

Felix

The Student Newspaper of Imperial College London

NEWS



PRES results show continuing concerns over funding

PAGE 3

COMMENT



Should medics have their after-party at Heaven?

PAGE 10

BOOKS



Philip Pullman in conversation at Southbank

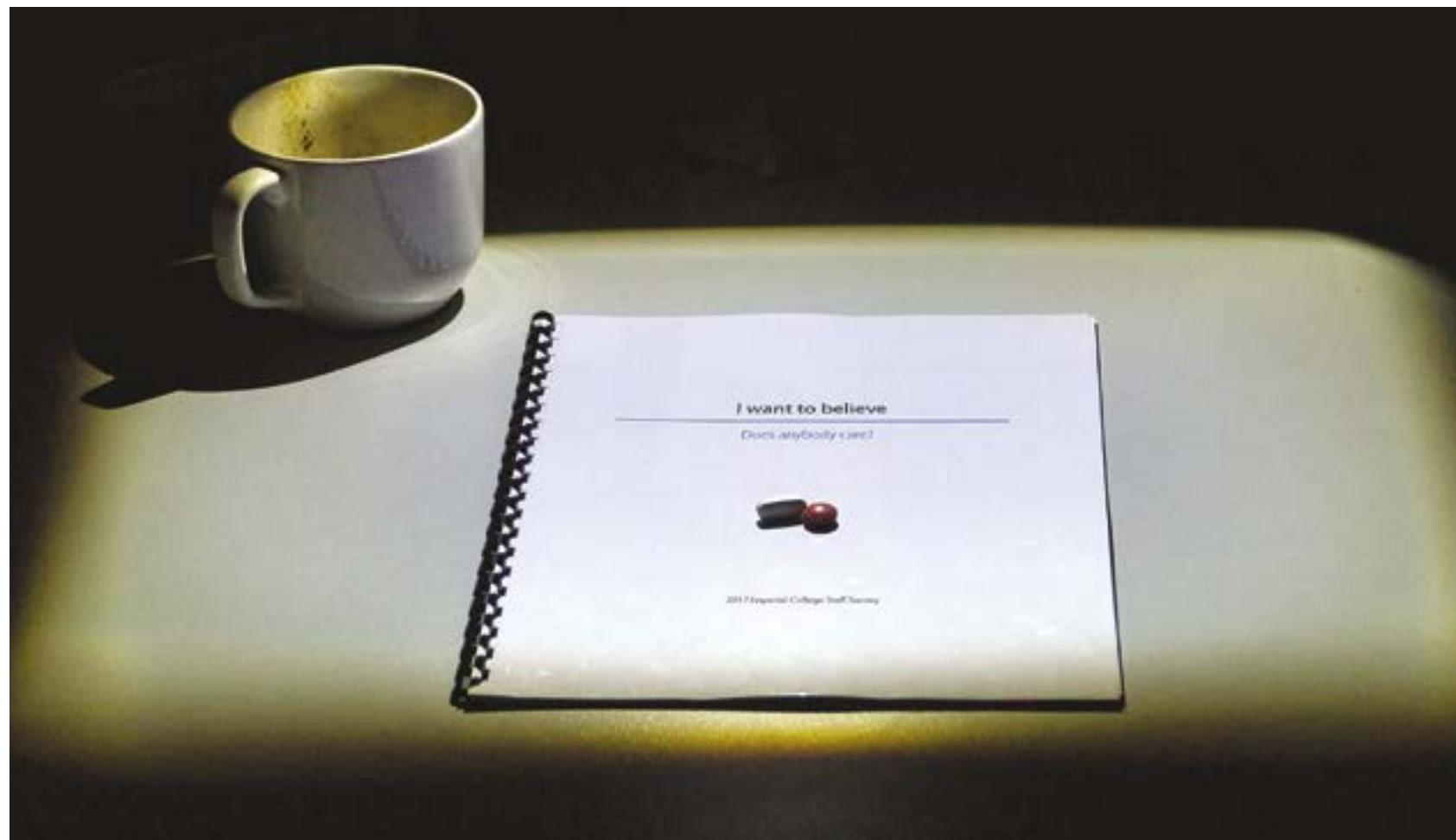
PAGE 24

FILM



Who will take on Day-Lewis' mantle?

PAGE 26



Will anything change because of the staff survey? Only about half think so // Tom Mzarek

Staff survey shows wide ranges in satisfaction

NEWS

Fred Fyles

Editor-in-Chief

Staff satisfaction rates vary widely across different College sectors, according to Imperial's staff survey results.

Imperial College released their staff survey results earlier this month. The survey, which was last carried out in 2014, asks staff members their opinions on a broad number of topics, including their faculty, College leadership, and whether they think the survey results will be acted upon.

College and Faculty Leadership

Out of all sections of the survey, leadership – both of Faculties and of College as a whole – scored lowest among staff.

Fewer than half of those surveyed felt there was effective leadership from Faculty heads, or had a clear understanding of the purpose of their Faculty. Staff in the Faculty of Natural Sciences were the least likely to know the objectives of their Faculty, with only 37% of staff feeling they understood them.

In terms of overall leadership, only 40% of staff felt that the College leaders showed effective leadership, and 45% felt they provided a clear direction for the College's

future.

One of the questions eliciting the lowest scores asked whether changes made are made for the better, with only 34% of staff agreeing. The Departments of Aeronautics, Computing, and Physics were the least likely to agree, with less than a quarter of staff feeling that changes were an improvement. Staff in the Faculties of Medicine and Natural Science, and in the Union, were also unlikely to think changes made things better.

Somewhat surprisingly, the overall response of 34% still places Imperial second out of the ten universities used as a benchmark.

It could be argued that a contributor to this divide between College

leadership and staff is the result of issues with communications: only 45% of staff agreed that the communications received helped them understand College-level decisions, while just over half felt sufficiently involved in decisions impacting their role.

One of the areas of College's strategy that the survey reflected poorly upon was the 'Imperial Expectations' – seven statements the College claims "show how we respect and support each other in achieving personal goals and the College's strategic objectives". Examples include "champion a positive approach to change and opportunity" and "deliver positive outcomes".

Overall, only 37% of

staff thought that these were useful to their role at Imperial, with a large number of staff having no opinion at all. Staff members working more closely to the central faculty (e.g. those working in Campus Services) were more likely to find Imperial Expectations useful, while departmental staff generally had a poor opinion of them: in the Mathematics department only 22% of staff thought 'Imperial Expectations' were useful.

Departments and Collaboration

The survey showed departmental staff were satisfied with their work, and had good perceptions of the College: over

Cont. pg 4

EDITORIAL

CONTENTS

EDITORIAL	2
NEWS	3-5
POLITICS	6-8
COMMENT	9-11
SCIENCE	12
TECH	14-16
ARTS	17-19
MUSIC	22-23
BOOKS	24-26
FILM	27-31
TV	33
TRAVEL	34
FOOD	35
HANGMAN	36-37
PUZZLES	38
SPORTS	39-40

Felix Office
Beit Quad, Prince Consort Road
London, SW7 2BB

Tel: 020 79548072
Email: felix@ic.ac.uk

felixonline.co.uk
@feliximperial

Printed by Illifee Print
Cambridge, Winship Road,
Cambridge

Registered Newspaper
ISSN 1040-0711

Copyright (c) Felix 2017

The stories behind the data

So this week has been a week of firsts for me: first time I've been to Union Council; first official complaint made against *Felix* (and certainly not the last); and first 48-page issue of the year. Nearly. On Tuesday evening we were all gearing up to do a 48'er, which seemed like a good idea for all of 30 minutes. Then I realised that we still only had one computer, and that, to paraphrase Meatloaf, while I'd do anything for student journalism, I won't pull an all-nighter – we'll save that for another time.

This week *Felix* has gone survey-mad, doing some analysis on both the Staff Survey – which was sent out to all staff working at Imperial – and the Postgraduate Research Experience Survey (PRES), which went out to research postgrads. Both were largely similar, asking people about what they thought of the College and their colleagues, whether they had everything they needed to do a good job, whether they were happy – the usual.

But they both threw up some interesting results: the staff survey showed a huge range in results, with some staff clearly very

content about how things are going, and others furious about what's going on on-campus. There mainly seemed to be a disconnect between the Faculty/College leaders, and the general staff, which I think can come as a surprise to quite a few people. I think when a lot of students at Imperial grumble about how their cooked breakfasts have been taken away, or that the College is being run as a business (no judgement, I love to complain), they're picturing Imperial as a vast monolithic entity, combining all staff together into one big mass.

But the survey shows that for a lot of staff, our concerns are their concerns too. A lot of them feel powerless to enact change; many feel isolated within their own department, and yearn for collaboration; and I don't think anyone on campus really understand what 'Imperial Expectations' are. Sometimes it turns out you're on the same side after all.

Moving on to the PRES, I think that what this can show is the issue of relying too heavily on data. Based on the raw numbers, it looks like Imperial are doing really

well – and I'm sure they are! Pat yourselves on the back! – but speaking to my postgraduate friends paints a decidedly different picture. .

Looking at the data alone doesn't show us the people behind the numbers. It can't tell you about the friends I have who felt forced to carry on their research when their funding ran out, who bounced around from place to place, sleeping on couches and in hostels, trying desperately to balance the demands of their PhD with the mental pressure of being essentially homeless. You can only get that by speaking to people.

Simone Weil wrote that "the love of our neighbor in all its fullness simply means being able to say, 'What are you going through?'" Now, I'm no Simone Weil, but I want *Felix* to have the same viewpoint (although maybe without the early death): we're here for you, to represent your voice and your views, to challenge College and the Union on your behalf. But for this to happen, you'll have to let us know about it. Until then, I'll be here, chained to the West Basement's one working computer.

Fred Fyles – Felix Editor



The Felix Team

Editor-in-Chief
Fred Fyles

Deputy Editor
Joanna Wormald

News Editor
Joanna Wormald

Politics Editors
Avi Banerjee
Divyen Vanniasegaram

Science Editors
Chris Richardson
Henry Bennie

Tech Editor
Tom Mrazek

Comment Editors
Charlie Titmuss
Alan Perfect

Arts Editors
Indira Mallik
JJ Cheng
Adam Gellatly

Books Editors
JJ Cheng
Alice Peberdy

Music Editors
Andy Djaba
Adrian LaMoury
Henry Eshbaugh

TV Editor
Andrew Melville

Film Editors
Michael Purdy
Mikhail Demtchenko
Mark Aduol
Ashley Luckyram

Food Editors
Andrada Balmez
Alice Davage
Chun Yuan Hii

Travel Editor
Edita Pileckyte

Puzzles Editor
Hamish Beck

Sports Editor
Imraj Singh

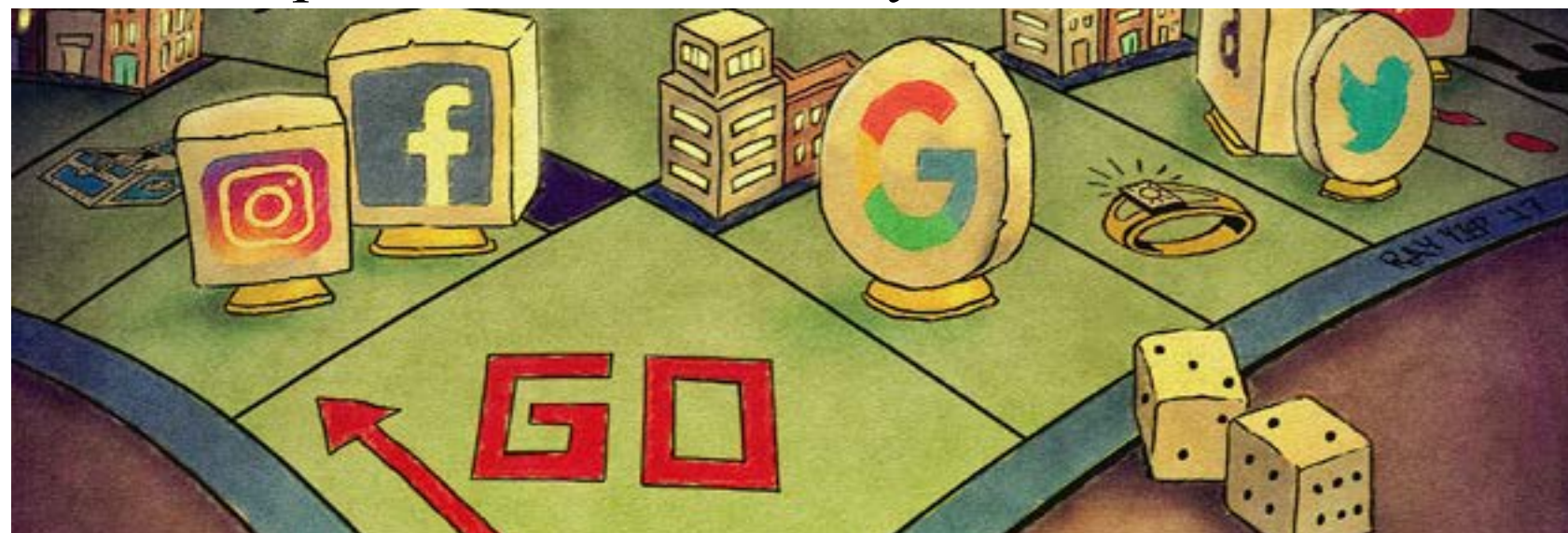
Head Photographer
Joe O'Connell-Danes

Cover Photo
Tom Mrazek

Copy Editors
Ash Pattar
Astrid Zong
Selin Olenik
Rhidian Thomas
Ezgi Ozyilkan
Alexander Adler

