water for a night before cleaning it up the next day. Believe it or not, that's the first time I've seen someone soaking their dishes. I thought they were just being lazy; I didn't even know that it was the norm here until I asked them.

It doesn't hurt to ask how things are normally done where your flat mate was originally from. Even if they don't change their behavior, you can at least understand where they're coming from which would make it more tolerable or even change your thoughts. Without the understanding, you'd probably think that they're doing it to piss you off, easily making it a personal thing rather than cultural.

There is no harm in asking!

As students from another culture are probably used to their way of living, they'd probably not notice that their lifestyle is bothering anyone else. In this case, a nudge and a friendly reminder is usually enough to change someone's way of doing things. Much better than muttering under your breath and gossiping about 'that goddamn flat mate', huh?

For example, I used to have some sweet-smelling (opinions may vary) green curry paste in the fridge. Of course I didn't notice it since no one ever minded back at home. One day, my flat mates told me that they've been discussing among themselves and decided to tell me that the curry is stinking out the fridge. I was mortified, apologized and quickly bought some cling film to cover it up. The curry's sweet smell is now kept all to myself. The problem is solved painlessly.

No racial stereotyping

I've mentioned this briefly earlier in the article. Why not? That's because it would leave the flat chilly for the rest of your time there, widening the chasm between you and the international students you've branded. There would be no chance to come to a better understanding and your flat mate will remain that caricature for the rest of your time there.

It's kind of a self-fulfilling prophesy. For example, if you think that your flat mate is so anti-social that she only hangs out with her international friends, you're probably going to ignore her every time you see her around the flat. Now to her perspective. If she thinks that you're giving her a cold shoulder, she'd think that there's no one else she can hang out with apart from her friends from home. See how that works?

Granted, initially she might be a bit shy. She might just be anxious in a new country and faced with language barriers, but that doesn't mean she's anti-social and unfriendly. Give her a chance and try socialising. She might be relieved to find a friendly flat mate that can help her settle into the new country!

Living with people from overseas isn't always a pain as long as you're willing to reach a more understanding position. It can also be more rewarding than you thought. You can hear stories from their hometown that you'd get to hear nowhere else. And if you become best mates, you can even get a chance to visit their country and stay with them too!

Mental health helplines and resources

If you are concerned about your own mental health, or that of a loved one, there are people out there you can talk to who can give you advice, or will be there to listen.

Helplines If you are distressed and need someone to talk to : <u>Samaritans (24 hr helpline):</u> Phone: 08457 90 90 90 Website: www.samaritans.org. uk

Anxiety Help : <u>Anxiety UK</u> Phone: 08444 775 774 (Mon-Fri 9:30 - 17:30) Website: www.anxietyuk.org.uk

<u>No Panic</u> Phone: 0808 800 2222 (daily, 10am - 10pm) Website: www.nopanic.org.uk

Eating Disorders: <u>Beat</u> Phone: 0845 634 1414 (Mon - Thurs, 1.30pm - 4:30pm)

Addiction: <u>Alcoholics Anonymous</u> Phone: 0845 769 7555 (24 hour helpline) Website: www.alcoholicsanonymous.org.uk

<u>Narcotics Anonymous</u> Phone: 0300 999 1212 Website: www.ukna.org

College Resources <u>Student Counselling Service</u> Phone: 020 7594 9637 e-mail: counselling@ic.ac.uk

Imperial College Health Centre Telephone: 020 7584 6301 e-mail: healthcentre@ic.ac.uk

You can also go to your academic or personal tutor regarding pastoral issues, especially if you think your mental health might be affecting your academic performance.

Felix 1600



Culture



My Favourite...

The Felix Culture Editors tell us about the culture that inspired them

...Author — Margaret Atwood

FRED FYLES ARTS EDITOR

The first book that I can Г remember being upset at finishing, not just sad, but actually physically hurt, was Margaret Atwood's The Handmaid's Tale. A story of a future in which radical Christians have transformed America into a theocracy, and the declining fertility rate has led to the remaining fecund women being enslaved as 'handmaids', The Handmaid's Tale kick-started in this prepubescent boy a love of dystopian fiction; 1984, Brave New World, We, these all followed in rapid succession, but none could match the joy I felt when reading Atwood's carefully crafted prose.

Luckily, I found a fellow confidante in my mother: a big fan of Atwood, her collection stood proud on our bookshelves, their green spines and bitten apple logo indicating that they were printed by feminist publishers Virago Press. And so I gorged. Gorged myself on cannibalistic rituals involving women made of cake; on themes of Canadian nationalism and a return to nature; on the inner thought of artists, and writers, and paleontologists, and students, all brought to life thanks to Atwood's deft wit. Reading Atwood's novels, so many of them are concerned with rural Canada, a dichotomous environment of majesty and fury, beauty and pain. They made me yearn for a country I have never visited yet could clearly picture, for a place that could not be more different from my North London living room but which still seemed familiar.

Her body of work is enormous, not only in scope but volume too: fourteen novels; fifteen books of poetry; nine short story collections; three *libretti*; the list goes on. Her novels wilfully defy categorisation. When people started saying that she was a feminist writer, she politely corrected them: "The Edible Woman, [Atwood's first novel] is protofeminist rather than feminist: there was no women's movement in sight when I was composing the book in 1965... though like many at the time I'd read Betty Friedan and Simone de Beauvoir behind closed doors".

Instead of giving her Oryx and Crake trilogy the moniker of science-fiction, she instead calls them speculative fiction, telling us in no uncertain terms that there are "no martians". This slipperiness, this struggle against conformity, which has continued throughout a career that has entered its fifth decade, is what sets her work apart, lifting her higher than any writer currently working

Sometimes, if I am feeling down, I get up a picture of her on my computer screen; she's the only person I know in whose physical features genius is manifestly evident. It's there, in her eyes. A glimmer. A gleam. And in her mouth too, the way her lips curl slightly upwards at the ends, as if constantly laughing at her own private joke.

They give an indication, a suggestion, of a mind at work; a mind that's constantly ticking over, scheming, laying out plans, keeping itself busy. A mind for which we should be thankful. A mind that makes the world so much bigger than I can possibly imagine.



...Album — The Shape of Jazz to Come

KAMIL McCLELLAND ARTS EDITOR

959, probably the most important year in the history of jazz, a turning point away from bebop and its roots in blues and dixieland, towards a new path for jazz: free jazz. In the same year Miles Davis released Kind of Blue and Dave Brubeck came out with Time Out, a lesser known artist called Ornette Coleman came out of the shadows to release his album *The Shape of Jazz to* Come. The implications of this album cannot be underplayed; it heralded the advent of free jazz: more a way of thinking than a genre in itself, that would revolutionise music for the rest of the 20th Century.

Jazz is often seen as either lounge music or so abrasively complex as to make it effectively unlistenable. The Shape of Jazz to Come was my gateway drug that took me beyond this misrepresentation. It contains just enough of the old school of jazz and conventional harmonic structures to make it enjoyable and not completely baffling, whilst simultaneously introducing new musical concepts



that completely blow the artform wide open. Retrospectively, this album is by no means free jazz, not at all free of the musical shackles defined by jazz and blues standards. In fact, you can certainly hear the influences from Thelonious Monk and Charles Mingus in the album. However, you cannot doubt how avant-garde it was at the time, with Miles Davis describing Coleman after its release as "all screwed up inside". Yet he was simultaneously described as a genius by Leonard Bernstein, such was the controversy of the album's release.

How bold a statement to call an album 'The Shape of Jazz to Come'! Coleman originally wanted to entitle it 'Focus on Sanity' but fortunately just in time, his producer suggested the name, recognising the album's potential for revolution. It was also just in time for Coleman in another way. For before this producer, Nesuhi Ertegun, picked him up, he was considering abandoning music altogether and becoming a pastor.

Coleman had always been an innovator as a saxophonist, much more interested in the timbre of the instrument as opposed to playing the 'correct' notes. In fact in 1954 he started playing a plastic saxophone, unable to afford a metal one, giving his playing an extremely unique sound that is a lot drier and more piercing than other saxophonists.

However, whilst his work can sometimes be quite affronting, it is also some of the most emotionally rich and complex that I have ever come across. From a hyena-like cackle to a lamenting weep, he truly encompasses the beauty of dissonance. Harmony is unimportant to him, emotion through melody and timbre are what counts, embracing a raw energy rarely seen in any jazz artists before him. He also did not view pitch in the same way as his artistic counterparts. He appreciated it was a spectrum and made use of microtones like no other, insisting the same pitch should sound different at each performance depending on the context and mood. It was truly revolutionary thinking!

And this is why I love this album so much, the work of a maverick innovator miles ahead of the curve – truly the shape of jazz to come. **Celebrating the 1600th issue of Felix**

..Musical — Next To Normal

BEN HOWITT C&S EDITOR

Provide a constraint of the set of the set

When it was on Broadway during 2009-11, the production controversially won the Pulitzer Prize, and also gained a cult following on YouTube and Twitter, before closing in January 2011.

Bipolar depression is not an easy topic to write a musical about – and the pain felt by many of the characters is scarily real. The various attempts made to manage Diana's condition correspond to real life treatments for bipolar II, and watching each of them try, and fail, to heal "the cut, the break… in your soul" is terrifying to watch.

The addition of Diana's son Gabe into the mix lends something of a sinister, seductive aspect to the show. Their scenes, culminating in Diana being led to attempt suicide, are made more worrying by the fact that it isn't until the middle of the first act that we even find out he's died, and it becomes clear just how far Diana's psychosis has progressed.

This is not to say that the musical is altogether depressing. Diana's daughter Natalie and her boyfriend, Henry, have some incredibly sweet moments as he tries to pull her out of her own spiral towards substance abuse and depression. Their arc, ending as it began, with the word "I could be perfect for you", is tinged with a bittersweet acceptance of the other.

Even Dan and Gabe find a resolution of sorts. Natalie and her mother reconcile, and we are left with a more balanced, if disparate, family, searching for "the light in the dark".

Is *Next to Normal* misogynistic? Maybe. It's certainly true that Dan is presented as a sympathetic figure and Diana as something of a home wrecker. Natalie is similarly seen to be unable to handle things without the strong hand of Henry. Even the end of Dan's arc relegates her to the status of a caregiver. And it fails the Bechdel Test. Which, given how much else Natalie and her mother might have to talk about, is quite upsetting.

The music, though, is wonderful. It doesn't have the richness of Bernstein, nor does it require the vocal gymnastics required for works by Jason Robert Brown. Despite this, it stands up as one of the strongest examples of a rock musical score I have heard to date, making it a worthy winner of the 2009 Tony for Best Original Score.

The show taps elements of the human experience that we don't get to see all that often, filling a void left unattended since Jekyll and Hyde was released in 1997. It's not perfect – it's not normal – but it opens out the scope of musicals beyond what's been done before and since. Yorkey and Kitt have done well with Bring it On, the musical based on the little cheerleading squad that could, and If/Then, which starred Wicked and Frozen's Idina Menzel. Maybe they could use some of this success to launch a full British production? Only time will tell.



The case of award-winning musical Next To Normal Credit: Craig

...Play — The Importance of Being Earnest



Portrait of Oscar Wilde, Napoléon Sarony, 1882 Credit: Creative Commons

JACK STEADMAN FILM EDITOR

have such an obvious fondness for *Arcadia* – and for Stoppard's work in general – that my picking it as my favourite play seems like a foregone conclusion. So let's side step that conversation by turning straight to my second-favourite play. Now comes the requirement to actually think about the answer to this.

There are quite a few candidates – Jez Butterworth's *Jerusalem* and *Mojo* spring up as early contenders, alongside the brilliantly funny *One Man, Two Guv'nors* by Richard Bean. But the winner is probably Oscar Wilde's last – greatest – play, *The Importance of Being Earnest.*

There's a lot of history surrounding *Earnest*, not least the part it played in Wilde's eventual trial and imprisonment for "gross indecency". It was at the opening night that the Marquess of Queensbury, father of Wilde's lover (and somewhat displeased at this arrangement), attempted to present Wilde with a bouquet of rotten vegetables (he failed), and it was during the show's run that Wilde and Queensbury's feud made its way to the courts. *Earnest* marked the pinnacle of Wilde's career, with the downfall that must follow such a claim coming brutally swiftly. 86 performances later, *Earnest* closed. Public opinion

was no longer on Wilde's side. Despite that, *Earnest* endures. Despite all the controversy surrounding it, despite the depressingly short original run, it continues to find itself being revived on a near-constant basis, regularly appearing in some new form in the West End.

The reason for that can be found in the sheer joy of seeing *Earnest* performed. Described in its full title as "a trivial comedy for serious people", this is a play that takes neither itself, the audience, nor its apparent targets seriously. It's as much a farce as anything, dealing as it does with multiple cases of mistaken identity – each of them equally improbable – as well as ridiculous fascinations with names as a reason for marriage.

Taking the text itself and examining it, there's not always much to recommend *Earnest*. The plot – as mentioned – is absurd. The characterisations are often flimsy. The satire is, these days, borderline toothless, and the capacity to introduce new relevance – as in Shakespeare – is limited.

And yet, when put in the hands of a skilled cast, it springs to life; jokes that seem dated on the page are suddenly hilarious; there's enormous space for physical comedy; the interplay between the characters is a joy to behold when the lines are being thrown, rapid-fire, between skilled actors.

Earnest is the ultimate example of a 'fun play'. It's hugely entertaining with a good cast, and from the other side it's a treat to perform. It's a far, far smarter play than its surfaces suggest – I stand by all my claims of toothless satire and limited relevance – because its apparent lack of any real subject is the whole point.

Earnest is as much Wilde's twofingered salute to the literary establishment of the day, and it's a salute that holds true now. As an artistic point alone, it's fantastic. The fact it's fun to perform and watch is simply a bonus.



..Comic Series — Sex Criminals

GRACE RAHMAN MUSIC EDITOR

won't lie, I don't know shit about comics. I only started frequenting Soho's GOSH! Comics for the sexy men and proximity to good record stores. Before I started lurking in the graphic novel section of Waterstones, I thought comics simply provided fuel for Marvel Studios to re-hash into a new blockbuster every summer. Don't get me wrong, I know my Aquaman from my Iron Man, but beyond the necessary general knowledge to get me through a rogue DC/Marvel question during Mastermind, I just wasn't interested. And I'm still not interested in the world of superhero comics, despite recent expansion from the cis white male template that the genre traditionally serves so well. The latest incarnation of Ms Marvel, written by a female Muslim convert, is a teenage Pakistani living in New York. Her parents are terrified she'll have sex or not become a doctor.

Despite these totally identifiable themes, the stories themselves do little for me. I like sci-fi, but I also like comedy and beautiful pictures. I want mature stories, an exciting premise that can be snappily summed up in a sentence and a little bit of

smut. Behold *Sex Criminals*. Forget stolen kisses between Superman and the odd mermaid, Sex Criminals provides it hard, fast and from page 1. With drawings by Chip Zdarsky who's just been given the reigns by Marvel to reinvent Howard the Duck, and words from Matt Fraction of *Hawkeye* fame, it's a fantasy comic by people who admit they don't have a lot of loyalty towards the genre. And I think this shows, for the most part, making it a nice introduction for the comic novice. There are no backstories to get bogged down in, no arguing in the forums over nuances implied way back in '87 and it passes the Bechdel test. The first volume, 'One Weird Trick', introduces our main characters, Suzie and Jon, who feel like the world stops when they get down on it. Except it literally does, so they decide to rob banks during their post-coital bliss.

This premise alone sold it to me, and as well as straight up sex jokes throughout, the subtle background puns make it a re-readable buy. Zdarsky's futuristic and downright sexy layouts are the perfect complement to the cheeky content. At one point, Apple deemed it too rude to read on their devices, and prevented its download on iOS via iTunes or the huge comic viewing platform **comiXology**. This was a multifaceted error on their part; people weren't stopped from viewing the first issue after Apple realised they didn't want to publish the second and this arguably fuelled people's intrigue.

Like anything forbidden, it became far more interesting. Plus, quite embarrassing for a forward thinking company that prides itself on empowering creative types to have banned Time magazine's Comic of the Year. Most importantly, the decision was ill-informed. Sex Criminals is not for getting off on. Zdarsky uses his mates as models for Susie and Jon, which he says limits the amount of gratuitous sexiness since he has to direct his friends into simulating said acts (Love Actuallystyle). It's certainly not all smut, and the second volume that came out last week sees Jon and Suzie move beyond the honeymoon phase. The bank robbing has lost its shine and the young couple are suffering under all the strains that being able to stop time when you climax brings. There was more depth and humour than I was expecting in my first dalliance with comics, even if it's too rude to read on the tube.

Sex Criminals: Volume 2 is out now on Image Comics



Sex Criminals: Volume 1, our Music Editor's comic of choice Credit: Image Comics

...Musician — Taylor Swift



And look, isn't she just so gosh-darned pretty? Credit: Taylor Swift

TESSA DAVEY COMMENT EDITOR

nyone who knows me will know that I have a particular penchant for Taylor Swift. Whether I'm posting new Swifty (while I realise that Swiftie is the tumblr-accepted spelling, I prefer it with a y, okay?) videos on people's walls on Facebook with overexcited captions, OMG!!!!! ITS SO GOOD I DIDNT THINK TAYTAY COULD OUTDO HERSELF BUT SHE DID OH MY GOD, or forcing the entire *Felix* office to listen to nothing but Taylor Swift for an entire day, I don't exactly keep my love to myself.

I know Taylor Swift isn't exactly the epitome of cool, and I would love to name one of the generic indie bands that I generally listen to, in order to maintain some pretence of sophistication, but actually, when it comes to TayTay, I'm not sure that I care if people know that I love her. Every girl loves Taylor Swift, and those who say that they don't are liars. You see, Taylor Swift appeals to the very essence of the female being. I'm going to be very cis-heteronormative here, but I'm pretty sure this actually extends to all genders/ sexes/sexualities/etc, but I can only speak for myself. And Taylor Swift, obviously.

Taylor Swift is the manifestation of girl-cray. She is the feelings that you would love to display, the obsessiveness that you're a little bit ashamed of, she is all the emotion that society tells us that makes girls crazy and they should suppress.

This is obviously ridiculous, and an example of our patriarchal society's female-shaming, or even alpha-maleemotion-shaming. Everyone feels this way – whenever someone is upfront about it, they are lauded for their honesty – but for some reason, people try and hide it as much as they can, and are ashamed if they let it show. Taylor Swift is honest about it. She's frequently mocked for being a bit over-emosh, for falling in love too hard and then writing songs about it, and while people might laugh along, there's no denying that Taylor Swift is SO relatable.

Don't you think that it's incredibly liberating to be completely honest about how you're feeling, to admit that you completely illogically want to get back with your ex who didn't treat you right, because you miss the excitement, or to confess that you spend most of your time fantasising about your best friend breaking up with his girlfriend, because obviously you are really the girl for him.

Swifty's latest album has several songs where she addresses her cray reputation, mocking people who say she's just an overly attached maneater. But Taylor Swift isn't crazy, she's just honest. And on top of this, she's a little bit basic bitch embarrassing, which she's not afraid to embrace, and her songs are hella catchy. And that makes her better than us all.

CTITTE

Celebrating the 1600th issue of Felix ——

A Wonderfully Inappropriate Comedy

Fred Fyles takes on Desiree Akhavan's New York sexual romp



Desiree Akhavan in Appropriate Behaviour, which chronicles a bisexual Iranian woman's life in Brooklyn Photo: Gravitas Ventures

hen asked where she gets her oddball sense of humour from by the interviewer, Desiree Akhavan pulls no punches: "My genitals," she replies, "my humour comes from my genitals." Akhavan is here, being interviewed at the **ICA**, to promote her debut film Appropriate Behaviour, a drama-comedy revolving around an Iranian bisexual woman living and loving - or at least, attempting to - in hip New York. While the film has received numerous comparisons to Girls, no doubt helped by the fact that Akhavan has a recurring role in this season of Lena Dunham's brainchild, it is clear from the beginning that Akhavan's vein of humour is more brash, nuanced, and utterly unique.

The indie comedy equivalent of a triple threat, Akhavan has both written and directed the film, and appears as the main character Shirin, who we first meet as she collects her stuff in preparation for moving out of her girlfriend Maxine's (Rebecca Henderson) apartment; throwing the whole lot in the bin, she then reconsiders, pausing to retrieve a strap-on, which she half-heartedly carries along the streets of a summertime Brooklyn. Told through a series of flashbacks, a move that is obviously indebted to *Annie Hall* – Akhavan has herself admitted as such – we follow Shirin as she tries to forget that she was once loved by making a series of increasingly unwise, and hilarious, life decisions.

As a second generation immigrant, Shirin is walking precariously along a tightrope, one day attending a Persian new year's party, the next heading to an art show to see a friend "dress up like a farm animal and touch herself". It is this strain, magnified by the fact that Shirin has a 'Don't Ask, Don't Tell' policy with her parents when it comes to her sexuality, even when they are confused as to why their daughter is living with another woman in a one-bed apartment, that leads to the break-up of the relationship. As part of the healing process, Shirin decides to get a new job, taking up the offer of the friend of a friend to teach filmmaking to a group of "really talented, clever Brooklyn children", who turn out to be a group of 5-year-old boys. With her grief and libido increasing, she soon begins to regress to her students' level, pulling ever more immature stunts to try and make Maxine jealous.

While Akhavan is the obvious star here, the supporting cast are

equally strong. The ex-girlfriend is a particularly difficult role, but Henderson shines in it, managing to make Maxine somewhat brittle nature seem utterly sympathetic. Within cinema, there seems to be a trope that true love cannot exist within a relationship that has gone sour; that if their love were 'real', if neither of them were 'bad people'. then why would they ever break up? Akhavan and Henderson use their performances to make it clear that, sometimes, shit just happens like that, and their relationship isn't any the less for it.

The film has an episodic structure, which is clearly due to Akhavan's experience producing her online web series *The Slope*; made with her then-girlfriend Ingrid Jungermann, The Slope revolved around the lives of a couple of "superficial, homophobic lesbians" living in Park Slope, Brooklyn. Brilliantly accurate, the pair received a great deal of media attention thanks to their open willingness to be hypocritical, confusing, and messy individuals. It was this attention that helped lead to the generation of Appropriate Behaviour, something for which we should all be thankful (so remember, when you're "constantly wasting

your life" watching YouTube, you're actually helping the independent cinema industry. Take that mum!).

One thing that Akhavan does brilliantly is draw attention to the navel-gazing, self-indulgent tendencies of millennials, within both the queer community, and the general population. Alongside the gags about pretentious art shows and taxidermist roommates, there is a subtle commentary on how perhaps Akhavan's generation is horrifically self-involved. In one scene, for example, Shirin attends a workshop on queer justice, which she knows Maxine will also be attending; as one man tells the group how the 'Crime Against Nature' laws resulted in him being branded a sexual predator. Maxine and Shirin ignore him and argue in the corner about the plans they have made, until Shirin eventually puts her hand up and asks the facilitator – a law professor at NYU – out for a drink. In another scene. Akhavan reveals the twofacedness of Maxine, showing her to be a woman who makes her girlfriend read a copy of Stone Butch Blues for self-improvement, but will also call Shirin's bisexuality "just a phase" in one of the most chilling scenes of the film. Akhavan shows this all quite

bluntly, but never aims to be mean; instead it is just a gentle reminder that a narcissistic streak is inevitable, not just for Generation Y, but for all young people.

While the break-up comedy genre will inevitably be bittersweet, Akhavan manages to keep things from becoming cloying thanks to an acerbic wit that is both oddball and cynical, a fact that sets *Appropriate* Behaviour apart from other, similar films. As mentioned earlier, Girls is an easy reference point, as is Noah Baumbach's Frances Ha; after all, they all feature slightly off-beat 20-something year old women trying to make their way through life in Brooklyn. But while it is easy to see such films as merely more content in an genre that probably reached its peak when people gave up \$3 million to ensure Zach Braff can make another film (\$3 million!), Akhavan has created a piece that is not only welcome, but downright vital. With her background as a selfidentifying bisexual Persian woman, Akhavan is the very definition of intersectionality, and it is up to people like her to commit their experiences to film.

Appropriate Behaviour is out now on Peccadillo Pictures.

In fine

Celebrating the 1600th issue of Felix

1971: McCabe & Mrs Miller

1972: The Godfather Many consider this the greatest

Coppola's mafia movie certainly lives

up to the high expectation, starring

the great Marlon Brando as the Don.

1973: The Exorcist

as one of the scariest, most terrifying

1974: The Godfather Part 2

Linda Blair, voiced by Mercedes McCambridge, will forever remain

incarnations of cinema. All other

children have nothing on Regan.

With a clever structure of parallel narratives set in two different time

periods, there is further enrichment

of the strong characters we have come

1975: One Flew Over the Cuckoo's

Nest A hugely important and influential

1976: Taxi Driver

film, the public's perception of the world of psychiatry has never been

to love from Part 1.

film of all time, and Francis Ford



1949: The Third Man



Joseph Cotten and Orson Welles star in this atmospheric Cold War thriller masterpiece that was the most successful film at the British box office in the year of its release.

1950: All About Eve

as Margo Channing, an ageing actress

1951: A Streetcar Named Desire

performances from Marlon Brando,

Vivien Leigh, Karl Madden and Kim

1952: Singin' in the Rain

Led by a quartet of unforgettable

Hunter, this tragic play gets the

Gene Kelly's iconic singing and

dancing in the rain will forever be

remembered and treasured, as will

Donald O'Connor's intense 'Make

1953: Roman Holiday

The perfectly cast Audrey Hepburn

and Gregory Peck share something

special here: a chemistry so natural

1954: On the Waterfront

As a low-life bum destined for a life

of crime, Marlon Brando's award-

and convincing that it makes the

finale all the more bittersweet.

perfect screen makeover.

'Em Laugh' sequence.

a bumpy night. Get ready for Bette

threatened by a young star.























1960: The Apartment It deals with a relatively serious subject matter of infidelity given when this was made, but it remains timelessly funny, sweet and upbeat even to this day.

1961: The Hustler The darker the themes get, the better, as greed, alcoholism, gambling, and addiction all taint the clean-cut image of the idealistic hopeful pool player Eddie Felson (Paul Newman).



1963: The Great Escape Steve McQueen riding a motorbike as he flees from an impenetrable Nazi prison camp during the Second World War solidified his status as the 'cool' dude of cinema.

1964: Dr Strangelove

Stanley Kubrick's outrageously funny satire, poking fun at the Cold War and international politics, benefits from having the talented Peter Sellers

1965: The Sound of Music

There is no family more coordinated and musically talented like the von Trapps, and their sweet sound of music lives on, even to this day,

1966: Who's Afraid of Virginia

Woolf? Four people get drunk, shout and scream at each other, arguing over various things, most of them stemming from marital strife

1967: Bonnie and Clyde

Faye Dunaway and Warren Beatty bring to life the two notorious criminals who robbed banks and eventually met their tragic ends because of it.

1968: The Lion in Winter Katharine Hepburn's fiery performance that earned her one

of her four Oscars is reason enough to give this entertaining medieval historical romp a look.

1969: Midnight Cowboy

Unexpected friendships arise from all sorts of places, but nothing is more surprising than one that develops between a prostitute (Jon Voight) and a conman (Dustin Hoffman).

1970: MASH

As a war-time black comedy set during the Korean War, it has that strange mix of being as hysterical as it is often depressing, directed by Robert Altman.













"You talkin' to me?" is the defining moment of Martin Scorsese's hypnotic vigilante film, starring Robert De Niro in a period where his career was rocketing to new heights.

1977: Annie Hall

In the titular role, Diane Keaton is utterly delightful, and has the chance to show off her singing, too. She and Woody Allen make a funny, quirky, and touching couple.

1978: The Deer Hunter

It may be heavily one-sided in its harsh portraval of the aftermath of a brutal war, but there is undeniable power in Michael Cimino's lengthy, but completely gripping war drama.

1979: Apocalypse Now

One of the most unforgivable travesties of the Academy history is how Kramer vs. Kramer managed to beat out Francis Ford Coppola's audacious, haunting Vietnam picture.

1980: Raging Bull

One of Scorsese's finest directorial achievements, it stars Robert De Niro in his second Oscar-winning role, for his intense portraval of a violent downward spiral of self-destruction.



Actor/director Warren Beatty and Diane Keaton (what a performance) play real-life political journalists Jack Reed and Louise Bryant who are hopelessly in love.



1956: The Killing

1957: 12 Angry Men

1958: Vertigo There is something deeply hypnotic,

sinister and confusing about detective









1959: Some Like It Hot There has never been a better

John Ferguson's (James Stewart) search for the truth in a highly

complex case.

screwball comedy ever since Jack Lemmon and Tony Curtis decided to dress up as women and both fall for Marilyn Monroe.























2004: Million Dollar Baby

Eastwood is steady both in front of

and behind the cameras, and as his

leading lady Hilary Swank is terrific

2005: Crash

This layered, intelligent hyperlink

drama looking at various potential

racial issues in downton Los Angeles

was the rightful shock 'Best Picture'

2006: Pan's Labyrinth

The Spanish Civil War seen through

believes in the world of fairies and

drifts in and out of the real world.

Javier Bardem makes a terrifying villain despite his character's odd

winning, pulse-pounding crime

all together for one flawless film.

Director Jason Reitman's most

2009: Up in the Air

accomplished, balanced film yet, this

2010: The Social Network

ownership. Far superior to The King's

Speech, which won the Oscar that year.

2011: The Artist

that is truly worth your time, Michel

with his massively appealing picture

2012: Beasts of the Southern Wild

A black-and-white and silent film

Hazanavicius impressed everyone

that no-one thought would work.

A relatively small, low-budget

Quvenzhane Wallis.

film that is not to be ignored, it is

a vibrant, highly energetic indie,

much like its excellent young star,

monsters is a fascinating vision that

2007: No Country for Old Men

hairdo, in this Coen Brothers' award-

2008: Slumdog Millionaire

the eyes of a young girl who still

winner at the Oscars.

A hard-hitting boxing drama,

as a determined female boxer.

Celebrating the 1600th issue of Felix



1982: E.T. Steven Spielberg's revolutionary



1983: Scarface

The final shoot-out is one hell of an intense sequence, and Al Pacino is utterly gripping throughout. Also added in the mix is the sizzling Michelle Pfeiffer, in her first big role.



1984: Amadeus Led by two assured performances from F. Murray Abraham and Tom Hulce, this stunning period piece packs in so much stylish substance into its narrative.

1985: Back to the Future The first of a franchise that sent Michael J. Fox into superstardom in the film industry, it is a funny, inventive time-travel adventure that has for sure stood the test of time.

1986: Stand By Me

There is great chemistry and a strong

sense of camaraderie between the

four young actors, which is why the

1987: The Princess Bride

Can you believe that good old Saul

Berenson (Mandy Patinkin) from

the TV series Homeland is the same

guy who made the "prepare to die"

ending is an effortlessly nostalgic,

bittersweet one.





Celebrating the 1600th issue: best films of 1982 – 2014

speech? How time flies. 1988: Cinema Paradiso A sweet, tender film about a boy's love for cinema, it brings pure joy from start to finish following the life



of Toto, as the mischievous young lad roams around his Italian village 1989: When Harry Met Sally

Meg Ryan will forever be remembered as that woman who faked an orgasm so well in that diner that spawned the line "I'll have what she's having."

1990: Dances with Wolves

A heart-felt, earnest story told with

performances; this is generally what

1991: The Silence of the Lambs

Anthony Hopkins immortalised the

role of Hannibal Lecter, the non-

blinking, cannibalistic psychiatrist

toying with the police to help them

catch a serial killer.

stunning scenery and powerful

is needed to win an Oscar, which

director/actor Kevin Costner did





1992: Unforgiven



















1993: Schindler's List Painful to watch, but essential viewing: Steven Spielberg's harrowing Holocaust drama is a difficult one to beat in terms of the sheer power and emotional resonance it gives off.

1994: Pulp Fiction Also known as the film that revived John Travolta's struggling film career, it also features the best, most iconic work of actor Samuel L. Jackson, who quotes the Bible like no other.

1995: Heat

The definition of an adrenalinepumping action cop thriller, we get Al Pacino, Lieutenant Vincent Hanna of the LAPD, chasing Robert De Niro, career criminal Neil McCauley.

1996: Fargo

The Coen Brothers' quirky, violent black comedy sees a struggling car salesman arrange his wife's kidnap, and a pregnant police chief heading up a murder investigation.

drama features a quiet, effective

1999: American Beauty It is in the closely observant, carefully structured narrative that Sam Mendes' film pieces everything together so successfully. Perfectly

2000: Requiem for a Dream Darren Aronofsky's gutsy, energetic and unflinching directorial style piles on the uncomfortable, gut-wrenching images. One to watch if you are

2001: Moulin Rouge!

Australian director Baz Luhrmann reintroduced the musical film genre for the 21st Century with his flashy, over-the-top extravaganza that is a feast to the eves and ears.

2002: Far From Heaven Julianne Moore excels in this period drama set in the beautifully shot 1950s, as she always does, in a role that won her a whole bunch of awards

2003: The Return of the King A fitting finale for an epic fantasy trilogy, Peter Jackson managed the almost impossible and directed a final chapter that tops the quality of its predecessors.





















2013: 12 Years a Slave An unflinching, brutally honest look at one of the most horrendous chapters of history, Chiwetel Ejiofor is heart-breakingly good, as is the stunning Lupita Nyong'o.

2014: Boyhood

So it ended up losing a lot of the key awards to Birdman, but the legacy of Richard Linklater's ground-breaking film will no doubt live on, as the greatest coming-of-age story ever.



















1997: L.A. Confidential A cleverly plotted film based on the book of the same name, it features three mismatched cops (Kevin Spacey, Guy Pearce, Russell Crowe) investigating a series of killings.







cast, and smartly written.







































that should have included an Oscar.

thinking of dabbling in drugs.



Celebrating the 1600th issue of Felix



Once more into the lens: The History of Projection

Ellen Mathieson takes you through the last one hundred and fifty years of projection, film, and sound in the cinema industry

he field of optics was founded during the scientific revolution, leading to large improvements in lenses. Photographic paper was first developed in the 19th century, around the same time that the first phonographic sound recordings were happening. Once these three existed. it was only a matter of time until they were combined to make the first moving pictures.

The very simplest form of moving image is one that has been made by every primary school child for the past century, the zoetrope. A cylinder with vertical slits along the side, with series of images pasted onto the inside, zoetropes would then be spun to create the illusion of movement. These were very popular with Victorian children and adults alike, and are still a popular gift.

The first true projector was the zoopraxiscope, invented by Eadweard Muybridge in 1879. It is based on a similar concept to the zoescope, projecting images from a set of rapidly rotating glass disks. It was the zoopraxiscope that created the first moving picture of something in real time, rather that using staged photographs. The first example was of a galloping horse, and was actually developed to see if a horse had all four feet on the ground at the same time whilst galloping. Early models

had the images painted onto the glass, while later ones would print the outlines and then do the colouring by hand.

It is thought that this device is one of the main inspirations for the kinetoscope, the first commercial film exhibition system, where the moving pictures would be viewed by by looking through a spyhole. Though the original concept was suggested by Thomas Edison, it was actually mostly developed by one of the employees in the Edison labs, William Dickson, They also created the kinetograph, one of the earliest film cameras that could be used to create films for the kinetoscope, and a few years later released the kinetophone, combining the kinetoscope with a phonograph, the first film-sound system.

Celluloid was first invented as Parkesine in 1856, and was made into photographic film by thinly slicing blocks of celluloid then using heated pressure plates to remove the slice marks. These were then coated with a photosensitive gelatin emulsion. This process was perfected in 1888. It was a 380mm wide strip made by this process that was used in the kinetograph. However this was too stiff to meet the needs of motion picture photography, so more flexible celluloids were developed to be used by 1889.

It was the Blair Camera Company that supplied the Edison labs with film stock. Originally they only supplied film that was 40mm wide, which would then be cut and perforated to 35mm wide with four perforations that allowed the film to be moved through the camera. Eventually Blair began supplying film that was already cut to size. The size and perforations were patented by Edison, forcing the other film producers in the US to create 68mm film and a friction feed method to move it through the camera. In 1902 a court decision invalidated the patent claim, allowing anyone to use the Edison format, as has been happening in Europe where no patent had be filed originally.

At this time there were many projectors based on similar concepts, moving the film past a lens which would focus light onto the film, which would then be projected onto a screen. However different companies would build them slightly differently. so the film would have to perforated slightly differently depending on what equipment a cinema would have. The Edison format was the dominant version, and this was chosen by the Motion Picture Patents Company in 1909 as the official standard, along with a 1.33 aspect ratio. This standardisation had an enormous impact on the

"Even if

the film

would

burn"

underwater

continue to

placed

film industry, as this meant that all projectors were built to the same specification, so for example a film recorded in the US could then be played anywhere in the world.

It was around this time that celluloid began to be replaced, due to the fact that it had the unfortunate problem of spontaneously combusting above 150°C, a temperature that could easily be reached in a projector. It had the added problem of creating its own oxygen supply as it burnt, meaning that even if placed underwater the film would continue to burn. Acetate cellulose film was developed to combat this issue, first being produced in 1909, with several revisions over the next few decades.

The safety of acetate film meant that there was a large boom in the home cinema industry. In 1923 Kodak released 16mm wide film, as a cheaper alternative to 35mm. This was followed up by a standard double 8mm wide film in 1932 as an even cheaper alternative. This worked by first filming on one side of the film, then flipping the film in the camera and filming onto the other side of the film. These would then be cut in half and spliced together to form a continuous 8mm film to be projected. In 1965 an improved version known as Super 8 was released, which had far better visual quality and did not





"Once

these three

existed, it

was only a

matter of

time until

they were

combined

pictures."

to make the

first moving



A modern zoetrope, to be veiwed by looking through the slits A kinetoscope, the first commercial exhibition system **Photo: Wikin**



A single frame of 35mm film, with the soundtrack at the top

OTHE

Celebrating the 1600th issue of Felix -

need to be reloaded. This was quickly taken up by the public, and remains a very popular medium for amateur filmmakers. It is usually converted from film to video to be more easily worked with, a process known as

The soundtrack was still mostly sound-on-disk at this time. being played on separately on a phonograph at the same time at the film played. The first method to put the soundtrack directly on the film was phonofilm, which was patented in 1919. This recorded sound directly onto the film from a microphone as a series of parallel lines. This would then be turned back into sound at the other end this. It was mostly used to film musical numbers, especially opera singers, and political speeches Though the sound quality improved over the years, it could never match the quality of the sound-on-disk systems and was no longer used by

"the sound

improved

quality

over the

vears, it

could never

match the

quality of

the sound-

on-disk

systems"

Disney, in association with RCA Records, also attempted to create a sound-on-film system for called Fantasound for the original release of *Fantasia* in 1940, which had a multi-channel soundtrack recorded on a separate strip of film. This never really took off as many cinemas did not pay the expense to update their equipment. This meant that not many cinemas could play Fantasia as

originally intended, and is thought to be a large contributing factor in *Fantasia*'s poor original run.

The earliest films were all in black-and-white, but in 1906 the first colour process was developed. Known as Kinemacolor, it used commercially from 1908-14 and worked by photographing and projecting a black-and-white film behind alternating red and green filters. The second commercially process was the very widely used Technicolor, which was used to develop films in Hollywood until 1952. It's distinctive saturated colouring was found in such classics as the *Wizard of Oz* and Snow White and the Seven Dwarves.

A large problem with many film prints throughout the twentieth century is what is commonly known as "vinegaring". When films are stored in humid conditions the acetate turns into acetic acid causing it to turn brown and become brittle: not only does this mean the film can no longer be played, it also degrades the image quality mean the film can no longer be copied either. This has caused the loss of many film prints as it an irreversible process, and led to the development of cellulose nitrate and other film types throughout the late twentieth and early twenty first

Sound-on-film, based on the Academy optical system, worked

centuries.

by having an audio signal as two lines running parallel with the film. The lines grow thinner or wider depending on the magnitude of the signal. A light shined from a lamp called an exciter is passed through the film, and the intensity is detected by a photosensitive element which is then turned into sound. This was originally black-and-white, but due to the pigments being environmentally unfriendly this was switched to a cyan dye in the early twenty first century. As cyan dyes do not let infra-red light through, the exciter was switched to a red coloured LED or laser, which are backwards compatible with earlier prints. The Academy optical system suffered from somewhat poor audio fidelity This problem was solved in 1975 with the introduction of Dolby Stereo, a system that was widely adopted by cinemas world-wide and used with Star Wars and Close Encounters of the Third Kind in 1977. Dolby Stereo was supplanted by the Dolby Digital AC-3 format and the first film to use the system was Batman Returns in 1992.

In 2002, newly produced digital projectors were tried out in cinemas. These had issues with pixelisation in some scenes. By 2006, this had been solved, and the projectors themselves became much smaller. Only a couple of years later cinemas began to make the switch to digital, and the film

"soon in

the future

projectors

themselves

could

become

obsolete"

these digital

distributors followed suit, with fewer and fewer films being printed on 35mm. In 2013 it was estimated at that 92% of US cinemas had switched and the last of the large UK cinemas. Vue, had converted. By January 2014 most major UK distributors began distributing films only in digital formats, with Disney and Warner. the last two companies stopping soon after. Now only directors with enough clout in the film world can get their films printed on 35mm, and it is thought that Christopher Nolan's *Interstellar* could be the last film in the UK to be printed in the format

It is possible that soon in the future these digital projectors could themselves become obsolete, with large amounts of money going into research into laser projection. This would mean that the films would be projected much brighter, with a greater range of colours.

The current main issue with this is that a vast cooling system is needed to keep the projector at a constant temperature as this leads to a colour change, obviously a large problem with film projection. However lasers are being developed that are based on different technologies that are much easier to keep cool meaning the challenges of keeping the laser at a constant temperature would be fewer. Until then, the screen belongs to digital.



An example of vinegared acetate film Photo: Wikimedia



A scene from Wizard of Oz, filmed using Technicolor. Photo: Victor Fleming/MGM



Lasers that have been used in a laser projection demo. Photo

h issue of Felix



Plus-size fashion need not be boring and unadventurous

Tessa Davey explores the beauty in fashion for the plus-size woman, and the politics behind it

ess Munster, also known as Tess most famous plus-size models in Holliday, has recently become • the largest model ever to be signed to a major modelling agency, MiLK Model Management. Her size being a UK 22-24, and 5'5", she describes herself as a "body-positive activist", and is most well known for her #effyourbeautystandards movement, created to encourage larger women to accept and love themselves.

Despite being bullied for her appearance throughout her life, Tess started plus-size modelling when she left school. Now she is one of the the world, with a huge following on Instagram. However, she experiences a vicious backlash on social media in response to each post, which accuses her of promoting an unhealthy lifestyle. Throughout this, Tess is an unfailingly positive presence on the internet

She regularly hosts events all over the world to help women with their personal body acceptance. She was named one of the top plussize models in the world by Vogue Italia; her career is spiralling wildly upwards, making history.



Gabi Gregg has a fashion and style blog, *GabiFresh*, which is based on rejecting fashion's "rules". She believes that people should reject the idea of dressing for their body type. After seeing the positive reaction to a bikini photo she posted, she went on to design a hugely successful range of plus-size swimwear.

Jacket: Maurices T-shirt: H&M+ Trousers: Forever21+ Shoes: Steve Madder Necklace: ASOS

Nadia Abhoulosn is a fashion blogger and designer from New York City. As well as modelling for American Apparel, Boohoo, and many other brands, she (and her blog) have been featured in many magazines including Teen Vogue. Along with Tess Munster and Gabi Gregg, she created the music video #everyBODYisflawless, promoting body positivity.

Dress: Posh Shoppe Shoes: Aldo Necklace: Aso:



had an overwhelming response, and are starting to embrace their bodies and show them off, instead of hiding them away.

Over the last few years, the high street has started to catch on to the vast demand for more interesting items, and many brands such as Asos, New Look, and Forever 21



to: kathastrophal.de

Kat hastrophal is a computer science student from Wiesbaden, Germany, who blogs about fashion, cooking, and craft in her spare time, considering it her own little corner of the internet. She is adamant that you can look and feel beautiful no matter what your oody shape is.

Blazer: Missguided Blouse: New Look Shorts: Dorothy Perkins Clutch: Asos Tights: Evans Ankle boots: Jana Shoes

have launched ranges that allow women to find the pieces that they want to wear, and let them have the freedom of choice of what to put on their body. While the choice doesn't come close to that of "straight fashion" (regular sizes), it's getting better every day, and there is much less shame associated with buying clothes in larger sizes.

But the world of high-end fashion is lagging behind. There is still discrimination among high-end designers and retailers, and while some are starting to welcome plus-size women as customers and models, the world of highend fashion largely remains an unfriendly and inaccessible place for





Photo: Girlie Show Photography

t's safe to say that the world of plus-size fashion is rapidly accelerating at an unprecedented rate. It's not difficult to see why. Over the last few decades the average size of women (and men) has increased. and regardless of the reasons why they're getting larger, people still need clothes.

So why is the fashion industry playing catch-up now, after years of swelling waistlines?

Historically, it has always been very difficult to find fashionable clothes in sizes above a UK 16. Most high street stores didn't stock larger sizes, and those that did only sold very plain, basic

items like dark stretchy t-shirts, as though there was no market for exciting clothes for fat girls. Any plus-size girl can list the set of rules that are ingrained in us by fashion magazines and clothing stores: "Nothing tight or body-hugging. No crop tops. No loud colors. No patterns. No horizontal stripes."

This doesn't leave much room for imagination and experimentation, leaving plus-size women no option but to cover up, and hide their bodies under swathes of dark fabric. Why have larger women traditionally been denied the opportunity to express themselves in this way

Inspired by plus-size fashion



bloggers, many women have started having the courage and confidence to embrace fashion, and dress more boldly. There is a huge body positivity movement, helping larger women who have always been ashamed of their bodies to accept themselves, and acknowledge that they are worthy of nice clothes. There is also opposition; many people consider this acceptance to be a promotion of obesity, or are even simply offended by seeing people proudly baring their rolls of fat and cellulite. Somehow, the world has been so conditioned to see thin as attractive that it is actively repulsed by anything different. With movements to stop discrimination

of race, gender and disability, why is it still seen as okay to look down on the overweight? Why is the general attitude of the fashion industry and the general public – that if you are not thin, you don't deserve to have glamorous clothing; you don't deserve to stand out? Luckily, these body positivity movements have millions of women all over the world

Celebrating the 1 500th issue of Felix

Callie Thorpe is a blogger from South Wales, who writes about her adventures and life in London. She originally started her blog to document her dieting woes, but now posts her outfits, offers bodyshame-free fashion advice for plus-size women, and writes about her journey to body acceptance. She has been featured in Vogue Italia, The *Times*, and has even participated in a television debate with **Channel** Four's Ion Snow.

Jumpsuit: Stories... by Kelly Osbourne

a larger woman. Plus-size women can enjoy fashion, but in the knowledge that these clothes are specifically "not for them". But although it's still rare, plussize women are beginning to be featured in magazines such as Vogue, and plus-size fashion weeks are springing up all over the world. It's a case of changing attitudes towards fat women, and people in general. When everyone, be they plus-size, disabled, transgender, or anything that they identify as, is seen to be as worthy of nice clothes as the waifs that traditionally grace runways, then the world of fashion will be truly inclusive and representative, as it ought to be.



to: fuzionmag.com

Chastity Garner is a plus-size blogger from Georgia, who blogs about her fashion inspiration and gives style advice. She started an online campaign against the clothing chain, *Target*, as she felt that plus-size women were treated as second-class customers. Following this, Target expanded their plus-size ranges significantly, one of which Chastity now models. She has been interview by *Vogue Italia* in a blog featuring ome of her best looks. She promotes plus-size fashion to create demand to drive the industry towards change.

"Many members of the public are even offended simply by seeing people proudly baring their rolls of fat and cellulite"

An interview with plus-size fashion blogger, Natashia Judge

atashia Judge is a blogger who constantly promotes body positivity and wants to spread happiness through pretty things. She also likes feminism, food and cats, and has hella selfie game. You can, and should, find her at teafortash.tumblr.com

Have you always been into fashion?

As a child I always felt uncomfortable about my body and

out of place and hid underneath baggy t-shirts and sportswear. As soon as I could afford to I started experimenting with clothing and found it helped me express myself. Throughout school and university my style was always very eccentric and colourful, and my goal was to enjoy clothing as much as I could. never fearing shapes or colours.

What inspired you to start posting vour outfits online?

I started using *tumblr* in 2011; I was in the final year of my photography degree and had a big collection of images that I had saved for inspiration. tumble seemed like the ideal outlet for me to share these and discover more. I slowly stumbled upon the fashion side, promoting body positivity and it was everything I needed but hadn't realised! I had spent my earlier years reading Flle avidly and never seeing anybody that looked like me; looking at people online now who had the same body type experimenting with clothing opened up my eyes, and gave me a wonderful sense of belonging and identity.

Why do you think it's important to see plus-size models represented?

I think representation is a crucial thing. It was so overwhelming for me to see people who look like me enjoying fashion and celebrating their appearance, because I had never seen that before and previously felt isolated as a fat woman who loved clothes. I think the media should aim to represent all sizes, races and genders, so that people who may feel isolated with their appearance or identity can see others that look like them and feel a sense of belonging and pride.

How do you feel about the negativity that many plus-size models face?

I find it incredibly disheartening, considering all they are trying to do is promote beauty in diversity. think it's important to try and rise



Photo: teafortash tumblr.com

above it, though, as personally I try to promote happiness and positivit and be a supportive person to people of all sizes. If somebody else feels their purpose in life is to tear others down, I would ask that perso to examine why and to understand that it won't help them.

Where do you like to shop?

My ultimate favourite retailer is Aso Curve. Their sizes are accurate, and they are bold and fashionable whilst still being affordable. I get very frustrated being told that I should only wear certain styles because I'm fat, and I feel like Asos Curve agree with me! I like Simply Be and New Look Inspire although they can be a bit hit and miss with sizing. I also wear larger sizes from brands such as H&M. Primark. Tesco and Asda. Sizes vary so much from store to store so I think sometimes it's just important to try things on and give it a go!

Is it difficult to shop for plus-size clothes on the high street?

It really is. A lot of stores stop at UK 16, and even stores that stock 18 or 20 often don't stock their

quirky clothing in those sizes. Evans have some exciting items on their website, but their stores are very plain and safe. I don't want a wrap dress or an oversized t-shirt emblazoned with the word Diva! Fat people want to look good, if you push the boundaries with your clothing we will come and buy it you only have to look at Gabifresh's sellout plus-size bikini line to see!

Why do you think that there's a lot less out there for plus-size men?

This isn't something I had realised until recently, I'm not sure whether it's because fashion isn't as orientated towards men or whether men are surprisingly self-conscious about accepting their bodies and enjoying clothing... either way, l think larger men should have more options of expression and shouldn't be afraid to embrace fashion!

What are your aims as a plus-size blogger?

To promote happiness, positivity, and love to people of all sizes, races, and genders and to help spread the message that everyone is deserving of respect, love and nice clothing!



House: A Post-**Mortem**

Om finne

Joshua Renken offers a final retrospective on this long-running medical drama

T f you have never watched *House*, I envy you. It is one of the most Inuanced and intelligent shows ever created, and there are 177 episodes for you to enjoy for the first time. In the eight years that *House* ran (2004-2012) it was distributed to over 60 countries and at one point had the highest worldwide viewing figures of any television series. While the idea of a new medical show for Fox network originated with Paul Attanasio, it was David Shore, credited as creator, who conceived the titular character that made the series so captivating.

The series centres on the life of Dr. Gregory House: a misanthrope if ever there were one. House is a drug addict who depends on Vicodin pills to manage the pain caused by an infarction in his quadriceps muscle five years prior. His reputation as something of a medical genius carries weight at Princeton Plainsboro Teaching Hospital, an institution headed by Dr. Lisa Cuddy (Lisa Edelstein). Leading a team of elite diagnosticians at PPTH. House takes on the cases that other doctors have not been able to solve, in an attempt to "diagnose the undiagnosable."

At the beginning of the show his team consists of Dr. Chase (Jesse Spencer), Dr. Foreman (Omar Epps) and Dr. Cameron (Jennifer Morrison), but the composition of his diagnostic team undergoes several changes. This chopping and changing of characters kept the series fresh in the fifth and sixth series, a point at which many shows begin to think about finales.

But really this show is all about House. The team primarily serve to create talking points for our troubled protagonist, who regularly probes into their personal lives in an attempt to understand his employees better; very attentive when it comes to the behaviour of his team, there is rarely something he misses. House expends a huge amount of energy avoiding his responsibilities as a doctor, so he has

time spare to mull over the patient's condition (they work case-by-case). gossip with Wilson about Cuddy and nvestigate into the private lives of his team. A stubborn and principled man who thrives on conflict, he believes that his employees will work best in a chaotic environment where they are constantly trying to outdo one another. With each batch of employees he quickly creates a competitive environment and under House's tutelage his fellow physicians learn to distrust what their patients say. He encourages them to stand up for what they believe and fight for their ideas. The team bend the rules if they feel that it is not in the best interests of the patient and often break into the patient's home without permission. Perhaps unsurprisingly, House's favourite mantra is

"everybody lies". Each week there is a new case, which House typically solves after a few erroneous diagnoses, but the team screw up regularly enough to keep you guessing. It is explained in the pilot episode that House is one of the best in the country at finding medical 'zebras' when other doctors are looking for 'horses'. He has a knack for solving obscure medical puzzles that most other doctors could not.

House is a series that regularly deals with contentious issues including rape, abortion, religion, faith, and adultery. The momentum of the show stems from the intriguing cases which provide a bottomless source of ethical dilemmas and thought provoking topics for the characters to debate.

Dr. House frequently reaches an epiphany when in entertaining conversation with his confidant and only friend Dr. James Wilson (Robert Sean Leonard). Wilson is the Head of Oncology at the hospital, and acts as a sounding board for House to bounce ideas off: in many ways he is House's conscience. House relentlessly mocks Wilson for caring so much about the people he treats,

"House was

one of the

first series

to put an

anti-hero

as the main

protagonist"



The cast of Season 4 of House Photo: FOX

in one episode knocking on Wilson's door and declaring, "I know you're in there. I can hear you caring." It is mentioned that Wilson has a Messiah complex; if true, then in contrast House has the Rubik's complex. He just wants to solve the puzzle. Highly manipulative in his relationships, House often tests those around him to find their breaking points. He loves to play mind games with Wilson, and the duo often prank one another, often escalating until Cuddy has to intervene.

House is a deeply depressed character with a very cynical outlook on life; for all his existence he has been an antisocial maverick genius who struggles to connect with people. With a penchant for medical puzzles, playing the piano, Vicodin, alcohol, and hookers, House is simultaneously immature yet perceptive in his conclusions about life. He reacts on impulses and is only selectively rational. He strongly believes that people are purely self-interested, that everybody lies, that religion is a joke and that thoughts don't matter. Only actions. He thinks there is no objective purpose to life and dismisses the lives he saves. It is through his solving of medical puzzles that he attempts to find deeper meaning, but he describes the lives he saves as "just collateral damage.

This series gets darker as House's behaviour becomes more extreme He is always unstable and the people closest to him, Wilson and Cuddy, are in constant fear that he will go off the rails. They try to provide an atmosphere where House is given enough freedom to do his best work as a doctor, but not so much that he kills

rating the 1600th issue of Felix



Photo: FOX

himself. Forever popping Vicodin pills in his mouth as though they were tic-tacs, in later series House begins to blur the boundary between physical and emotional pain, at one point justifying his substance abuse to Wilson by saying, "the pain doesn't discriminate and neither do the pills His actions become more radical and lead to stints in both a psychiatric hospital and a prison. It would be fair to say that *House* is more of a meditation on misery or a deep character study of a compromised genius than it is a medical procedural drama.

House himself is an enigma. His brain means everything to him and he has recognised that solving obscure medical cases somehow lessens the chronic pain in his leg as though he were too busy with the puzzle to think about his physical vulnerabilities. While House portrays himself as very lazy, he often goes out of his way to prove a point or be in control; he rarely takes the path of least resistance and is always his own worst enemy. House is reluctant to form relationships because it makes him vulnerable and is constantly evading and deflecting in conversations. He tends to make light of morbid situations and never fully opens up to communicate honestly with those around him. This means that despite his inner demons, House is often very funny.

Forever trying to escape his clinic hours – where he actually has to meet patients face to face – House also generally avoids visiting his non-clinic patients, since he believes that removing emotional biases and keeping objectivity makes him a better doctor, an opinion not disproved on the show. The short clinic scenes, however, provide light relief and make great use of Hugh Laurie's comedic sensibilities – the series will make you laugh more thank you might think, largely due to the hugely satisfying 'Houseisms' that grace the series. In one episode an inspector remarks, "Dr. House, I've heard your name," to which he replies "Most people have, it's also a noun." In one confrontation over a colleague, House tells Cuddy "I don't want to say anything bad about another doctor... especially a useless drunk."

House has an uncanny ability to 'read' people and diagnose their ailments simply by looking at them; this talent is just one of the many similarities between House and the fictional detective Sherlock Holmes. House's intelligence, deductive reasoning skills, social awkwardness and powers of observation are near identical to Sherlock's. Furthermore, both House and Sherlock play instruments, take drugs and have one true friend (Wilson/Watson). House even lives in flat 221B, essentially making the series a modern day Sherlock, albeit with a medical degree.

It is often the case that actors do a great job in their roles, and it is easy for the compliments made



The cast of House (L-R): Jesse Spencer, Olivia Wilde, Hugh Laurie, Robert Sean Leonard, Lisa Edelstein, and Omar Epps Photo: FOX

about their achievements to lose their punch, but it has to be noted that Hugh Laurie puts in a truly mesmerising performance as House. As discussed above, the titular character is one of the most nuanced and demanding parts that has ever been played on the small screen, and Laurie delivers in full.

Hugh Laurie has said that when he first read an early sample of the script he instantly felt that he understood this cranky doctor. Assuming that, due to House's personality and conversational style that, he was planned to be a "quirky" side member of the cast, it came as a surprise to Laurie that House's life, work, and opinions were in fact the whole foundation of the show.

David Shore explained that when he and others got hold of Laurie's five minute audition tape, one of the executive producers said, "See, this is what I want; an American guy." This is impressive in itself, but even more so when you consider that Hugh is in fact about as quintessentially British as it is possible to be.

The rest of the cast put in a universally top rate performance and the quality of the writing never dropped. The scripts remained as witty and thought provoking as they were at the beginning, an incredible achievement when you consider the sheer number of episodes.

This series was nothing if not bold, being one of the first television series to put an anti-hero as the main protagonist. Before the turn of the century the vast majority of leading men and women were depicted as moral supermen. *House* wasn't the first, but it was certainly one of the very best shows to embrace the idea of having a leading role that on paper the audience should dislike, if not actively hate. House's character was a controversial figure. steadfastly holding views that were not all that popular and often taboo But the show's success has led to the

mainstream adoption of this new direction for television: we have seen a huge influx of more conflicted damaged and all round realistic central performances ever since House's premiere way back in 2004 The quality of television has never been higher than it is now and House is one of the shows that forged the path towards this exciting new era.

When the producers announced that the eighth series was going to be the last, fans were not demanding for the show to continue – instead, many of them were appreciative. Despite adoring the characters and the concept, the audience recognised that it was time for people to move onto new projects. Millions of people were heavily invested in House and wanted closure. Some went as far to say that *House* should not have continued past the sixth series, as it had lost its freshness and sense of humour. Regardless, the show's commitment to character development gave House a limited shelf life.

The pilot episode was titled 'Everybody Lies', a phrase that is uttered countless times throughout the eight seasons that make up this nuanced medical procedural drama; the final episode was appropriately titled 'Everybody Dies'

A hospital whodunit with a twist. House's enlightened cynicism and addictive tendencies made him an endearing character that you empathise with. This series was amongst the most thought provoking and intelligent pieces of television in recent history and there is over 125 hours of it to experience. All told, *House* was a hugely successful and influential medical drama that deserves to be watched. Even if its ideas are never executed to the same exceptional standard, House's television legacy will be felt for a long time to come.

All eight series of House are now available on Netflix.

one of the shows that forged the path towards this new era of TV"

"House is

Om inre

issue of



ICTV? In my West Basement? It's more likely than you think

ICTV's output may have peaked with the release of *High Hopes go to the Brit* Awards, a show in which two students snuck into the backstage area of the Brits to harass Lionel Ritchie, Damon Albarn and some knob from the X-Factor, but you may not have heard that they've also been putting out a load of short films this year. Pete Brook takes us a few of the year's highlights...

The Archivist



o firstly, *The Archivist*, a short lreamy thriller, and – full admission – my own film. I wrote the first draft about a year and a half ago, we shot it March 2014, and finished editing, colour grading and sound mixing in October 2014. It was first publicly shown as a part of the London Short Film Festival in January this year and sitting in the back row of the Hackney Picturehouse I felt like I was going to implode. I don't like watching my films with an audience at the best of times but

this time was terrifying as every other film in the programme had a big budget for a short film, probably in the order of thousands of pounds. Mine didn't have a budget and was shot in the pre-redevelopment West Beit basement and an abandoned office kitchen we managed to sneak into over a weekend.

The Archivist is a film that follows a few days with a news video archivist who, whilst ingesting old footage, starts seeing himself in the background of old spools of film. A

spectre of a reporter hangs over him with a grudge and starts playing odd mind games with him.

Without ICTV's old decrepit studio I'd have had no place to shoot, and without the crew I was able to find we wouldn't have had the opportunity in the first place. The three days shooting was simultaneously the most stressful and fun time I've had here, and I'm really proud (probably too proud) of what we all made together

The Archivis

Writer, Director and Co-Editor: Peter Owen Brook Cinematographer and Co-Edito Jamie Topp

Starring:

Ross McNamara Lilly Brando Roseanne Lynch Paul Cosmo

Sound and Music Sam Dudley

Crew:

Kelvin Choi Nathan Barker Nick Farmer Cem Hurrell Fahdi Kanavati Aleksander Pacnik

The Archivist is available to watch on YouTube now.





ost in Transbola was the winner of ICTV's 48-hour film competition, held in October. The rules were to make a film that was set at the end of the world, including the phrase "This is how I die" and an example of dramatic irony, a technique whereby the audience knows something the characters don't A comedy about a germophobic

Nuisance



ahdi Kanavati has been an ICTV regular for the last year; a filmmaker who's had his shorts shown at the Cannes Film Festival. Kanavati is committed to making great, fun films – at the expense of his PhD, fingers crossed his supervisor doesn't read Felix.

Nuisance is a dark comedy about a studio engineer who is forced to record a flautist who he thinks is terrible, only everyone else disagrees his boss thinks he is great; his girlfriend thinks he is great; only

he can hear the true awfulness of this flutist's sound. He is constantly followed about the maddening flutist until it starts to destroy every aspect of his life

Kanavati, a man of many talents, both wrote and directed this film; he found the crew – both newbies and old hands – at ICTV's regular film crew meets, and we utilised sets available in the media basement and elsewhere. Film-making can often be a gruelling task, where anything that can go wrong, goes wrong; in this case

it was impossible to get all the cast for long enough meaning that not all the actors could be in the final scene at the same time. However using his ability with after-effects, and a canny shooting technique, Kanavati managed to overcome this issue. The ability to overcome the odds no matter what happens is surely the sign of a great director

I asked him for a quote about this film and he unhelpfully replied: "Yes, without ICTV the film would only have ended up being in stick figure

drawings. It was written for after effects."

Thanks Fahdi, we appreciate the endorsement

Nuisance

Writer, Director & Editor Fahdi Kanavati Music: Sanha Lee

Script Supervisors: Diljot Grewal, Don Ma

Starring: Tiberiu Chis Max Falkenberg Mcgillivray Jonathan Masters Sophie Stromback 1st AD: Ferogh Ishan

Camera Operators: Alex Ionnou + Ferogh Ishan Lighting Coordinator: Don Ma Sound Technician: Vanya Zheludev

Nuisance is now available to watch on YouTube

Lost In Transbola



tourist who comes to London and learns about an Ebola outbreak, *Lost* in Transbola was a comedic highlight of this year's programme. The tourist desperately tries to cross London to meet her brother while encountering the worst place for a clean-phile in London: the underground.

Although this was a first attempt at filmmaking for many of the students involved, it really doesn't show. As

Station Manager of ICTV, it is really exciting to see new students come through and produce something. especially when it's done as well as this, and generates a few genuine belly laughs!

The director Oli Bauer is currently working on a comedy about 3 students who steal the waxwork of Tony Blair from Madame Tussauds after a drunken night out; it will be

shooting in the next few weeks, so keep a look out!

What this film shows is that if you have an idea and make the effort to write, shoot, and edit, it doesn't take much experience to make something truly great. If you want to get involved please send a message to ICTV@imperial.ac.uk, and we can put you in contact with the people making the next production

Lost in Transbold

Sister: Lucy Luo Brother: Joseph Huang TV Presenter: Ferogh Ishan Director/DOP: Oli Bauer Producer/Audio: Jonathan Masters Chief Editor/ Scripter: Ivan Zhelude

Lost in Transbola is available to watch on YouTube.