THIS WEEK'S LONG-READ:

The monopolies of Silicon Valley



READ IT ONLINE AT FELIXONLINE.CO.UK/LONGREAD

NEWS

news.felix@imperial.ac.uk

Imperial improves in PRES results, but continuing problems with PhD funding are highlighted

NEWS

Fred Fyles
Editor-in-Chief

The Postgraduate Research Experience Survey results were better than 2015's, but reflect issues with supervision and funding.

Imperial College Union responded to the Postgraduate Research Experience Survey (PRES) this week. The results indicate an improvement on 2015's results, but issues with supervision and funding continue.

Imperial reported an increase in average scores across all question sectors since the last PRES, with seven of ten sectors being above or equal to the national average. However, some sectors highlighted issues research postgraduates face: supervision, in particular, scored the furthest below the UK average, with 83% of Imperial students satisfied, compared to 86% nationally. The Dyson School of Design Engineering, Centre for Environmental Policy (CEP), and the Imperial College Business School (ICBS) all scored significantly below the Imperial average for supervision, which includes skills and knowledge of supervisors, as well as the amount of contact students have with them.

Imperial College Union identified this as a particular issue, noting: "Many students report that they do not have regular meetings with their supervisor. Furthermore, some supervisors do not respond to emails."

One student *Felix* spoke to, who is in their final year of a PhD, said: "My supervisor is really bad

with feedback, especially before deadlines. I asked him numerous times to look at my early stage assessment report, which was 70 pages long, but I only received his comments a few hours before submission. Colleagues have had similar experiences, which led to sleepless nights and working on the weekend"

A spokesperson from the College told *Felix* that they have "already taken action to enhance and develop the supervisory experience of research students", putting in place "improvements to policies" and the opportunity for anonymous feedback.

Completion rates also revealed the issues with funding that affect a significant number of PhD students. While the completion rate at

"Completion rates revealed the issues with funding that affect a significant number of students"

Imperial was above the UK average, there was wide variation, with ICBS having the lowest completion rate, of 71%. A number of students said financial pressures play a large role in completion.

"A lot of PhDs in my department get funding for 3.5 years, but are pressured into continuing experiments for the full four years," one student told us. "It creates a lot of stress when your supervisor wants you to gather more data at the risk of becoming homeless without extra funding."



A number of student reported concerns about funding their PhDs // Creative Commons

Another student *Felix* spoke to, who has just finished their PhD, confirmed that financial pressures caused a large psychological burden: "While Imperial is having a push away from three-year funding, funding was still a huge issue for me. When mine ran out, I was unable to pay rent, and experienced 'hidden homelessness' while I stayed on friends' sofas." The London Assembly Housing Committee recently estimated that 10% of people would experience hidden homelessness in any year, causing a large amount of mental strain. "For about six months," the student told us, "I didn't have my own place, and the stress meant I was completely paralysed in terms of working."

In their response – containing recommendations that they say "if met, will make a meaningful difference to everyone working towards their PhD" – the Union highlighted that "some students are unable to complete their programmes due to financial difficulties", and said

these pressures place "an unnecessary burden on student", affecting both welfare and work quality.

The PRES also revealed departmental variation: the Department of Aeronautical Engineering, for example, scored below the Imperial average on nearly all metrics. The ICBS also fared poorly, with all scores below the Imperial College average; particular issues were opportunities – with only 50% of students feeling they had enough chance to develop – and overall satisfaction, with 2/3 of students feeling satisfied with their experience.

The CEP was another department that performed poorly, with five of their sector scores being the lowest across all departments. Only 36% of students felt satisfied with the research culture, and half were satisfied with their overall experience, compared with a College average of 81%.

In contrast, a number of departments scored very well, with the Crick Institute, the Department of Computing and

Mechanical Engineering, and the Institute of Clinical Sciences all reporting above average scores across a number of domains.

Imperial scored particularly highly on resource availability, with an 88% satisfaction rate compared to 81% nationally. Students generally felt they were provided with enough to do their research, although the response did identify

"Imperial College Union identified supervision as a particular issue"

support for a postgraduate social space. Student opinion of their department's 'Responsibilities', which covers whether they felt their feedback was valued, showed wide variation, with the Union reporting there was "a clear frustration from those who felt that their

feedback was not valued". Scores were particularly low in the Department of Aeronautical Engineering (66%), and the CEP (62%).

In a statement to *Felix*, Nick Burstow, Deputy President (Education), said: "The Union has produced its latest Response to the biennial PRES, part of our ongoing commitment to speaking up for our members by influencing College's decision-making at the highest levels. It was the quickest and earliest PRES Response we've ever produced, meaning we have already begun lobbying on behalf of our members to senior Members of College, right from the start of the academic year."

A spokesperson from the College told *Felix*: "We are determined to make sure the College is the very best place it can be for our students. We take feedback from students seriously...Departmental action plans in response to the survey, developed in consultation with student reps, will be finalised over the coming weeks."

NEWS

news.felix@imperial.ac.uk

Staff survey reveals poor opinion of College leaders

Cont.

90% of staff surveyed felt that they had good relationships with their colleagues, and that they were trusted to organise their own workload. The vast majority also knew what was expected of them in their role. Safety was singled out as an area Imperial did particularly well in, with the majority feeling their department ensured they were safe in the workplace.

The majority of staff felt proud to work for the College, and 80% felt a sense of personal accomplishment.

However, while the data seem to show that people were generally satisfied with their departments, they revealed that few staff thought that there was enough collaboration. Only 34% of staff agreed that there was ‘effective collaboration between Departments that work within my Faculty’. Of the four main Faculties, the Faculty of Natural Sciences scored the worst on this question, with only 30% of staff seeing evidence of effective collaboration.

Within departments, there was evidence of increased collaboration, with 56% agreeing there was effective collaboration between teams within

a department. However, some sectors scored poorly, with the Departments of Aeronautical Engineering, Civil Engineering, and the Centre for Environmental Policy all reporting scores of under 50%.

Departmental Breakdown

A number of departments did particularly poorly in the survey: the Department of Aeronautics, in particular, stood out for its low scores, with 53 out of 58 questions garnering a below-average response. Aeronautics staff were among those to have the worst opinion of their own Departments, their Faculty, and senior leadership as a whole. Fewer than half the staff surveyed felt that they had enough resources to do their job, while only 29% felt that their contributions to the College were valued and recognised.

The Department of Computing also scored poorly, with 50 questions below the Imperial average. It was the department with the least positive opinions of College senior leadership, and staff were among those least likely to feel valued at College: only 37% felt

that their pay was fair, and under half thought that their contributions were valued. A number of staff felt Imperial did not care about their welfare, with only 31% agreeing that the College cared about their health and wellbeing.

The results obtained from Imperial College Union staff, half of whom completed the survey, seemed to reveal a sense of feeling under-recognised, with only 39% feeling that their work was recognised as a contribution to College. Union staff also had among the lowest opinions of the College

“In the Department of Aeronautics, only a third of staff thought action would be taken after the survey”

senior leadership.

In a statement to *Felix*, a Union representative stated that while the Union participates in the survey, “it is important to note that

we are an independent-led organisation distinct from College, with our own strategic plan, management structure and Board of Trustees,” which “explains why they are less likely to consider themselves to be contributing to College’s strategy.”

The representative reported that the Union runs their own staff satisfaction survey every year, which found that 96% felt they understood the Union’s values, and 93% felt proud to work for ICU. They also pointed out that “regarding questions that are applicable to both College and ICU staff members, we are proud of our results [and] our scores are consistently at least 10% higher than College overall in some areas

Other departments that did not feel a strong sense of belonging to the College included the Departments of Medicine and Life Sciences, with a minority of staff feeling a sense of belonging. In both these departments, less than half the staff felt they had enough resources to complete their work, and they scored poorly in their opinions of their respective Faculties. Women working in the Life Science Department,

in particular, were less satisfied with College leadership and line management, and were less clear about their department’s goals.

For some departments, the survey reflected well – the Grantham Institute, Imperial’s research hub for climate change and the environment, scored particularly highly across a number of questions. The Dyson School for Design Engineering and the Department of Earth Science Engineering also tended to score highly.

All departments have now completed ‘Action Plans’ to address the results of the survey. Among the lowest scoring departments, there is an emphasis on increasing communication within departments and with College leadership. The Departments of Aeronautical Engineering and Medicine both suggest increasing staff input on their Management Committees, while the Department of Computing states it will “provide forums for discussion on a termly basis”. Harassment and bullying will also be addressed, with an emphasis on “Active Bystander” training and encouraging staff to feel confident in expressing concerns.

A College

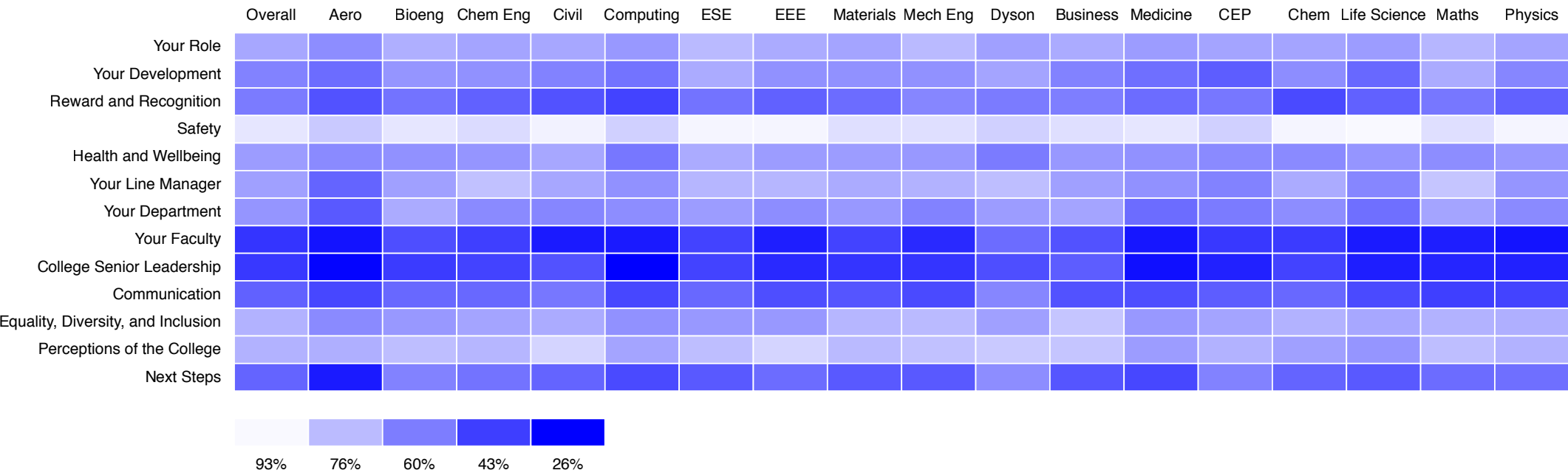
representative told *Felix*: “the College level results and action plan are being discussed this Friday at Provost’s Board – one of the College’s most senior management boards – with updates to the community through Staff Briefing later this term.”

However, among the departments scoring lowest in the survey, there seemed to be a general feeling that things would stay the same. Overall, 53% of staff felt that action would be taken following the survey; however, in the Department of Aeronautics and the Union, only a third of staff surveyed felt confident that things would change, and fewer than half those surveyed in the Departments of Medicine and Computing had faith that action would be taken.

Bullying, Harassment, and Equality

One of the most sensitive questions in the survey asked respondents whether they had experienced bullying or harassment during the last twelve months at Imperial. Overall, only 81% of staff were able to deny they had experienced any such harassment or bullying, which places Imperial 15th out of 18 in

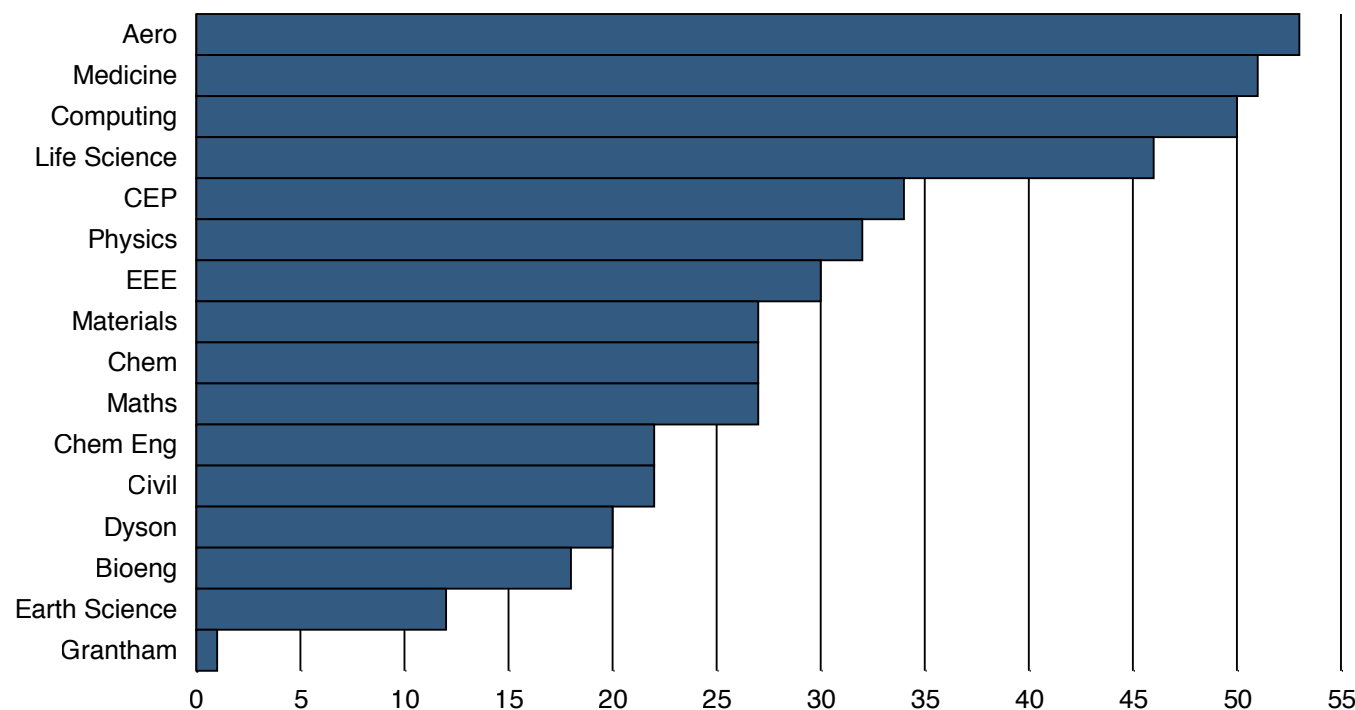
Percentage of Postitive Responses for Question Classes by Department



NEWS

news.felix@imperial.ac.uk

Number of Questions With Answers Below Imperial Avg Per Department



a benchmark comparison with other universities surveyed.

This is an increase on the last two iterations of the survey: in 2014, when asked about harassment or bullying, 86% of staff were able to confirm they had experienced neither within the last three years.

Several departments scored concerningly high on the question: in the Department of Aeronautical

Engineering, the Centre for Environmental Policy, and the Dyson School of Design Engineering, 14% of staff said that they had been bullied or harassed within the last year. For the Department of Earth Science and Engineering, and College's ICT department, the proportion was 13%. In the majority of cases, the bullying or harassment appears to have been carried out by a

colleague, the individual's line manager, or another manager within their department.

College policy states "harassment, bullying, and/or victimisation is unacceptable," and says "line managers have an obligation to tackle harassment".

Another possibly controversial question asked respondents whether they believed 'career

progression is fair within Imperial (regardless of ethnic background, gender, religion, sexual orientation, disability or age)'. In total, 58% of staff agreed that career progression was fair, but some departments reported lower scores: less than half of ICT staff, and 52% of staff in the Department of Bioengineering, ESE, and Dyson School, felt progression was fair.

Women were less likely than men to feel career progression was fair, and were less likely to know what career progression opportunities were available. Imperial College was also a founder member of the Athena SWAN Charter, which was established to "encourage and recognise commitment to advancing the careers of women in STEM employment". On their website, Imperial make it clear that, as a public body, they have a legal duty to ensure they take appropriate action to "advance quality of opportunity" for all staff.

The numbers reflect a decline since the last survey, which asked whether staff feel they had the opportunity for progression regardless of age, gender etc. In the last iteration, 85% of staff agreed that they had fair opportunities for career progression, against a UK average of 63%.

Comparison

A College representative emphasised that while "The Staff Survey is an important tool to hear the views of colleagues across

our campuses", that it "also allows us to benchmark ourselves against similar institutions." Imperial did well compared to UK university benchmark measurements, with 14 questions five percentage points or more above the benchmark, and only one question below. However, a number of scores have decreased since the last survey: out of the 20 questions that could be compared to the 2014 survey, only one had increased, and ten had lower scores.

In a statement, a College representative said: "The talents of Imperial's staff community are our greatest strength, and central to the College's mission. We know that if we are to continue to attract and retain the very best staff, we must provide a supportive working environment. The College Strategy makes clear how we do that. "While we're pleased to see that 87% of staff are proud to work at Imperial, and to have outperformed the sector generally, it's clear that there is more still to do, and we are determined to continue to improve."

Opinion split over Union's election investigation

NEWS

Fred Fyles

Editor-in-Chief

The Union's decision after a complaint was raised over a mailing list has divided opinion of student representatives.

A complaint with the Union was raised related to last week's Autumn Elections, when it was discovered a mailing list had been used to promote one of the candidates.

An email was sent out from the Chemical Engineering Society's

mailing list, by a member of their executive, shortly after 6pm on the evening of Thursday 17th October – roughly 18 hours before voting closed. The email asked recipients to vote for one of the students running for the Faculty of Engineering (Undergraduate) Ordinary Member of Council. It was sent to 1228 members of ChemEng Soc, of whom it is estimated 8-900 were eligible to vote for the position. It was not sent with the knowledge of the candidate in question, or the Chairman of ChemEngSoc, Kieran Naylor.

The position was one of the most highly-contested in the elections, with 16 candidates running for

four positions at the time voting closed. In total, over 900 people voted for this particular position, with the candidate in question topping the polls, more than 50 votes ahead of their nearest rival.

A complaint was raised over the weekend of the 21st/22nd by a Union Council member who was alerted to the email. The complaint was raised after the close of voting; the Union's regulations for the Autumn Elections state that "all complaints must be received within two hours of the close of the voting period."

A Union spokesperson told *Felix*: "Democracy is one of our fundamental values, and we

immediately investigated whether this rule breach would require further action to ensure our democratic integrity". They stated that the Union decided that "as previous similar incidents have not required disqualifications or caused election to be cancelled, it was not proportionate for us to rerun this election."

The Union's response seems to have divided those students heavily-involved with student representation: Naylor described the investigation the Union conducted as "appropriate", saying that "in general, I believe that this issue has been blown way out of proportion through poor

communication."

However, one student told *Felix* that "as a fellow candidate", they were "disgusted that the Union will not be pursuing an investigation or disciplinary action". Another student said "The Union failing to take a harder line on this demonstrates they only care about democracy when it's convenient for them."

Naylor told *Felix* "The ChemEng Soc, and myself, believe that the integrity of the elections must be upheld by all parties. We should always endeavor to make sure all candidates have an equal platform regardless of access to mailing lists, social media platforms or

other mass media."

He went on to describe the candidate as "incredibly well-respected, popular, and well-liked", and expressed his confidence that they would have won the election with or without the use of the mailing list, stating that – while Chemical Engineering is one of the departments with the highest turnouts – he believed that the majority of students who would have received the email voted before it was sent.

The Union stated that they "will follow this up with the individual concerned, who has offered their apologies, to emphasise that this behaviour must not be repeated."

POLITICS

felix@imperial.ac.uk

UK Party Conferences 2017: Corbyn is confident, May

Taking place each autumn, political party conferences are essentially like festivals where loyal groupies go en masse to cheer on their favourite stateswomen and men. Politicians take to the stage to discuss the current state of the party, set out their ambitions for the following year, and physically demonstrate that they understand the UK stretches beyond its capitals.

POLITICS

Ratan Gor

Politics Writer

P-45s, writing on the wall, and coughing – the Tory conference overshadowed by the PM's speech

Manchester hosted the Conservatives and their delegates this year. The question on everyone's mind was whether the Prime Minister would remain leader for much longer, and who from her inner circle was itching to replace her after an embarrassing general election campaign. The who, it turns out, was Boris Johnson. The

former London Mayor and current Foreign Secretary has been gunning for the top job and now smells blood after Mrs. May's disastrous General Election result, which saw the Tories go from a majority to a minority government. Mrs. May has been haemorrhaging support since, and Boris smelled blood.

In other news, the Chancellor, Philip Hammond, made a speech during the conference defending capitalism and free-market economics, accusing Labour of leading people "down a dangerous path" through their left-leaning policies.

The Home Secretary, Amber Rudd, discussed banning acid sales after a

worrying spike in attacks resulting in devastating injuries in recent months. She also brought to the forefront the discussion on tech company regulation and granting authorities access to messages on platforms such as WhatsApp that currently have end-to-end encryption, arguing that such platforms were "helping criminals".

The most memorable address, however, was that of the Prime Minister's. She was plagued by a tickly cough throughout her speech, detracting from the importance of the messages she was attempting to convey. If her upper-respiratory tract woes weren't bad enough, a prankster managed to hand her a P45 – a form

telling an employee that they are fired – stating it was from Boris. If those weren't enough, the sign behind the PM started falling apart during the speech: the writing on – or falling off – the wall perhaps symbolised Ms. May's current cabinet – fractured and in need of repair.

Finally, to add insult to injury, Boris and much of the cabinet actually had to be cajoled at the end of the speech to join in with the closing standing ovation.