OTHTEL

issue of



House Of Cards Series 3: Worth the wait, worth your weekend

Joshua Renken gives a brief overview of the latest 13-episode instalment of the hit US web television series. In short: less sex, more politics



Francis Underwood (Kevin Spacey), Claire Underwood (Robin Wright), and Doug Stamper (Michael Kelly) in Netflix's House of Cards Photo: Netflix

Warning: this review contains spoilers

fter a year of waiting, the much anticipated third series of House of Cards has finally reared its head. The 13-episode season was uploaded to Netflix at 08:00 last Friday, and no doubt millions of people decided to spend their weekends binging on the web television.

This new series was always going to be rather different to the previous two, because Frank's position has fundamentally changed. Before the end of the last series he was constantly on the offensive, fighting tooth and nail to take down Walker and snatch the top spot for himself. But now that Frank and Claire have achieved what they set out to do, it is

"No doubt millions of people spent their weekends binging on the television series"

now a case of maintaining the power and winning popular support with a view to the upcoming 2016 election. This new season picks up three months after Frank's swearing-in as president, with less than two years before the next election: since Frank was never voted in by the public it will be an uphill struggle to make his short time in office count so that he has something to present to the American electorate come poll time. Frank's big policy is the 'America Works' job programme that will spend \$500 billion to find jobs for every single able-bodied person in the country. Mr and Mrs Underwood are acutely aware that public image is everything, and they must focus their efforts on quashing the campaigns of other democratic presidential

candidates – it's not paranoia if they really are out to get you.

It may sound like a strange comment to make about House of *Cards*, but this new series is very, very political, with strong parallels between the political landscape in series three and what is going on today. The politics extends beyond domestic policy and reaches as far as Russia and the Middle East. President Petrov (Lars Mikkelsen), effectively a carbon copy of Vladimir Putin, mirrors the situation we see today they discuss actual events such as rising Middle East tensions and the Pussy Riot protests, while creating a fictional gay rights activist whom Carrie is trying to get released in Russia. These meetings between Underwood and Petrov are the most

"The politics in season 3 extends beyond domestic policy, reaching as far as into Russia"

thrilling in the series, and means that House of Cards has a very real-world sting in its tail.

One of the starkest differences in this series is the frequency with which Frank swears. This might seem like a small detail, but it makes a real impact in the dialogue. Most of the swearing is delivered within a threat or in one of Frank's angrier fourth wall breaking monologues.

In one tense discussion with another democratic presidential candidate. Frank ends a phone call with this splendid bit of prose: "I have only one thing to say: go fuck yourself." He then turns to the camera and explains "Christ that felt good". In the next monologue, Frank declares that his opponent "can go after me but if she goes after Claire

I'll slit her fucking throat in broad

Celebrating the 1600th is



Arch-manipulator Claire Underwood, played by Robin Wright, in Netflix's House of Cards

daylight." You'll probably agree, there's a tad less poetry to this than the prose Underwood used to share with the audience in seasons past. It is also true that in this series Frank's straight-to camera monologues are altogether less grandiose than his early soliloquys. Less wisdom is imparted and instead Frank's mood and opinions are more commonly vented through discussion with Thomas Yates (Paul Sparks), the popular novelist who the president entrusts with writing his autobiography. Yates is an interesting addition to the ensemble of connivin politicians and his interactions with the presidential couple give the series some extra momentum and intrigue. One of the greatest issues with House of Cards is that the series does not attempt to reveal anything about why the Underwoods are so hell bent on the acquisition of power, but Yates begins to ask the questions that the

"House of Cards never reveals why Underwood is so hell bent on acquiring power"

audience want to know about.

The latest episodes do a better job than the second series of making each plot strand equally attention grabbing. Doug's storyline is more stimulating this time round and you even take an interest in the guinea pig wielding cyberterrorist. Despite this, his departure from the show would still be welcome, as to allow the writers can distil House of Cards down to the essence of what we really care about: Frank, Claire, their relationship and the presidency. In that order

Speaking of the relationship petween Frank and Claire, this is the central theme that this series will be remembered for. The cracks are appearing as the pressure of high office takes its toll on the couple and the final episode leaves their delicate relationship on a cliffhanger. There is no doubt that this series puts to bed one of the biggest issues with the previous two series, which was that

Frank seemed to be able to glide over all problems with unrealistic ease. Now he is noticeably more troubled and has met worthy adversaries and truly challenging obstacles. The situation seems much more critical than it did in the first 26 episodes, as we are exposed to the ugly reality of the American Presidency.

As with the previous series, there is no shortage of 'what the fuck?' superficial shock factor moments that House of Cards so regularly employed during Frank's rise to power. These short scenes once again do nothing for the overall storyline and come across as a lazy attempt at character development. Despite this, House of cards is nothing if not confident in its execution; the performances are first rate and Spacey continues to own his character with exacting standards, while also subtly indicating the monumental strain of high political office

This series marked a change in the dynamic, and felt like a more realistic representation of Washington politics – a darker

"Season three is another eleven hours of delicious drama that doesn't disappoint"

West Wing. Frank's formidable and principled democratic opponents also demonstrated an attempt to stop painting all politicians with the same brush. Sure, Frank's evil. Sure, Claire's evil. But not all politicians are that morally bankrupt.

Series three is slightly less addictive to watch than the first two seasons, probably because the chase is up and now it is about staying in control. There is still plenty of scheming, but it is more reactive than proactive. Nevertheless, series three is another eleven hours of delicious drama that doesn't disappoint. It's a bit of a slow burner at first but becomes more nail biting than ever as it crescendos to the peak, with more than a whiff of Shakespearean tragedy to it.

The two previous series set a high bar and season three is doing a remarkable job when you consider the audacity of the project. After all, what greater stage is there than the Oval office?

House of Cards Season 3 is now available on Netflix



Francis (Kevin Spacey) and Claire (Robin Wright), in House of Cards. They're probably plotting something Photo: AP/Netflix

Celebrating the 1600th issue of Felix



FKA twigs, Feminism, and Female Sexuality on Video

Fred Fyles compares the different approaches FKA twigs and Sia take when it comes to their controlling their public image in music videos

ast month, in her debut at London's **Roundhouse**, British auteur **FKA twigs** brought her unique vision to a crowd of 3,000. Entitled Congregata, a latin word for 'gathering', the two hour spectacle saw twigs put her indomitable singing and dancing talents to good use; she vogued alongside a dancer in fishnet stockings, was tossed up in the air by burly men with topknots, and changed outfits whilst contortionists kept the crowd entertained. It's a far cry from her London debut. which took place at Hoxton's **Courtyard** Theatre, a little less than a year ago, in front of an audience of just over 100. While at the Roundhouse she was front and centre, at the Courtvard she was kept shielded from the audience by a swirling mist, through which you could make out the petite figure who has become one of the most important voices in the British music industry. What was kept constant between the gigs, however, was her sheer gratitude at being able to perform; at the end of *Congregata*, twigs breaks character, telling the audience in a breathy voice that can barely contain its excitement how happy she is to be there. As if any other outcome were possible.

As twigs has become more and more popular, her presence in our visual landscape has become nearly inescapable; if you don't spot her staring you down on the Summer 2014 issue of Dazed Magazine, her backcombed hair making her look like she's been plugged into an electrical socket, you'll see her looking out at you on a tube advert, a crimson mark covering, like some form of stigmata, a face photoshopped to look like porcelain. Of course, with her relationship with Robert Pattinson nearing the 6-month mark, you are even sure to find her gracing the Daily Mail's 'Sidebar of Shame' every now and then

While such visibility seems near-inevitable in our social media, instagram-as-verb, post-panoptic world, Australian singer Sia has managed to take a different approach; while acknowledging that promoting her sixth album 1000 Forms of Fear necessitates the required media



FKA twigs looking bug-eyed in her video for Water Me, from 2013's EP2 Photo: YouTub

"While such visibility seems nearinevitable, singer Sia has managed a different approach"

circuit of performances, photoshoots, and interviews, she has remained wilfully – and delightfully – obtuse in how she chooses to present herself. In what could be described as a publicity stunt, but really deserves the title of performance art, Sia has refused to show her face whilst performing for the last year. Instead, she has put the spotlight on Maddie Siegler, a 12-year-old dance prodigy from the TV series *Dance Moms*; Siegler takes centre stage alongside a range of celebrity cameos, from Lena Dunham to Kristen Wiig, while Sia turns away from the audience, her shoulderblades shuddering as she exercises her fearsome vocals. Like anything on the internet, if you want to see her face that much you can google it, but Sia's damn sure not going to present herself up to you willingly.

Siegler has become some sort of an avatar for Sia, the precocious preteen presented as a public face for Sia's music. In the video for 'Chandelier', Siegler flings herself around a dilapidated apartment, twisting and contorting her face into "FKA twigs' video for Pendulum is erotic, sensual, and achingly beautiful"

The steamy, sensual video for FKA twigs' Two Weeks, from 2014's LP1 Photo: YouTube

gruesome configurations, while in Elastic Heart' she dance-fights with Shia LaBeouf in a giant cage. Instead of presenting herself as a visual object, Sia subverts the audience's expectation, delivering instead a piece of carefully choreographed performance art. What makes her decision – prompted, she says, by a desire "to not be famous" - all the more interesting is the fact that for all previous albums she has done she has shown her face quite willingly. You only have to go about halfway down the first page of YouTube results that pop up when you search 'Sia' to find ner face: a video of a 2007 SXSW performance in which she addresses the audience head on, telling them in an excited voice that they were "radical". So what changed? Perhaps the songwriting interval between her fifth and sixth albums, during which time she penned 'Pretty Hurts' for Beyonce and 'Diamonds' for Rihanna. gave her the opportunity to get used o eschewing the limelight.

In terms of music videos, twigs seems to stand in direct contradiction to Sia: while Sia's rise to fame has led to her shielding herself from the public, as twigs has become increasingly popular, she has chosen to reveal herself more and more. In 'Hide', for example, one of the first singles from her excellent debut EP1. she is only visible from shoulders to knees; wiggling around to the beat of the song, she tenderly caresses an anthurium, clasped between her thighs, whose phallic spadix thrusts upwards. Even when she first decided to reveal herself to the world, she used technical trickery to add an uncanny valley element to her image; on the cover of *EP2*, her neck is subtly lengthened, and in the video for 'Water Me', the lead single from that release, twigs' already wide eyes are enlarged, until she resembles something not-quite human.

As time has gone on, it seems that twigs has become more comfortable with revealing herself: covered in glitter, she is simultaneously strangled and caressed in her video for 'Papi Pacify'; sitting upon a throne like an ancient Egyptian goddess, she is surrounded by an army of mini-twigs who krump and Maddie Siegi Kevin Mazur gyrate, in the 'Two Weeks'. In her most 'Pendulum', p off her stellar is hung, nearl ropes braided world away fn the video is er just heartbrea slowly unties she has create over her skin and imprints knots, until s waist-length to liberation. What sets t of female sex her contempo that her video aspirationalis their own, an by mental as desire. To ma Beyonce's vid most overtly fifth album, a entire oeuvre, of consumeri Beyonce is ex

Celebrating the 1600th issue of Felix -



Maddie Siegler and Sia Furler at the 57th Grammy Awards, held earlier this year Photo: Kevin Mazuria/Getty Images

gyrate, in the Nabil-directed video for 'Two Weeks'.

In her most recent video for 'Pendulum', possibly the best track off her stellar debut record *LP1*, twigs is hung, nearly nude, from a set of ropes braided from her own hair; a world away from *Fifty Shades of Grey*, the video is erotic, and sensual, and just heartbreakingly beautiful. As she slowly unties herself from the bonds she has created, the camera glides over her skin, taking in the grooves and imprints caused by the tight knots, until she is completely free, her waist-length hair flying like a tribute to liberation.

What sets twigs' expression of female sexuality apart from her contemporaries is the fact that her videos lack a sense of aspirationalism; they stand on their own, and are contextualised by mental as opposed to material desire. To make a comparison: in Beyonce's video for 'Partition', the most overtly sexual piece from her fifth album, and perhaps from her entire *oeuvre*, we are shown a world of consumerism and wealth. Sure, Beyonce is expressing her sexuality.

"Both artists have complete creative control over how they present themselves" allowing herself to be transformed into an object of desire, but we are also meant to covet other features of the video: the manor house with extensive grounds, through which a limousine slowly prowls; the bowls of fresh fruit at the breakfast table. presumably arranged by the highfashion maid; the wide array of luxurious lingerie, most of which is encrusted with jewels. In 'Partition', Beyonce explicitly presents us with an array of objects that scream 'wealth'. and thereby implicitly makes a direct connection between capitalist and sexual desire. In contrast, twigs' videos seem divorced from time and space, instead presenting themselves as mere fragments of her overactive imagination; for her, the context for the videos is her own mental space, as opposed to anything that exists in the physical realm. twigs allows us the opportunity to look inside her fantasy world, but not to inhabit it. There is also a key difference in how

There is also a key difference in how Sia and twigs place themselves within their own songs: twigs takes herself as the starting point, creating music that seems as personal and specific as someone's diary, whereas Sia tends to

- as her choice of presentation would suggest – lose herself with a crowd. In 'Big Girls Cry', for instance, Sia speaks about her experiences of loneliness – "I come home/on my own…I may crv ruining my make up...and I don't care if I don't look pretty" – before she bursts into the chorus, exclaiming over crashing drums and icy synths how "big girls cry when their hearts are breaking". She explicitly aligns herself with a general group of people who have gone through similar pain, thereby allowing her song to strike a chord with individuals whilst maintaining a sense of generality.

twigs takes a different approach, sticking - almost aggressively - to the deeply personal. The nature of her lyrics make it little surprise that the most commonly used adjective to describe her music is "intimate". In 'Pendulum', for example, the lyrical closeness is offset by the cavernous spaces between beats, which allow twigs to open up to herself, as she confesses the extent to which she yearns for another: "I've got time but you're tired of waiting/you only want me in open spaces/come fill your gaps with people/I know no-one" she sighs, in a heartbreaking paean to unfulfilled desire. Similarly, in 'Lights On', she achingly sings of her fear of connections: "I shy away in my mind/in hopes that I could share this place with you...when I trust you we can do it with the lights on". Is she exploring bodily insecurities she experiences when becoming intimate Or is she despairing at her issues with trust, her inability to reveal her secrets to a confidant? Either way, she is treating her music as a confessional. bravely whispering her innermost feelings into a microphone. Like Sia, she manages to produce music that

"It is up to trailblazers like Sia and twigs to try and change things in the music industry" connects with many, but looks inward as a starting point.

While the two musicians may have diametrically different approaches to how they choose to present themselves, what they have in common is an unbending refusal to allow themselves to become a pawn in another's game. They both have complete creative control over how they present themselves, something that is rare for any woman, let alone those in an industry that is as obviously sexualised as the music business. Speaking in 1982 about how her record company had presented her in the promotion of her debut LP The Kick Inside, Kate Bush said: "The media just promoted me as a female body. It's like I've had to prove that I'm an artist in a female body".

Sadly, it seems that little has changed; women are still presumed to be unable to create great music without having a man behind them, a fact lamented by musicianextraordinaire Bjork in a recent interview with *Pitchfork*.

It is therefore up to trailblazers like Sia and twigs to try and change things. Their approaches towards what they do with their bodies and their images are completely different. but that's ok: in a complex world that is getting more and more convoluted every day, it is not my place to say which approach is better, or even to try and suggest that there is a 'better' approach. All I can do is be thankful that we have such artists, who will go to any lengths maintain an autonomous control over their image thereby protecting their creative visions; it is these visions, these vital, meaningful, unapologetically confident visions, that we need most right nov



FKA twigs' erotic video for Papi Pacify, from 2013's EP2, which saw her being strangled by a male dancer Photo: YouTube



Jazz: A Revolutionary Chapter In Music

Kunal Bhanot explores what the term 'jazz' really means to us today



Credit: Pablo Records

ook up the word 'jazz' in the dictionary and you come to find a whole host of definitions ranging from "a type of American music with lively rhythms" to "meaningless or foolish talk" or indeed anything in between. If we stick with the former definition, jazz could be assumed to have its roots in ragtime music, whereas with the latter we are left to question whether jazz should be confined to a sole genre within the realms of music. Some of us, for instance, imply that 'jazzing' something up is the process of making it more interesting. Be it in a musical sense or not, jazz fundamentally reflects the art of spontaneity, an art that gained popularity at the beginning of the 20th century.

This is not to say that master improvisers did not exist in the 1800s: quite the opposite in fact. The likes of JS Bach were known to perform encores lasting for hours with no written music in sight. Come forward 100 years from this and you'd still find the likes of Liszt altering Chopin's themes to his own liking, albeit angering him in the process. Based on our earlier definitions we could therefore argue that jazz has its roots in classical music even though the improvisational art form

"Many

classical

of today

lost the

essence of

creativity."

have

musicians

was hindered by the dominance of compositional music at the time. What is it then that has led us to believe that jazz was born in the 20^{th} century with ragtime? For me, it lies with the fact that ragtime was a form that allowed musicians to congregate and perform with fewer restrictions that written music may have unintentionally placed on them. It comes as no surprise that musicians who were unversed in reading music formed the foundation of this 'birth'. Their musical ideas were largely developed through the process of combining western harmonic ideas with traditional African rhythms. A main theme may have been evident, such as that in Joplin's 'The Entertainer', but this could be altered in numerous ways. akin to traditional call-and-response drumming rhythms found in early African music. The regular use of syncopation in ragtime gave a taste of what was to come – greater freedom in expression, be it rhythmically, melodically, or harmonically. There is a reason, however, that

There is a reason, however, that written music had prevailed for so long. After all, the sense of familiarity in a melody or harmonic structure gives music its appeal, one could argue. This is certainly true to some extent; a melody that is memorable gives a piece of music a sense of identity, but repeat an idea for too long and you'll soon find the listener in a state of boredom. On the other hand, if you're presented with a particular melody but don't return to it, you leave finding yourself uninterested, no matter how brilliant the compositional or improvisational techniques used. Jazz has lessened the degree of predictability in music and has given way to innovations in music that leaves the listener wanting more. Where a Beethoven symphony may be satisfying to listen to multiple times, we subconsciously learn that the motifs within the piece will not change whether it is played today or tomorrow

The only varying factor in the performance is the technical ability of the performer and his or her emotional interpretation of the piece. This is one aspect of classical music that has remained unchanged for many years, and perhaps 'jazzing' it up from time to time wouldn't do it any harm. As talented as they are, many classical musicians of today are so intent on achieving technical perfection that they lose the essence of creativity – something that Chopin and his contemporaries seemed to have in abundance.

The pursuit of technical excellence

is a noble one however – a lack of proficiency on your chosen instrument could quite easily lead to a lack of expression. Great jazz pianists such as Bill Evans were classically trained from the beginning, which gave them a technical foundation that comes through so beautifully in their Jazz playing. This leads me to talk about Oscar Peterson – perhaps the most technically gifted jazz pianist ever to have lived. It is a well-known fact that Peterson would sit at the piano from 4 to 6 hours a day, with a large proportion of this time devoted to technical advancement through meticulous attention to scales and arpeggios.

What he did so well though, contrary to many accomplished classical pianists of today, was challenge himself musically with these technical exercises. The result of this was a breath-taking display of virtuosity and creativity that wowed audiences across the world. From his freakishly fast runs down the piano, to his subtle reharmonisations of popular standards, Peterson was a fine example of how jazz gave musicians an extra dimension to their playing. The art of improvisation would give great jazz musicians such as Peterson the ability to let their emotions fuse with the music, which in turn gave every performance its own unique touch. For Peterson, this stayed true throughout his life, as an unfortunate stroke in his later years did not prevent him from performing solely with his right hand. In fact, many (including myself) would still argue that a one handed Oscar was better than his two handed contemporaries!

So the 20th century certainly saw jazz's rise in popularity. Whether it was the two-step genius of Scott Joplin or the unparalleled virtuosity of Oscar Peterson, jazz gave rise to a greater degree of spontaneity in music. Where is jazz in 2015 then? In a good place, it seems. I was fortunate enough to see Cuban trumpeter Arturo Sandeval at Ronnie Scott's recently, only to be stunned by his wonderful command of his instrument across a wide array of styles, ranging from modern funk to traditional Cuban folk. Based on this, jazz could almost be considered to be too broad to be a 'genre' as such. Instead, we should look at it as a licence to express oneself, even if it is in the context of Bach's counterpoint melodies written many hundred years ago.

"Peterson

was a fine

example

jazz gave

an extra

to their

playing."

musicians

dimension

of how

No matter what your trade as a musician, keeping things jazzy can only be a good thing.

Belly Dance showcase http://tiny.cc/belly



N

Thursday 19th March Metric, 8pm






UNION CONCERT HALL STUDENTS £6 / NON-STUDENTS £8 WWW.MERRILY2015.COM WWW.MERRILY2015.COM WWW.MERRILY2015.COM Celebrating the 1600th issue of Felix

Live by the fringe. Die by the fringe.

Grace Rahman takes us through the five best bangs in pop music

Long before Kate Moss brought the fringe back into the mainstream in 2007, these indie babes were rocking some seriously visionimpairing styles. Forget Cara Delevingne; where we're going there are no eyebrows. It's not about seeing the audience anyway, as long as they can see your fringe and you can see your guitar, and the rain doesn't hit it, you're away.



Lily Allen at the 2007 BRIT Awards. Note how the gaudy bow draws attention to her razorsharp barnet. Credit: Press Association

Klara Söderberg

2 It's well known that the more dominant sister in **First Aid Kit** commands attention through fringe presence alone. This eyelid skimming look is teamed with mermaid length in the rest of the hair, which can only be achieved by constant attention. It might not look like it, but this woman is braver than all of us; she is a genuine hair's breadth away from total blindness. A small price to pay to sell out the Royal Albert Hall.



Arguably leading to a whole era of indie chicks running down to Headmasters clutching a copy of the *NME*, Lily Allen circa 2007 starts the billing with her heavy set, statement bangs. They start high, making them a real commitment; when it starts sticking to your forehead two days into Glastonbury, all the Kirby grips in the world aren't going to stop this mother from flowing free. Add hoop earrings and sing in a mockney accent to disguise the fact that you actually went to Bedales.



A fringe can be difficult look to pull off when your head slopes majestically like a Swedish mountain peak. Klara clearly has no fear. Credit: Micke Bayart



Button nose? Check. Doe eyes? Check. A fringe that can kill a man without a second thought? Fucking check. Credit: Coup de Main



By What was the boldest thing about Natasha Khan's (AKA Bat for Lashes) cover for of *The Haunted Man* in 2012? Was it the naked man she had in a fireman's lift, whose skinny limbs were only just covering her modesty? The shift in her musical style from sweet, feather-and-unicorn-inspired folk to a darker, much more grown-up chamber pop? No, it was that blunt fringe and bob combo that really filled column inches.

Kate Nash

Back in the days (and fringes) of Myspace, relationships could be made or broken by the order your mate decided to put you on their friends list. So too, could careers, and when veteran fringe Lily Allen put Kate Nash at number eight on her list, she was instantly catapulted to stardom. The twee-as-can-be debut *House of Bricks* aided this endeavour, as did her fringe. Nash has had quite a style change of late; her last record saw her favouring a '40s quiff or perfectly rollered fringe; but back then she was the indie archetype: naturally ginger with a scruffy side-swept fringe – the ultimate in low-maintenance.



Like the existence of aliens and the Bermuda Triangle, VV Brown's fringe is a mystery. Does it curl over or under? We will never know. Credit: Capital Records



Like a carefully constructed bird's nest, this fringe may appear messy, but has a structure all of its own. Bow down, bitches. Credit: Creative Commons

VV Brown

5 When it comes to the evolution of fringes, few women have achieved what VV Brown has. Much like the total overhaul of her 2009 debut sound, her image (read: fringe) has changed dramatically. Her 1950s pin-up fringe was epic and perfectly suited to the sickly sweet 'Shark in the Water'. Not just a structural achievement, but with flicks and attitude, it was a fringe of the moment. Then in 2013 she emerged with a new album and look. It had higher aspirations than the first; the retro bangs had been replaced with a staple choppy style and with cheekbones that high, she simply couldn't go wrong. Celebrating the 1600th issue of Felix



Fred Fyles takes us on a tour through the history of the early pioneers of electronic music

ecently, an image has been widely circulated on Twitter, K widely circulated on 1 Leeds 2015 lineup would look like if all the male-only bands were removed. Published by the music blog Crack In The Road, it makes for a grim indication of the modern music industry: a wealth of band names has instead become a sea of vibrant yellow, like an garish alarm warning us, "there is a problem". This year, 89.6% of the festival's lineup consists of solo men, or all-male bands; remarkably, this isn't actually that bad – feminist organisation female:pressure, a collective of musicians and artists pushing for equality, have stated that "nowadays, a 10% proportion of female artists can be considered above average". Although we are now 15 years into the new millennium, it seems that festival organisers, music promoters, and – indeed – many arts journalists are still stuck in the last century. However, this isn't seen as a

problem by Melvin Benn. Current managing director of Festival Republic, the UK music promoter who organises Reading and Leeds festivals. Benn has denied the idea that music festivals have a problem with women artists. "The idea that female bands are sidelined is just not there," he said to *Gigwise* earlier this year. "Gone are the days where a band was four guys. It's genuinely gone." And so why does his festival only

feature 3 women-only acts, out of a lineup of nearly one hundred? Many defenders of such practices

have argued that there is an inherent problem with the genre of 'rock' as a whole, and festival promoters can't feature woman-lead guitar music if there simply isn't any. Aside from the fact that there are innumerable incredible women guitarists working currently (Annie Clark, anyone? Anna Calvi?), such an argument just reminds me of defences of Rockism, that mating call of the *NME* journalist that strives for 'authenticity', only insofar as that translates to 'white, straight men with guitars'. In his seminal critique of this industry bias, The Rap Against Rockism, journalist Kelefa Sanneh argued that Rockism actually amounts to little more than an excuse for sexism, racism, and homophobia. "[Rockism] reduces Rock and Roll to a caricature, then uses that caricature as a weapon... could it really be a coincidence that rockist complaints often pit straight white men against the rest of the world?"

When it comes to how the music industry. I feel that Benn would do well to listen to actual female musicians, such as Icelandic artist **Bjork**; in an interview with *Pitchfork* earlier this year, the creative *auteur* lamented the bias against women within the industry, mentioning multiple instances where her work she had done was credited to male

"The

relationship

women and

electronica

runs back

to the 19th

Century"

between



Portrait of British computing mastermind Ada Loveleace. Margaret Sarah Lovelace, 1836 Photo: Creative Commor

producers. "I want to support young girls who are in their 20s now. You're not just imagining things," she said, "Everything that a guy says once, you have to say five times."

Bjork, whose achievements are too many to list but include 14 Grammy Award nominations, a Cannes Film Festival prize for Best Actress, and an upcoming Museum of Modern Art retrospective of her 30-year career, has carved out a space for herself in a genre that is, perhaps, most open to gifted women wanting to make music on their own terms: experimental electronica. Although the genre's openness towards women may be explained by the fact that anyone with a laptop can produce music now the relationship between women and electronica actually runs far deeper, all the way back to the 19th Century, and Ada Lovelace.

Lovelace, often described as the world's first computer programmer, worked on Charles Babbage's Analytical Engine; her notes describe what is now known as the first algorithm designed to be carried out by a machine, and pointed out a flaw in Babbage's equations, making her the world's first debugger. Described by Babbage as the "Enchantress of Numbers", she saw the potential for computers to be used as a social, collaborative tool, as opposed to merely a means of calculation. In her notes, she speculated that computers may "compose elaborate

"What these women composers had in common was a strong academic background"

and scientific pieces of music of any degree of complexity", thereby also affording her the title of the mother of electronic music

However, it wasn't until a century later that a woman composed a work scored for electronic instruments; Johanna Beyer, a German-American composer who moved in circles with other luminaries like Henry Cowell and John Cage, premiered her work The Music of the Spheres in 1938. An atonal masterpiece, the work's ominous high-pitched drone seems to precede the work of György Ligeti in Stanley Kubrick's 2001: A Space Odyssey. In fact, Kubrick had a strong relationship with the electronic music scene, enlisting composer Wendy Carlos to perform the scores for two of his most popular films: A Clockwork Orange and The Shining. Carlos became well known for her album Switched-On Bach: first released in 1968, the album consisted of JS Bach pieces performed on the thennovel Moog synthesizer, and helped contribute to a significant interest in electronic music. It evidently captured the public's imagination. becoming one of the first classical music albums to sell over 500,000 copies and picking up three Grammy Awards along the way

The 1970s saw an explosion of interest in electronic composition. It was during this time that Laurie Spiegel gained invaluable experience in electronics, working for audio synthesiser laboratories. Spiegel's work is beautifully intricate. generated using complex algorithms and in 1977 her interpretation of Johannes Kepler's Harmonices Mundi became the opening track of the golden record sent off in the Voyager spacecraft. In August 2012 Voyager I passed into interstellar space, making Spiegel one of the furthest reaching composers in human history

What all these women had in common was a strong academic background, something that is understandable considering the prohibitive cost of early synthesizers, which meant that only large institutions were able to afford them The fact that educational equality did not enter into US public law until the Women's Educational Equity Act was passed in 1974 only makes the achievements of these composers all the more impressive.

And it wasn't only in America that the relationship between women and electronics was fruitful; in 1958, at the request of composer Daphne Oram, the BBC Radiophonic Workshop was founded to provide compositions and sound effects. Oram set up on her own after less than a year, establishing her own studio where she perfected the 'Oramics' technique, in which drawings on cellophane film are translated into abstract electronic compositions. Oram's mantle would be taken on by Delia Derbyshire. who transferred to the Radiophonic Workshop in 1962 and a year later produced the iconic theme tune for

Celebrating the 1600th issue of Felix



Delia Derbyshire, of the BBC Radiophonic Workshop, hard at work in the studio

"Holly

Herndon's

music lies

half-way

between

academia

euphoria"

and

the *Doctor Who* series, leaving an indelible mark of British culture. The long line of exceptional female composers has continued to this day, with numerous women creating music that transcends the boundaries of art and music. For some of these artists, such as **Planningtorock**, the political struggle for equality is at the front and centre of their music; their most recent album, All Love's *Legal*, directly confronts the unequal power structures at the heart of society. 'Misogyny Drop Dead', for example pairs lines like "degenderise all intellect" with a funky bassline and skittering drums, while 'Let's Talk About Gender Baby' has singer Jam Rostrum mistily invoking gender politics over stabbing

synths. Planningtorock have also collaborated with Swedish sibling duo The Knife, whose Shaking the Habitual was a highlight of 2014, lauded in both the mainstream and alternative press for its innovative use of abrasive sounds. On the Hyperdub label, perhaps one

of Britain's' best known experimental electronic record labels, there are a number of women producers represented: Jessy Lanza, for example whose debut album Hold My Hair Back was hailed on its release in 2013. praised by *Pitchfork* for its "sense of self and attention to detail", and

garnered a nomination for the Polaris Prize: Laurel Halo, a classically trained musician whose switch to electronica is a boon for us all, gifting us with albums like Quarantine, a combination of jazzy instrumentals, sludgy drones, and skittering dubstep; and Fatima Al Qadiri, an Americanbased musician and visual artist, whose upbringing in Gulf War-era Kuwait fed into her *Desert Strike EP*, and whose 2014 debut LP Asiatisch aims to take us on a "virtual road through an imagined China".

One of my favourite artists working right now, however, is Holly Herndon, an American composer who has divided her time between Berlin and Mills College, California. The resulting music has a sensibility that lies halfway between academia and euphoria, like **Stockhausen** taking on the 02:00 set at Berghain the Berlin nightclubl. Herndon refutes the widely accepted opinion that computers are cold and impersonal, arguing instead that the laptop not only has the ability to unlock many people's musical potential, but also forms a personal documentation of the self. To that end, her music revolves around the intimate. Her debut LP *Movement* uses gasps and breathing as a basis for tracks. weaving them around densely layered abstract electronics, while the lead

"The internet has created a forum for people to criticise the lack of diversity"



Fatima al Qadiri in New York's Chinatown. Her debut LP Asiatisch is ou on Hyperdub Records Photo: Tim Knox/Guardian

single of her recent EP *Chorus* is built from foraged audio clips of YouTube and Skype, arranged to form a throbbing, foot-tapping monster of a track.

Herndon has spoken about attitudes towards gender within the industry, and remains optimistic about the future for women producers. Speaking to Dazed Magazine in 2014, she said that: "The community of artists I find myself involved with are pretty enlightened with regards to gender issues, and I'm rarely made to feel overly conscious of it when in the company of peers." However, this attitude does not seem to extend to the general public, or those in charge of the music industry, who hold women to a higher standard than men. Speaking of Kanye West, Biork said "With the last album

he did [Yeezus], he got all the best beatmakers on the planet at the time to make beats for him... Yet no one would question his authorship for a second." This double standard is endemic to the industry, but it is sad to see it begin to filter into a genre that has historically been a safe space for women composers. But people are beginning to fight back; while the internet has created a forum for people to express their frustrations at the lack of diversity, last year's Wysing Arts Centre's festival of art and music saw a line-up almost exclusively focussed on women in experimental and electronic music and art. They called this year's iteration Space-Time: The Future, a direct allusion to how women will shape the genre's future, just as they laid its foundations in the past



Experimental composer Holly Herndon, renowned for her combination of the synthetic and organic P hoto: RVNG Int



Hitting The Right Notes: ICSO at Cadogan Hall

Kamil McClelland reviews the Symphony Orchestra's Spring Concert



Imperial College Symphony Orchestra at Cadogan Hall for their Spring Concert Photo: Ian Gillet

"How lucky

we are to

have such

a talented

musicians

doorstep!"

group of

on our

onight was a first in two respects; not only was it my first time attending a concert in the gorgeous **Cadogan Hall** but it was also in fact the first ever time I had seen the Imperial College Symphony Orchestra (ICSO) perform. And so, as you can imagine I was suitably excited.