"We have become a government-in-waiting" – Labour's call to arms for another election

Labour graced the

seaside town of Brighton for their rendezvous this year. The atmosphere between Labour MPs seemed amicable, with the mutinous MPs who last year would've wanted nothing more than to see Corbyn replaced with a cleanly shaven Blair 2.0 appearing placated after his better-than-expected performance in the General Election.

Much was discussed at the conference. There were some typical left-wing speeches about capping interest rates on credit cards, nationalising industries such as rail, water, and energy, raising the minimum wage to the highest in Europe, and taxing corporations further.

However, much beyond this was discussed. Everything from the apocalyptic hurricanes plaguing the Atlantic and the role climate change was playing in such devastating events, to automation of jobs in the future and how the country should prepare for such disruption.

The overwhelming theme, however, was Jeremy Corbyn. "Oh Je-re-my Cor-by-n" was chanted at every opportunity like a case of herd-induced Tourette's. It appeared as though Labour were rallying the troops for another election, but this may, however, be premature and in vain, considering the realistically slim chance of the Tories collapsing and ceding their power.

He (or his PR team) certainly can satiate the youth, however. He was asked whether he wanted to take off his jacket at a fringe event to which he retorted, "the man's not hot" – referencing the latest phenomenon to grip social media: 'the ting goes' memes. Although the line was perhaps his most awkwardly deliv-

ered, and was as cringe-worthy as seeing your dad dance at New Year's, it was nonetheless lapped up by his young backers. At the start of his closing speech, he mentions how the atmosphere of the crowd was infectious and that they should all make sure "the whole country is infected with the same thing" (puzzled emoji). Every meme he touches turns viral so perhaps he is onto something.

Liberal Democrats limber up to regain their position

The Lib Dems took a trip to the seaside as they opened the conference season in Bournemouth.

Sir Vince Cable, the former business secretary and newly appointed party leader, is attempting to reclaim the position of the third largest party after being punished for going into coalition with the Conservatives back in 2010 and breaking crucial manifesto promises, such as the infamous tuition fee increase backtrack. The humbling experience resulted in their 57 strong MPs all but disappearing, leaving only 8 standing today.

They are now in rebuilding and rebranding mode, wanting to become the party of "no Brexit is better than a bad Brexit", and once again lure the youth, as well as appealing to the snubbed 48% who voted to stay in the EU. During the conference, delegates agreed to commit to a referendum on the final Brexit deal, with the option to stay in the EU.

Also, on the agenda were discussions about radical tax reform to tax wealth rather than work, creating disincentives for second homes, tax penalties on properties acquired for investment purposes for overseas residents, and



This was the only copyright-free image we could get from the Tory conference...// Wikimedia

POLITICS

felix@imperial.ac.uk

is choking, and Johnson is out for blood



The Absolute Boy looking at home during the conference // Wikimedia

changes to, you guessed it, tuition fees. Although, on the final point they stopped short of committing to anything specific, leaving it as the open statement “rethink the student debt burden” because “the worry about debt does cause students and their families real concern”.

The Lib Dems have always put forward convincing arguments and policies that appeal to both the left and right. However, from the conference, it appears that their current task is to convince delegates and potential members that they can deliver on these as opposed to offering false pledges.

The SNP take to Glasgow

The Scottish National Party, fronted by their leader Nicola Sturgeon, held their conference in Glasgow.

The General Election

for the SNP was a big setback: they lost twenty-one parliamentary seats, but remain in power in Scotland alongside the Scottish Greens.

Key points from the conference included pledging to create a state-owned energy company in Scotland that offers the cheapest power – “renewable of course” – to homeowners, and a £20,000 bursary to professionals to go towards retraining as a teacher – due to current shortages. Scottish Labour has said that such policies had been “photocopied” from their own proposals. The SNP also said that they would pay residency fees for EU citizens currently working in the Scottish public sector, and so protect 20,000 EU nationals currently with jobs in hospitals, schools, universities, and public agencies.

They also voted for a motion calling for a ban on under-18s being

the military was purposely targeting youth from low-income backgrounds through social media advertising. They argued that enlisting those under eighteen increased their risk of death in battle, post-traumatic stress disorder, and alcohol abuse. Critics of this, however, argue that the motion ignores issues regarding pay, equipment, and housing, and would deny opportunities to some youngsters.

Plaid Cymru set out their vision for Wales

Plaid Cymru, the party from Wales, held their conference in Caernarfon last week.

Leader Leanne Wood, and her party, promised a “rail revolution”, offering new routes across the country as well as providing education and re-training to the over 290,000 workers in Wales threatened by increasing automation and technology disruptions. On Brexit, Plaid stated that people

must have the opportunity to reject the disastrous situation of a no-deal scenario, either through a public vote or via a parliamentary democracy on the matter.

Greens set out their policies to protect the environment

The Green party, jointly headed by Caroline Lucas and Jonathan Bartley, arrived in Harrogate, North Yorkshire for their conference. In the General election, their vote share was reduced, but they retained their Brighton Pavilion parliamentary seat.

During the conference, they stated that they had “suffered” because of a two-party system, but that their environmentally considerate ideas and policies were now part of the mainstream and that their aim was to be “the most influential” party in 21st Century politics.

Issues and policies discussed related to: electoral reforms regarding

the need for a proportional voting system as opposed to a two-party one; offshore wind energy prices dropping below that of nuclear – necessitating the need for Hinkley Point C to be reconsidered; a four-day working week; the Grenfell Tower tragedy; and what Brexit would mean for the environment. On the last point, Jonathan Bartley stated that the “Green Brexit” the Conservatives had been proposing was an oxymoron, stating that “almost by definition the Conservatives seem to be anti-environment”, and their recent decisions on fracking and fossil-fuel subsidies did not align with a green vision.

S

Conferences offer interesting insights and opportunities to compare positions of the different parties and its members on key issues, allowing us to think about who we might vote for, the next time the occasion should arise – the fabric of a democracy.



Not now mate, I'm the one with the microphone // Wikimedia

POLITICS

felix@imperial.ac.uk

Czech elections throw the country into political turmoil

The rise of the populist ANO party means that the future of the Czech Republic is uncertain.

POLITICS

Veronika Šigutová
Politics Writer

Last week's legislative elections in the Czech Republic were record-breaking in many ways – most candidates and parties standing; most fragmented Chamber of Deputies to date, with nine parties crossing the 5% mark; and the first time in the country's history that neither Civic Democrats (ODS) nor Social Democrats (ČSSD) won. These changes mark a shift in Czech voting tendencies, mirroring those found all across Europe.

The landslide victory of ANO, a centrist-populist party led by Czechia's second richest man Andrej Babiš, was predicted by all polling agencies. However, prognoses about the remaining parties completely failed, grossly underestimating the appeal of the Pirate Party and the anti-immigration, anti-Islamic, Eurosceptic "Freedom and Direct Democracy" (SPD) which

finished third and fourth respectively. They also failed to predict the poor results of the left-wing ČSSD and Communist party (KSČM) who each got a meager 7% – their poorest result yet. The reason for these inaccuracies? Although the authors of the polls claim we need to take standard error into account, the main factor was most likely the indecisiveness of many voters. This uncertainty reflects distrust and displeasure with the traditional parties, and so many of the wavering voters laid their hopes in the new, anti-establishment parties such as Pirates and SPD.

Although ANO established itself as the winner in all regions, a closer look reveals nuances: the party gained most of their new votes where ČSSD suffered the largest losses – thus it seems that ANO pulled its votes from Social Democrats, although the two parties have led the government together for the past four years. The country has prospered under their governance, maintaining a surplus budget for two consecutive years and

decreasing the unemployment rate to the lowest in the EU. One can argue that both parties have a share in this success: however, ANO took the credit. Why is that the case? The persona of the ANO's Andrej Babiš plays a major role, being cited as the second most influential factor in the election of the party.

But who is Babiš? The Slovak-born agricultural and media tycoon entered

"The persona of the ANO's Andrej Babiš played a major role in their success in the Czech election"

the political scene in 2011, when he founded his party, which he states was to express a dissatisfaction with the corrupted state. Although he describes himself as a self-made man, he largely benefited from his parents' positions

in the Communist party. However, much like Donald Trump and Silvio Berlusconi to whom he is likened, the voters don't seem to mind his wealth. They also gladly turn a blind eye to many accusations against him – such as the 'Stork Nest Case' in which Babiš received EU subsidies intended for small enterprises for his recreation centre and farm, which is part of the large conglomerate Agrofert. He also allegedly cooperated with Communist secret police during the totalitarian regime. Babiš rejects all these accusations as political attempts to destroy him.

Now that ANO is in power, what can we expect? Babiš is not a man of ideology, and that makes him unpredictable. However, one can get an idea from his book where he outlines his vision of Czech Republic in 18 years: let's dissolve municipal councils, regional assemblies, and the Senate, and streamline the system, he says; let's run the state like a company. Such changes would concentrate power into the hands of a few,

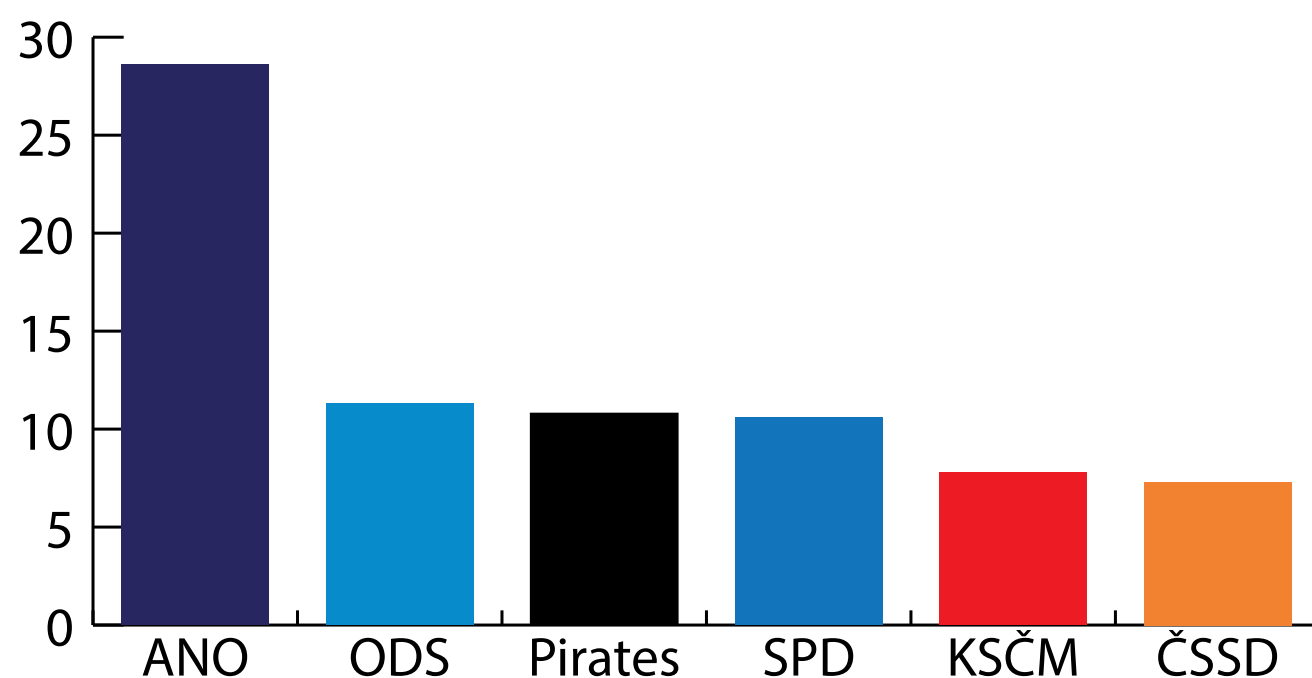


Andrej Babiš is holding the cards // Wikimedia

namely the MPs and the mayors, and raise concern about the preservation of democracy. The abolition of the Senate would also enable changes to the constitution without moderation. Another concept that Babiš would like to introduce is direct democracy – an idea appealing to the Pirates and SPD. Superficially, there is nothing as democratic as giving the power to the people. However, one must be wary of the consequences – after all, many voters tend to decide emotionally rather than rationally, and some decisions require expertise in the subject. As an example, direct democracy was one of the factors explaining why women in Switzerland were only granted suffrage in 1971. One of the first referendums would inevitably be about "Czexit", as the anti-European mood is rising among Czechs. What would follow is unimaginable.

Where do the others come in? The gamut of political views in the lower chamber is colourful and reaching agreement will be difficult. None of the parties is willing to form a coalition with the ANO, with the exception of the SPD, but they are just as dismissive of a minority government. It's only clear that there are many changes ahead: power within the parties is shifting as they deal with their defeats, and half of MPs have been replaced. The lower chamber has diversified as many politicians under 30s and women were elected, but has also become more polarized.

Czech Republic took a step in the populist, right-wing, anti-European direction, much like its neighbours Germany, Austria, and Poland. Where this road will lead is difficult to tell at the moment – hopefully not away from democracy.



"Damn, Felix, back at it again with the sick graphs" // Felix

COMMENT

comment.felix@imperial.ac.uk

Fred's dead baby, Fred's dead



Charles Titmuss
Comment Editor

TÊTE À TÊTE

Alan Perfect
Comment Editor



The revolution has finally arrived at the Felix Comment section!

The dawn of a new age in Felix Comment is here

People rejoice! The brutal dictator General Fyles is no more! His evil reign has finally come to an end, after a prolonged internal struggle, led by the brave Colonel Alan Perfect and ably supported by Major Charles Titmuss. We have retaken the Comment section and restored it to Freedom, Liberty, and Truth! The management wish to reassure those that live under the new duumvirate that business will continue as usual provided their Loyalty remains unquestioned. Traitors to the Cause, and those that write better Comment articles

neglected child of *Felix*, the Comment section is set in the unloved middle of the newspaper, only occasionally seeing the light of day as people desperately search for the centrefold. Despite this ignominious situation, the Comment section remains a crucial and vibrant part of the newspaper, rather like some forms of non-lethal bacteria. It is the most critical part of a student newspaper, as it creates a space for measured debate and the careful expression of opinion by students and staff about a range of topics that they are interested in, engaging with the rest of Imperial on sometimes highly sensitive subjects.

A good example from last year was the article written on Tie Clubs in *Felix* issue 1661 that provoked significant debate all over the university. We are both looking forward (at least I am) to creating and editing more articles that split opinion to the same degree. This leads perfectly into the next excellent thing about the *Felix* Comment section: people read the articles that you create, and will be interested in your perspective. You can have an impact on the way that your peers – some of whom will no doubt become very successful individuals – view an issue that you care about, and raise awareness of that issue, all as a result of the research that you have done and the article you have created. It is not necessary to possess any particular skill as a wordsmith, or I would

definitely not be writing! If you have an idea for an article, simply come down to the *Felix* basement and talk it over with either one of us. Don't worry about the fact it's in a basement: think *Steve Jobs* and not *50 Shades of Grey*.

I have been warned about the sensitive handling required for certain subjects, but I am nearly always on side of freedom of expression. If a view is controversial it is not productive to sweep said view under the carpet. It is far more useful if that view is expressed in an articulate fashion, so that it can then be considered and understood in context, and

“At the end of the day, I need something to read in lectures”

if necessary disassembled and defeated. However, I recognise that freedom of expression comes with the freedom to take the consequences. Occasionally the consequences of publication may be too risky, but it is something I am willing to discuss, and pretty much all topics are fair game!

Finally, and most importantly, send in articles! At the end of the day, I need something to read during lectures and it might as well be content that you created!

Vive la révolution!

All hail Major Charlie Titmuss and Colonel Alan Perfect, the new supreme leaders of the Comment section! Fred Fyles has been finally overthrown! I would like to thank my mum, my friends, the FA, and especially Muammar Gaddafi, who was a great source of inspiration in this coup d'état.

This year we want the Comment section to become the most high-profile part of *Felix*. We know it has been sometimes neglected, but we can restore it to the place it deserves: as an outlet for any Imperial student to voice their opinions on issues they care about. We are well aware that your opinions as a student matter, and we will use all our strengths to make sure they are properly heard.

A format we want to emphasise this year in

the section is the “head to head” page, which will look exactly as this article looks next to Charlie's on the left. You might be one of those people that loves an internet discussion, and is able to craft some beautifully long, properly sourced arguments on a reply to an obscure Facebook thread. This format is then definitely for you. Get the person you disagree with to write an article, write one yourself, and we will display it as a head to head debate here

“We will use all our strengths to make sure your opinions are properly heard”

in *Felix* for all students to see. You will be amazed by the response you get.

Felix is ultimately about raising the issues you care about. You don't have to be Union President for your voice to be heard. We have had some amazing comment pieces come to us during these past years, from articles steering important debates about mental health to passionate discussions about how terrible ales are if you're European. If anything bothers you about the university experience, why quit at just raising it with your Year Rep? Here, at the Comment section, we will make sure your initiatives, frustrations, ideas, and rants can be properly heard. Hell, we will even help you out to make sure you word them right.

Be the change you want to be. Have a positive impact. Write for *Felix*.

“Comment remains a crucial part of the newspaper, like some form of non-lethal bacteria”

than either of us, will be dealt with swiftly...

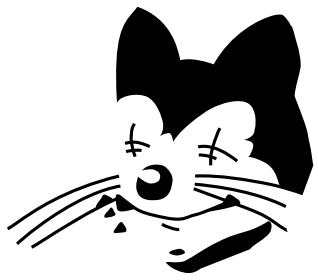
Propaganda aside, the Comment section of *Felix* is now officially up and running! A significant change when compared to last year's *Felix* is the split of the Comment section into the Politics section which deals far more with specific topics, and the Comment section, that will probably deal with whatever the Politics Editors decide they don't want. Traditionally the



In case you're wondering, that's the Editor-In-Chief's head // Flickr/History Stack

COMMENT

comment.felix@imperial.ac.uk



Finishing the night in Heaven: inclusive, inappropriate, or irresponsible?

Is ICSMSU's decision to return to an LGBT+ venue as the after-party for its freshers' pub crawl well intentioned or inherently problematic?

COMMENT

Anonymous
Comment Writer

The question, “Is it ever acceptable for straight people in large groups to congregate in an LGBT+ space?” is a contentious issue, and – in recent media – a divisive one. I’d like to make my position perfectly clear: there is something incredibly special about gay venues; something which, I believe, should be respected and protected by all.

This may be mistaken as ‘heterophobia’ by disgruntled straight people who are not used to being routinely discriminated against for their sexuality or gender identity. But it is failure to recognise this privilege which leads to ignorance about the reason these venues exist: they provide a haven for LGBT+ people to surround ourselves with like-minded people and express ourselves, away from the oppressive society where we feel we can’t. They are places where heteronormativity is not the norm, and we are no longer the minority.

Don’t get me wrong, equality for LGBT+ people has come a long way since the brave days of the Stonewall riots. The idea that LGBT+ people can go anywhere without fear of discrimination means that there are fewer and fewer LGBT+ spaces remaining. This lack makes it even more important to respect them for what they are: gay spaces – for gay people.

Of course, this is not to say straight people



We would have gone to Heaven to take photos, but that wouldn't have been very respectful // Creative Commons

should be refused entry to all gay venues, or that straight people should not accompany their gay friends to such venues.

“We need to respect LGBT+ clubs like Heaven for what they are: gay spaces, for gay people”

It does, however, require straight people to reflect

on their presence in these spaces. Just because one is allowed to do something does not mean morally it is the right thing to do, and by bringing large groups of straight people to LGBT+ venues, the purpose of such venues is lost. It undermines this respect for LGBT+ patrons who frequent them simply to feel safe and be themselves.

It is this point which brings me to ICSMSU's choice to return to Heaven, the popular gay nightclub, as its venue for their annual fresher's pub crawl. Heaven is a cracking venue, and is thought to be one of the largest gay

venues in the country – a fact which, incidentally, is not mentioned on the ICSMSU-generated event page. If the whole medical student body were respectful, clued-up allies it would be possible to argue that this influx would not threaten the safe space. However, given that our own Union venues are unable to provide a similar haven of safety for LGBT+ students – something evidenced by the ordeal faced by a non-binary student in the Reynolds bar last year, who was nearly forcibly-removed from the women's bathroom, despite union venues claiming a zero-tolerance

stance to discrimination in all its forms – it is difficult to argue this is the case..

Furthermore, it seems – if only in terms of sheer

“Inclusivity and being supportive does not give you the right to monopolise the safe spaces of a minority group”

numbers – the quantity of drunk medics will so far outnumber any LGBT+ people, that the respect for why the venue exists would be lost. ICSM seems only to be furthering the fetishisation of LGBT+ issues, something which is seen year on year by the masses of straight people donning glitter and celebrating Pride with very little appreciation for what it really means.

LGBT+ spaces are fantastic and should be celebrated, but they are also not a zoo or a novelty for freshers to marvel at – and they should not be used to purport an ideal of progressiveness without real change or support. It is admirable that ICSMSU would want to pledge their support for LGBT+ people and issues by supporting Heaven as a venue; however it does beg the question if their efforts might be better spent evaluating their own community.

The LGBT+ medicine project last year raised the fact that there was no formal teaching about LGBT+ issues in the entirety of the 6 years of the medicine curriculum – many early years teaching was actively outdated. Furthermore, there is currently no LGBT+ officer in the ICSMSU committee, nor are there events for LGBT freshers or even older years – just saying.

It may be uncomfortable to hear, but inclusivity and supportiveness does not give you the right to monopolise the safe spaces of a minority group. Although we like to think we live in a society with true equality, we are not there yet – and we cannot be complacent.

COMMENT

comment.felix@imperial.ac.uk



Students and Self-help Books – A compulsory course requirement?

At an institution like Imperial, the drive to achieve success can make campus seem like a pressure cooker. Self-help books can provide us with invaluable advice about maintaining a balance.

COMMENT

Connor Qiu

Comment Writer

At the world's top academic institutions, the pressure to achieve can be all-consuming. Often I find myself walking amongst high-flyers, questioning what drives this culture of self-sustaining competition. An innate drive emanates from these students, one that cannot be contained. For those that compare less favourably academically, there is a feeling of inadequacy that perpetually lurks in the back of the mind, casting a shadow over what they do. One imagines the top of the class to be the complete opposite, but, sadly, candid accounts of student experiences

suggest otherwise.

The modern world has redefined what it means to be a student. A good job means good food, decent housing, and, perhaps, some disposable income. Getting one requires meticulous planning, but job security and longevity is no longer a certainty. Sceptics will argue

“The modern world has redefined what it means to be a student”

student resilience and determination has decreased compared to previous generations. Whatever the reason, today levels of stress and anxiety are high, and it is difficult to

find someone who would disagree. According to a study carried out by New York University in 2015, chronic stress that starts from secondary school and persists well into university years is not a rare finding amongst high-achieving students.

In a world that has become so interconnected via technology, having the confidence to be our own person is difficult. The effect of social media and clickbait news is omnipresent. Perceptions are moulded and formed as quickly as information is transmitted from one screen to another – at the speed of light. The concept of self and knowing oneself has never been more challenging than before, but self-help books cater for all spectrums of situations and problems. Therein lies their magic.

Self-help books intend

to help their readership live better lives by offering practical solutions and advice to a wide variety of human problems from the professional to the very personal. I discovered this genre out of curiosity in a chance encounter whilst browsing an independent bookstore, and have been an avid reader of their

“Self-help books offer practical solutions to a wide range of problems”

volumes ever since. In subsequent years, after my discovery of this uniquely personal genre, I have found their contents to

be comforting in difficult times, their spirit to be an indispensable guiding light and their optimism to be the very definition of positive energy.