This was their Spring Concert, a celebration of a term of hard work and careful planning. For our enjoyment they were performing Gershwin's 'An American in Paris'; Mozart's 'Piano Concerto in D Minor'; 'In the Steppes of Central Asia' by Borodin; and finally the incendiary 'Firebird Suite' by Stravinsky. It was a crammed and very varied schedule, designed to illustrate the broad range of the orchestra's repertoire. I was also eager to see Martin James Bartlett, an 18-year-old pianist and winner of the BBC 'Young Musician' Award in 2014, about whom I had heard great things, perform alongside the orchestra on the Mozart concerto.

Expectations were running high as the orchestra took their place on the stage in front of me.

And so, we dived straight into Gershwin's classic, a symphonic poem laced with generous helpings of jazz melody. He described it as "the impression of an American visitor in Paris", simultaneously absorbing the atmosphere of the

French capital in the 1920s and a "spasm of homesickness" in the form of syncopated rhythms based around the twelve-bar blues format. It truly is a beautiful tune, full of the excitement and dynamism of the Roaring '20s, done justice by this impassioned orchestra. How lucky we are to have such a talented group of musicians on our doorstep!

To criticise them, I have to hold them to the highest of standards perhaps they did not flow as well as a truly integrated orchestra might, unable to fully embody the dreamy state of the piece, the vivid whirlwind of sights and sounds every person experiences when they visit such an exciting city. I wasn't completely transported away to this foreign land though not for a lack of effort; the singing strings did a particularly excellent job manipulating my emotions every which way. The problems lay mainly in a lack of time and dynamic manipulation, but then I am picking at the smallest of holes.

However, as Gershwin himself admits, "it's not a Beethoven Symphony, you know" but instead a "light, jolly piece". Can this piece ever be more than that, merely a pleasant collection of notes, a musical in the world of operas? Thus, as we went next to Mozart's piano concerto, an incongruous pairing for certain, I wondered how this selection of

emotions with no clear overarching theme, was chosen. You do not experience music as a singularity, it is all about context. Hence, by placing all of these pieces together, I felt I was not able to truly witness their depth of emotion – a real shame.

Next we were transported back to $18^{\rm th}\,Century$ Vienna, and Mozart's 'Piano Concerto in D Minor', a considerably darker piece than Gershwin's jolly little number. The fearsome strings build up to a forte along with the rest of the orchestra, powerful in their presence on stage.

Then the young virtuoso Bartlett takes the lead, with the orchestra in accompaniment – a tremendous pianist with a deft touch on the keys effortlessly glinting beneath his fingers. He certainly doesn't lack charisma; you can read the emotion in his face and body language as well as in his music. This showman style of solo piano playing is not one I particularly like – perhaps his masterclass with Lang Lang rubbed off a bit too much – however, you cannot denv his skill.

"The brute

percussion

and brass

real punch

gave it

when it

was most

required.'

force of the

The piece is incredibly lyrical, taking us on a journey from the sombre to the joyous, with ascending arpeggios vaulting up from the instruments into the music hall. Having said that, it is not my favourite piece; sometimes boring, often repetitive, at least it was performed well.

The interval came and went in no time at all, and as I made my way back to my seat I readied myself for a short but sweet trip across the serene grasslands of Central Asia. Borodin's symphonic poem tells a simple but elegant story: that of a trading caravan of horses and camels crossing the vast emptiness accompanied by Russian soldiers. This manifests itself as a complex blend of Western and Eastern melodies, an amalgam of a gentle Russian tune with "bizarre and melancholy notes of an oriental melody". And through this all is the continuity of the desert winds and the trudging of pack animals. It is a truly beautiful story, requiring respectful and vivid playing.

This was generally well done, with beautifully flowing strings and flute, serene and peaceful. However, in parts it did not feel suitably delicate, as if the players did not have in their minds the specific vision of the piece, resulting in parts being too coarse or loud.

And finally, the *pièce de résistance*: 'The Firebird' Suite by Stravinsky. This is the score that catapulted Stravinsky into the limelight and represented the start of his very fruitful partnership with ballet patron Sergei Diaghilev which led to the production of 'Petrushka' and 'The Rite of Spring'. Thus the piece's significance cannot be underplayed, with Diaghilev even saying of the young composer that he was "a man on the eve of celebrity". And you can fully understand why this was said of him on the debut of its performance in 1910 for the Ballets Russes company in Paris. It is absolute genius.

It was by far the most interesting piece of the night. Emerging out of the rich murkiness of the cellos and double basses like a primordial sludge, you are enraptured by Stravinsky's imagination, truly the pinnacle of early 20th Century art. It was also the best played of the night; the brute force of the percussion and brass gave it real punch when it was most required, simultaneously as the harps rushed back and forth across the soundscape, a marvellous experience to behold.

What a way to end it! Does anything compare to modern works like this? Why ICSO insists on including the likes of Mozart in their lineup when they could have a whole night of 20th Century works I do not know. But it was a wonderful night overall and I would thoroughly recommend anyone to attend ICSO's future performances, provided they can create better cohesion with their choice of repertoire.

pieces, a complete mess of genres and



1600: A Year To Go Down in History

Clara Clark Nevola takes us through the life of Giordano Bruno

tenuous numerical link is enough to lead us from the significance of the grand history of Felix, now its 1600th issue, to 1600 AD, a year in the life of Early Modern Europe. In dear old Blighty, Elizabeth I is on the throne, busily destroying the Armada and maintaining her virginity. Martin Luther has aired his doubts on the big guy in the Vatican, and protestant reformers are giving Europe a good shake-up. The Church's astronomical dogma, already feeling touchy after Copernicus going public on the whole sun-centric thing, is further challenged by Tycho Brahe pointing out that a new star (the supernova SN 1572) had appeared, and that the celestial sphere isn't so immutable after all. Amidst all this, on the 17th of February 1600, a man was burned at the stake in a small square in Rome. Think of this as an obituary, almost half a millennium out of date. The obituary of a man on the border between science and religion, a man both heretic and martyr. This is the story of Giordano Bruno.

The story starts in 1548, in the town of Nola – then part of the Kingdom of Naples – where Bruno was born. He became a Dominican monk at 17 in a monastery in Naples, where he was a bit of a performing monkey thanks to his outstanding ability to memorise stuff (think Sherlock's mind palace, but better). But he wasn't the top of the class for long. Forbidden literature was found in his loo (a self-annotated copy of Erasmus' writing, not a 16th century copy of Nuts magazine) and he developed a reputation for supporting free speech – the horror! – as well as spreading certain non-Catholic views.

The Kingdom of Naples wasn't a particularly liberal place at the time so Giordano deemed it best to leave the monastery and start travelling towards the more liberal Venice. From here he wandered around for more than a decade, crossing into France, Britain and Germany. He taught in Universities; visited monarchs, diplomats, and intellectuals; and published a good deal of critical pamphlets on philosophy, religion and astronomy that didn't make his too popular with many of his contemporaries and colleagues.

He eventually returned to Italy after he heard news of a job offer as Professor of Maths at the University of Padua. He didn't get it; Galileo was hired instead. I'm sure he got that standard email about how the quality of applicants had been very high that year. But career disappointments

"Think of

this as an

obituary,

millennium

out of date"

almost

half a



The Statue of Giordano Bruno, Campo dei Fiori, Rome Photo: Creative Commons/Remi Iouan

weren't the only thing coming for him: the Inquisition got wind of his views and decided to crack down. A seven year trial, dotted with imprisonments, culminated in a death sentence. He was publically burned at the stake in Rome, in Campo de' Fiori, his mouth filled

with a wooden block to stop the public hearing his dangerous opinions. So that was that.

End of life, end of story. Another heretic got rid of. And yet, in many ways, the story of Giordano Bruno started in 1600 with his death. The Inquisition tortured and murdered

people for beliefs that we today uphold as scientific and liberal. The heretics of yesteryear are the saints of today – Galileo is a prime example in case. With Giordano Bruno, the case is not so clear. Both his life choices and his writings put him on an ambiguous boundary between science and religion: there is a lunar crater named after him, yet his commemorative statue in Campo de' Fiori shows him in his Dominican robes. He upheld the Copernican view of the universe at a time when very few did, and went beyond that to suggest that all starts were suns, each with their own planets around them; he stated that the universe was infinite, without a centre and containing multiple worlds. Is he the forbearer of modern cosmological theory and a martyr of the multiverse hypothesis? Should we, young disciples of a science-centric atheism, herald him as our patron saint? If you're nodding vigorously and preparing a little shrine for him in your room, know that you are not alone in your new-found realisation. And yet, before you buy flights to Rome to go on a pilgrimage to his death-site, think on this: Giordano Bruno probably never carried out an astronomical observation in his life.

Yes, he was a proponent of Copernicus' heliocentric theory. Yes, he wrote a book called On the Infinite Universe and Worlds. But his many worlds theory was, above all, a pantheistic interpretation of the universe. The scientific theory is a metaphor for a philosophical, spiritual approach to existence. Had he been a brilliant mathematician who used thorough astronomical observations to formulate a theory on the existence of other solar systems, chances are that he would have been burned as a heretic none the less, as the Pope was none too open to new ideas concerning the universe. But Giordano Bruno wasn't a scientist by any standard. Is he a saint for Cosmology? No. Did he uphold ideas that questioned the restricted, hemmed in doctrine of his time? Yes. Did he have a lasting effect in promoting a philosophy that emphasised the centrality of human intellect? Also yes. So if you're buying your tickets for Rome, go ahead and count me in, because I'm a fan girl. But let's remember Giordano Bruno for who he was and what he promoted: the importance of free speech, and the tolerance of views based both on spirituality and insight alongside those based on observation and measurement. Both have their place in our world.

"He upheld

ideas that

restricted

his time"

doctrine of

the

questioned



An Ode to Medicine, Mortality, and Art Jingjie Cheng explores the interaction between art and science

n his poem *Larynx*, Pablo Neruda implored of Death:

Why are you following me? What do you want with my skeleton?... Why do you have to take me? What business have I with Heaven? Hell doesn't suit me – I feel fine on the earth."

The anxiety of the speaker upon learning of a possible laryngeal tumour – "a small seed of death" – speaks for any patient who discovers he has a serious illness. The fear, denial, rage, the stubborn will to live ("I wanted to be a cyclist | to pedal out of death's range") reflects more about human nature than it does of the science of medicine itself: it is the human nature which is about standing up against trying times that art so often attempts to capture.

Neruda, who is far better known for his passionate love poetry than ruminations on mortality, is only one of thousands of artists and writers who have based their creative works on medicine and the art of healing. Love and death, medicine and art, are not greatly different after all history is replete with examples of marriages between art and medicine, from Da Vinci's Vitruvian Man to Rembrandt's famous painting of The Anatomy Lesson of Dr. Nicholaes Tulp, now almost an icon of medical education. Illness, struggle, healing, and death make profound and personal subject matter for creativity. but there is also the simple aesthetic appreciation of the human body both in health and in illness – an externalised observation of our inherent vulnerability.

There is a Mandarin saying that sums up life as "birth, age, illness, and death", painting a picture of life as basically a gradual submission to the forces of age and disease. Perhaps it is this universality of sickness and healing that makes medicine such a popular inspiration for artists, more so than any other profession. We all understand it; we see it in our own bodies, in the struggles of loved ones, and in the work of doctors.

I picked up a book recently titled The Sick Rose: Disease and the Art of Medical Illustration, a display of exquisite, unsettling drawings of sickness from the Wellcome Collection. Created in the time before colour photography, most of the drawings were done with the purpose of educating physicians of the past, rather than as creative works. But any viewer would be able to appreciate the skill that went into them. To me, the crystallization of a disease, something so dynamic, into a particular representative drawing, is creative interpretation in and of itself. Call it perhaps a morbid fascination, but I think the appeal of these medical illustrations lie in an innate drive to understand ourselves. Looking at all the hair-raising diseases staring almost too placidly from the pages reminds me of how impermanent health and youth is, and how powerless our bodies are in the face of such ravages.

Thus, in appreciating the aesthetics of health, I find that there is beauty in how basic chemical molecules come together to form a sentient being. Where there is beauty, there is art. The New Objectivity movement in photography, for example, focused on capturing nature for its objective beauty divorced from any sentiment. Perhaps the aesthetics of the human body holds similar sway.

Yet, despite its objective fascinating qualities, in the past disease and the human body make such attractive artistic inspiration perhaps also because of its unknowability. Disease might have been represented as bad spirits swirling around patients, or demons trying to break free. Our knowledge of disease increases by the day and such representations, far from dying out, simply become metaphors. We can understand perfectly that infections, poor diet, or wayward cells cause disease, but that doesn't stop us from seeing our ageing and weakening bodies as an affliction on ourselves as a whole rather than in the scientific mechanisms of disease

In a scathing criticism of the medical profession's obsession with cutting things up and in the process dehumanizing medicine, Dannie Abse, a British physician-poetplaywright himself, writes in his poem *X-ray*:

Some prowl sea-beds, some hurtle to a star

and, mother, some obsessed turn over every stone

or open graves to let that starlight in. There are men who would open anything.

Harvey, the circulation of the blood, and Freud, the circulation of our dreams, pried honourably and honoured are like all explorers. Men who'd open men.

There is somehow a sanctity of the human body that makes one averse to breaking it all down, and it is this wholeness that art captures. The nuts and bolts of disease may very well be left to science, but afflictions of the body is more than that; it affects the person, and that is the void that art



"Art allows

us to stand

in the

shoes of

others -

crucial in

attacking

the status

quo"

The Scalpel 2, Barbara Hepworth, 1949 Photo: Tate

fills

Medicine is so crucial to society; it is also an institution, especially in modern times. Thus, more than just inspiring art on a personal level, medicine and healthcare institutions have also inspired social and political commentary in art. What is disease? What is madness? What is sanity? In One Flew Over the Cuckoo's Nest, Ken Kesey questions what madness is, criticising the medical profession's monopoly over its definition. Art allows us to stand in the shoes of others, and good art allows us to understand different points of view vividly – crucial in attacking the status quo.

Last month, I caught Nina Raine's revival of her 2011 play *Tiger Country* – a snapshot of life in the NHS with everything that was wrong thrown in. "Tiger country" refers to dangerous situations in surgery where the surgeon knows that a slip would cause death. In the play, the whole hospital is tiger country for those trying to navigate it. As a medical student, watching it was utterly depressing, but I must admit that it was a fantastic and timely poking-of-holes in the NHS. Clearly, theatre was a very immediate way of provoking discussion on our overstretched healthcare system and the working environment our healthcare workers have to deal with.

I have never been able to decide whether I am more of a "science person" or an "arts person" – a line people often like to draw - but I think being able to appreciate the relationship between the two makes life a lot richer. Perhaps medicine and disease make ripe creative material precisely because it straddles the middle ground between the two worlds, a space of multiple possibilities and fresh ideas. More than that. I also think that it is our undying obsession with our own mortality that elicits such varied and fascinating artistic exploration. I am of the opinion that art actually has something to contribute to our larger understanding of medicine as a whole as much as medicine provides for artistic inspiration. After all, as the ancient Greek physician Hippocrates wrote, "Life is short, and art long" we will always be transient beings despite the medical profession's best efforts, but art immortalizes this very human struggle.

"There is somehow a sanctity of the human body that makes one averse to breaking it down" **Celebrating the 1600th issue of Felix**

The White Square — An LSD Rhapsody

Anonymous explores a secret operatic world previously out of reach



About Yellow, Bridget Riley, 2013-2014, Oil on linen Photo: Bridget Riley

Ave I just made the stupidest mistake of my life?" I wondered as the white square dissolved in my mouth and passed down my throat. I reassured myself, the whole thing was thought through and the plan was bullet proof. I stepped out of the bathroom and an usher passed a few angry words in my direction. I didn't hear what she said, but surely it wasn't possible that she knew? "The men's toilets are over there" she pointed.

Drugs are a taboo issue so I'll explain myself. Psychedelic drugs alter perception and thought and they've been used in spiritual and religious settings for millennia. Some of the oldest known cave paintings depict, for example, the connection between man and mushroom. A study at John Hopkins reported that almost everyone given psilocybin recounted it as one of the most significant experiences of their lives. These compounds are also of great scientific interest and are investigated for their potential to break addictions and cure depression, amongst other things However, outside of the therapeutic setting, 'recreational' users are interested in their power to enhance emotion and facilitate connections in thought.

Psychedelics are tools, and should be used as such – I believe that before using them, an experience should be curated with a known trajectory and predictable effects. For me, one of the most powerful and intellectually satisfying things I can do is to see an opera, live. It seemed like a perfect experiment: this opera, one I already know and love and almost 6 hours long, the same duration that the drug has an effect. I felt I could make a potent experience even more so, and thought that I might be able to read between the lines. I had read so much about this work, I had played it on the piano, analysed the score. But now I was ready to really experience this work of art. I made my way to my seat, my bag was full of food and drink for the long intervals. All that was left for me to do was sit back and enjoy.

Just as the overture crashed into being, the drug started to take effect; it was pure euphoria, and I was utterly captivated as the orchestra segued into the first scene. The people on either side were forgotten, melting away to leave only the action in front of me. Everything that happened I noticed, every glance and gesture of the singers seemed momentous and full of meaning. No detail of the dense musical texture escaped my attention and its relevance to the stage action was obvious. At the moments of greatest power, my knees trembled and became weak. Before I knew it, the first act was over but I was still revelling in it.

As everyone made their way out to the bar, I stood to let them pass. Was I being awkward? It became hard to tell, but I glanced at the note I had left myself on my hand – 'nobody knows or cares'. It was helpful to remember that no one pays attention to anyone else, and as I looked out into the stalls I was amused by the behaviour of "I felt I could make a potent experience even more so ... I was ready to really experience this work of art." some people – "if that guy can get away with doing that then I can get away with a lot more". I sat patiently cuttings of conversation falling onto my ears. I was overwhelmingly curious but I stayed put. "Shit" – over there, "do I know that person? Is he looking my way?" I tried to look busy and wrote some notes to myself about the opera.

People filtered back into the auditorium and the second act began. On stage were two houses; a village scene. Beautiful floral patterns seemed to me projected onto the roofs, swirling and dancing, but actually painted, motionless. "Relax", I thought, "Enjoy what you're seeing".

The plot wound its way onwards, twisting through its tensions – people all wanting the same thing, or wanting different things and opposing one another. "The Hegelian dialectic manifests itself in everything!!!", I scribbled in the next interval. For the first time since learning about the dialectic in philosophy I understood it; it actually made sense to me.

The opera was funny as well and laughter was a great feeling, of almost absolute freedom and joy. With the chuckle of the man next to me, I felt as if we were sharing something great. The act was over too soon and the next interval, 40 minutes long, was rife with potential dangers.

I waited until everyone had left and finished my maddened philosophical analyses. I looked around me. I was tripping now, hard, and the shapeless interval stretched out before me as an abyss.

"No detail

of the

dense

musical

texture

and its

was

escaped my

attention

relevance

obvious."

I walked to the bar but there was nowhere to sit so I stood, painfully awkward. I returned to my seat to tuck into the chocolates and drinks I had brought. I didn't feel hungry – but surely my body would be? – it was difficult to tell, but the timing seemed right, and besides, the chocolate tasted good.

A man sat down beside me, I tried to continue looking around, but the inevitable happened and he spoke.... It surprised me how freely I took part in his conversation. As I watched him prattle on I felt detached but the right responses simply flowed from my mouth. I even fancied myself to be witty at times.

As the third act started the man and I wished each other a pleasant time. I felt that the effect of the drug was wearing off, although I wasn't sure at first. I didn't mind. In fact, I was a little relieved – the purgatory of the interval was difficult enough so what would I do when the opera finished? Still, I was a small bit disappointed that I might not feel the ecstasy of the finale as I had the overture. As a way was found to a happy conclusion, I simply enjoyed it as I usually do. I couldn't help but feel that there were some secrets, previously in reach, that were now being kept from me. It was frustrating - so much of the experience was wasted on those interminable stretches of interval, but every other moment was pure magic.

I reminded myself – it was an experiment after all.



Press Nights – The Absurdity Of It All

Kamil McClelland gives us a tour of a world of tweed, gossip and wine

ne of the perks of writing for the Felix Arts section has of course got to be all of the free tickets we get: plays, exhibitions, opera, you name it (even puppetry...)! I still find it amazing to think that these art establishments actually somewhat value our work, even if it is just that free publicity trumps empty seats.

It is certainly a very odd experience going to a press viewing, sat there awkwardly in the corner with your biro and notepad feeling completely under qualified to be in this position (how did I find myself here, I'm a medical student, aren't I? I didn't even do A-level English!). And then in come the big dogs – *Times, Guardian, Time Out* – effortlessly at ease as if they own the place. Elbow patches, greying hair, weary eyes – a lifetime of experience. How could I possibly add something to this conversation?

However, behind this respectable veneer of critical journalism – the glossy façade – a less nuanced figure emerges. It is not what one would expect. Yes, perhaps pretension still infiltrates their manner, but surely amongst the top culture critics in the land one would envisage finding more refined conversation than what I was overhearing; no Kant and Nietzsche, more Kathy and Nigel.

It was fascinating. I had never heard anything quite like it – just wall to wall gossiping! It seems only quite a small clique of reviewers visit all of London's latest shows, whatever newspaper, website or blog they might write for. On the Monday, they're at the National Theatre for the latest production, the next day the Barbican and the day after that, the **Royal Court**! I guess they must get to know one another pretty well. It is also the perfect networking opportunity, surrounded by your counterparts at the rival newspapers, each person vying like vultures for the next job opening more senior that their current one. To get into this inner circle where everyone knows everyone, and every single part of their lives, you need to be able to talk the talk and walk the walk.

Then you have the freelancers, the mavericks of the group working only a few nights a week and charging double for their reviews. These guys are sharply dressed, cocky, and usually look at you with an even more upturned nose than usual. This is an industry where to survive, you must either know the right people or back yourself so much that you're able to fake it to make it.

"Elbow

patches,

greying

hairs,

weary

eyes — a

lifetime of

experience"

It's the interval, twenty minutes of respite and time for me to reflect on what happened in the first act over



Statler and Waldorf from The Muppet Show. Photo: Creative Commons

a acrid glass of the complementary chianti. I didn't particularly like the main actress, she didn't have the stage presence needed for her role. But the stage design was br...

"Oh, did you hear about Rachel? I heard her and John broke up." "But they've been together for years! Well, I always thought she was

too good for him anyways." It is one of those freelancers again;

as I carry on listening, the plot thickens even further. It transpires that the freelancer, a very slick, well turned out man, has also recently been made a bachelor of sorts ("It's just that I'm always too busy flying between London and New York, it wasn't a sustainable relationship"). As soon as the other man finds out, ever so subtly, he starts hitting on him, dropping compliments about his new haircut or shoes or making sexual jokes. It was quite extraordinary. I backed away from the conversation; it was getting too awkward even for me.

Alongside them, you had the classic Statler and Waldorf type art critics, hardly able to keep their eyes open, completely dulled by half a century of service. Yes, they may have the experience but how could people like these possible make commentary relevant to today's world? They could hardly see beyond their drooping eyelids and cataracts. You can understand why I felt utterly out of place in this whole environment. We may be quite a humble

production, little old Felix tucked away in the basement of Beit Quad, however I am going to argue that we do actually hold quite an important role in the world of art reviews. For not only do we have access to a very important cohort, the capital's future art consumers, but we also provide a rare perspectival counterpoint to the homogenous and formulaic pieces much of the country's press is coming out with. Yes, I may not be able to contextualise this piece of meta-theatre in the history of Eastern European interpretive dance, but the utility of a fresh set of eyes on a production cannot be underplayed. We have not been tainted and influenced to as great an extent by a status quo, and can provide a much more instinctual review based on our

"You can

understand

why I felt

of place."

utterly out

viewer experience.

That is why it is disappointing that we are either shunned away to the worst seats in the house, barely able to even see the stage, or sometimes even flat-out refused press tickets as a matter of course by certain institutions (*cough* **Royal** Opera House *cough*). Not only does it harbour poor relations with students, but it also decreases the art house's exposure amongst their most important demographic, the future. So whilst only the snooty reporters who are becoming part of the furniture, at one with the brocade, are being invited to press shows, we will still only get one aspect of the artistic picture; a picture that is purely aimed at rich elderly white men, who funnily enough make up the large proportion of the critics. And until things change, I shall still be the minority, shoved off into the corner, just me and my complimentary white wine.

We are always looking for new reviewers. If you have a love for free press tickets and cheap chianti, drop us a line on arts.felix@imperial.ac.uk.



Ban Bland: In Defence of Popularity

Fred Fyles on populism, cultural criticism, and Kim Kardashian

opularity. If the innumerable American coming-of-age films have taught us anything, it's that popularity is a double-edged sword; to be popular is to be both loved and loathed in equal measure. Nowhere is this more true than in the world of music and film, where popularity often leads to an immediate critical reaction that is completely divorced from the content itself. The phrase "I liked it before it was popular" has become so ubiquitous as to enter into cliche, forming – alongside listicle, hipster, and cereal cafe - part of our post-postmodern cultural lexicon. With the internet ushering in an unprecedented era of hype, whereby acts can boom and bust in the time it takes to get through an episode of Girls, as well as a collective hivemind insatiable in its appetite for think-pieces, our relationship with popularity is only going to become more and more complex.

I am writing in defence of popularity. In defence of the idea that something being popular and something being high quality are not mutually exclusive. Just because something is liked by many people all over the world, it doesn't make it bad – to me this seems like a simple fact, but I have lost count of the number of times that people willingly reject certain aspects of our culture based on how present they are in our landscape. Furthermore, their attacks never form part of a critical discourse, but instead act generally as proud declarations of ignorance: 'Beyonce's new album? Of course I haven't listened to it. Kanye West's latest antics? Why should I care?'. The phrase 'the wise man knows that he knows nothing' may sound good, but I fear certain individuals have taken it to heart, feeling that their refusal to engage in popular culture is an admirable personal trait.

Now, I am not saying that spending all day on *TMZ* is a better use of someone's time than reading Virginia Woolf, but both activities are in some way educational; your judgement just depends on how you value culture. In an ideal world I would know all about Sartre's philosophy, the work of Marie Curie, and what happened between Solange and Jay-Z in that elevator, but this is impossible; we simply don't have enough time, and knowing everything is an impossibility. However, it is one thing to recognise this fact, and quite another to actively enjoy not knowing something, willingly refuse to be clued-in. They are people who believe that it's impossible to love both Martin Heidegger and Made In Chelsea, Taylor Swift and Thelonious Monk; in our post-internet age, where a wealth of culture is available at our fingertips, such an attitude is simply outdated.

That said, I understand such an attitude, and sympathise; it is easy to convince yourself that refusing to engage with the popular is not a character defect, but instead makes you a special snowflake. If you're



Kate Middleton's first official portrait, by Paul Emsely, which was described as 'pretty ordinary' Photo: National Portrait Gallery

"Popularity and high quality are not mutually exclusive qualities" the kind of person who would rather read real books than magazines, who would prefer to be in bed watching a movie than out at the club, who shares be-bop interpretations of Meghan Trainor on Facebook with the caption "this is REAL MUSIC, take me back to the '50s!", then, well, unfortunately you're part of the problem. Looking at the past with rose-tinted spectacles, it is easy to feel that back then what was popular was also authentic: Kubrick's films, the Great American Novel. The Beatles - these were what everyone enjoyed back then, right? Well, The Shining was accused of destroying all that was suspenseful in the original novel, James Agee only received acclaim for A Death in the Family following his death in 1955, and the highest selling single 1967, the same year Sgt. Pepper's Lonely Hearts Club was released? 'Release Me' by Engelbert Humperdinck. It seems that things are no worse today than they ever were.

I feel that, having come this far, I should include an addendum: I am a massive snob. I am a cultural critic. so this is to be expected, and I am completely proud of my aversion to certain elements of modern life, a number of which correspond with what is popular. However, there is a key difference: I don't hate things because they're popular; I hate them because they're populist. The difference may be subtle, but it's there. While a piece of music, theatre, or prose achieves the title of popular simply by being enjoyed by a large number of people, something is populist if it has been specifically engineered to appeal to the widest possible number of consumers. To be populist is to devalue what art means, reducing it cynically to a mere product – a sweet pap made to appease a broad swath of the population. Yes, it is true that there is a

crossover between what is populist and what is popular; just look as Sam Smith, who recently won four Grammy Awards for his soulwithout-Soul - blandishments for the bland. However, there is a key difference, which we must recognise and appreciate. Kim Kardashian, for example, who is perhaps the closest we have to a deity of the digital age, is popular, but certainly not populist – her image may be carefully curated to generate online clicks, but it is certainly not designed to be appeasing. Her recent cover of Paper Magazine, which 'broke the internet' thanks to Jean-Paul Goude's decision to cover her derriere in baby oil. was not intended to be inoffensive,



Kim Kardashian at the 2013 Met Gala, New York Photo: Getty Images

"I don't hate things because they're popular. I hate them because they're populist" but instead to generate controversy, something it surely achieved. In contrast, Kate Middleton couldn't be further from Kim K: Middleton's personal style, which generally consists of various outfits from Whistles and Riess, was part of what led acclaimed author Hilary Mantel to describe her as "designed by a committee and built by craftsmen, with a perfect plastic smile". In this way, Middleton perfectly encapsulates the word populist: inoffensive, safe, and boring. It is this that we must fight against – if I am going to be a snob, then by God, I'm going to be the right kind. The only other option is boredom.



Britain's Greatest Living Playwright

Jack Steadman champions Tom Stoppard's right to the title

o call anyone "Britain's greatest living playwright" is a bold claim. Competition for the title is fierce, and ever-growing – a simple glance at the work coming out of the likes of the **Royal Court** shows the strength of new talent.

But one name has been at the forefront of British drama since his debut play, first staged at the 1966 Fringe and promptly picked up and produced at the **Old Vic Theatre** (in its **National Theatre** days) in London.

After Rosencrantz and Guildenstern are Dead!, a re-telling of the events of Hamlet from the perspective of the titular courtiers, mere bit-parts in the original, was a storming success, Tom Stoppard's name was made virtually overnight.

Rosencrantz and Guildenstern was – is – an intoxicating blend of dry wit, sly re-purposing of existing plotlines, and deep metaphysical conversations.

With such extensive discussions dominating the play's runtime, it runs the risk of being too scientific (if such a thing exists), of coming off cold and inhuman, but somehow manages to sidestep it all. There's a heart pulsing beneath the play, and it occasionally rears its head in beautifully eloquent fashion.

Just take Guildenstern's final speech:

"No...no...not for us, not like that. Dying is not romantic, and death is not a game which will soon be over. Death is not anything... death is not. It's the absence of presence, nothing more. The endless time of never coming back. A gap you can't see, and when the wind blows through it, it makes no sound..."

That blend of eloquence and emotion, warmth and wit is a continuing trend throughout Stoppard's works.

The balance varies from play to play – early play *Jumpers* (another Old Vic production in 1972) is designed as a farce, and bears the comedy to match, but also wields philosophical discussions over morality ("what's so good about Good?").

Travesties, which followed two years later courtesy of the RSC, tells the tale of a production of *The Importance of Being Earnest* in Zurich during the First World War, featuring an eclectic cast of characters that includes James Joyce, Lenin and Dada founder Tristan Tzara. With roots in realities, *Travesties* ends up being an examination of art and war, albeit one riddled with puns and ingenious nods to the events of *Earnest*. Stoppard's trend of producing a play every year or two continued from 1966 through to *Hapgood* in 1988, the first play that really felt like it failed to strike that balance between science and emotion. Ostensibly a piece of spy fiction, *Hapgood* deals in quantum mechanics (not least the uncertainty principle), and doesn't quite succeed in striking the classical Stoppard notes. Critics (and audiences) reacted negatively, and the play never really took off. A five-year theatrical silence

followed. Then along came *Arcadia*. Set in an English country house, *Arcadia* follows events in 1809 and 1993 in parallel, using the interactions between its characters to explore the very concept of the past and how we perceive it, as well as the likes of the second law of thermodynamics, iterated algorithms and the shift in gardening techniques across the centuries.