I believe self-help books can play a fundamental role in re-establishing the principles that make self, self. There are tips galore about how to live our lives – outlets like *BuzzFeed* are a favourite present-day source – but there is something irreplaceable about the semi-academic rigour of a good self-help book. They bring a deeper and more substantial perspective, one that allows reflection upon current life practices, in a manner which is decidedly non-judgemental.

Of course, there will be those who are sceptical. Detractors might claim that self-help book content is all common sense and nothing special; some will claim that real world experience is the only way to learn, and that loading up on theory will never be the solution. Whilst there is something to be said for all the numerous counter-arguments, they all reveal a level of cynicism that cannot be healthy.

But there are many self-help books – where should one start? Of course, the best-sellers and the ‘classic texts’ come highly recommended, but the truth is the starting point is not of huge significance. Two contemporary volumes that are easily accessible and offer actionable steps are *Designing your Life* by Bill Burnett and Dave Evans, and *How to Have a Good Day* by Caroline Webb. These books will introduce some of the most pertinent and relevant self-help thought leadership – the recognised

cutting-edge thinking in the field of study. Expect answers to your failing war with procrastination and to your currently unknown life purpose. From here, you might choose to engage in further study with more academic texts, and maybe even go on to develop a passion for the genre. When acquainted with the literature, there will be similar themes that emerge, and some will appear to ‘repeat’ the same principles. The reason for this is clear: there are a few principles that work, but they can be rather challenging, nigh impossible, to execute

“Such books bring a deeper perspective, one that allows reflection on life”

flawlessly. It is important to emphasise that the real value of these books is unlocked by appreciating their interdisciplinary nuances and working out how they apply to you.

Nonetheless, reading a self-help book provides an opportunity for a fair and kind evaluation of oneself. It allows us to improve in our own mind's eye, to be kind to ourselves. By becoming more assured in oneself and living off the can-do-everything ‘growth mindset’ high that these books imbue, self-help books and the modern-day student are a perfect combination. Perhaps reading them should be made a mandatory course requirement.



Help yourself to some reading... // Flickr/Thanakrit Gu

SCIENCE

science.felix@imperial.ac.uk

Miracle material could bring an end to cracked smartphone screens

Researchers from Queen's University Belfast are hoping that through combining different materials together, your iPhone may be made shatter-proof.

SCIENCE

Rachel Baxter

Science Editor

It looks like a dream, but it's real," says Dr Elton Santos, a researcher from Queen's University Belfast's School of Mathematics and Physics. Santos has led an international team of scientists to create a new miracle material, one that could be used to make crack-free smartphone screens and self-charging devices.

By combining super-thin and stable graphene with a substance known as hexagonal boron nitride (hBN) and a semiconductor called C₆₀, the team were able to create a brand new material that is more durable and cheaper than current materials on the market like silicon.

"It's almost impossible to pick one material with all the properties you want," explains Santos. "I came up with the idea that if you combine materials with different purposes then maybe you

can create a new solid. So you combine these 3 materials and you could get completely new or novel features."

So how does one go about creating a material from scratch? "To me it's like you are in a very sunny place, like a sunny Spain or sunny Malaga, and you look up at the sky and there's nothing there," says Santos. "I got the idea and then the theory and

"As well as making more durable screens, the material could allow smart devices to become solar powered"

then did simulations. After several months those simulations worked well so then I suggested to a few colleagues in Berkeley

and Stanford to try to make it and they did – that simple!"

"One of the applications that people got very excited about was essentially to try to replace some of the components you have in the iPhone, for instance," he adds. "In several of the iPhones they use different kinds of glass, kinds of sapphire glasses, or other kinds of polymers. Those polymers or those glasses are expensive and very fragile but if you replaced some of those components, and then include the material, you could get so many features and one of those is unbreakable screens."

As well as making more durable screens, the new material could allow smartphones and smart devices to become solar powered and therefore rechargeable on the go.

"We thought let's create a material that harvests energy and solar electricity and then you can just charge your battery while you just drink your beer in Piccadilly," says Santos. "You can catalyse the electric current in the



When you go full Naomi Campbell // Flickr/Cory Doctorow

battery so you connect the screen to the battery. I know prototypes in the market with different materials that are doing that. So it's not far away from reality at the moment."

However one potential problem with a widespread use of graphene and graphene-based materials is possible effects on our health. Only discovered in 2004, the toxicity of graphene is still under investigation.

"Potentially it could be harmful," explains graphene expert Professor Owen Guy, Director of the Centre for Nanohealth at Swansea University's College of Engineering. "Types of graphene which are particulate could potentially get into the body more easily, and there is the possibility there could be toxic as with carbon nanotubes but I think there's probably not enough data or enough studies on that yet."

In terms of environmental impacts, using graphene on a large scale should be safe. "You know graphene's organic," notes

Santos, "it's a carbon material, so I would say essentially it's environmentally friendly."

Whilst the new material has huge potential, it still needs tweaking before it can be put into use as it lacks an essential feature known as the band gap. The band gap is needed to give electronics like smartphones an on-off switching function.

"Graphene is what they call a 0 band gap semiconductor," explains Guy. "In a normal semiconductor you have what they call a band gap between the valence band, the band which contains electrons, and the conductor band, the empty band. In order to get conduction you have to have either a hole or electrons and they have to be able to flow. In pure pristine graphene there is no gap between the valence band and the conduction band but when you modify it in some way then you can introduce a band gap."

Santos and his team are already working on potential solutions. "The idea

now is trying to replace graphene with other materials," he says, "materials that are still flat and still 2D but with a band gap. So there are several materials now that we are looking into like the transition metal dichalcogenides."

So when might this new

"When might this material reach smartphones? Elton Santos reckons it's not too far away"

material reach our smartphones? Santos reckons its application isn't too far away. "If you think in terms of time frame it can easily take between five to seven years," he says. "I think that it will not take too long to use this kind of prototype, this new material that we discovered."



No more asking around for an iPhone charger // Flickr/Solución Individual

Wellbeing Rep Network: Year Rep Induction



MONDAY 30 OCTOBER 2017 | 18:00 - 20:00

Meeting Room 3, Union Building

The Wellbeing Dep Rep Induction will cover the following topics:

- Role & responsibilities of the being a Rep
- Overview of Union and College structures and key staff contacts
- How to run effective campaigns
- Representation principles and tools

*This induction is restricted to those elected as a Year Wellbeing Representative.

How to be democratic - Training



WEDNESDAY 1 NOVEMBER 2017 | 17:00 - 18:30

Meeting Room 4, Union Building

Learning outcomes for Your Democracy are:

- Introduction to Imperial College Union and its Structure, Bye-laws and Constitution
- Understand where your CSP fits into the organisation
- Understand what your responsibilities are for ensuring the democracy of your club is maintained
- Be able to run an election for your CSP
- Understand what inclusivity means and be able to apply it to your CSP

*This workshop is for Club, Society & Project Officers

advice centre

INDEPENDENT
CONFIDENTIAL
IMPARTIAL

We're here to help

We offer academic and non academic advice.
We are confidential, impartial and independent from the College.

Get in touch

advice@imperial.ac.uk

020 7594 8060

imperialcollegeunion.org/advice

what's on

Don't forget to keep an eye on our page to keep yourself updated with all the stuff that's happening! We have amazing things coming up. Have a look on our website, here:

imperialcollegeunion.org/whats-on



Share your knowledge in STEM and inspire the future generation of scientists! Applications are open to become a STEM-subject tutor in a local public school, tutoring students from primary school all the way up to senior year. Tutors are asked to dedicate 1-3 hours of their time weekly, usually on Wednesday afternoons. Register your interest for Pimlico Connection: <https://www.imperialcollegeunion.org/volunteering/opportunities/pimlico-connection>

TECH

tecfelix@imperial.ac.uk

Gene Drives – A technology capable of changing entire species

An emerging technology may allow us to play God, but should we take the risk? More importantly, can we afford not to?

TECH

Xiuchen Xu

Tech Writer

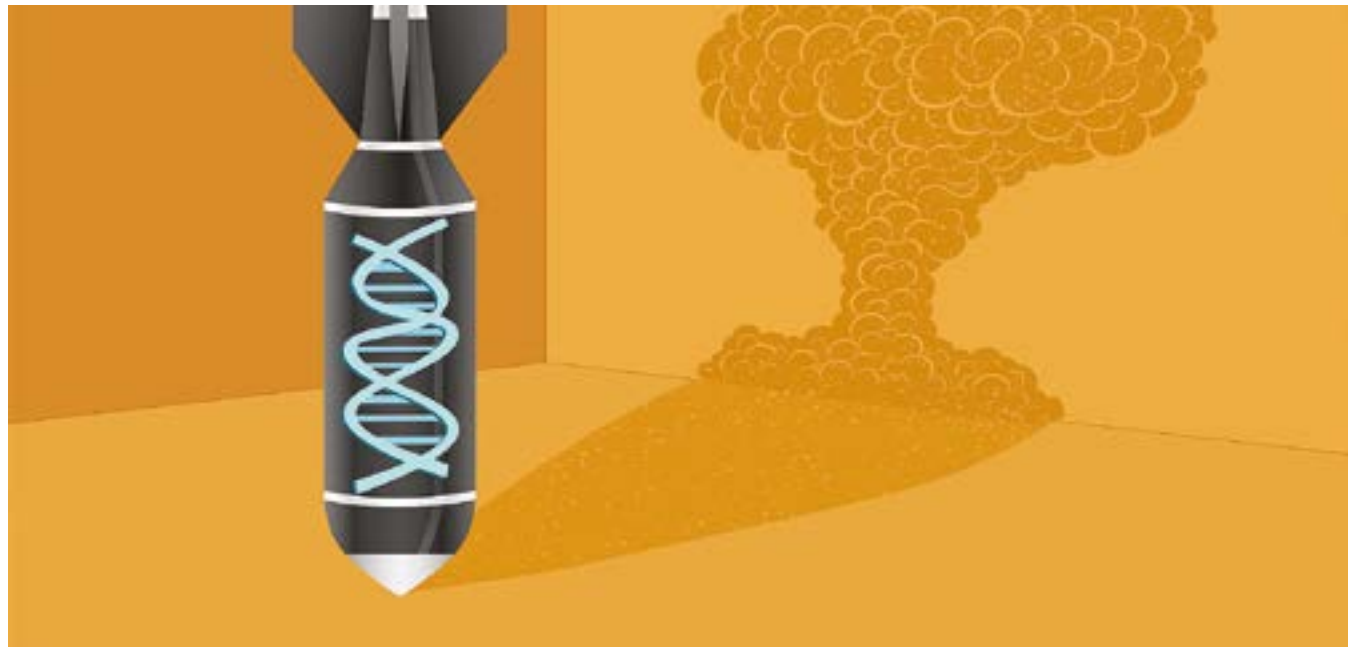
Gene drive technology allows humans to introduce genetical modifications to species that are always passed on to the next generation, which allows a characteristic to become prevalent in a species over very few generations. The technology is powerful enough to wipe out whole species, and has applications in eliminating invasive species, and controlling vector-borne diseases. The technology is showing promise, and it has attracted huge investments. Bill Gates, for example, has invested a total of \$75 million in Target Malaria, a consortium led by Imperial College aiming to control the spread of malaria. Gene drives are to be used for this purpose, specifically one to make female mosquitoes sterile to eliminate the mosquito population.

Gene drives have been

made possible by the development of CRISPR/Cas9, a powerful and precise genetic engineering tool. So how does a gene drive work? A gene drive contains a guide RNA which directs it to the right place along the chromosome, then Cas9 cuts the gene and the cell repairs the damage by copying the gene drive into the cut site. This means the gene drive is present in both copies of a gene (both will have the gene drive allele).