It's an impossibly complex maelstrom of competing ideas, plotted to the nth degree, to the point where throwaway lines are key plot points. Yet, somehow, it never works to the detriment of the play.

The sheer chaos of the play's plot simply serves to demonstrate its larger themes, which the characters themselves are more than happy to vocalise. The conflict between science and the humanities comes to the fore more than once, with one character spurning scientific progress with the gem of a line "quarks, quasars, big bangs, black holes - who gives a shit?" before going on to remark that "I'd push the lot of you [scientists] over a cliff myself. Except the one in a wheelchair, I'd lose the sympathy vote before people had time to think it through." A serious conversation, veiled in comedic insults. Stoppard was back on form.

Arcadia still stands as what is, most likely, Stoppard's greatest work, but that's not for lack of trying in the years since. 1997's *The Invention* of Love, based on the life of A. E. Housman (the poet), was equally well acclaimed, while Stoppard's reputation outside the theatre was cemented for eternity when he won an Academy Award for his screenplay with Marc Norman for Shakespeare in Love.

2002 saw a trilogy of plays, *The Coast of Utopia*, split into *Voyage*, *Shipwreck*, and *Salvage*, and dealing with events in late 19th century Russia. Running nine hours in total, the three plays opened in quick succession in the National Theatre, winning a Tony Award after their Broadway debut four years later.



Tom Stoppard, perhaps the greatest living playwright? Photo: Laura Hynd

At the same time as *The Coast* of Utopia was earning its Tony, Stoppard's next play was opening at the Royal Court. *Rock 'n' Roll* was one of Stoppard's more political plays, dealing with the socialist movement in Czechoslovakia under the Soviet Union, and rock and roll's part in that movement.

The idea of dissidence through art, specifically against the Communist Party of Czechoslovakia, was one Stoppard dipped into from time to time, although *Rock 'n' Roll* is arguably his largest work to tackle it. It's here worth noting that Stoppard

is Czech by birth, although his parents fled the country when he was two during the Nazi invasion. After *Rock 'n' Roll*, the plays

stopped.

The non-theatrical work continues to pour out, however, with screenplays for the television adaptation of Ford Madox Ford's *Parade's End* and the film version of Tolstoy's *Anna Karenina*, as well as the radio play *Darkside* (another entry in a long list of Stoppard's radio plays).

"No-one

out there

manages

quite the

same trick."

Then came the announcement of a new Stoppard for 2015 – *The Hard Problem* – which promised to wander into the realms of consciousness. In interviews, Stoppard revealed that the subject had been a long time coming – "I don't use a computer, so I take lots of [newspaper] clippings. Some of the oldest ones date back to the 80s."

He also, being Stoppard, couldn't avoid some typical wit. When asked why he waited so long to publish the play, he remarked "I didn't wait, I procrastinated."

The Hard Problem shares many traits with Stoppard's earlier works, not least its delightful blending of highly technical discussions with deft humour and emotion, but also marks a slight shift away. The scenes are shorter, and the play runs through with no interval. It's all got faster, more reminiscent of a film – maybe Stoppard's screenplay work has finally started to seep into his theatrical ventures.

That's not a criticism. Far from it. Change is always exciting, and Stoppard pulls off *The Hard Problem* with aplomb. It's another successful, brilliant work in a list stretching back decades.

Stoppard's influence is undeniable – a brief glance at plays such as *The Nether* (currently in the West End) proves that much – but there's still no-one out there who matches up. No-one out there manages quick the same trick. Maybe no-one ever will.

"Quarks, quasars, big bangs, black holes - who gives a shit?"



Et in Arcadia Ego, Unfortunately

Jack Steadman is less than entranced by Stoppard's classic drama

disclaimer, before this review goes any further. I have extraordinarily strong feelings and opinions about *Arcadia*. I studied the text for A-Level, and directed the show for DramSoc in the summer of my first year of university. It's been a huge part of my life for the past few years, and it's only fair to the **English Touring Theatre** production that I make that plain before passing comment on their show.

Originally appearing in 1993, *Arcadia* is easily Tom Stoppard's most popular play, if not one of English literature's most popular plays – a claim acknowledged in the programme notes for this latest large-scale production, where it is revealed that it came near the top of their audience poll of future play ideas. It's an exquisitely composed work set entirely in the large drawing room of a country house, with scenes transitioning between 1809 and 1993.

This single-set approach is usually a cue for the set designer to go overboard with extravagant designs for the room and all its furniture, and on first glance this production appears to be no exception. A vast wall occupies the upper third of the stage, with enormous windows looking out onto the gardens of Sidley Park, home to the aristocratic Coverly family. The room is large, and the expansive table squatting in the centre of the room does little to cover the swathes of empty space surrounding it - but that's fine. The room's emptiness is explained away by the script at one stage, and as the play progresses the table (and by extension the room) rapidly becomes more cluttered and disorganised, echoing one of the key themes of the play. Unfortunately, no excuse is given for what lies on the other side of the aforementioned large windows. The gardens are revealed to simply be the rear wall of the stage, in all its undisguised glory. No painted backdrop, not even a black tab. A grey wall, replete with cabling and sockets. Whatever the reason for this particular set choice, it's not exactly the most auspicious start to proceedings, considering that the house opens with the set (and the wall beyond it) clearly visible to the entire audience.

So far, so unimpressive. But having heard the director Blanche McIntyre speak about the play, expressing her love for its complexity and how she and the cast spent hours unpacking all of the science behind it to ensure they could fully convey the themes to the audience, I've got a lot of goodwill sitting in the tank, so I'll let it slide. Sadly, the first two scenes rather quickly threaten to squander every last drop of that goodwill. There are some positive moments – the scene change is nicely handled, with the characters from past and present crossing paths with each other on stage, drawing attention to the similarities between the two eras. Some of the cast members are simply stellar in their performances. Others, less so.

Flora Montgomery deserves particular praise as Hannah Jarvis. In a role created by (and written for) Felicity Kendal, she makes it her own, perfectly capturing Hannah's blend of external Classicism and internal Romanticism. In the past scenes, Kirsty Besterman makes an impact as Lady Croom. The role is a treat for any actress, providing ample opportunity to dominate the stage, and Besterman runs riot with it, taking full advantage of Croom's unwavering control of the scene. It's just a pity that neither actress really gets decent sparring competition – at least not to begin with.

There's a weird sense of lethargy permeating the opening scenes, starting with an oddly subdued Dakota Blue Richards as Thomasina. the prodigal daughter of the house, and spreading from there. At times, it's only the sheer joy of the script that saves proceedings, with the jokes themselves, if not their delivery, prompting occasional outbursts of laughter. There is some defence for this, in that while the later scenes do a lot of the heavy lifting for explaining (relatively) complicated scientific or mathematical principles, the early scenes have to do a lot of the groundwork for making those ideas make sense in the context of the play as well as – obviously – introducing all the key players.

But that defence doesn't really stand up when an early confrontation, traditionally the part where the play springs to life after a lengthy dialogue between Thomasina and her tutor Septimus, fails to ignite. Much of the comedy is lost, leaving the script to fight for itself. To its eternal credit, it succeeds, proving the theory that it's impossible to make a bad show out of *Arcadia*. It's just possible to do *Arcadia* badly.

Another scene change later, and I'm starting to have second thoughts about this production. Is it just my personal bias, the intrinsic "this is how *Arcadia* should be done" that comes from directing it, or is something genuinely off with this show? One glorious moment



Dakota Blue Richards (Thomasina Coverly) in Arcadia by English Touring Theatre Photo: Mark Douet

"When the

case settles,

the majority

hit the notes

just right,

although

a wonky

remains"

feeling

of physical comedy a second later, however, and suddenly I'm sold. Everyone seems to wake up, and everything speeds up enough to revive the play's flagging momentum. Nakay Kpaka's Ezra Chater, the would-be poet, finally becomes the incompetent, flouncing comic relief he's supposed to be. Faced with a livelier companion than the subdued Thomasina, Wilf Scolding's Septimus comes alive, revelling in the Byronesque wit of his character. Even the 1993 scene that follows feels livelier, with Ria Zmitrowicz's effervescent Chloe Coverly standing in stark contrast to her counterpart from the past.

This recovery continues unimpeded by the interval, making for a far more competent second act, and meaning the play feels like a much stronger production overall than the early moments would suggest. When the cast settles, the majority find their roles and hit the notes just right, although there are enough miscast roles to unbalance the show and leave a distinctly wonky feeling. But touring a show is always hard on any cast, and hopefully with a few more performances (in front of some very different audiences) the whole cast will find their feet and be able to hit the ground running every night. This production of Arcadia, then, is very much a mixed bag. Gorgeous yet un-intrusive lighting design, minimalist (arguably to the point of detriment) set design and adequate sound design combine with a masterful script and various calibres of performance to produce something ultimately watchable, and enjoyable, albeit with some almost unbearable low points. It's the embodiment of 'hit and miss', and at no point is this more obvious than in the very last moments. The play's soaring emotional crescendo, as Thomasina and Septimus waltz in the past to the strains of modern-day music, is played perfectly and strikes exactly the right tone – only to be undone by the appearance of the other characters in the background, looking on. It's an artistic decision that feels slightly off, and undermines such an intimate moment that was done so well. It's a huge shame, as the bum note of the final moments can't help but taint the good work that came before. This isn't a bad production of Arcadia. It's just not a very exciting one.

"Much of the comedy is lost, leaving the script to fight for itself"



Tom Stoppard: Not so Hard After All Jack Steadman wraps his head around the playwright's latest



Olvia Vinall (Hilary) and Anthony Calf (Jerry) in Tom Stoppard's The Hard Problem Photo: Johan Persson

"We do

science.

brain

There

is only

one Hard

Problem."

om Stoppard's latest play has been a long time coming. His last work to grace the stage was 2006's *Rock and Roll* at **The Royal Court** – and his last work at the **National Theatre** was four years before that, with *The Coast of Utopia* in 2002. Nine years since his last play. To call expectations high might just be an understatement.

Early signs are promising. The play is shaping up to be quintessentially Stoppard, blending meaningful discussions of complex scientific ideas with eloquence and wit. Where *Arcadia* tackled the second law of thermodynamics, and *Rosencrantz and Guildenstern are Dead* dealt with existentialism and free will, *The Hard Problem* turns to the notion of consciousness.

The titular Hard Problem (capitals wholly necessary – as one character explains, "we do brain science. There is only one Hard Problem.") is one of explaining consciousness, explaining our first person, subjective experiences, phenomena such as colour or taste. In the programme notes, Stoppard credits the Australian philosopher David Chalmers for the phrase – as would most of the internet – although he acknowledged in a later interview that he "might as well have credited Leibnitz" for coining the term.

There's an added incentive to be hopeful in the form of the location for Stoppard's return to the stage: the **Dorfman Theatre** at the National. A redevelopment of the old **Cottesloe Theatre**, it's a wonderfully versatile space, offering multiple possibilities for staging.

Add in the fact it's directed by Nicholas Hytner, in his last show at the National before departing as its Director, and the anticipation is almost unbearable.

At first glance, the set design does little to reward or spurn that anticipation. A collection of vertical bars, entangled in a mess of wires, loom over an empty stage. The first scene rapidly reveals how this is going to play out from a visual perspective, as a minimalist approach to set design evokes the settings rather than outright stating them.

A bed and a desk comprise a bedroom, some chairs and a coffee table indicate a waiting room, and so on. Bar the occasional use of a backdrop, it's left to a few items of furniture and the work of the actors

"I think the

play's been

done really,

really well."

to suggest the setting – and it's to the credit of all involved that it works wonderfully. The design allows for the play to focus on Stoppard's typically glorious dialogue, forcing the attention onto his words and the actors delivering them, rather than their surroundings.

The bars and wires hanging over the stage turn out to be a touch more exciting than just a mysterious sculpture, coming to life in the scene changes. As classical music plays over the darkness, the bars and wires pulse, flickering with the music. It's clearly intended to evoke images of brain activity, but mostly it just comes across as a pretty light show.

The rest of the play's dealings with brain activity are somewhat more effective. The opening gambit is classic misdirection, as tutor Spike (Damien Molony) tells Hilary (Olivia Vinall) "you're looking at two years. The jewellery was under the floorboards. The police have nothing to connect you to the scene of the robbery."

As the discussion unfolds, it's revealed they're talking about the 'Prisoners' Dilemma', a psychology scenario that Hilary attempts to deconstruct. It's immediately, classically Stoppard, discussing high concepts in an engaging – and supremely enjoyable – manner.

The cast are having a ball playing with Stoppard's dialogue to boot, and it's that which really helps the show succeed. Vinall thrives as Hilary, graduating from leading roles in Shakespeare (Cordelia and Desdemona in *King Lear* and *Othello*, respectively) to what could arguably be called the modern-day equivalent. Other standouts are Damien Molony as the charming Spike, and Parth Thakerar as Amal, the arrogant driven rival to Hilary for a job at the Krole Institute for Brain Science.

The character's interactions provide the show with momentum that isn't necessarily provided by the plot itself. It's a surprisingly straightforward affair – still well put-together, certainly, but nowhere near as meticulously composed as the likes of *Arcadia*.

Stoppard admitted in interviews that he adopted a tactic akin to "write and see where it goes" for (at least parts of) *The Hard Problem*, in contrast to the extensive mappingout of previous plays. It makes for an interesting experience, as the play runs for a hundred uninterrupted minutes, providing a more streamlined and brisk Stoppard experience. The content and general style may not have changed, but the overall form has, and it's no bad thing.

Does *The Hard Problem* match up to the expectations piled upon it by its very nature? Easily. There were a few design choices that felt slightly off – the scene change music in particular had a nasty habit of either starting late or running on for too long – but nothing that actually harmed the show.

Stoppard's latest play is another gem, quite possibly his best since *Arcadia* (it always comes back to that, doesn't it?), and the director and cast that have been enlisted to bring it to life do an impeccable job. As Stoppard himself put it, "I think the play's been done really, really well."

The Hard Problem is on at the National Theatre's Dorfman Theatre until 27th May. Tickets from £15.



Olivia Vinall (Hilary) and Damien Molony (Spike). Photo: Johan Persson



It All Could Have Been So Beautiful

Joshua Jacobs is let down at the National Theatre's new production



A scene from the National Theatre's Behind The Beautiful Forevers Credit: Richard Hubert Smith

"I doubted

legitimacy

characters

because

confused

subtext"

of the

the

of the

ehind the Beautiful Forevers, based on the nonfiction book by Katherine Boo, and adapted for the stage by David Hare, is currently on at the National Theatre. Hare's adaptation is principally mediocre, and does very little but leave me wanting. Set in a slum outside the Mumbai airport, the play begins with a stage littered with refuse, waiting to be collected, along with a backdrop of crude temporary buildings. Shane Zaz's character of Abdul Husain is anchored at centre stage sorting rubbish, whilst other young characters run around collecting what they can, thus clearing the stage. This scene foreshadowed the tone of the first half of the play, not only in that it shows the frenzied nature of the characters' lives, but also the insincerity of the production, which extends to the whole play. Booming electronic Indian music attempts to corroborate and justify the pace of this scene, as the characters frantically run to and fro across the stage. However, the balance of the music forcefully reminds the audience that they are in a theatre, and that the characters moving around on stage are performing for them, undermining any possible immersion into the world in which

this play is set.

At points I doubted the legitimacy of the characters; this was not due to the actors ability, but instead because of a confused subtext. The characters' behaviour was not validated by what they were saying, and instead I felt like there was a collection of ideas and context that filtered down from the original book, via the playwright and director - some of them were coherent, some were now confused, and others weren't present at all. If you are going to adapt a book, and cannot recreate it without losing some of the content, we need to consider whether the play can stand alone apart from the text. It is important that references and behaviours which become spurious in the script and production are removed, otherwise the play loses it's integrity and becomes confused, as this play did – allusions were made to internationalisation and the effect it has on local communities, tolerance of different religions, and disabilities in India, but they were trivialised by the illegitimacy of what else was going on stage. This is a major shame, as such issues

are current and highlight why the book was successful. The comedy within the play was inelegant and childish, and thus distracted further from any serious political discussions that occurred on stage. If this was an employment of Brechtian practices something I doubt - it only served to make the experience less enjoyable, and it was done in vain. Not only was there no distinctive discussion, but the audience were again overly aware of being in a theatre.

The staging was ambitious: early on in the play, masses of rubbish fall from above the stage, to cover it yet again, as it was in the first scene; in the closing scene a character performs a jump from scaffolding, to highlight the risks that the characters made to earn money; and the most exceptional part of the whole production was when lights and sound flew a plane over the audiences heads. Although the latter device was exciting and by no means mediocre, it only served as a counterpoint to the rest of the play, and each event just seemed like an attempt to wow the audience. Although they were fun to watch, it felt disjointed from the bulk of the play. Further to the plane flying over the audience, the lighting was particularly clever, and effective at creating different spaces on a large open stage

The set, which at points was

"Norris' direction and Hare's adaptation failed the book, the cast, and the audience"

deconstructed and reconstructed, was mostly based on a large turntable, meaning the characters could walk from one scene to the next without leaving the audience's sight. Aside from the turntable, it felt gimmicky and - like the majority of things in the play - still couldn't distract from the flimsy script. I feel that Rufus Norris' direction and David Hare's adaptation failed the book, the cast, and the audience, resulting in a staging that could do little but distract the audience from the aforementioned failures – this play is an excellent example of artistry not correlating with size of budget. I don't, however, doubt the brilliance of the book, and I would love to see another adaptation of it, as I am sure the stage could be an effective medium through which to discuss the topics involved and for telling such a story. Rufus Norris is the incoming Director of the National Theatre; I hope this is an anomaly in his work, and the bathos pervading this play does not extend to his further work at the theatre.

Behind The Beautiful Forevers is on at the National Theatre's Olivier Theatre, until May 5th. Tickets from £15.



Mark Rylance - Long Live The King

Kamil McClelland takes in the Sam Wanamaker Playhouse's atmosphere

t is easy to forget how magical London is at night but as I crossed Millenium Bridge to reach the Globe Theatre, perfectly perched on the riverside, this feeling rushed back to me. With St. Paul's Cathedral illuminated behind. I was suspended in a state of wonderment as I entered the Sam Wanamaker Playhouse, the Globe's new indoor theatre space. Created to extend the working life of the open air theatre beyond sunny summer days, the Sam Wanamaker Playhouse is a truly mesmerising indoor theatre space, built entirely of wood in a late Elizabethan style: intimate, hand painted and lit solely by candlelight; I have never been to a theatre quite like it. However, this did come with a few downsides. It seems there weren't many people who were 6' 4" in the 17th century, which made fitting my knees into the cramped rows a bit of a mission. That, combined with uncomfortable benches, reports of dripping candle wax, and poorly positioned columns meant that, although certainly authentic, it wouldn't be for everyone.

Having said that, it was the perfect venue for Claire van Kampen's production of Farinelli and the King, a story about fame and the curative power of music. It recounts the tale of Farinelli (Sam Crane), an 18th century castrato, and his relationship with the King Philippe V of Spain (Mark Rylance). Philippe, disabled by his depression and unwillingness to rule, is on the cusp of being kicked out of office by his advisor De la Cuadra (Edward Peel). In desperation, the queen Isabella Farnese (Melody Grove) travels abroad in search of the famed Farinelli, the best singer of the era. Once found, through his voice, Farinelli is able to enliven the king from his depressive slumber, and each of them learns to rely on the other for emotional fulfillment. It is a tale of fame, duty and the therapeutic power of music.

It was my first visit to the Playhouse and it reminded me how much of the artistic experience is lost in large venues, where the personal nature of the art is lost due to your acute awareness of your surroundings: the man coughing two rows back; the lady flapping her programme to the left of you. And to walk in to live harpsichord music, there is truly nothing that compares! This is true of the music interludes that stud the whole play, disguising the scene changes expertly.

This is in fact van Kampen's debut as a playwright, although it seems a natural progression of her previous work as a composer and musical



Mark Rylance as King Philippe in Farinelli and the King. Photo: Marc Brenner

director. However, this is no ordinary play, as it's musical components play an almost equal role to the spoken word, both adding integrally to the progression of the plot. It also just so happens that Rylance, in the title role of King Philippe, is van Kampen's husband. Although some may argue that this seems a bit iffy, all I can say is that the resulting partnership between them is sublime. Rylance fills van Kampen's characterisation of the King perfectly: charming, hardheaded, and witty, it may in fact be that their close relationship helped develop the character even more fully.

One simply cannot fault the acting performances in this production. Rylance, behind languid eyes and a deep sadness, is delicate and sensitive in his humour, and you cannot help but empathise with him - an unwilling king shunted into a role he never wished to fill. Crane as Farinelli is equally witty and charming in his sadness, yet has a hardened exterior that comes from the humiliation of his castration and his hollow fame in the limelight. Best of all is the simply phenomenal countertenor Iestyn Davies, performing the singing roles of the duality of the

Farinelli character. His performances of Handel's arias, such as the final 'Lascia ch'io pianga', are breathtaking. Never have I before looked across at other audience members, grown men amongst them, mouth agape in complete wonderment or eyes glazed over by the haunting beauty of his notes that float through this wooden hall so perfectly. It was a holy experience.

However, this was not simply a case of highly talented actors and singers carrying a poor libretto on their shoulders; van Kampen has created a story full of rich philosophical discussion and oppositions. Through the king, Farinelli is able to largely set aside his stage persona, a self-division visually portrayed by the dual casting of Crane and Davies as Farinelli, both dressed identically but each playing an opposite aspect of his personality.

"Grown

mouth

agape in

complete

haunting

beauty of

his notes."

wonder

at the

men,

As well as discussing issues such as fame, this play also raises the importance of music in the treatment and alleviation of all kinds of mental illness, from schizophrenia to depression. And just as Farinelli is able to dissolve these feelings of deep-seated misery in the king, making him realise once again the transcendent beauty of art and

nature, he is able to do the same in us as his ethereal notes sooth us to our core. And just as Farinelli's talent, the product of a lifetime of pain, is able to ease the King's ailments, reciprocally the King provides Farinelli with a worthy audience, not obsessed with societal games, completely divorced from the realities (ironically) of upper class life. The King provides Farinelli with perspective, showing him that his depression and duality is not a unique case, but rather a commonality amongst all people in his position, raised to fame and fortune by factors beyond their control.

And as the chandeliers once again rose up, dimming the candlelit stage in a subtle changing of mood, I was left with the same restorative feeling the King himself experienced, through the music, singing, acting and venue. It was overall an extremely worthwhile theatre experience that I would recommend to anyone else.

Well, as long as they are not as tall as I am!

Farinelli and the King is on at the Sam Wanamaker Playhouse until 7^{th} March. Tickets start from £10.

"Intimate and hand painted, it was the perfect venue for van Kampen's production" **Celebrating the 1600th issue of Felix**

Tokyo No-Go: When acting goes wrong

Arianna Sorba finds bad acting deflates Harajuku Girl's fine script



Haruka Abe (Mari), Nomo Gakuji (Mr Okada), and Meg Kubota (Mrs Okada) in Finborough Theatre's Harajuku Girls Photo: Alexander Newton

'm pretty obsessed with Japanese culture. I'm also an ardent feminist, and I'm constantly moaning to anyone who'll listen about the lack of interesting female characters in modern literature. So I was more than ready to love Harajuku Girls, a new play about three women growing up in modern day Tokyo, treading the line between empowerment and victimhood as they take up work in Tokyo's notorious red light district. Heck, they even gave me a free pint with my press ticket. When I settled in to my excellent seat at the Finborough Theatre, a tiny venue above a pub, I was already glowing with admiration for the whole thing.

Alas, it was short-lived. It turns out that no amount of intelligent direction, clever staging, and excellent scriptwriting can compensate for plain old bad acting. And I mean **painfully** bad acting.

The opening scene was probably the worst. After an incredibly awkward pause where one actress clearly just forgot her lines, the rest of the cast seemed to take the entire scene to recover, so I was too busy cringing to really gather what was going on. I later had a quick flick through the

script (another press ticket perk) and sure enough, one of the actors had accidentally jumped ahead a good page and a half of dialogue. Once the cast regained their confidence the quality picked up, but never so much as to be really convincing. Like I said, I'm a committed feminist, so I don't say the following lightly, but of the five main cast members, the three women were definitely less believable than the two men. Perhaps this was simply because the women had more complex, demanding roles than the two men did - and for that I give immense credit to the scriptwriter, Francis Turnly, for writing such interesting characters - but often the female actors seemed somewhat panicked by the immensity of the opportunity, and ended up overcompensating, rushing through dialogue, or stepping on each other's lines. This was particularly true of

the main character, Mari, played by Haruka Abe, who incidentally features as the main role in *Clean Bandit*'s 'Rather Be' music video. For the simplest of lines, like "you're going to be late for work", her emphasis was all wrong in a school-play sort of way, and it only got worse as the script became more demanding. The moment when Mari tells her father "I love you but I don't even know you" was over-egged to the extent that it simply just highlighted the cliché of the sentiment, rather than the subtlety. Meanwhile the character Yumi, played by Kunjue Li, was meant to be both innocent and simultaneously painfully self-aware of her own low prospects, telling her friends "it's not my fault I'm stupid" and aspiring to work as a lift operator. But she was played with such naiveté that her complexity of character was lost almost completely. (It didn't help that at one point the director literally dressed her in a spotty onesie.) In fact, there were moments

throughout the play where I felt that the excellent script was somewhat let down by the nervous actors, since Francis Tunly has managed to create truly exciting, interesting, and believable characters with this work. As the three childhood friends grow up, their developing relationships are portrayed with such an authentic combination of support and jealousy that I was genuinely surprised to find out that the scriptwriter was a man. The gradual transition Mari makes from schoolgirl to sex worker, as she slowly compromises more and more of herself in order to achieve her dreams, was written perfectly convincingly; the only slight irony is that Mari's dream is to go to acting school.

Even the seedy male characters of the play are well rounded; through the use of increasingly sparing dialogue, Tunly convinces you to almost forgive them their creepiness, revealing their humanity. This was especially effective due to the immense talent of Nomo Gakuji, who managed to play both Mari's father and her client at different points in the performance with such confidence and skill that it didn't quite make me queasy watching it.

The staging of the play was also nothing short of spectacular, especially given how little space the theatre provides, a testament to what can be achieved when the cast are willing to do some heavy lifting. In a bold and incredibly effective decision by the director, Jude Christian, the main cast members often switched costume on stage during a scene change, still in character. The moments where Mari was helped into her clothes by her best friend, before checking her make-up in the 'mirror' that was the audience, were some of the most poignant of the whole performance, despite the fact that the walls were moving around her and it didn't quite make sense with the storyline. There's inevitably something incredibly character revealing about the way a woman takes her dress off. And the designers managed to perfectly recreate an authentic Tokyo atmosphere with their choice of music and props, without ever over-doing the kawaii Hello Kitty cliché.

But all this cannot save a play when the main characters just aren't played well enough to convince. It's not as though I didn't enjoy myself; in fact there was one particularly dark scene where I was briefly genuinely terrified – although come to think of it, the moment broke as soon as someone spoke. It was just so frustrating to watch a wonderful script with such exciting potential being wasted by uncomfortable actors talking over each other and overusing their eyebrows. Perhaps a few nights later in the run, the cast will get over their nerves and finally deliver. If they do, then perhaps this team will finally have a true gem of a play on their hands.

"There were

moments

where the

excellent

let down

by the

nervous

actors"

script was

Harajuku Girls is on at the Finborough Theatre until 21st March. Tickets start from £14; available online.

"No amount of intelligent direction and clever staging can compensate for bad acting



Art History From A New Perspective

Aleksandra Berditchevskaia goes behind the scenes at the all new **View Art Festival**

"Delaunay

cultivated

her own

version

of what

it meant

to be an

artist in

world."

the modern

recently came across an opinion piece in *Art Review* magazine L that discussed the crisis of the contemporary within art, particularly focussing on the difficulty in finding a suitable label for the art of the present day. With 'modern' art confined to a temporality at the beginning of the 20th century, and the use of both 'postmodern' and 'contemporary' rapidly falling out of favour, a new word is being called for. The author drew attention to the increased use of the term 'now', which has seemingly been employed to resolve this problem. At first glance, the organisers of View Art Festival at the **Institut Francais**, were not faced with confronting this dilemma. After all, their ambitious programme, which took place over the weekend linking February and March, was concerned with discussions around the topic of art history

The variety of events on offer ensured that there would be something to suit anyone with a mild interest in the arts, even if that

something was merely fulfilling a desire to rub shoulders with the continental art crowd. There were free short talks running throughout the day on Saturday, complemented by debates of a longer form to lead on from the challenge posed by the Friday night opening discussion on 'Redefining the Artistic Canon'. The billing featured contributions from many respected curators, art historians and other representatives of the French and British art establishment. My favourite elements of the programme related to the Preserving and Restoring focus, with questions such as 'How do preservation and restoration of art works determine the course of art history?' under discussion by the best minds in the field.

The concurrently running series of student-led 'salons' with intriguing titles along the lines of 'The Tales of the Killer Rabbit', on the other hand, ensured that a fresh perspective on art theory from the next generation of critics was also voiced. For a

public less partial to the topics of conservation and collections the 'Avant-Gardes and Precursors' strand also had plenty to offer. The star draws were probably the Saturday night appearance of the inimitable Ieremy Deller, winner of the 2004 Turner Prize and Britain's representative at the 2013 Venice Biennale, and a screening of the Dadaist film Entre'acte on Sunday afternoon

Anyone who managed to attend the 'My Night with Philosophers' event hosted by the same organisation two years ago would be able to understand my nervous anticipation of the queues I was likely to encounter. especially in view of the quality of the programme. However, on entering the main building of the French cultural centre early on Saturday afternoon I was surprised to find the staff to visitor ratio peculiarly balanced to oppose my expectations, and the atmosphere surprisingly subdued.

"She

a stark

to the

contrast

Russians

who were

motivated

ideology."

by Socialist

represented

I was there to attend a fascinating

insight into the **Tate**'s upcoming Sonia Delaunay retrospective, delivered by the curators of the Parisian rendering of the exhibition. The Institut Français provided a particularly appropriate setting for this discussion about Delaunay and her ideology – one of her colourful abstract tapestries normally hangs above the main staircase of the entrance hall. Constrained by a short-talk format, the speakers provided a regrettably

brief overview of the work and life of this doyenne of modern art. A key figure of the European avantgarde, she defied easy categorisation Despite engaging with the numerous emergent movements of the first half of the twentieth century, including particular intimacy with the Parisian members of Dada, Sonia and her husband Robert remained at a distance and cultivated their own version of what it meant to be an artist in the modern world. Delaunay's understanding of this transcended the boundaries of aesthetic art and allowed her to engage with fashion, interior design, traditional craft, theatre and film as media for delivering her message. She often modelled her own designs at social events, almost suggesting an early version of performance art. For Sonia Delaunay a line between art and life was unnecessary; all of her activities and collaborations bled into and complemented each other. continually drawing attention to her other work. The curators argued that this warm embrace of selfadvertising coupled to an interest in the industrialisation of design processes reflected a utopic vision which had capitalism at its core. In this way, she represented a stark contrast to the similar developments amongst her Russian contemporaries, the Constructivists and Suprematists. who were motivated by socialist ideology. The talk was supported by images of the exhibition, which along with the persuasive rhetoric of the speakers helped to generate a genuine excitement for the opening of this show in April. Apart from paintings the exhibition is set to feature tapestries, photographs, costumes, furniture and books – a feast for the senses drawn from the richness of the oeuvre of this remarkable artist In contrast to the talks, the guided

tour listings seemed to be the more popular events of the Festival, with all of the options selling out well in advance of the opening night. I was lucky enough to reserve a place on a 'Behind the Scenes' visit to **Blythe**



Wooden aircraft windtunnel model in the Science Museum's Blythe House. Photo: Creative Commons



e 1600th issue of H

110211

120 1 1 1 1 2



Hand-coloured pochoir by Sonia Delaunay. Photo: Goldmark

"Perhaps

to remain

relevant,

needs

to find

its own

"now".

version of

art history

House, which is home to the archive collections of the British Museum. V&A and Science Museum. The tour description promised items that had never been on public display which, coupled with 15 person cap on participants, helped to instil a sense of excitement from the outset. The almost palatial grandeur of the Grade II-listed Blythe House tucked behind the Kensington Olympia exhibition hall, seemed a world removed from the bustle of the Hammersmith Road that led me to it. Its illustrious history, the source of numerous anecdotes from our vivacious hostess Rebecca, was enough to satisfy most of our appetites for an exclusive experience even before we made it through the fover to start viewing the collection. Blythe House holds 85% of the object owned by the Science Museum, with only "anything larger than a washing machine" being allocated to a more spacious storage site in Wroughton. Overall, this means that the public galleries on Exhibition Road hold

only a tiny proportion of the curiosities that the museum has to offer. Our guides around the treasure trove were two dedicated members of the collections and curatorial team. whose unlimited enthusiasm and background knowledge ensured that we were entertained throughout.