“Gene drives could help stop a range of diseases, such as malaria or Lyme’s”

As a result, the gene is certain to be passed on to the offspring. The gene drive will then repeat the same mechanism when passed down, resulting in homozygous offspring



Gene drives are a powerful tool that could wipe out entire species if not used correctly // SynBioWatch

with the gene drive in both copies of the gene. A desired characteristic can be encoded within the gene drive to be passed on.

Gene drives can help solve a range of problems. As discussed earlier, they could stop a range of diseases such as malaria, dengue, and Lyme by altering insects. In the case of mosquitoes, the possible alterations include making mosquitoes resistant to the malaria parasite, making mosquitoes sterile, and

making them less interested in humans as prey. Gene drives could also help eliminate invasive species (such as carps, whose adaptability allows them to wreak havoc in ecosystems all around the world). Whole populations can be eliminated if the gene drive encodes for gender (for example making all offspring male). Gene drives could also be used in weeds to reverse resistance to pesticides, which can help increase crop yields.

Indeed, gene drives could save lives and improve ecosystems, but should this powerful piece of technology really be deployed? Gene drives have already been successfully created within laboratories, but their effect if released into the wild is yet unknown.

The effect of releasing gene drives into ecosystems is not yet known, but they would likely seriously affect population dynamics. There is also the fear of an accidental release, which is why most labs take precautions. The risk is always

there, however, and the fallout could be disastrous. Furthermore, there is the existence of gene flow, which means that species may breed with neighbouring species. If gene flow happens then the gene drive may not be confined to only one species, the spread to other species will lead to unwanted consequences, and a more complicated situation. For the case of invasive species, the gene drive may spread away from the intended area, meaning that the whole species may be wiped out, instead of just the areas where they are invasive and don't belong. Lastly, there is the fear of the use of gene drives for bioterrorism, as gene drive technology isn't hard to use (although it takes a long time to identify specific genes and how to alter it to acquire the wanted characteristic). For example, terrorists could possibly add a toxin-making gene to mosquitoes, which would cause devastating damage on a large scale. Overall, there is a large amount of uncertainty

over what would happen if a gene drive were released into an environment. Gene drives have the potential to save millions of lives, but it could also have devastating consequences, so is it unethical to use gene drives, or is it unethical to not use them?

The use of gene drives is a complex subject, and the regulation of this technology requires discussions on an international scale. In 2016 there was a United Nations biodiversity meeting discussing a gene drive moratorium which was ultimately rejected. Gene drives can change the world on an international scale, so in the future it is inevitable there will be disagreements on the use of different gene drives. In the meantime, scientists are continuing their work in this field, currently an obstacle that has emerged and needs to be overcome is the evolution of gene drive-resistant organisms. A lot of exciting research is happening, much of it in fact taking place over here at Imperial.



Gene drive technology could rid humanity of malaria // Wikimedia

TECH

tecfelix@imperial.ac.uk

The October 4th Google Event: Pixel 2 and More

TECH

**Ignatius-Roy
Hillcoat-Nalletamby**
Tech Writer

Google announced a host of new products in San Francisco on the 4th of October this year. Everyone eagerly awaited the announcement, particularly the unveiling of the company's second flagship smartphone, the Pixel 2. However, in true Google fashion, there were a few surprises in the announcement too. As always, Felix Tech gives you a round-up of what went down in San Francisco. From the outset, Google made it clear the focus was on Artificial Intelligence and Machine Learning – the idea of integrating clever software with great hardware.

Google Home Mini

Google started off proceedings with the announcement of the Google Home range. Amongst the newcomers was the Google Home Mini. You

guessed it, a mini version of its original bigger brother the Google Home. Powered by an even smarter version of Google Assistant, the Google Home Mini is designed to either blend in or stand out depending on your preference. The design is based on a small pebble, made from a fabric top and a plastic bottom, and comes in three colours; coral, charcoal and chalk. The device is designed to slot neatly in any space, no matter how big or small. The magic appears in the form of four LED lights under the fabric – they light up to show the device is listening or thinking. As with all things Google Assistant, the Google Home Mini can be controlled by tapping or with your voice.

Much like its big brother, the Google Home Mini can do a huge range of things, from answering random questions like “How many teeth do puppies have?”, giving you updates on weather, traffic and sports results to personalised schedules, reminders and news. The device also works with



The Google Home Mini is a subtle, yet clever device // expertreviews.co.uk

Chromecast – allowing you to stream shows directly to your TV or music to your favourite speakers. The Google Home Mini comes in at an attractive price point of £49, making it accessible to many more people!

Google Home Max

Google Home Max is Google's first foray into the big speaker market. The speaker is the biggest in their current range and includes built-in machine learning and Google Assistant functionality. Google boasts the Max has a 20 times more powerful sound than the original Google Home. The use of machine learning has allowed the development of Smart Sound – the speaker adjusts its sound output automatically to the surroundings it is placed in using machine learning. This can include different physical environments all the way to different contexts. For example, the speaker will play more quietly in the mornings (for those who aren't morning people) but play

more loudly when there is a lot of background noise (like the dishwasher running). The design is a simple one, with two colours; chalk or charcoal and comes with a helpful magnetised foot stand – allowing for either horizontal or vertical use. At the moment, Google Home Max will only be available in the US in December for \$399, but more countries are expected to be reached in 2018.

Google PixelBook

The next step in Google's Chromebook series – a high performance version. The design looks very similar to Lenovo's Yoga line, at 10mm thick and 1kg in weight, with multiple form factors including a laptop and a tablet. The PixelBook boasts Core i5 or i7 processors, up to 16GB of RAM and a QuadHD LCD display. Of course, it has Google Assistant built in (with a dedicated button) and an additional accessory for tablet use – the PixelBook Pen. Prices for the PixelBook start at

\$999 and Pixel Pen will retail for \$99. The two will be available in the US, Canada and the UK on the 31st October 2017.

Google Daydream

The announcement of Google's second version of its own VR headset, with minor improvements including a wider field of view, new colours: coral, chalk and charcoal (notice a pattern yet?) and Chromecast compatibility. Prices start from \$99.

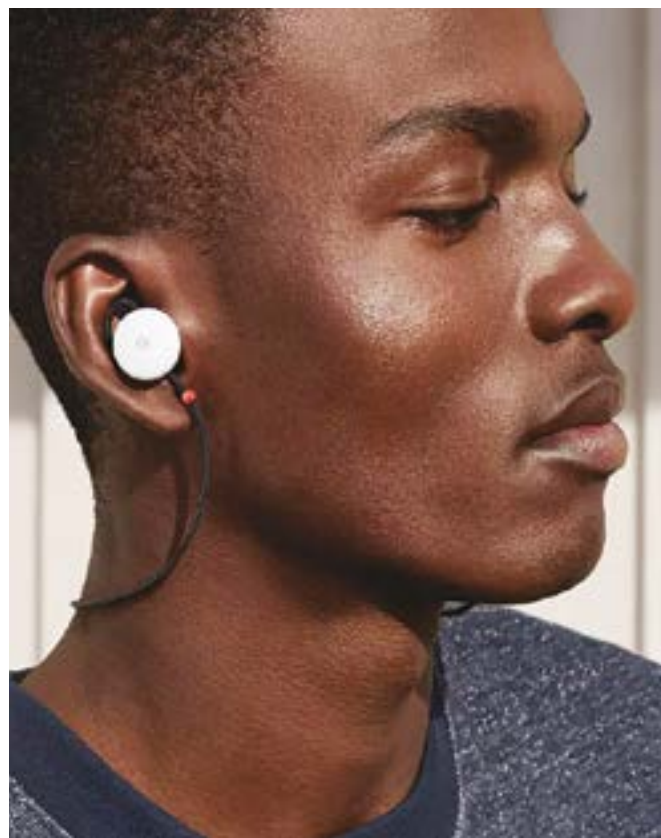
Google PixelBuds

Of course they did. Google released earphones, smart ones no less, with Google Assistant functionality (when paired with a Pixel 2). The PixelBuds come in three colours: Clearly White, Kinda Blue and Just Black. Included is a charging case that holds multiple charges, allowing users to get up to 24 hours of listening time. The PixelBuds allow you to tap to start and stop music, swipe forward and back to change volume and

of course tap to access Google Assistant when paired to your phone. The idea is that you can keep your phone in your pocket as the headphones can play music, send texts, give walking directions from Google Maps, alert to new notifications and read messages. Google also showcased the ability of the headphones to act as a translator – using machine learning and Google Translate to act as a real time translator in your ear. Google's first earphones will be available from November and will start at \$159.

Google Clips

This was definitely a surprise for many. Google Clips is effectively a mini camera that captures the important moments for you, meaning you can be in them and not staring at a screen trying to get the perfect candid shot. The first version is designed for parents and pet owners – when you don't time to whip out the phone to capture the moment. The camera itself is hands-



The Pixel Buds can translate in real time // Google



The most eagerly awaited products announced at the event – The Google Pixel 2 and Pixel 2 XL. //expertreviews.co.uk

free, small and compact and has a high-quality lens and shutter button. Where it comes into its own though is on the inside – the camera has built-in machine learning. It learns who and when to take photos of, focusing on movement and faces. One neat feature is Motion Photos – the camera takes burst of shots to produce a moving photo (like a GIF). The Google Clips isn't in production yet, with Google saying it will be "coming soon" and will initially sell for \$249.

Google Pixel 2 and Google Pixel 2 XL

Now for the announcement everyone was waiting for: the Pixel 2 will succeed the very successful Pixel and Pixel XL. As with its predecessor, Google announced both a smaller Pixel 2 (five inch screen) and a larger Pixel 2 XL (six inches).

The materials used are similar to last year's smartphone – a mix of glass and aluminium. The design I'm sure will be a Marmite situation: some will love it, others will hate it. Google popped in a bit of fun this year with a coloured power button just because they can. The Pixel 2 sports an HD OLED display whilst the XL has a POLED QHD+ display.

The usual suspects also turned up: a fingerprint sensor (in the right place, on the back of the phone), USB-C charging and IP67 dust and water resistance. For Pixel's second iteration, Google listened to its critics and added in two front facing stereo speakers and included an Active Edge feature to squeeze the phone and activate Google Assistant – a nod to the HTC designers behind the project I'm sure. HOWEVER, Google removed the trusty

headphone jack – a sign of the times I'm afraid. The trademark feature of the Pixel and Pixel XL – a seven hour charge in 15 minutes remains in the second edition, but the newly updated Android Oreo UI brings lots of

exciting new features. The new Always On display shows the time and notifications without you even having to wake up the phone. Now Playing is another feature straight on the lock screen – Google uses its machine learning

capabilities to work out what song is playing in the background automatically. Exclusive to the Pixel 2 range, Google Lens, built into the camera app, allows you to take a photo of something interesting and Google will tell you what it is! Finally, the Pixel was famous for its camera and Google were keen to continue this

Machine learning collects double the information even though there is only one camera, allowing for amazing portrait mode photos and selfies! The Pixel 2 and Pixel 2 XL will be available in Australia, Canada, Germany, India, the UK and the US – retailing for £649 and £849 respectively. Later in the year the Pixel 2 and Pixel 2 XL will be hitting stores in Singapore, Italy and Spain!

That's the rundown of the Google Announcement, a series of products with a common theme – software that keeps on giving thanks to machine learning. They will help society become increasingly connected both at home and on the move, but is that a good thing? Is it not just a big corporation constantly listening in on our daily lives? Only the sales figures will tell how people truly feel...



The PixelBook is Google's second laptop //Google

“Google’s Pixel 2 achieved a DXO camera rating of 98 – the highest of any smartphone”

in their second edition: the Pixel 2 achieved a DXO camera rating of 98, the highest of any smartphone camera ever.

ARTS

arts.felix@imperial.ac.uk

The Lady from the Sea: An adaptation worth its salt?

We travel to the Caribbean by way of the Donmar Warehouse for a refreshing take on one of Ibsen's later works.