We worked our way through the different levels of the building, descending from the top floor storage aptly dedicated to Space and Aviation to the ground floor rooms housing the, often bizarre, peculiarities collected by Sir Henry Wellcome of the **Wellcome Trust**. This

medically-themed part of the tour included an entire room of wooden prostheses, while another was filled with statuettes of saints associated with wellbeing and ancient sacrificial objects intended to promote health and fertility

Many of the objects in the collection hold a purely aesthetic beauty and I don't doubt that anyone interested in the history of modern design would relish a

"Whether vour passion lies with telescopes, planes or medicine, there is much to take your breath

away."

visit to those rooms. Whether your passion lies with telescopes, planes, ships, or the history of medicine or the development of modern technology such as telephones and audio speakers, there is much to take vour breath away. Our whistle-stop (two-hour!) tour concluded with a visit to the conservation studio where museum staff were busy cleaning old calculators in time for their appearance at a new exhibition dedicated to Mathematics. The presence of a Biosafety Hood and the strong smell of chemicals in the room almost brought to mind a typical lab space at Imperial!

A A ASSAULT I HAR ANY MACIN

It felt incredibly special to be allowed to freely wander around those rooms and inspect the objects; I can't help but echo the sentiments of Sir Roy Strong, a former director of the V&A, who argued that the site should be not just a dumping ground but an exciting new complex for the public" when the original bids for the space were first being put together. I guess that, until an increase in arts

funding makes that possible, we must place our faith in the curators of the Science Museum exhibitions as they select which of those items should be brought out of hiding to best tell the inspiring stories of science.

Considering my own

overwhelmingly positive experiences at the festival. I can't help but think how much of a shame it was that the event did not attract more attention Did the programme not pack enough of a punch? Or is it more likely that organisers of an art history festival (even if one of the themes deals with the subversive avant-garde) will always be faced with the burden of shedding the stuffiness and highbrow scholasticism that is associated with the term? Perhaps to remain relevant and interesting to a new generation of art lovers, art history needs to engage with the wider debate of the art world and find its own version of 'now'. I just hope that View Festival survives another year in order to lead the way.

The View Festival was on at the Institut Français, 27th Feb - 1st March.



Goya's Grotesques: The Image and the Fury

Fred Fyles is horrified and awed by this display of Goya's lost album

arely has there been a painter who represents the darkest recesses of humanity more skillfully than Spanish artist Francisco Goya. Making his living as a court painter for the latter half of the $18^{\rm th}$ Century, it wasn't until 1793, whilst recuperating from a disease that would leave him permanently deaf, that he began to paint the violently disturbing scenes for which he is best known today. Saturn Devouring His Son; The Sleep of Reason Produces Monsters; the entire The Disasters of War series; all of these are deeply unsettling visions of the blackness fundamental to human nature, and it is for these, more than for his masterful court scenes, that he is most celebrated today.

As part of his convalescence, he began painting a series of private albums; these works contained neither preparatory sketches nor a diary of what he saw, but instead acted as a record of thoughts, dreams, and fantasies – they were, in other words, fundamentally private. However, whatever qualms one may have about prying into another's personal work is swiftly quashed by the sheer magnificence of The Courtauld Gallery's latest exhibition. In an astonishing feat of curatorial adventuring, Juliet Wilson-Bareau, one of the world's leading Goya experts, has brought together all the extant drawings from a single one of Goya's albums, presenting it - for the first time - as a complete whole.

The result is nothing short of magnificent. The Witches and Old Woman Album - not a name chosen by Goya, but rather by art historians, thanks to its themes and subject matter - is a collection of 22 works of watercolour and ink, whose small size belies the emotional power they hold. Some are grotesque, such as Unholy union, in which a grinning figure, clad in a flamenco-style dress, carries away a snake-bound man; others are pitiful, like Can't go on any longer at the age of 98, whose central, ancient figure shuffles forward, back bent double, supported by two worn sticks. While Goya may not have been particularly favourable in his portrayal of the elderly, with a penchant for wizened crones and toothless hags, his work is unmistakably humanistic, conveying all the joy and misery of life.

This duality is reflected in his rising and falling figures, a popular feature of his work - in Regozijo (Mirth), two figures are shown suspended on an expanse of white paper, seemingly floating. One figure, who appears to be a man, although nothing is certain in these works, stretches his



Regozijo (Mirth), red chalk and scraping. 237 x 148mm. Francisco Goya (1746-1828) Image: Courtauld Gallery

arms out to his sides, while the other

gazes up, her legs akimbo and her

mouth twisted into an exaggerated

underbite. They follow the themes

explored in his earlier set of prints

Los Caprichos, a selection of which

are presented in an anteroom in an effort to give historical context which is interesting, albeit unnecessary: the Witches and Old Women album is strong enough to stand up on its own. Gova's work in this album repeatedly returns to a number of key themes. Chief among these is nightmares: Goya draws a direct link between dreaming and the grotesque, bringing to mind Freud's saving that 'dreams are the royal roads to the unconscious'. Some, like He wakes up humanistic, kicking and I can hear snoring, directly conveying allude to the process of sleeping and waking, while in others the contents all the joy are so horrific that we have little and miserv choice but to conclude - or perhaps of our lives" hope - that they must be the products of bad dreams.

"Goya's

work is

"What is truly inspiring is the skill with which the curators have assembled the album"

One such example is *Wicked woman*, which truly is the most unsettling image in the whole gallery – a witch, whose face resembles nothing more than a skull, over which skin seems to be merely draped, grasps at a baby, its spine twisted, intent on feasting. These are all nightmares. It is as if Goya were gripped by a malarial fever dream, ink pot in hand, consumed by the desire to record his unholy visions. The blank space that surrounds most of the figures, which are isolated in the centre of the page, only reinforces this off-kilter, nightmarish quality, conveying a sense of supreme loneliness.

While the paintings themselves are magnificent, what is truly inspiring is the skill with which the curators have assembled the pages of the album, which have been scattered across the globe. Furthermore, expert analysis has allowed the original order to be deciphered, knowledge which had previously been lost thanks to heavyhanded cropping of the images, which led to the numbers denoting the progression being removed.

Berlin, New York, Paris; these

pictures have travelled a long way to be here, and to have them assembled in a single room is breathtaking, allowing us to take in the full breadth of skill on display in Goya's work.

With a deft use of little more than black ink, washes of watercolour, and a razor, Goya has conjured up some of the more profoundly affecting drawings I have had the privilege of laying eyes on. A combination of the figurative and the abstract, these pictures, which range from the supremely delicate to the unapologetically bold, simply cement Goya's already-solid reputation as a fundamental bridge between the romantic and the modern. I am thankful to the Courtauld Gallery. and particularly to the efforts of Wilson-Bareau, for assembling the Witches and Old Women album, and allowing us to experience the full, magnificent, terrifying glory of Goya's darkest visions.

Goya: The Witches and Old Women Album is on at The Courtauld Gallery until 25th May. Tickets £7.50 adults; £3 students.



Cantar y Bailar (Singing and dancing), brush and black and grey ink with scraping. Francisco Goya (1746-1828) Image: Courtauld Gallery



The Indian Queen — Purcell's Final Flourish

Kamil McClelland reviews Peter Sellars' contemporary take on a classic

o call this production of *The* Indian Queen at the ENO Purcell's opera might be seen as unfaithful to the extent to which Peter Sellars has reinvented the work First performed in 1695 only a short walk away at Theatre Royal in Drury Lane, *The Indian Queen* was Henry Purcell's final work, for he was to pass away tragically prematurely later that year. Based on a libretto of the same name written thirty years previously by John Dryden, Purcell was unable to finish the work, and hence it has been largely left abandoned from the contemporary repertoires of the world's great opera houses. Yet, as brilliantly illustrated in this interpretation of the piece, Purcell's music still carries all of the weight and majesty of his original vision, proving to any listeners that he was a true master of Baroque opera.

But why do I act as if Sellars' version of the work, originally performed in 2013, is almost an entirely new work, or at least one that would be largely unrecognisable to the great Purcell himself? Well, in typical Sellars fashion he has turned his nose up at orthodoxy, creating a work as unique as his colourful dress sense or spiked up hair. From the colourful stage design by Angeleno graffiti artist Gronk, to the accompanying text by Nicaraguan writer Rosario Aguilar, overflowing with emotion, this is a collaboration of the arts in the truest sense, full of intrigue and excitement, once again showing why Sellars is one of the most highly acclaimed opera directors of our time.

This production forms part of Sellars' six month residency at the ENO, one that he described as "very exciting" due to their "consistent artistic excellence" and "lack of orthodoxy". As well as this production, he took on Adams' The Gospel According To The Other Mary, which ran during last November and December, to great success. I was excited to see what The Indian Queen held for me. I couldn't honestly say that I knew the work well at all beforehand, but I knew that whenever Sellars gets his hands on something it is going to be interesting.

Whilst Dryden's original text tells the story of Latin America before the Spanish Conquest, Sellars has completely rewritten it, describing it as "unrevivable" due to its highly stylised take on the theme, as if it were some kind of French love story. Instead, he has transported the story forward a generation, to the horror and barbarism of the conquistadors, raping and pillaging as they went. And not only that, but he has reformulated it using text from *The Lost Chronicles of Terra Firma*, a



Maritxell Carrero and Julia Bullock in The Indian Queen. Photo: ENO / Richard Hubert Smith

novel by Rosario Aguilar telling the story of Mayan colonisation from a female standpoint. It is the tale of an Indian Queen, performed incredibly sensitively by Julia Bullock, married off to a sadistic Spanish general, whom she then falls helplessly in love with as he continues to destroy the culture and heritage of her people around her. It is an agonising insight into a story lost in the annals of history.

The opera opens with a series of Mayan creation scenes, contextualising the rich spiritual heritage that existed when Spanish forces, emotionless with their camo gear and assault rifles, arrived. In turn, panels painted by Gronk descend from above like a deity, a monolith akin to Kubrick's creation myths in 2001: A Space Odyssey. Ballet dancers act out these tales, elegantly choreographed by Christopher Williams, occupying the stage with all the majesty of the gods they represent.

And how does 17th Century baroque music from Western Europe possibly accompany a story like this, dark and full of pain? Well, to my utter disbelief, perfectly! I think Sellars describes it perfectly when he says Purcell's score is "the most emotionally overwhelming music I have ever put on stage". Incorporating both the original music as well some of Purcell's other religious works, a soundscape is created that is at one moment ethereal and in the next, heartbreaking – truly breathtaking.

"They

impose

on the

all the

of pre-

epicness

temples"

Columbian

themselves

stage with

I cannot leave this review without going into more depth about graffiti artist Gronk's unbelievable stage design. Each panel that descends from above, as if from heaven, is an artwork in itself, not merely some prop to aid understanding of the story; it is the story, as integral to it as any other part. He manages to embody the rich artistic heritage of Latin America, from the dazzling colours to the naturalistic designs to the anthropomorphic animal-god figures boldly defined on canvas, simultaneously bursting with energy and static, like a relief on the side of a Mayan pyramid at Chichen Itza. They impose themselves upon the stage with all the epicness of pre-Columbian temples, as if the whole opera is being performed in a vast religious space, with dramatic shadows projected onto them from the clever front-lighting. It is a wonder to behold, well worth the visit, let alone the accompanying genius of Purcell's music. I really do hope for further collaborations between graffiti artists and opera houses, whether Gronk or someone else. No other group of artists have such a command and understanding of decorating space, whether it be our daily architectural surroundings or a West End stage - they are masters of the mural

In the past, Sellars has been criticised a number of times for straying too far from the creators original vision, reinventing the opera as his own as opposed to simply enhancing themes that already exist in the work. However, I don't mind too much and I don't think Purcell would either. In this work, Sellars has created something truly unique, not only a gesamt kunstwerk that incorporates music, singing, art, spoken word and ballet, but also, unusually, an opera from a female perspective, thanks to Aguilar's beautiful text. I had not realised how alien this idea was, an opera about women, until I actually saw this work: I suddenly realised that every single opera that I had ever seen was from the male perspective of an event, with female characters merely adding colour to the script. It was shocking, and highlighted to me the underlying sexism that pervades much of Western art - thank goodness for Sellars! He has created a work that is refreshing in every sense and is vet another example of his innovation in the field. And we mustn't also forget to acknowledge the ENO in all of this: their tireless support of operas that break away from the conventional, even as they struggle for their existence due to the Draconian limitations imposed on them by Arts Council England, deserves to be celebrated. Lets hope it survives long enough to put on many more of Sellars works.

The Indian Queen is running at the English National Opera until 14th March. Tickets from £12.

"Once again showing why Sellars is one of the most highly acclaimed directors of our time"



Felix 1600: Culture

The road towards the *Felix 1600: Culture Section* has been long and arduous. It was our editor, Philippa Skett, who first suggested the idea; given that the output of Arts, Film, Music, TV, and Fashion had been of such consistent high quality this year, Philippa felt that a bumper 'Culture' section would be a good call. Over time this swelled, from 24 pages, to 32, and finally to the 40 page behemoth you are holding right now. We couldn't be more proud.

Of course, we haven't done this alone, and the *Felix Culture* team would like to thank the following:

Contributors

Aleksandra Berditchevskaia, Kunal Bhanot, Pete Brook, Jingjie Cheng, Clara Clark Nevola, Tessa Davey, Fred Fyles, Ben Howitt, Joshua Jacobs, Ellen Mathieson , Kamil McClelland, John Park, Grace Rahman, Joshua Renken, Arianna Sorba, and Jack Steadman

Editors/Layout

Tessa Davey, Fred Fyles, Ellen Mathieson, Kamil McClelland, John Park, Grace Rahman, and Jack Steadman

Copy Editing Team

Stephen Ball, Ben Howitt, Cecily Johnson, Ellen Mathieson, and Jack Steadman

Finally, a few quick shout-outs: firstly, massive thanks to the various takeaway outlets who have kept us fuelled throughout this project (we're looking at you Number 10); also, the security guards at the South Entrance to the V&A for not confiscating our giant cat head during our hijinks; finally, thank you to our editor, Philippa – we couldn't have done this without your drive, your vision, and your insatiable appetite for children's cough syrup.



Get ready.

Voting opens

12:00 Friday 6 March

Cast your vote at: imperialcollegeunion.org/vote

imperialcollegeunion.org/elections

imperial • college union



It's easy and quick to vote anywhere

You can also vote on your mobile phone! Visit **bit.ly/voteicu** through your phone's browser.



imperial

college

Keep up to date with The Elections Live Stats

ashboard Recent Activity Votes cast New voters	11.6%	11.7% Postgraduates	11.2% Postgraduates Taught
15-	Undergraduates	Research	000/
5- 1 1 10 4 4 5 6 4 3 4 1839		06	2094 votes cast by
or - History	11.5		1972 voters
Nau London	3% turn		154 1
65 Binningham City University	43% Last 26	24	ast 177 154 lay ^{votes voters}
a 24 ↑ Last 26 24	0100	es voters	00.0%
Last 26 24 hour votes 5 min votes votes hour votes			in motors.
23.5		Proportio	n of last year's 4958 voters this year, but have yet to d 4958 to go!

imperialcollegeunion.org/elections

06.03.2015 73

<u>Union President</u>

Lucinda Sandon-Allum



Your time at Imperial should be that of a versatile world-class institution. However, 29% of you feel the Union is not the voice for students; I can be the one to change that, as the platform for representation of all students

I've been fully involved in the Union throughout my 3 years studying Biology. I have gained insights, knowledge and understanding of a diverse group of students, through my experience as RCSU Vice-President (Activities),

Netball club member and 2 years in the RAG committee My main aims:

- Ensure students feel supported by the Union.

- Increase the ease of access to Union services and activities for all students.
- Greater student engagement. - Strengthen the student
- community.

To achieve these aims, I will: - Introduce 'work weeks' and skills workshops, allowing for informed

career choices and successful applications.

'Find a Sponsor' event for Clubs, Societies and Projects; ensuring equal and enhanced opportunities for IC and ICSM CSPs to obtain funding.

- Amplify the support for the setting-up of new societies and the running of student-led campaigns.

- Greater transparency and communication of matters that affect us, by implementing a consultation platform for students to express their views, before decisions are made.

- 'Recommend a House' scheme to make the process of 'house hunting' easier.

- Bring together Imperial's diversity at an annual 'Celebration of Culture' evening.

- Strengthen communities within Imperial through integrated

undergraduate/postgraduate events. Visit www.votelucinda.co.uk to find out more!

If you want me to be YOUR voice, make me YOUR choice.

Luke Armitage

Kills all other competition.

Extremely the best.

Undeniably winning the election.

Union President



Fact: I am faster than 80% of all snakes.

Whenever I'm about to do something I think 'would an idiot do that?' and if they would, I do not do that thing.

How would I describe myself? Three words: Hard-working; Alpha Male; Jackhammer; Merciless; nsatiable

But that's enough about me. Fact: There is not enough Cider

Deputy President (Clubs and Societies)

on campus. No crofters to be seen anvwhere

Fact: Nobody has ever been into university on a Thursday. Therefore removal of all contact hours on Thursday.

Fact: There is not enough Snooker on campus screens.

Fact: There are still no dip-dabs. Fact: Nowhere on campus can I buy Beets.

Question: What are we going to do

about this?

Answer: Vote for me to find out. Fact: Beer cost the union 68 pence per pint to purchase. Therefore sell all pints for 70 pence.

Fact: Ronnie O'Sullivan has never visited Imperial.

- Fact: Cider makes things less
- boring. Therefore the union will supply free cider to council meetings. Fact: Transparency.
- Literally the best.

Benjamin Howitt



I'm currently the treasurer of the Recreational Clubs Committee (RCC), and look after the finances of over 45 clubs, with a combined turnover of £420,000. I've supported the creation of dozens of clubs this year as a member of the New Activities Committee.

I've also worked at the Union bar and the Union reception, so I have a great working knowledge of how our Union operates.

And, of course, I am a member of a whole host of clubs too! I am heavily involved in Pole Dancing, Musical Theatre, Cheerleading and Felix, as the editor of the Clubs and Societies pages, so I have a wide spread of experience and ideas. I want to:

- improve support for new clubs and committees by adding to training for club and society volunteers and committing to regular cross-campus

check-ins on what clubs are up to. - make people approachable; I believe sabbs should spend at least a day a week available to students. I'll also move my office in with the rest of the student activities team.

- form a focus group of students to see how we're doing on a regular basis. Students tell me they don't know how to tell the Union there's a problem, and I aim to fix that - commit to making C&S activity

in Acton and on other campuses a reality.

I love promoting and celebrating the amazing things clubs and societies do, making me a perfect candidate to represent your views, full time, as DPCS next year.

Deputy President (Clubs and Societies)



Hi, I'm Issie. I'm a third year studying biology, but I think you'll agree there's a lot more to university than academia.

From speed skating for Imperial to posing naked for *Felix* with nothing but a saxophone, I have become well and truly integrated in clubs and societies. I believe extra-curriculars are vital to people's welfare, happiness and success at university, so I want them to be the best they can be.

With me as your deputy president

you would be in safe hands: - This year I am chair of IC Big Band, also sitting on the Arts &Entertainments board. - I am current director and

founding member of Take Note a cappella group, and tour organiser of A Cappella society.

- I have held Skate Society committee positions over the past two years.

I have experience running societies from bottom to top, and

understand the issues that concern clubs of different types and sizes. No matter how big or small, social or competitive, your club matters! As DPCS I would:

- Support smaller clubs and societies.

Continue the review and overhaul of management boards.

Review and encourage an overhaul of room booking systems.

- Review and adjust eActivities to improve accessibility.

Isabelle Barrett

- Continue the fight to protect training grounds.

Encourage inter-society events. I am keen to interact with you directly to solve any issues that arise,

and will fight for what I believe is best for you! For more details of my manifesto visit www.challengethecarrot.co.uk



Deputy President (Clubs and Societies)

Tom Rivlin



As Social Clubs Committee Chair, I've overseen the development of over 60 highly varied clubs with a turnover of almost £150,000. This has given me insight into how the Union works at the highest levels, and the skills needed to manage large budgets and groups of clubs.

I'm a physics student, *Felix* contributor, and former chair of the Sci-Fi Society. I'm running for DPCS because I've benefited from all the clubs I've joined, and I'd love to give something back to make your time at Imperial as great as mine has been. In my four years here, I've gained ideas for improving all clubs, societies and projects. I'm passionate about the Union, dedicated to its clubs, and well-organised in managing projects and emails.

Students generally see the Union as a monolithic, opaque organisation. Often, a club committee only interacts with it when making claims through the mysterious eActivities, or when being nagged to attend management group meetings. I will ensure that every member of every club enjoys a user-friendly experience. The Union is here to serve its members, and my door, inbox, and Skype will always be open to you. As DPCS, I will:

- Produce a definitive, up-to-date guide to eActivities

- Defend the autonomy of all clubs

- Tailor Union training material to best explain what your role is
- Increase transparency of the Union's inner workings

- Advertise higher level meetings to more students

- Complete the Management Group restructure started by the DPCS this year

Visit *voterivlin.co.uk* for a full manifesto.

Deputy President (Finance and Services)



If you would like to see your daily life made easier then vote for me!

I have organised over 100 events for more than 40 clubs as the Dramsoc Technical Director, giving me a unique insight into how a large variety of societies run, and how to make their high-value, high-risk events run smoothly.

Having been treasurer to multiple societies, I know how infuriating

simple Union tasks can be, so want to change things to make it easier for you.

I will make your annual budgeting process easier so that you can get it done faster and more easily predict how much funding your society will receive each year.

I will improve long-term club plans by allowing you to save money across multiple committees to make it easier to purchase expensive equipment, or build up reserve to draw on if you run into problems in the future.

I will make your financial transactions easier and quicker by reducing the need for management group approval so you don't have to wait for them.

I will make it easier for you to book rooms by making the booking schedule freely available so that you know which rooms are free when.

Ali Lown

If you vote for me I will make your interactions with the Union quicker and easier, letting you get back to socializing, running your clubs, or whatever else you fancy doing to avoid your degree!

Deputy President (Finance and Services)



Vote Chris Kaye for experience: As a trustee of the Union this year, I have been jointly responsible for a charity with a turnover of £7m.

I lobbied to help level the playing field for women, by successfully reducing the cost of feminine hygiene products in Shop Extra. Working with the Commercial

Services team, I have championed inclusive, non-alcohol focussed

events such as DRI.

Vote Chris Kaye for new ideas: I will work to implement Gift Aid on donations to the Union. This can add up to 25% extra to donations when received from taxpayers.

I will work to implement a donation button for all clubs and societies union webpages, so it is easier for clubs to get donations direct from alumni and benefactors. I will review Union catering, and lobby for fresh and improved pizza bases made on-site at the Union. I will continue the incumbent DPFS's work to lobby College for greater transparency and fairness in its fees and charges, such as international bank transfer charges.

I am certain that my experience coupled with my new ideas will bring a positive impact to the Union and to your student experience.

Christopher Kaye

If you like what you've heard, please vote Chris Kaye for DPFS.

Deputy President (Finance and Services)



I'm Lizzie, a final year physicist. I'm currently chair of Skating Society, a role in which I've learned a lot about how to budget for a society, and the issues which societies face with regards to money. I've also been secretary of FemSoc for two years and secretary of Skate Soc in the past two years.. These societies have made my time at Imperial immeasurably better and I want all societies to be able to run events that enrich students' lives. This is obviously easier when finances can be managed easily and efficiently, and that's what I would be there to help with!

As DPFS I would promise to: - Make the process of applying for tour budget clearer and easier, and concentrate on maximising the amount of money available to societies. - Make it easier for smaller societies to utilise union spaces such as the Union Bar and Metric. For many societies the minimum spend is unattainable, but they would like to hold an event with a bar. I'm sure a compromise could be found that suits both parties financially.

- Maximise financial support to campaigns. Student run campaigns are an excellent idea, and can make real change on issues that are important to IC students.

Elizabeth Campbell

- Make sure that the bars remain a pleasant space to meet with friends, and a place where you would like to spend time.

I'm mathematically literate, love a good spreadsheet and most importantly I really care about the Union and want to help it run smoothly.

Deputy President (Welfare)

VOTE FOR EXPERIENCE

Experience as ICSMSU

Member of several

UK and involvement in their project

to tackle the lack of affordable

housing in West London.

Close links with Citizens

Undergraduate training in psychiatry and sexual health Launched a national campaign to improve student

funding for senior medics Personal experience of many of the difficulties of university

life after 5 years at Imperial Suffered and overcame own mental health problems. I have

experienced the flaws in the welfare system first hand. THE FUTURE'S GINGER Fight further halls closures

and lobby for more affordable rooms Unfreeze funding for

Student Counselling and lobby for a more extensive system

Lobby for increased provision of mental health support in College

Extend peer support networks already proving successful in ICSM to the whole of College

Increase awareness of support services available in College and the wider community Hold open forums with as

many student groups as possible to identify and tackle unreported issues More support and training

for constituent union Welfare

Officers

Review personal tutor selection and training

Increase support for student-led campaigns across all liberation zones

Revisit Safe Space Imperial initiative for sexual harassment reporting

Vote experience. Vote compassion. Vote dedication. VOTE JEN Full manifesto: https:// www.facebook.com/ events/836780536380272

eputy President (Welfare)

Over the past four years, I have come to realise just how critical student welfare is. With the amount of pressure we're all under on a daily basis, it's essential to have the support of the union behind us.

As you might know, I started running a regular Welfare section in Felix this year because I believed we needed to reach more students and help raise awareness while letting people know what welfare resources

are available. I'm also familiar with how the union operates due to my current roles as both an academic representative and a club secretary, which have given me the necessary expertise for the position.

Most importantly, through my own experiences, I have come to know exactly where the system fails to provide students with the support that they need.

So what do I plan to do about it? I

want to work on two key areas: Mental Health

- Set aside my lunchtimes to talk to students regarding the mental health resources available, and help them find the best options

Deal with the abysmal NHS waiting times by running more therapy-based group sessions

Work with and/or lobby college to expand the counselling services offered

Accessibility -

- Hold welfare events at other campuses so that medics and other students not based primarily at South Kensington can benefit from them - Have better personal tutor

Diba Esbati

training to help support students with welfare issues

- Provide more training for the Welfare and the liberation officers - Create resources to address more minority specific issues

Deputy President (Education)



My name is Chun-Yin and I am the current ICSMSU Academic Officer (Science Years). Over the past year, I have had the privilege to represent 400+ students across 16 cohorts. Together with my Reps and working with the Faculty, I have been able to realize improved learning experiences for my students, including roll-out of Panopto recordings, strengthened academic welfare support, improved teaching, and the introduction of new careerbuilding opportunities for the Biomedical Science program.

As your Deputy President (Education), I aim to deliver on several areas to improve your learning, strengthen your academic support, and increase your education's value, including:

- Best practice: To conduct a 'census' before and at my term's start, so to base my agenda on the issues that you care about, and to work with College on identifying/sharing 'gold

standard' practices

- Personal tutor support: To introduce – as minimum– pastoral groups of ~6 students and 2 staff members, ensuring regular tutor meetings and promoting face-to-face time between students and staff

- Feedback: To introduce – as minimum- a '3 good/3 bad things' framework in assessment feedback 'Hop-on' representation: To make

it clear that you can contact anyone in the Rep hierarchy if you have

learning concerns - you shouldn't have to be strategic in order to be heard

Chun-Yin San

I have many more ideas, so do get in touch via email (cys12@imperial. ac.uk). On Friday 9th 12:00-14:30 I'll have a drop-in at SAFB, and on the 3rd/9th/12th13:15-14:00, I'll be at Co-Curricular Studies (3/F Sherfield) so do come and have a chat!

Felix Editor



I'm currently Felix's Music Editor, and I've always enjoyed reading, writing and getting involved with our student paper. I've written press releases for the House of Commons, so have a good understanding of how journalism operates outside of the university environment.

Felix has massively improved this year, but there is always scope to go that extra mile! I would love to take

the reins next year and, if elected, I plan to:

Improve our online presence by creating a new website from scratch, revamping the app and extending our social media reach to ensure we attract as many readers as possible. I'll increase our online advertising scope and reinvest the profits into the paper to increase its quality.

Recruit an online editorial team

to make news articles instantly accessible.

Make *Felix* more open to all by running workshops on news reporting, editing and design. I'd also increase the diversity of our contributors; more photographers and illustrators on board would add depth to our reporting.

Get *Felix* out by 10am every Friday, so you don't have to wait until

lunchtime to get your fix.

Revive our gaming magazine 'Another Castle' to accompany 'Phoenix' and 'I. Science'.

Grace Rahman

Get *Felix* back into halls for first years so a copy is in their rooms on the day they move in.

Continue to hold the College to account, keeping Felix free from the Union's influence.

Jennifer Watson

06.03.2015 75







ICSMSU President

Maredudd Harris



ICSMSU is a fantastic asset to our education. I want to make sure this asset is kept as strong as ever and continues to serve the needs of the student body.

I have been on committees throughout my four years at ICSM. These have included RAG, Boat Club, Rugby Club and ICSMSU as Clubs and Societies Officer. I have learnt a lot about the running of ICSMSU from these. I don't make promises I can't keep but you can expect high commitment, communication and a well run Students Union from me.

If elected these are the things I aim to implement: - Jenny Watson is doing an

incredible job in highlighting the need for better funding for 5th and final year students. I will continue to support this campaign.

- ICSMSU and the faculty are continually looking for ways to

improve education at ICSM. I aim to
implement an essay competition to
hear your feedback and experiences.
There has been a lot of
discussion over the use of The
Reynolds Bar. I aim to foster a
continuing open dialogue between
faculty, bar and the students about its
use.

- I aim to better publicise the work the officers do and the support the SU can offer you whilst at

Imperial.

- ICU has fantastic opportunities that are often less well advertised within ICSM such as the volunteer recognition awards would be well suited to our students who offer their time so readily.

I look forward to answering any questions at hustings

<u>RCSU President</u>



Hi!

My name is James, a 3rd year Chemist running for RCSU President! I have been on the RCSU committee for the last two years, as Secretary and current Treasurer and have gained a great amount of experience over this time. I have learnt a lot about the workings of the RCSU as well as where it can improve, and I would love make these changes as next year's President. I am also the current Rifle and Pistol Club Captain, a role which requires a high degree of responsibility and organisation due to the nature of the club! As President I would:

 Make the RCSU a community driven by you, rather than just an events organiser, creating more opportunities for people to offer feedback.

• Introduce workshops for skills such as study techniques, stress

relief and more throughout the year to cater for more aspects of student welfare.

Re-form some of the RCSU's sports clubs to give members an opportunity to play casually as well as trying to re-start inter-faculty sports competitions. I would also look into starting non-sports clubs where there's a demand!

• Introduce new events including inter-departmental

James Badman

competitions and a Europe trip (at last!) alongside delivering the traditional events such as the seasonal balls and bar nights, and expanding the more popular events.

• Build on this year's success of Broadsheet and improve Science Challenge, making it more accessible and varied, whilst keeping its core values.

Thank you for taking the time to read this and don't forget to vote! :)

Ze Tan

<u>CGCU President</u>



I'm Andrew Olson, your current CGCU Events Officer. This year however I will be running for president. I believe that I can make a difference on how the CGCU is run, and build on what Tim has done this year. My three main aims for the following year are:

-Increase the presence of the CGCU on campus by organising more and better events, with a great focus on a good Welcome dinner and "casual" events like the City and Guilds Week and mince pie parties.

-Strengthen our relationship with the other constituent unions (Royal College of Science Union and Royal School of Mines) by organising joint events. Increasing the presence of the CGCU in the Union, giving a stronger voice to all engineers.

-Increase student support by promoting welfare sessions as well as

working with societies and campaigns that provide student support.

I bring experience and I'll make sure that every member of the CGCU has a say in how things are run. I hope I'll have the pleasure of being your president next year!

Cheers, Andrew Olson CGCU Events Officer

<u>CGCU President</u>



I am Dave and I am currently the Faculty of Engineering Representative for Undergraduates as well as the Electrical and Electronic Engineering Year Representative. With the involvement and opportunities I already have to obtain feedback and seek a more holistic education for all, I would like to run for the CGCU President to improve and lead CGCU. Having obtained regular feedback time to time, I had followed up every request thus far. I think as a CGCU President, I can definitely do more for our College and I aspire to work harder to provide better education for you and I.

Andrew Olson Gallardo

<u>RSMU President</u>

Madeline Hann

06.03.2015 77



Since falling head over heels in love with the RSM in my first year, I have spent this year fulfilling two committee positions. As Tour Secretary for RSM Hockey, I have been involved in all major decisions and every day running of the club. I have also played a key role in establishing RSM Netball, and have recently been made Social Secretary. The strong bonds linking the RSM community are founded through outstanding participation in DepSoc, Sports Club and RSMU activities and events. I intend to ensure our activities and events remain illustrious and inclusive to all. I will make certain all events are thoroughly publicized to Materials and ESE, especially promoting the Hill Cup to encourage interaction between departments. The prolific history of the RSM is part of what makes it so special. The RSMA provides a vast network of alumni, with wonderful stories and invaluable advice. If elected President, I will work hard to continue strong links with the RSMA and look in to holding new events with them.

This year has seen the RSMU come under the watchful eye of the

union. I aim to ensure the RSM runs smoothly and unscathed through these challenging times. As President, I would sit on a number of ICU committees presenting your views and upholding the reputation of the RSMU. I am ideally suited to this as I have the ability to be calm and listen in high pressure situations, whilst keeping the RSM firmly in my head and heart.

<u>RSMU President</u>

<u>SMU President</u>



During my three years at the RSM I have experience sitting on a number of committees. This year as president of Geophysics Society I successfully put in place a significant number changes; I more than doubled the attendance of talks and socials and planned the upcoming Mount Etna Tour. This position has also allowed me to become a vocal member of the RSMU committee enabling me to obtain a strong understanding of the

workings within the RSM. Last year as sponsorship officer for the DLB I raised £400 from Premier Oil for the autumn tour. The experience I have acquired through these positions stand me in excellent stead for the role of RSM president. My main polices are:

• Increase attendance to RSM socials through the combination of newer events with the current favourites.

Increase the involvement and identity of the DepSocs and sports teams within RSM life through the co-hosting of events, such as bar nights, between the RSM committee and a DepSoc or sports team.

Ensure the minutes of all future RSM executive meetings are public, by posting them on the RSM Facebook group, ensuring the decisions made within the RSMU are made with transparency and allow all within the RSM to see what events are ahead.

• To be approachable and welcoming to all within the RSM. Thank you for taking the time to consider me and I hope that you will trust me to maintain the excellent standard we have all grown accustom to.

RSM Love Matt x

Samuel Argyle



<u>GSU President</u>

The RSM has made a huge impression on me over the past three years, not only academically but socially too. By listening to our students, each year's committee ensures that they keep the RSM such a friendly place. Having sat on the committee as Pit and Publicity Officer I have seen great progression this year in the RSM. I played an integral role in organising The Bottle Match to guarantee the day went smoothly. I also worked hard with Jan Cilliers and Neil Alford to make The Pit more inclusive and accessible so that it fell in line with the interests of the college at the same time as representing the students. We even held Freshers' Dinner at the Rembrandt Hotel with no mishaps! I wish to continue to show ICU that the RSM can maintain its fantastic traditions problem-free, whilst embracing new ideas such as Tri-

union bar night.

I hope to continue the increased attendance by Materials and ESE students we have seen this year, so that eventually the RSM will become more cohesive and inclusive of all of its students. I would also like to work closely with the RSMA to host a networking day for all students, in the hope of furthering our options after education. I have developed a clear understanding of how the RSM functions as a community and I am certain I can drive the RSM in the direction it needs to be led to keep it such an incredible place.

Patrick Naccour



Yalla Vote Habibi

Matthew Wetton

Alexander Mytenka



My name is Alex Mytenka and I am currently a third year Earth Scientist in the RSM. I am a running for council chair because I have a passion to help others and aspire to make a difference to university life. I have an excellent track record

of success, achievement and determination to be the best. I have demonstrated these traits

both academically and outside of my studies: I am currently ESE 3rd year

representative, as well as being the former assistant station manager of ICV and secretary of the Media group. Other past experiences include being a vital member of a disability councillor team at an American summer camp, and 15 years as master of ceremonies at my local parish.

These all emphasise my confident leadership, commitment, flexibility, responsibility, ability to be a crucial team player, and ability to thrive in

new situations.

I am confident I can make an instant impact in this role and will ensure that each policy brought forward are considered in depth and every voice listened to. I will ensure that the executive branch are held accountable at all times and that they fulfil their election promises.

I accept the challenges that this role will require me to face, and will act accordingly and to the best of my

ability for the best of the union. As an RSM member I know what change and progress looks like. I believe this gives me an edge to lead this council successfully into the future

<u>Council Chair</u>



Since the beginning of this academic year, I have served on Council as an Ordinary Member. You may not know much about Council, but its proceedings affect all of you who are reading this. So far this year, we have set the rent ratio between Acton and South Ken halls, reduced the price of feminine hygiene supplies in the Union shop, kept the sabbatical officers in line, and changed our own voting rules to

make Council more transparent. We have also formulated 'official' Union positions on issues as diverse as tuition fees, the Counterterrorism and Security Bill, fossil fuel divestment and ethical investment, postgraduate experience, and bursary funding. Many of these proposals were brought to Council not by Sabbs or Council members, but by ordinary students.

At the heart of an effective Council

is an efficient and impartial Chair: someone who is familiar with the Union ecosystem, someone who wants to ensure that everybody has their voice heard. I believe that I am that person. From two years serving on various committees (and two terms on Council) I have the skills and experience necessary to navigate the turbid bureaucratic waters of the Union, and the commitment to ensure that Council reaches its full

Jasper Menkus

potential next year.

Vote Menkus.

Richard Cameron

If elected, I will encourage a greater variety of students to submit papers to Council. I will also strive to improve communication between Council members and the communities that they represent, which has been lacking of late. Vote experience. Vote dedication.

<u>Council Chair</u>



I have been involved with the Union for 4 years now (first as an undergrad, and now doing my PhD in the Physics department). I currently sit on the Union Council and chair the Recreational Clubs Committee, a group of around 45 clubs & societies in the Union with over 2,600 members

This requires me to help with the running of RCC clubs and to liaise between them and the Union, as well as chairing regular meetings of the RCC to keep the clubs up to date with happenings in the Union.

In addition, this role has required me to sit on both the Union Council and the Clubs, Societies, & Projects Board - the panel governing all clubs at Imperial – as well as a variety of other Union and College committees.

While Council is quite removed from the student-facing side of the Union, it makes many of the most

important decisions for the student body, from overseeing the sabbatical officers to even setting rents in halls next year. As the Council Chair also sits on the Union's Board of Trustees, taking on this position is a huge responsibility.

Having experience of chairing a large group within the Union, as well as experience on Council itself, I believe I would perform this role well. If elected, I would simply promise

to chair Council meetings impartially and responsibly, for the benefit of students, and to welcome input from across the student body in my role as a Trustee for the Union

We've interviewed many of the candidates too! Read online: www.felixonline.co.uk

Take part in our exit poll, or tell us why you won't vote this year! http://bit.ly/felix-poll

<u>Student Trustee</u>

Benjamin Fernando



I'm Ben, the current RAG Chair. I've been at Imperial for three years now and have experience in a variety of Union positions, including three years as academic representative in Physics, former captaincy of the University Challenge Team and Treasurer and then Chair of RAG. My roles in RAG have given me a good understanding of charity law, so I can make sure that the Union as a charity meets its legal requirements.

In this time, I've seen what we do well, but perhaps more importantly, what we need to improve on. On Union Council, I was able to pass a paper that led to all representatives' voting records are made public - so that you can check we are doing our jobs properly.

In terms of student engagement, I will also push for the longpromised 'e-petitioning' system to be introduced in the next democracy review, so that you can make your voices heard. To further increase transparency and accountability I am happy to answer questions or take criticism from any student.

I will also serve as your voice on the Trustee Board, making sure that we do things with proper consultation – for example, I would have voted against this new, unconsulted policy that forces large clubs to hold their elections electronically.

I will also make sure that we improve our guidance to clubs on what to do when things go wrong, to avoid repeats of some of this year's incidents.

So, please trust in my experience and vote Ben!

Student Trustee



The Union needs change. In order for anything meaningful to be achieved, a change must be passed by the Trustee Board, which ultimately governs the Union's actions. The Student Trustees sit on this board and enable the student voice to be heard at the highest level of the Union and College. Two student trustees will be chosen in the Big Elections, and I hope to be one of those with your help!

I'm a second year Mechanical Engineer, and am heavily involved in the Union. This year, as the A Cappella Chairman (and a committee member of A Cappella group 'The Techtonics') I've had the chance to get to know the Union right to its core.

I believe that there is an issue with the way in which student activities are funded. This year I've been campaigning to establish a clearer and fairer tours funding policy and, by working closely with the DPCS, change looks to be implemented in time for the next academic year. As your Student Trustee I would push harder for a full review of Union funding strategy, enabling fairer distribution of grants.

I am also a member of the LGBT community and would ensure that Imperial's minority groups' voices be heard at the highest level, and establish a strong line of action as a

Henry Harrod

result.

My experience, drive and significant passion for improving the Imperial student experience hopefully makes me a good candidate for Student Trustee. Vote for a better Union. Vote for Harrod

<u>Student Trustee</u>



As a Student Trustee, I will strive to make the Student Voice of the Union College louder and clearer, engaging with every aspect of Union provision. I am dedicated to the success of the Union in its plans and long-term targets and will put time and effort into seeing them fulfilled. My policies for the 2015-16 period include:

Better student representation on College Boards. Recent developments surrounding communication between College and students have proven that our current paradigm doesn't satisfy students. and that our elected Officer Trustees cannot be expected to cover all the bases and be infallible. Support for increased student representation has come from faculty members, Officer Trustees and even a Vice-Provost, so the time is right to push for increased student representation where our experiences and issues are concerned.

By evaluating the space on campus and talking with Clubs and Societies. I intend to see that effective study space expands to meet demand during exam periods; for those who have the resources to facilitate their revision and need only a conducive atmosphere for revision, I intend to push for later opening of departmental buildings and use of the larger Union venues. Improving volunteer

Michael Edwards

role diversity through the schemes we have. By branching out and forming new volunteer partnerships through Community Connections and the Imperial Hub, we can boost participation in an activity that is valuable to both the local community and our future job prospects.

Student Trustee



Hey I'm Nida, a PhD student and the current Graduate Students' Union President. I've previously been the International Officer, a News Editor for *Felix*, a Hall Senior, a year rep, and a member of numerous College/ Union committees. I have also been a part of the

Provost's 2015-20 College Strategy for Imperial and would love the chance to be a trustee.

If elected, I promise to:

- Have through oversight and push for transparency in new changes and pre-existing procedures.

- Ensure the student voice is heard at all levels. That includes good representation of Postgraduate and International Students as well as every other student at Imperial. - Support campaigns against

government policies that impact

students the hardest.

- Ensure the Union is engaging with

ALL students, which means a change in strategy so students feel their voice is being heard.

- Develop a long term robust strategy that caters for the needs of all Imperial Students #VoteNida

Nida Mahmud





Student Trustee

Shun Kobayashi



Hi, I'm Shun Kobayashi, currently in the second year of my physics degree.

As a student trustee, I (and my other trustees-elect) would be given a great deal of responsibility regarding the operation and compliance of the Union. I aim to serve with integrity and dedication in all areas, giving particular thought to the future strategic plans for the union.

<u>Student Trustee</u>



The Trustee Board is the highest governing body in the Union it defines the Union's strategic direction, ensures the Officer Trustees and senior management are held accountable for their actions and finalises high-level decisions. These could significantly impact the Union for years to come, both legally and financially, so to ensure students' best interests at heart, we

heard; that is the role of Student Trustee.

As the current RCSU President, I represent 2900 students in the Faculty of Natural Sciences at various levels in the Union and College, and the position has given me the experience and confidence in speaking out in the interests of students in the RCSU. I have direct insight into issues

students face as a result of being a member of Union Council,

Education and Representation Board, and Community and Welfare Board. Additionally, Student Staff Committees and Faculty Teaching Committee meetings have allowed me to voice student opinions to College, understand problems from College's perspective and push for transparency in College's decisions. Prior to RCSU President, I was

the Physics Society Treasurer; my involvement in these committees has given me a good understanding of

Serena Yuen

how the Union works at both a society and Constituent Union level. My experiences will provide the depth and perspective to the student voice that the Trustee Board desperately needs, and help me be a reliable, responsible and representative Student Trustee.

Trust me to be your trustee; vote Serena

Yuhang Huang

Student Trustee



Hello everyone,

I am Davies from China. I am currently Computing department first year student representative. As a member of union, I want to devote myself to improve the union. So I want to stand for Student Trustee. I fully understand the role of Student Trustee is to ensure that the Union is meeting its aims and objectives, sets the long term strategy, ensures that the Union is using its financial

resources correctly and is financially viable and ultimately is acting within the law.

I belive I would be a good Student Trustee, vote for me please!

Treasurer & CGCU Welfare Officer, please have a look and vote for me :)

ps: I am also running for DocSoc

Student Trustee



I'm sorry.

I'm not here to make false promises. I don't want to brag about all the experience I have. I am neither infatuated with Tom Wheeler nor interested in cultivating my CV. I'm running as student trustee because as a student body, we need help!

Currently, how involved do you feel with ICU? Do you feel you have a say in Union and College matters? Were you consulted regarding the closure

of Weeks Hall? What about the move of ICSM sports facilities from Teddington to Heston? You might be thinking, so what? who cares? You should, my friend!! There's an absence of communication, transparency & accountability between our union, the College, and its students - this is a cause for concern.

Now, lets be frank, I'm not playing the blame game here. I'm highlighting the problem - We as students, have a right to be involved in College matters through a Union which represents our interests. The fact of the matter is, we haven't. Whilst this may hindered by those individuals who claim to have no interest in Union proceedings, here's the solution - Vote for somebody who does

Student Trustees represent YOU, when you can't be there. We fight for your needs, voice your concerns

Zain Rizvi

and keep your interests at heart. Very cheesy, very cliché and I'm sure you've heard it all before, but I'm confident that now is the time we take action, rally together and make a difference.

Vote for Zain, because as you may have heard before: #NoZainNoGain

they are made transparently and with need to be consulted and our voices



No. 1600 6th March -13th March 2015 FREE

SHOCK ANNOUCEMENT AS DEPUTY PRESIDENT (HUGS AND TAMPONS) RUNS AGAIN FOR DEPUTY PRESIDENT (MONEY AND SWAG)



06.03.2015 81

Housemates forced to listen to student having sex, interrupting takeaway dinner and Take Me Out: The Gossip

Students in a house in Hammersmith were left both uncomfortable and slightly aroused after hearing their housemate have sex for five hours straight.

Rob Carling, 22, was in the living room watching a rerun of Take Me Out: The Gossip, when the noises started filtering down the stairs in their terraced house behind Charing Cross hospital. The uncensored moans of passion and pleasure started at around 20:15, just as Dick was tucking into his Tesco Finest ready meal (Spaghetti Bolognese).

The housemate in question, Luke Caringdon, 22, brought the unsuspecting female home around 19:20, after going for a drink with her at the local pub on Fulham Palace Road. The identity of the female remains uncertain, as sources tell Hangman that Caringdon's mate of choice was met online.

Rob told Hangman more about the ordeal: "It was actually very sudden; he made a cup of tea for himself and her, then they disappeared upstairs, and then literally five minutes later the moans began.

"I can only speculate that they either burnt their tongues downing the hot beverages before copulation, or they were left on the side, wasted". Rob became more distressed

however, as the sounds did not cease for hours, long after Take Me Out: The Gossip had finished. He told us how he was offered a brief respite as Caringdon went to get a glass of water from the kitchen, but once he returned up the stairs, the noises began again almost instantly.

Rob then contacted their other housemate, Jessica Late, 23, as he was at a loss at what to do over the noises. Jessica told Hangman: "I didn't know what to do either: I was working late in the office, so luckily wasn't present to hear the noises in person, but I was scared to go home".

Jessica confirmed with Farmer that the noises had stopped before going home, although sounds ceased around 01:00 – at which point Bratt left the room again, sporting a "suspiciously short robe".



Rob told us: "He came out the bedroom and downstairs wearing a pink dressing gown, and some fluffy slippers. We can only assume he acquired these from a former flame, although as to why he would continue to wear them around the house after copulation we can only speculate".

Hangman contacted Caringdon but

he refused to comment, although he did tell housemates he didn't know he was being too loud, and enquired as to whether it sounded like the girl was having a good time.

A candidate comes up to you in the library café, disturbing you as you eat a jacket potato	You read a manifesto promising "transparency"	Someone throws Haribo at you in SAF café	Lecturers ban candidate shout outs after lectures begin to run 15 minutes late
You get followed by an election twitter account, which itself has 12 followers	You read a manifesto that starts "Since my first day at Imperial"	Cafés and common rooms become awash with black and white flyers	You spot candidates holding up the printers and guillotines in the library
The Union sends you three spam emails in a day, reminding you to vote	You spy someone ripping down a poster	Someone irons a transfer onto their t-shirt backwards	The Union shop sells out of maoams
Someone makes a god-awful election video then asks you to share it	Someone comes to do a shout out at the end of the lecture, but everyone just gets up and leaves	Someone asks you to change your profile photo to their campaign photo. You ignore them	Someone promises in their manifesto to make eActivities faster

Elections bingo

nay be a new year, basically) new set candidates, and a election, but what pect never changes. e made you this dy BINGO board to out and keep, and we gest you take a few es for subsequent s if you are a younger ent. That way you can ggle through the two ks of campaigning hell wing what's still yet to e. Have you managed ake it to the JCR out seeing a poster, g thrown a sweet, or ting a homemade rt? Such tranguillity not last for long!

Exclusive: We interview this year's DP ENIS candidate



ne of the more unlikely candidates in the election this year, Don Ma, is running for the newly created position of Deputy President (Engagement of Naturally Introverted Students), or DP ENIS. The position was introduced last year as a way to address the 43% of the student body that fail to interact with the Union but instead live in the library.

The role of the DP ENIS is partially to research and address why these few nomadic dwellers never interact with students outside of the library, but also to actually go and visit these students now and again, to make sure they are washing and eating correctly.

Don Ma has pledged to donate a third of his salary to pay for washlets, red bull and desk fans for these neglected students, and his longterm goal is to finally install air conditioning across all study areas. We spoke to Don Ma, to hear what he thinks he can bring to the role.

Hangman: Hi Don, nice to meet you! What made you excited over DP ENIS?

DM: Well, as a previous library dweller myself, I know what it can be like to basically live within the confines of the fifth floor of the library. I know how distant everyone else can seem when you trudge up there at 9am, sit there for 14 hours straight, and only leave your desk to go and get some coffee from the library café.

Now that hot drinks are allowed in the library, you don't even have an excuse to sit outside on the lawn for ten minutes or so; the only reason we don't have showers in the library right now is because College are scared students may move in permanently.

H: But isn't one of your manifesto promises to actually put bunk beds into the library, especially now they are closing Weeks hall?

DM: That is very true. I think we need to accept that Weeks is going to close, but look for the best alternatives, and for those students who already spend most of their time in the library, they might as well be encouraged to move in full time. Then those who live further out but prefer studying in departments or at home can move into the rooms that those that now live in the library used to occupy. It's win-win.

H: If people are going to live in the library, won't that make it harder to encourage the students to interact with the Union?

DM: I think we need to accept the inevitable, and think about moving Union outlets to the library instead. I remember a few years ago,

there was a competition to name Metric, and most people wanted to actually call it the Library, so there is a demand there for a night club that embodies the elements of the library that students have become accustomed to.

Some people say they tried to name the nightclub after the Library as a joke, but I feel that in reality there is a deeper rooted attraction to the building that we now need to embrace, not fight.

Although saying that, one of my points is to literally pay people to go to Metric; people often do stuff if they get money in return I've heard, so it might be worth exploring that. H: Do you think College need to listen more attentively to students about the library?

DM: I really do, and I feel that they are too busy dilly dallying around rent prices and hall demolitions to realise that the main centre of all student life is in fact the library, and it should be treated as such. Why do we only have one library café? Why do we have 18 printers, 24 scanners, three lifts but no toilets?

These are the issues that these neglected students face day in and day out, yet all the other sabbs just worry about storage space for clubs, the price of pints and consultation platforms or frameworks or whatever. That is why this role is key; it actually seems to care about the issues that matter to students.

H: Naturally introverted students are hard to engage with; they can be quite shy. Do you have any experience you can draw on to ensure that this large demographic gets the attention it deserves?

DM: I've learnt a lot about introverted students during my internship as a park ranger; they are very similar to hedgehogs – they like to hide away or curl up in a ball. They are quite prickly too, and must be handled carefully. I will approach these students the same way I handled the hedgehogs; wearing gloves, offering up saucers of milk and talking in hushed tones. I think that way they will then be brave enough to let me pet them – I mean, talk to them – and I can ensure they are all happy and healthy.

Thanks Don Ma, and good luck in your campaign!

From the Felix message boards

Members of the Felix readership (all eight of them) comment online about the major issues of, well, the last issue

Student elections open for voting

This year we see a lot of the big roles uncontested, how do you guys feel about it?

Lol I was only gonna vote for the fit ones anyway -Such_a_Lad_69

Eugh I for one could not give a shit. I got invited to about 100 events for stupid elections of students who are just doing it because they don't want a normal job, or their CV is shit. The less idiots clogging up my news feed the better I say *-ThirdYearApathy*

I know rite they shud get an internship or smth instead lyk normal students have to - GoldmanSacsMan

I'm not even gonna vote, fucking CGCU never does anything decent like RCSU balls -A_Screw_Loose

That's coz there are no girls in CGCU so why would you even bother going lol *-Touch my balls PLEASE*

I personally think it is appalling. Sabbaticals are paid an extortionate amount to represent the student body, and it is decisions like Acton and Teddington that are made without student consultation, because in reality the sabbs elected are too spineless to do anything about it. Makes me sick

- Extra_OrdinaryCouncilMember

But this is the first time we could have a female President in years thank fuck the patriarchy has been pulled down a peg or two *-Feminist_and_shouting_about_it*

Actually, I think you will find that a record number of students have stood in these elections, more than any other year. If you are trying to say student engagement is low, then I have the figures that say otherwise. You are wrong.

- Diego_UnionOverlord

Have elections even started? -Wolfson_Suite_For_Lyf

Lol I guess it means I don't have to actually campaign. BELLO -Do_you_fancy_a_bit_of_D(PW)

Great stuff guys! - Felix Editor



Provost Post of the Week

Every week, a member of our esteemed Provost board shares their thoughts with our collaborative, cohesive community. This week, we welcome Dee Creaserent, the Vice Provost (Hall Demolition), who has been working extensively with the student body on what matters to them.

What a month it has been! Estates, our wondrous development team, and myself have been looking at all the ways we can improve our new beacon of hope, Imperial West, to ensure it offers the best facilities for world-class research, based in the heart of the metropolitan sprawl of White City. If it is good enough for our flagship British Broadcasting Corperation, it is certainly good enough for our scientists!

We had another ribbon cutting ceremony there only last week, where we celebrated the thousandth breezeblock to be laid at the site, yet another milestone worth mentioning in the ongoing Imperial West development.

I was a guest on the students' very own little television show a few weeks ago, which they just loved. I spoke to many students about our amazing work in building the new halls, and how we have kept our longstanding promise of making rents reasonable at Woodward, our new and exciting state of the art accommodation in the heart of Acton, another up and coming part of the metropolitan sprawl out in West London.

I also gently reminded our students that we all need to embrace change, we need to be continually evolving, or else we will never improve and never grow! Resisting change is resisting excellence, and although we have made some tricky decisions now, they will form the basis for world-class facilities in the future.

We will now be looking with what to do with our new site once we have demolished Weeks Hall: onwards and upwards I say!

Hello all,

We hope you are all having a productive and forward thinking week here in the Faculty Building! We have a lot of news since last week, so take a breather from your heavy workload of consulting, communicating and fiddling amenities fund expenses to catch up on the latest Blue News!

The most exciting news this week is that we finally have decided what to do with Garden Halls! This will be our new staff canteen, serving a variety of healthy foods and beverages, and will also feature a staff gym and sports hall, for Compulsory Cube Squash sessions on a Saturday.

With these provisions in place, we can now move Ethos' equipment to Heston, freeing up even more space for our ambitious Central Services takeover of the north side of Rising Prices Gardens (whoops! Freudian slip there!).

We also plan to announce the exciting news of our new halls, Imperial Very West (Heathrow Campus), next week to the rest of our community. With our Heathrow based halls, we will be able to offer accommodation for even more first year students at the low price of £148 a week, and they'll only be 60 minutes away from all the exciting, London based action.

We can't wait to hear what our active, vocal and attentive student body will say when we tell them the good news!

In sad news, we are saying goodbye to Vice Provost (Student Voice) as we decided their services are no longer needed. We hope they will be very happy at one of the "lower-ranking" universities (not that rankings are the be all and end all! Unless we come second, but I jest!), but one that values student experience nonetheless.

Since all of our students are so happy here, we don't need to waste so much money on a pointless role, and can use the funds to pay for the installation of a fountain for the foyer. Research shows that free flowing water features install a sense of purpose into the office environment!

Have a productive, cohesive, collaborative and happy day!



Alice Gast: Thought of the Week

"To move forward as a World Class Institution, we must collaborate, communicate, consolidate and collaborate again. Only through acheiving excellence in these fields, along with our alumni, friends, supporters and rich alumni friends, can we continue to be excellent in the world of research. Oh! And Education. We need to try to be good at Education too. If we have time."

What is going on inside the Blue Cube this week

We have an exciting stretch ahead of us, with lots of chances to come together and truly collaborate, propelling ourselves into the bright future.

All-Staff Group Trust Meeting

On Monday at 12pm, there will be our monthly Group Trust meeting, where we will be learning the importance of synergy and balance.

Don't forget your yoga mat! Green Tea will be provided. (All staff must attend)

Sweeping Statements Masterclass

On Tuesday, College Communications are running a seminar you are welcome to attend, about the importance of communicating Campus Portfolio Evolution.

There are murmurings of disquiet concerning Weeks hall, but rest assured, these changes are all part of the optimal Ten Year Plan. Come to this seminar at 2pm to learn all about how to deal with specific inquiries about the present with sweeping statements about the future.

Note: students in the building on Wednesday

On Wednesday, there will be a meeting on the second floor and several students are invited to attend, so do not worry if you spot any wandering the corridors. Politely point them towards the lift and they will no doubt drift away.

These students are "elected" Sabbaticals from the Union, meaning they are the cleanest and most polite of the student body, so do not be alarmed.

We advise you keep contact to a minimum; the students are here for our biannual "consultation" meeting, and we will be discussing our continued dedication to 24 hour library access, a topic we know they are continually concerned about.

What is going on outside the blue cube this week

Peace and tranquillity throughout campus no doubt!

We here are sure your walk through Dalby Court at the end of the day will reveal to you many a smiling student face, all excited to be on the same path to excellence we are embarking upon as a world class institution.

Students become territorial over library spots as exam season nears

angman can reveal that the bid to take over the best study spots in Imperial College Library has officially begun, as hoards of broken stationary, dummy notes and sometimes empty sport bags are being left strewn across desks.

The disarray of junk began appearing earlier this term as mid term exams took place. With many students saying it can take years to find the ultimate library study spot, it is no wonder that those who find academic nirvana within the confines of the library are doing anything they can to hold onto it.

The first spots to be claimed were the coveted window seats on the silent level 2, highly regarded due to the ambient temperature, the view over Queens Lawn (albeit slightly tinted) and the lack of noise. These space are perfected as investment of the signal classing elosa gluou gluet bib harly bafey arafé, are great for rehydration and energy replenishment.

. Old Casio calculators, empty



ring binders and the odd biro were reported to have appeared on these as early as last month.

The second spots to slowly disappear were the single study spaces in the Wolfson Suite in the first floor, favoured for those that prefer studying into the night and many final year biology students who have taken to living in the library before exams. Spots nearest the window were claimed nearly a fortnight ago, coveted because when the sun rises, the light hits these chairs and tables first.

This is considered especially advantageous for those that are night owls and are unlikely to come into contact with direct sunlight unless they prefer to cycle home midmorning.

The latest spots claimed from now until the end of the year are the group study rooms also on the first floor that are now being occupied in shifts. Hangman spoke to one of the students present, who explained how him and his housemate are taking turns to use the spot, as one prefers to work early in the morning and the other works throughout the night.

"Although we live together, I actually only see him during library handover. Our flat back in Hammersmith is a state and all our house plants we stole from halls in first year have died, but at least we are now averaging a 2.1."

Spots that are still up for grabs include most of those on fourth floor (unless near a fan) and the entirety of fifth floor, as medical students don't start working until the beginning of Easter. It is expected that these too will be claimed by the beginning of May at the latest, so it is advisable those who "Just can't work at home," start staking out their spot now.

Who should be the next Union President? You decide!



Lucinda's flowing blonde locks can only do her favours in her run for Presidency. Insiders say she conditions twice, and blowdries, but never straightens her perfect flowing mane. She also dips the ends in coconut oil. Fruity!



Luke has slightly shorter locks, and rumours have it he uses the classic conditioning technique of bathing his bangs in beer fortnightly, giving them a slightly fizzy yet soft feel. The rumours he then sucks the tips dry are unsubstantiated. Gassy!



Boris is the unlikely candidate for this year's Union President, but it is well documented that he only shampoos (using Johnson's own shampoo, obviously) then lets his locks dry naturally as he cycles to the Town Hall. Athletic!



Tilda Swinton dips her jagged tips in ice cold water every morning for three minutes, before towel drying and taking to the road. This ice treatment toughens Tilda up for a day of campaigning hard in the JCR. Democratic!



Taylor Swift is a big fan of pure eucalyptus oil, squeezed directly from a cactus. She then "shakes it off" before blow drying and styling. Look out for this blonde bob handing out fliers on the walkway. Mainstream!



(AT LEAST WE GET FREE SWEETS FOR THE NEXT WEEK ...)

THE STUDENT PAPER OF IMPERIAL COLLEGE LONDON FELIX

"Meat the Candidates" claims several casualties

n a new and startling move to try and increase student engagement, Imperial College Union launched a #MeatTheCandidates; a televised session where students could come and throw large chunks of animal flesh at the candidates running for sabbatical positions.

After recent surveying has shown that many students actively loathe those taking part in the elections, the Union made a rash decision to channel this anger towards candidates directly, in an effort to dispel it.

Students were offered buckets containing steaks, chicken breasts, chicken wings, pork chops, sides of salmon and chicken nuggets. Students attended in droves, and took to flinging the food at candidates after they were unable to give suitable answers to questions over their policy points.

There were several casualties of the night. A Council Chair candidate was struck down by a 9 oz steak after admitting that he had never actually been to a Union Council meeting. He was left feeling raw and disillusioned, and was unable to recover in time before suffering a hailstorm of



chicken nuggets after also admitting that he thought the Union Council had the power to decrease pint prices.

The student running for Deputy President (Education) suffered from several blows from a wrack of BBQ ribs after stating they would reduce the ratio of students to staff in tutorials; many of the BBQ ribs were actually thrown by overstretched academics who don't have the spare time to teach more.

A student running for Deputy President (Finance and Services) took a flurry of chicken wings to the body repeatedly after wanting to increase money for clubs and societies, but not knowing where this extra money will come from. Someone also threw part of a shepherd's pie at another DPFS candidate's face, after suggesting the Union could still do away with entry fees.

Deputy President (Welfare) fared considerably worse; after promising to reform the personal tutor system, someone threw a whole salmon at her face, knocking her off a chair and leaving a fishy grease stain down her top. Said the student who threw the fish: "You can't teach academics empathy".

Presidential candidates suffered worst; one took a heavy blow from a whole turkey after stating that they would ensure College wouldn't close Weeks hall. Their opponent received the most painful attack of the night, when they stated that they would introduce a new consultation framework, despite the current one left untouched and unused for months now

It took two people to throw the hog roast at the poor girl, and she was knocked out cold before a stretcher came to carry her away. Despite many of the candidates leaving feeling bruised, those who came to throw the meat said they were a lot happier with the elections season, and also felt they had truly engaged for the first time in years.

Said one final year student: "I've never voted in the four years I've been at Imperial, but for the first time ever I feel I've been able to constructively communicate my views to the Union over the issues that matter to me. Nothing says "student dissatisfaction with student coursework deadlines" like throwing a whole fish at a sabbatical candidate."



Industry-wise conspiracy to make windows more breakable to catch out rich sports teams

leading coach company has been caught replacing their windows with sugar-glass in an attempt to make them more breakable, it was revealed today.

The replacements appear to have been part of a plan to ensnare unwarv student sports clubs, with any minor impact on the sugar-glass windows causing them to fracture.

According to leaked documents seen by Hangman, the coach company then planned to cover the coaches in various alcoholic detritus, such as empty bottles of port stashed under the seats to "maximise the damage-to-student ratio."

The company would then demand compensation for the cost of cleaning and repairing the coaches from the sports club, as well as "lost earnings". The money this brought in would then be added to the insurance claim, leaving the coach company significantly better off, and the unfortunate sports clubs out of pocket and in disgrace.

It is believed the change was part of an industry-wide insurance scam, with several leading coach companies apparently complicit in the scheme.

"We were all doing it," said one

coach driver, who asked to remain anonymous "We'd all had enough of those students having a good time and being a bit noisy on our coaches, so we decided to get our own back, and make a bit of money on the side."

Said another coach driver: "We actively let students drink on our buses now, to maximise the chances of them leaning on the screen and breaking it. Once it shatters, we call their Union straight away, and demand as much money as we reckon they have.

"Sometimes, we even contact their student newspapers too, to really drive up the student-hating hype. That way we come across as a the victim, and people are more inclined to send us more money as compensation."

A police spokesman confirmed the launch of Operation CoachGate 3.0 Rugby, an industry-wide investigation into the practice.

They found illegal warehouses developing the sugar glass, alongside several hard drives filled with student details and scanned copies of a old Felix and Daily Mail articles. The investigation continues, and so far eight teams have been reimbursed.

TAURUS

CORP

Candid Candidate – Hangman gets an exclusive interview with a DP (Lad) candidate

here was complete apathy in Imperial College today as one of the candidates running in this year's Big Elections revealed their motivations for running were "I can't be bothered to find a job"

In a tell-all interview with Hangman, the candidate claimed "it doesn't look that hard, all you do is sit on your arse all day and pretend to be busy whenever a student walks in."

Hangman got things going by asking if the candidate actually had any experience that they felt would make them a reasonable candidate for the position. They pointed us to their extensive experience as the social secretary for a popular sports team, citing their many emails to the club's mailing list as proof of their laddish credentials.

"I even got my emails published in that rag the college publish, so I'm totally internet famous now," they claimed.

When asked to specify which club they were referring to, the candidate laughed and muttered something about "balls" before refusing to answer any further auestions.

After much coaxing (and a few pints), they were convinced to

GEMIN

SAGITTARIUS



continue. As the conversation turned to their opinion on the Big Elections, the candidate rapidly became more animated. "It's well easy to get elected," they roared. "All you have to do is promise to make eActivities faster and put some waffle about transparency and accountability. Everyone loves that stuff.

"Plus it turns out I'm running unopposed anyway, so who cares? I could smash a window or shake a small child and everyone would still have to vote for me. Actually, I might put 'Shake a Small Child Saturdays' on my manifesto."

'Shake a Small Child Saturdays' would in fact be only the third point on the candidate's manifesto, which Hangman was allowed an exclusive first look at before publication. The first is quite simply to "bring back Lad

culture".

We ventured a suggestion that this probably wasn't a valid manifesto point, so the candidate promptly emptied their pint over our head

Lured back by the promise of yet more pints and a free Tube ride (clothing optional), the candidate allowed Hangman to query why no-one else ran for the position. At this, the candidate just chuckled and beckoned us closer.

"That's totally my fault, actually," they revealed. "I just started a rumour that Kris Kraye was going to run for it, and everyone else was too scared to challenge him. I knew he wasn't going to, because he told me in the bar last night after our twentieth pint that he wanted to be DP (Money and Swag)

"What a lad".

HOROSCOPES

LIBR

ARIE

This week you campaign for president; printing posters with your face and some sort of pop culture reference because apparently that constitutes a campaign, and forcing all your friends to help. Then a rugby captain makes a joke candidacy for his penis and wins 68% of the vote. At least Kris Kraye will provide fresh pizza bases.

This week you run ICTV's

accidentally invite David

Cameron, and after seeing

shows up. Sporty Mcsports

drinks too much cider and

decides to fight Cameron on

most sensational student TV

broadcast ever; 6 whole views!

live television, creating the

Meat the Candidates on; you

there's only one opponent he



we finally complete the hotly anticipated fishcake recipe: Dip the cakes into the egg, then press into the breadcrumbs all over. Fry for 5 mins each side until golden. Remove and serve with lemon and watercress. I know no one found these funny but fuck you, I write the horoscopes here, not you.



party, investing a large amount in professional DJ equipment (by which you mean stealing it from IC radio). A problem becomes apparent at the party when you reveal your 70s playlist - your compilation of Rolf Harris, Gary Glitter, and the Jim'll Fix It theme doesn't exactly go down well.



This week you hit Metric hard, inviting 100 of your friends who say they live in Beit in order to get in free. When you return home you apply for a union position and subsequently win; however as a middle class white Surrey boy. your electorate don't really connect to you as black and ethnic minorities officer.



This week, after forgetting to donate a third of your paycheck to charity like you promised, you realize that your rampant addiction to vinyl PVC catsuits has left you with considerably less money than you thought. You decide to sell a kidney – luckily your medic roommate has a black market organ trade on the side.

ANCE This week you decide to do a 24 hour radio broadcast to feed Fen Bernando. After caffeinating yourself to within an inch of your life, developing diarrhoea, you decide to shave your head. People start to call you egg head, and someone in

the JCR tries to dunk toast into

your skull. You look like a cute

CAPRICORN



I like to think someone will someday look over these and wonder about the writer and what they're doing. Nothing constructive probably - I hope to become president of Surrey University so that when they send rejection letters, it'll read "Surrey, you didn't get a place". Might go to Uruguay a few years. Looks nice on the TV.



This week in celebration of *Felix*'s 1600th issue you decide to go for it and be the centerfold. Unfortunately you don't realize that the group who've booked the slot is the Alice Gast appreciation club, leading to you being pictured with a load of nude middle aged women. Rumors spread and your granny disowns you.



This week in an attempt to combat global warming you decide to start pissing in bottles, saving wasted water in the toilets; however you fail to take into account the sheer amount you piss, amassing 5 gallons in the first day. You bring a girl back to your room forgetting the piss. Luckily they enjoy a tad of watersports.



This week you decide to raise funds with a bit of kidnapping on the side; but after nabbing your fluid mechanics lecturer you realize the library locks its printer drawers so you can't send a ransom note. Outlook refuses to find the right person to send it to, so you have to use IC Secrets, after which the police find you. Pint?



This week you decide to run a paper that is 100 pages long, but forget that you are scheduled to have bronchitis that week too. The days pass in a strepsil-induced haze, and it is only on Friday when you realise you've actually submitted 100 pages of love poems, dedicated to an angry Northern fresher.

izzles

Puzzles Editor Michael Faggetter

Word Star

1) Find 5, **four-letter words** using the clues written below.

2) Fit them all into the star (the arrows indicate the direction in which the word is read).



Weekly Quiz

QuizSoc

This quiz has been brought to you by QuizSoc, who write a new quiz each week! If you need a quiz for your event, you can contact the society! Contact quiz@imperial.ac.uk for more information.

1) The Fine Arts

What is the name of the famous and much referenced Grant Wood painting of a farmer holding a pitchfork with a woman next to him in front of a house?

2) World History

Which decisive 1645 battle of the English Civil War was fought in Northamptonshire and effectively ended the war in favour of the Parliamentarians?

3) In the News

Which F1 driver was left concussed in a crash and is not expected to drive in the Australian GP?

4) Obscure Nerd Trivia

Which Star Wars race with brain-tails includes Jedi Master Aayala Secura, lovable street urchin Mission Vao, and belly dancer Oola?

5) World Geography

Which Arab country has capital Muscat?

6) Other Languages

To which language do we owe the words bamboo, junk (as in the type of boat), and gong?

7) Making Your Science Degree Work For You

What class of numbers is represented by the letter Z?

8) Sex, Drugs and Rock and Roll

With what name is the mix of cocaine and heroin for intravenous use known? John Belushi and River Phoenix are some that have died from this very dangerous concoction.

9) This Day in History

On the 6th of March 1834, the Canadian city of York was officially renamed. With what name is it known today?

10) ... and if you got all the others correct, their initials spell out...

16th century physician Andreas Vesalius was what specific kind of doctor, one of the first of its kind?



Cross-Number

26) Consecutive digits unordered.

This was so popular a couple of weeks ago... so here is another one! This one should be just as challenging. For those of you who didn't get this last week, the aim is to fill in the grid (right) with the numbers 0-9, using the clues below. Good luck!

If you need somewhere to start, check out the 'Last Week's Solutions' section for a hint.

Across	27) 7 across plus one.	12) 4 across plus 7 across.
1) A cube.	28) Its digits total fourteen 29. Same	13) First digit is the sum of the
3) See 5 down.	as 6 across.	others.
4) 11 down minus three.	30) Two same digits.	15) Last digit is the sum of the
6) 12 down plus 27 across 7. See 12	31) See 14 across.	others.
down		17) Mean of 3 across and 8 down.
8) 30 across squared.	Down	18) A square.
of bo across squared.	Down	10/11 square.
10) Its digits total 24 down 13.	1) 14 across minus 20 down 2. 15	19) Consecutive digits unordered.
, -		, 1
10) Its digits total 24 down 13.	1) 14 across minus 20 down 2. 15	19) Consecutive digits unordered.
10) Its digits total 24 down 13. Consecutive digits in order.	1) 14 across minus 20 down 2. 15 down squared plus a thousand.	19) Consecutive digits unordered.20) Three times 21 across.
10) Its digits total 24 down 13.Consecutive digits in order.14) 31 across times 15 down 16. 1	 1) 14 across minus 20 down 2. 15 down squared plus a thousand. 3) 23 down squared. 	19) Consecutive digits unordered.20) Three times 21 across.21) 12 down times 13 down 22. 10
10) Its digits total 24 down 13.Consecutive digits in order.14) 31 across times 15 down 16. 1 across squared.	 1) 14 across minus 20 down 2. 15 down squared plus a thousand. 3) 23 down squared. 5) 3 across squared. 	19) Consecutive digits unordered.20) Three times 21 across.21) 12 down times 13 down 22. 10 across minus 13 down minus four.

11) A square.



PUZZLES fsudoku@imperial.ac.uk

1)

2)

3)

5)

Puzzles Editor Michael Faggetter

Dingbats: UG Halls of Residence

4pics1word

1

5 4 9



Slitherlink

The objective of this logice puzzles is to connect dots with horizontal and vertical lines to form a single continuous line/loop.

In addition, the numbers in the grid indicate the total number of adjacent segments within the loop.

Word Search

How much time do you spend on the internet? Here is a fun test.

There are a total of 25 common memes hidden in the grid. e.g. "Anti-joke Chicken" Good luck!

3

4

1



_																									
G	0	s	х	Ε	w	с	н	R	w	н	s	т	Ε	Ν	Ε	н	F	А	s	J	т	R	Ε	Ε	D
р	Ν	U	٨	s	L	р	٨	0	Ε	т	G	к	٨	U	s	R	R	I	Е	I	к	В	γ	G	s
5	А	I	L	I	L	G	Ν	Ν	н	к	А	R	E	т	o	γ	А	т	L	Ν	х	Н	Ν	Ē	м
w	А	ι	D	0	Ν	D	Ν	G	D	С	С	G	А	С	0	R	Ν	Т	С	G	I	Ρ	к	С	Т
R	E	т	D	D	E	т	I	ı	s	¥	D	А	Q	R	G	s	к	Ε	I.	L	Q	۵	G	н	Ν
В	Ε	U	U	R	U	L	Ν	А	Т	I	С	А	R	A	R	Т	1	\$	С	Ε	ι	Т	U	I	С
D	R	I	L	R	Υ	Ρ	М	I.	R	s	D	A	Ρ	С	Ε	U	Ν	Ν	I.	F	G	J	В	М	Е
М	Α	А	Ν	R	Ν	т	Ε	т	с	۷	I	۷	Ν	К	н	0	с	I	W	F	F	L	U	Ν	Ρ
н	Ν	s	I	D	s	А	R	R	Ε	н	Т	R	I	Ε	T	R	E	0	W	М	Ε	н	В	Ε	Т
D	R	А	н	I	Е	А	ι	Ν	I.	D	0	В	н	R	0	р	Ν	р	к	D	т	R	S	Y	Ε
Α	F	R	R	Ε	Ρ	Е	т	I	0	н	М	L	G	С	М	S	s	U	к	Α	А	U	G	М	s
R	L	н	γ	5	R	L	R	E	А	х	5	В	А	۷	н	L	E	B	Ε	Ν	ι	В	I	Y	Ν
L	С	S	Е	М	I	м	0	Т	Ν	А	ρ	к	0	S	н	Ε	D	R	D	Ρ	0	Ν	Т	U	А
w	R	A	Р	Ρ	I	N	G	Р	Α	Ρ	E	R	R	A	z	s	w	Y	v	Α	с	В	Ε	L	м
F	Ε	S	Т	I	۷	I	Т	I	Ε	s	Ε	Р	Ν	0	С	s	в	Т	Y	Ε	0	Т	М	Ε	w
D	A	ε	R	в	R	Ε	G	Ν	1	G	Q	U	R	R	Y	U	1	К	М	Ρ	н	J	0	Т	0
М	U	L	L	E	D	W	I	Ν	E	W	К	E	0	D	T	R	L	Ε	z	C	С	В	С	I	Ν
s	А	ι	s	Ε	С	Ν	Ε	W	х	к	в	0	۷	Т	в	в	А	L	E	G	Ν	А	к	D	s
L	Ε	F	т	0	۷	Ε	R	S	Α	н	G	Α	Ε	F	Ε	т	L	s	Ν	I	U	G	Ν	Ε	р
В	L	I	т	z	Е	Ν	н	н	F	Ε	U	R	s	Е	L	D	Ν	А	С	S	L	Е	1	G	н

izzles

Juick Crossword

Puzzles Editor Michael Faggetter

Jamie Dutton and Ben Harvey

Across

1) Sound intensity unit (7)
4) A variety of bet (4,3)
8) Mayweather; American boxer
(5)
11) Gestured (5)
12) Idiotic (7)
13) Yet to be married (5)
14) Information (informal) (3)
15) Donkeys (5)
16) Hold back from (7)
19) Serbian-American inventor; Nikola
(5)
20) The; British rock band (3)
21) Style of the recent past (5)
22) Nationality of former F1 driver
Mika Häkkinen (7)
23) In addition (5)
24) Desensitize (5)

26) Eternal (7)
Down
1) Embezzle (7)
2) Member of newspaper production
team (9,6)
3) Small hotel (3,3,9)
5) In any circumstance (4,4,2,5)
6) Voluntary community
organisation (6,9)
7) Jewish language (7)
9) Musician Benny Goodman
nickname (4,2,5)
10) City in Minnesota (11)
17) S Club 7 member; Rachel
(7)
18) Football manager; Brendan
(7)



FUCWIT

For Issue 1600 there are three pages of puzzles! This is a serious opportunity to get ahead in the FUCWIT league.

Once again, just a reminder that to keep this section going, we need your support! If you have any ideas for puzzles that you would like to see here, or want to get involved in any other way, then please just drop us an email!

As always, don't forget to send in your completed puzzles. Points are awarded for each correct solution, bonus points (in brackets) are awarded to the first correct answer!

Points avaliable this week: Wee

25) Pool; pot the cue ball (7)

Weekly Quiz	4 points	(+2)
Word Stars	3 points each	(+1)
Cross-Number	4 points	(+2)
Quick Crossword	4 points	(+2)
Word Search	2 points	(+2)
Word Ladders	1 point each	(+1)
Sudoku	2 points	(+1)
4pics1word	1 point	(+1)
Slitherlink	3 points	(+2)
HoR Dingbats	2 points	(+3)

Leaderboard

128

74

48 27

23

15

8

7

2

1

Individuals:		Teams:
1. Adam Stewart	106	1. Fully Erect
2. Jem Ong	40	2. L3Gendary
3. Catmelon	39	3. Mindsuckers
4. Kebab King	21	4. WG
5. Sach Patel	11	5. pintosRules
6. Angus	8	6. Dapper Giraffe
7. Gene H.	7	7. AnyonebutKofi
8. Fengchu Zhang	3	8. Ebolalala
9. Gabriel Quek	2	9. Aerodoku
-		10. Guang <3 Le

Word Ladders

Climb down the ladders by placing four-letter words in the gaps, changing a single letter each time.



Clubs and Societies felix.clubsandsocieties@imperial.ac.uk

C & S Editor Ben Howitt

Geeks with Frickin' Lasers

Miles Taylor-Robinson's improbable Mission with Hackspace and Robotics Society

n a collaborative first, the Imperial College Advanced Haxckspace (ICAH) and the Imperial College Robotics Society (ICRS) teamed up to put on a brand new hackathon entitled Mission: Improbable.

The theme was inspired by classic heist and adventure movies, from Ocean's 11 to Indiana Jones. First, each team was tasked with designing and building a security device to protect a precious idol on display in a museum. Sadly, the British Museum were unable to lend us any suitably valuable items from their collection, so we went with 3D printed Yoda heads instead. At the end of the week (with a strict time limit of 3 minutes) each team had the chance to steal from a rival team's device undetected. The emphasis of the brief was on detection rather than prevention. We wanted there to be no physical barriers to hacking; teams won points for the openness of their design. The more the inner workings of the devices were accessible, the better. The onus was on the participants to use clever electronics as the defence mechanism.

The event kicked off on Friday 20th February with an open evening in the EEE building. Josh Elsdon, multi-talented ICRS Lab Manager detailed the rules to the assembled hackers. We then brought out a box of pre-purchased parts to get the ideas flowing: everything from lasers and pressure sensors to mirrored acrylic and development boards. Next the drinks came out, plus enough pizza to wallpaper the entirety of the Business School. The teams started to take shape and the last participants headed home around 21:30, full of new ideas. Over the course of the week we sourced components for all the teams' devices, including a smoke machine (seemed legit). We also ran a midweek hack in the ICRS lab for the teams to get some help from Josh and Aksat.

The Mission Improbable Finals!

Saturday 28th February began bright and early as the early risers ambled into the ICRS Lab at around 09.30. By around 11:00 there was at least one member from each team beavering away on their hacks. The last four hours were an increasingly frantic blur of hurried chatter, laser cutting and soldering; with a bacon buttie breakfast break in between.

Just before the 14:00 deadline our panel of judges started to arrive. We had Keith from Aviva with his son James, Shaun from Resin.io, Munir from Imagination and Imperial's very own Mark Witkowski. With everyone assembled, we pried the last of the teams from their desks in the ICRS lab and headed over to the Skempton lecture theatre where the showdown was to take place.

Amazingly, all 7 teams had managed to complete their devices. The first half of the afternoon saw each team explain the ins and outs of their devices and field questions both technical and comical ("Is it waterproof?"). no stone was left unturned.

It was great to see such a variety of systems used in the Hackathon. 'Team Aether' went with an elegant design which fitted the brief perfectly.



Lasers really do make literally everything cooler. Photo: Miles Taylor-Robinson

With fully open electronics, they used theramins to sound the alarm if an intruder came too close. Team Force created a beautifully laser cut triangle plinth with strips of mirrored acrylic to bounce lasers all around.

'Team Furry Shoe' went for a novel approach- building their plinth out of lego they enclosed their electronics in a motorised spinner, thus making hacking a difficult prospect! All seven teams had interesting and exciting designs, most of which included multiple layers to the security.

Drawing from a hat, each team was assigned their target device. Over lunch the teams grilled one another about the specifics of their devices; the competition rules mandated full disclosure! Some headed to the Pink Room to make widgets to help them hack. By 16:30 everyone was ushered back into the lecture theatre to begin the hacking phase.

For each device we ran through a system of simple disturbances – to



Left: Competitors assemble to discuss their plans for protecting Master Yoda. Right: a laptop running the security team is bypassed by rival team. Photos: Miles Taylor-Robinson

simulate the practical realities of life in a museum. This was also to demonstrate if a device was too sensitive to false positives. The test was threefold and involved testing for minor vibrations, gusts of air and torch light directed onto the idol.

After a short description of the plan of attack, the hack teams had 3 minutes to steal the Yoda bust undetected. The excited crowd alternated between raucous noise and pin drop silence; is there anything more tense than absolute silence followed by the solitary sound of wires being cut?

Once all the hacks had been completed, the judges adjourned to make their decisions. While each team produced a strong entry, the winner chosen was 'Team Force' for their beautifully realised laser plinth plus their successful hack. In second place was 'Team Invulnerable' and in third came 'Team MD'. 'Team Furry Shoe' took the Haribo prize.

A big thank you to Aviva, Resin.io and Imagination for their generous sponsorship of the prizes, plus special thanks goes to Josh and Aksat from ICRS for all their hard work in the lab and Eifion for his fantastic videos!

SPORT

Sport Editor: Kunal Wagle

Royal School of Mines wins the Bottle Match for the fifth year in a row

Nick Farmer reports from Harlington, where RSM come from behind to retain the bottle

For the fifth year running Imperial's Royal School of Mines were with Mines were victorious in the Bottle Match against Camborne School of Mines, held at the Harlington Sports Ground on February 21st.

Teams from the two mining schools went head to head in

Photo: Matt Pik

badminton, squash, netball, hockey,

football and rugby in a weekend-

long event hosted by the RSM,

with a large contingent of CSM

from Cornwall by coach.

Friday saw the squash and

supporters making the journey up

badminton matches, held at Ethos.

While RSM dominated the squash

on, winning 3 games

5-0, they were not so fortunate in

but losing 6 and the match to a CSM side featuring several players who are allegedly no longer students. RSM were also unlucky in the netball, with a strong CSM team featuring a particularly tall goal

attack pressing their advantage, and

RSM. Despite the scoreline the RSM

were vocal in support of the team,

An early start on Saturday saw

a highly enthusiastic but not

particularly experienced RSM

womens hockey team take an

unfortunate loss despite a goal from

fresher Alice Tidwell. The team kept

their heads high and defended to the

end, but to no avail, with the match

Match

with high hopes for the rest of Bottle

the match ending a 72-22 loss of

ending 10-1 to CSM

The mens hockey went better for the RSM, who took an early 2-0 lead from an excellent aerial in to the D from Rowan Hedgecock tucked in behind the keeper by Chris Thomas, followed by a flying goal from Richard Price, assisted by a well worked pass across goal by Will Murray. Although CSM drew level again by half time, the second half saw RSM pull back ahead with spectacular reverse stick finish from Murray before Anthony Vaquero sealed the match, putting the ball into the top of the net from a dummy drag flick from Bottle Match veteran Ben Bell. The match ended 4-2, with RSM retaining (and briefly losing in the Union) the Sharpley Cup.

As in previous years, the football was not particularly auspicious for RSM, with the match ending in a loss despite an enthusiastic performance from an RSM team who surprised CSM with a good press at the start, and delivered a much tighter game than reflected in the the 3-0 scoreline

The contest for the Bottle itself, the rugby, started with a few worrying moments for RSM, with CSM taking an early lead. However, RSM soon came to dominate the game, under the leadership of top Hollister model Freddy White, with tries from David Nielsen-Scott, Ed Durkin and James Cox. Despite a solid effort from the CSM team, who had two disallowed tries, the match



The RSM celebrate the retaining of the bottle, a feat they have managed for the last five years. Photo: Matt Pike



Photo: Matt Pike



Photo: Matt Pike



Photo: Matt Pike

Sport Editor: Kunal Wagle

What they said about the weekend

"Once again the Bottle proved to be a tough physical match. We had done a lot of preparation for the day but we were naturally a little nervous due to the history of the Bottle Match. Even after going behind in the first 20 and with 2 yellow cards I knew the RSM had the player quality to get the job done. I'd like to thank the entire squad for the effort they put in; many played through injuries and illness, toughing it out for the team." FREDDY WHITE, RSM RUGBY CAPTAIN

"Winning the Sharpley cup for the second time in as many years was a huge moment for the RSM, since it was only the 3rd time in the recorded history of the trophy (over 40 years) that the RSM have prevailed against a historically much stronger CSM side."

BEN BELL, MENS HOCKEY VETERAN

The scores in full

Badminton	6-3 CSM
Squash	5-0 RSM
Netball	72-22 CSM
Womens Hockey	10-1 CSM
Mens Hockey	4-2 RSM
Football	3-0 CSM
Rugby	19-7 RSM



excesses of alcohol-fuelled behavior that had marked previous Bottle

incidents of antisocial behavior of injury occurred. One CSM student be a costume prop. Speaking to Felix "hopefully next year they will get off our case".

Photo: Matt Pike

Photo: Matt Pike

SPORT

Imperial Falcons finish third in Loughborough

Ashley Ng carries on from last week, reporting on the second day of the tournament

n the second day of the M1 Series Tournament, the weather looked ominous as dark clouds rolled in following the Falcons' arrival in Loughborough. Thankfully, the weather held for their first game against the Loughborough Thunder and the Falcons got off to a decent start, opening the scoring with a run coming in off a passed ball as lead-off hitter Ashley came round to score after drawing a walk and stealing two bases. Centre fielder Chris and shortstop Edoardo also managed to get on base but were unlucky to get tagged out at home in two consecutive plays before the inning ended with left fielder Stephane grounding out to shortstop. The lead was short-lived however as the Thunder's return salvo at the bottom of the inning yielded four runs and gave them a commanding three run lead.

The Falcons failed to score in the second, despite right fielders Min and Chris both drawing walks, as rookie debutants Hriday and Zayd grounded out before Edoardo popped out to the Thunder's catcher. The Falcons made up for the abysmal hitting however with a strong defensive inning to hold the Thunder to single run in the bottom of the second. The third inning started off slowly with pitcher Ben Hollis grounding out to short. Rhys and Stephane however, managed to draw walks to get on base before stealing to third and second respectively. With runners in scoring position, the Falcons' rookies came out in a big way with two consecutive RBI hits to bring in 2 runs for the Falcons and make it a two-run ball game.

Despite the mounting pressure as the Falcons closed the lead, the Thunder came out strongly in the bottom of the inning to score two runs of their own and re-establish

the four run lead. As the clock ran down, the umpire announced that no more new innings would be played. This left the Falcons needing to score four runs to stay in the game and Loughborough finally brought on one of their more experienced pitchers to close out the game. Despite the stronger pitching, the Falcons came out strongly as catcher Ashley got on base off a walk and eventually came round to score on a passed ball after having stolen to third. Chris then gave up the first out as he struck out swinging on a 1-2 count. Edoardo then drew a walk and stole second before taking third as Ben got on base off a K-E2 (dropped strike out ball). With one down, the tying run, Rhys "The Beast" Jones stepped up to the plate and hit a line-drive between first and second to score Edoardo. Ben however was tagged out at home trying to close the lead as Rhys made an ill-advised attempt to lengthen his single into a double that resulted in an easy double play for the Thunder to close out the game and shutdown the Falcons' hopes of turning the game around.

With the score now at 7-5 to the Thunder, the bottom of the inning was played out due to the tiebreak rule, with Loughborough hoping to lengthen their lead and increase their run differential. This was not to be however, as the Falcons finally found their groove and shut down the Thunder offense, holding them to zero runs with two strike outs delivered by reliever Vincent "Demon Pitcher" Li.

As the Falcons took a 20 minute breather before their next game against Nottingham, the first drops of the previously forecasted rain started to fall. As the game started, the weather grew more menacing with ever darker clouds closing in



Photo: Baseball Softball UK

on the skies above the field. Despite the weather, the Falcons started strongly off some strong pitching from their ace, Edoardo Lisi. They held Nottingham to only one run before hitting a mercy rule inning to take a commanding 5-1 lead off consecutive over-the-fence ground rule doubles from first baseman Ben and second baseman Rhys.

As the second inning came round, the weather grew progressively worse and the Falcons slowly started to freeze. This was reflected in their fielding as the Falcons gave up three runs to allow the Thieves back into the game at a score of 5-4. Fortunately, the lead wasn't the only thing to disappear in the inclement weather as the score sheet dissolved in the rain, taking away all record of the abysmal inning. The Falcons offense then failed to replicate their first inning success, scoring only one run while giving up three easy outs to the Thieves. With the rain now in full force, the Falcons offered to end the match then. However, the northern-bred Thieves would not give up, and banking on their cold-resistant northern blood, they proceeded to hit in a mercy rule inning of their own to take a commanding three run lead. Things were now looking dismal

for the Falcons as they needed to score three runs in the bottom half of the inning to tie the game. The inning started off with Rhys getting on base off a walk before Vincent popped out to second. He subsequently stole to third as Stephane drew a walk to get on first. Rhys then came home on a passed ball to bring the Falcons within two runs as Stephane stole to third. The Falcons hope were dealt a huge blow however as rookie third baseman Zayd was put out to bring the Thieves within one out of sealing the game. With two outs, debutant right fielder Hriday stepped up to the plate and drew the walk to load the tying run on first and bring the Falcons back to the top of the line-up. With the tying run at the plate, the tension was palpable as Hriday stole second to put the tying run in scoring position. The Falcons' shortstop then hit a blistering line-drive that careened off the left field fence and scored Stephane to bring the Falcons within one run of tying the game.

With Hriday on third, centre fielder Chris took the strike to let Ashley steal second and get the winning run in scoring position. A missed swing later, the Thieves were now one strike away from ending the game and the intensity could be felt throughout the pitch. As the fateful pitch left the pitcher's fingers all eyes were on Chris as he turned and brought the bat to bear. The next few moments would come to highlight the Falcons' M1ST experience as the hard-hit line-drive sailed over the Thieves short stop and dropped for a single. With Hriday safely home and the game tied, Ashley rounded third without breaking pace and went full speed into home plate to score the fourth run and take the game for the Falcons. With the game, and third place safely in the bag, the Falcons then rushed to pack their equipment before making a beeline for the warmth and dryness of the Loughborough University Fitness Centre to celebrate their emphatic victory in what was effectively a third place playoff.

Despite losing out on a spot in the final by only two runs, the Falcons will take a lot of positives from this competition with the strong performances of debutants Hriday and Zayd as well as greatly improved hitting from the team in general. With these encouraging signs, the Falcons will train even harder over the next month and return to the Spring Cup with the aim of finally bringing home that coveted championship trophy.



Photo: IC Baseball

SPORT

Sport Editor: Kunal Wagle

Shots fired at BUCS: Rifle and Pistol win silver

Ernest Lo reports from Sheffield as the Imperial A team finish second

ver BUCS weekend at the end of February, six brave Imperial souls left the comfort and warmth of their London flats to compete in the BUCS Smallbore Rifle Finals. After a hearty Chinese takeaway dinner, something of a team tradition, they set off for Sheffield ready for the upcoming two days of individual and team shooting.

Smallbore is a rifle shooting discipline that involves a small calibre round (5mm wide by 20mm long) fired over short distances between 20-100 yards. Indoors it is shot over 25 yards. Smallbore shooting encapsulates the pure marksmanship aspect of rifle shooting, disregarding external factors such as wind, weather and lighting conditions, as well as the use of a more controllable firearm due to its reduced power. It is the most popular rifle shooting discipline owing to its simplicity and accessibility, forgoing the need of large outdoor ranges. For this very reason, many fullbore rifle shooters, those who shoot long distances outdoors, frequently train with smallbore shooting, especially during winter.

After a few hiccups and delays with some of the other teams (*cough* ULU *cough*), shooting got underway. The Imperial A team led by Laura Stokes, emerged with silver medals on their necks and relief after such stiff competition. This is the highest Imperial has placed in our known competition history, having come fifth the previous year and fourth the year before. A notable mention was our illustrious club captain, James Badman, who shot both the best and worst score of the team,



Smallbore training at the ICRPC range Photo: Rifle and Pistol

88/100 and 99/100, over consecutive rounds, showing that shooting is just as much about mental stamina as the physical stamina. There were a few competitors from other teams who felt the need to show off their impressive rifles with extra long barrel extensions, perhaps to compensate for their lack of skill. However that wasn't the case and the competition was tightly matched. The point margin between 2nd place and 6th place was ten points out of a maximum of 2400. The team won second place by 1 point. To put that in perspective, if one shot out of the forty by any of our shooters was off the mark by an extra half-millimetre, it would've knocked the team down to bronze.

Gold ultimately went to Southampton University, winners of the title eight times out of the past ten years, also the alma mater of one of our best shooters, postgraduate medic Lawrie Greenfield, owner of the infamous all-black "Darth Vader" rifle.

BUCS competitions are shot as a league throughout the winter, with the top teams and individual shooters progress onto the finals. Also worth mentioning is the fact that the Imperial B team, led by Goronwy Tawy, won first place in the BUCS smallbore division 3 league bringing back gold medals and further motivation to our mostly fresher B team.

Imperial College Rifle and Pistol Club is one of the oldest societies at Imperial College, dating back to before the merging of the constituent colleges. As a club, we offer every discipline of shooting that is available in this country, smallbore rifle, fullbore rifle, air pistol and clay pigeon shooting, most of which have corresponding Olympic events. We cater to shooters of all levels, from those who have never held a firearm before to national level athletes. In fact, our very own A team member, Alex Taylor, is on the GB U19 fullbore rifle team competing in South Africa this Easter. Our state of the art facilities and helpful community of shooters mean we've consistently had over 150 members, many of which start their lifelong shooting passion with us. So if you want to try something new, something a bit different, why not give it a shot?

We can be found by our Facebook (rifleandpistol), twitter (ICrifle) and on the Union website.



ICRPC Smallbore A Team Photo: Rifle and Pistol



Clay Pigeon shooting against LSE Photo: Joe Wilson