ARTS

THE LADY FROM THE SEA



Where? Donmar Warehouse

When? Until December 2nd

How Much? Tickets from £10

Jenny Lea
Arts Writer

Directed by Kwei-Armah, the British actor-cum-playwright and soon to be artistic director of the Young Vic – *The Lady from the Sea* tells a story of marital oppression and lost love. Calypso music plays and algae grows from the walls as

Kwei-Armah relocates the play from 19th Century Norway to a tourist haven in the Caribbean. Here we find Ellida, the lighthouse keeper's daughter; though her situation is anything but idyllic.

Ellida (Nikki Amuka-Bird) is the second wife of doctor Wangel (Finbar Lynch), serving as stepmother to his two daughters. Her mental state appears to be deteriorating, and her daily morning swims in the lagoon are becoming something of a compulsion. Wangel writes to the former tutor of his oldest daughter and childhood friend of his wife, in the hope that a visit from a familiar figure will bring back the woman he married. We learn Ellida is haunted by a teenage fling with a seaman to whom she became 'engaged' before he was forced to flee. His power remains



Most awkward Tinder date ever... // Manuel Harlan

over her, forging a gap between her and the doctor until he returns to fetch his mermaid bride.

Amuka-Bird gives an evocative performance of the glassy-eyed Ellida. She appears serene yet stifled, creating the perfect level of distance between her and the other characters, most notably her husband. Although the tale is centred around her struggles, she does not dominate the stage, allowing the other players to hold their own. Lynch complements this with his portrayal of the devoted doctor. He cossets his wife and seeks a cure for her detachment like one would a clinical indisposition, when we can all see that the only medicine she requires is freedom. Ellida is shackled by her wedding rings, to both Wangel and her absent mariner, and thus is left mercurial. The audience is forced to consider marriage as a form of oppression and duty, a way for men to keep their women at bay.

Subplots are allowed to develop yet remain

self-effacing, bringing in elements of tragicomedy as the tutor confuses the 'woman waiting' for him described in the doctor's letter with his ex-pupil, and proposes to her. We laugh at the cliché love-veiled-with-hate romance between the younger daughter Hilde – reemployed by Ibsen four years later in *The Master Builder* – and a travelling tortured artiste. Ellie Bamber does an excellent job as the pouting teenager, cruelly mocking the man she is clearly mad for (think Cher and Josh in *Clueless*). We enjoy to despise her target, the struggling sculptor Lyngstad (Jonny Holden), as his slapstick self-assurance provides a breath of fresh air from the melancholy of the main plot.

Writer Elinor Cook's sophisticated revamp of the text – originally written by Henrik Ibsen in 1888 – to the 1950s works almost seamlessly. This is helped largely by Ibsen's progressive humanism and use of strong female characters which drove the play ahead of its time. Cook

and Kwei-Armah keep a good balance between bourgeois realism and the sea shanty mythology of the original fable. It must be said, however, that what seemed like a constant rotation of two people on stage at once, combined with sometimes-forced conversations and received pronunciation, did leave me feeling like I was watching an episode of *Made In Chelsea*.

The location shift to the Caribbean post-colonisation does bring rise to a discussion unintended by the original Norwegian text. We are unaware if we should pay attention to the casting choice of a black woman for Ellida, juxtaposed with the uniform fairness of the (apparently) expat family she has married into. This suspicion is reinforced later when Ellida's estranged lover appears, sharing her darker skin tone. Their shift from affected elocution to an Antillean lilt when caught in a moment of passion does feel slightly heavy handed, implying race to

be a contributing factor to Ellida's isolation, but wisely Kwei-Armah does not let this encroach any further.

In trademark Donmar style the terraqueous set is simplistic but smart; a fish tank of rocks and submerged play boats are utilised to represent both the sea and the murky lagoon. The rest of Tom Scutt's scenery consists of only a mossy brick wall and slightly damp odour, subtly lit to provide an eerie tension at just the right moments. At times it seemed like cast members were going for a paddle purely for the sake of it, but personally this didn't dampen the impact of the performance.

At 100 minutes long with no interval the play seemed to steamroll ahead, leaving little time to get bored with overdramatics or flamboyant language. An unpretentious production with melancholy undertones softened by a few giggles, *The Lady from the Sea* takes you on a trip to the seaside but doesn't go too deep.



Is that an eclipse? // Manuel Harlan

ARTS

arts.felix@imperial.ac.uk



Seb didn't choose the thug life, the thug life chose him // Felix

Clash of Cultures: Can the arts thrive in the science dominated campus of Imperial?

In the second instalment of the series, IC Radio Station Manager Sebastian Gonzato sat down with Arts Editor (and former IC Radio Station Manager) Adam Gellatly, to discuss the role radio has to play in the arts at Imperial.

ARTS

Adam Gellatly
Arts Editor

Adam: Can you describe what being involved in radio entails, what artistic aspects of radio are you interested in, and how long you have been involved in those?

Sebastian: It's funny you're interested in the arts because apart from music I'm not particularly artistically inclined, I'm more involved in the technical aspect. But, of course, in IC Radio the main service we provide is the ability to present shows. If you're presenting a show you're doing it to entertain, relay information, or get people interested in a particular genre of music.

A: You say you're not artistic, but you're very into DJ'ing, which is definitely an art-form.

S: Yeah, I DJ on IC Radio. My show is called *Record Surgery* because I think there's something quite beautiful about DJ'ing with vinyl. But personally, I wouldn't call DJ'ing an art form, because it's so simple now. The basic idea of DJ'ing is to match BPMs – the speed of songs – in order to mix one song into the other and new software makes that super easy. I'll probably piss off the whole of Music Tech Society by saying that. I will admit that the difference between a good and bad DJ is song selection, and you'll find people who wax lyrical about how you should take the listener on a journey. Sometimes you hear that well done, but ninety-five percent of the time people fail at that. People think "I'm a DJ, I need to play bangers all the time", or "I'm a tech-house DJ and I need to play boring shit for two hours straight". There's an old DJ Marky jungle mix that's really good at taking you on that journey

through the historical progression of that genre. At Imperial, I like the variety of the music Debesh Mandal plays on his show [*The Big Daddy Hour*] and I admire the fact that he uses vinyl.

A: Through running the society and hanging out in the West Basement you definitely spend a lot of time with artsy people, even if you don't consider yourself one. Do you think Imperial students perform well at balancing their academic lives in science and their artistic side?

S: One thing that I notice is even though we have a lot of work, as Imperial students we all have quite high ambitions. Most of us, if we try to do something, we try to do it really well. For example, Joseph O'Connell, the photographer for *Felix*, has been a professional since before university and some of the DramSoc people are really

good despite studying, say, Materials. Nothing I have learnt studying Chemical Engineering has ever helped me with Radio: there's no plumbing in Radio.

I find it interesting that despite being such a technical university there's so many artsy types. I see it particularly in those who study Physics and Maths – maybe because they're such pure sciences – that they're just attracted to learning in all forms. I was reading a Feynman quote where he said, "Physics is a bit like sex: sure, it may give some practical results, but that's not why we do it". No engineer would ever be that poetic.

A: Is your interest in radio and DJ'ing purely a hobby for you, or do you see either of them as a future career? And if the latter, why are you studying Chemical Engineering at all?

S: I flirted with the idea of

studying Sound Engineering at university; I was really into music production before I came to university. I read a lot about the basic maths of sound, so I knew about Fourier series, for example, before I came to university. But I wanted to learn more about why the world works. You can learn about radio, or history, or politics in your own time and understand it. But engineering and maths are too complicated to simply pick up a textbook and understand. I don't think I'll ever go into radio or media as a job, but I plan on continuing with radio as a hobby once I leave university. One of my heroes is Ben Goldacre: he's a physician but he's also a journalist, and wrote the books *Bad Science* and *Bad Pharma*. If I could plan out my life, I'd do the same: have a technical job, but also let the world know what your work entails by going on radio, or writing articles. I think science communication is important, but I

find the science itself too interesting to focus solely on the communication.

A: What sort of job are you looking to go into?

S: My criteria for a future career is that it must have some positive impact on the world. I wouldn't want to go into research as I find it too abstract, but working in something like renewable energy would fulfil that goal.

A: At, for example, the University of Westminster there's a full-time Radio Production course. At Imperial, we have no undergraduates who study radio. Do you think the quality of IC Radio's output suffers as a result?

S: I think if we had a radio or general media course we could do a lot more. But, despite that, all media at Imperial is really active. Definitely on

ARTS

arts.felix@imperial.ac.uk



ICRADIO.COM

the tech side we're really good, compared to other universities. I did a year abroad in Switzerland last year – the radio studio there was not as good as IC Radio's and they had a lot more technical issues.

But in Switzerland they had students studying journalism for whom radio was a career path and not a hobby, so they spent a lot more time in the studio [compared to Imperial students].

A: If you had to choose to be a part of only IC Radio or your station in Switzerland which would you pick?

S: IC Radio for sure. I've

developed an irrational attachment to this station, which is probably a bit unhealthy. But I'd love if we had a sofa or a fridge in the studio here like they did in Switzerland.

A: Compared to other arts and media societies at Imperial, it seems like IC Radio reaches a much smaller audience. If radio is about entertaining but your audience is very small, why are people attracted to the club?

S: For a start, it's entertaining for you, the host. I've done shows with only three listeners and it's been fun to just play tunes. You also learn a lot. If you

listen back to yourself you find you have a lot of verbal ticks. And you also learn to plan what you're going to say and how to finish a point without trailing off.

A: Last year it seemed like IC Radio was split into three distinct groups: the traditional group who produce their own shows weekly, the Science Communication students who do radio as part of the course, and those in Music Tech who are slowly taking over as the largest demographic. Do you think IC Radio – and radio as an art – has lost its identity and ability to survive

on its own merits?

S: The big thing that's changed since 1975 [when IC Radio was founded] and now is that no one listens to the radio anymore, whereas DJ'ing is now huge. But I think radio is very good in allowing people to train their presenting and play their music. Music will still exist, mics will still exist, recording will still exist, even if radio as a medium for entertainment and disseminating information won't.

The full and unedited version of this interview can be found online, at the ICRadioPodcast Mixcloud page

All the Little Lights: A Story That Needs Telling

ARTS

ALL THE LITTLE LIGHTS



Where? Arcola Theatre

When? Until 4th November

How Much? £17; £14 concession

Vaishnavi Gnananathan

Arts Writer

Jane Upton's *All the Little Lights* looks at the world of child sexual exploitation from the perspective of the young girls who are most often its victims. It allows you to see the seemingly obvious factors at play in their lives – poverty, isolation, peer pressure – that make them vulnerable to abuse. When stories such as the Rochdale case shock us and make us wonder how this can happen, *All the Little Lights* offers some insight into how the lines between harmless fun and danger appear to blur

for the children involved. This is important to help us understand how this happens: how children, even those with families that seem to care about them, can fall through the cracks in the system and in society.

Three young girls, Joanne, Lisa, and Amy, are the only characters in the play, an important choice, as we see the story only from their perspective. At the centre of the play is Joanne, who is throwing an impromptu birthday party for her friend Lisa in a tent by the railway. Their relationship clearly complicated, as Lisa is in foster care and has been missing from Joanne's life, so much so that Joanne has used desperate means to find Lisa, posting a missing persons ad on Facebook. This is one of the first hints that something is wrong, that there is something hidden in the shared past between Lisa and Joanne.

12-year-old Amy seems to be Lisa's replacement in Joanne's life and their relationship is also complex. Amy clearly idolizes Joanne, whilst Joanne's attitude to Amy is callous

and often cruel. We learn that Joanne has introduced Amy to 'TJ', the local chippy, which seems innocuous until we learn that TJ wants pictures of Amy's breasts – the first hint at what is going on. Lisa is clearly terrified of TJ, indicating the role he has played in the lives of Lisa and Joanne; we gradually learn more about their experiences and what Lisa has escaped from.

The story and its characters are based on abuse survivors that Upton met through charity Safe and Sound, who works to protect children from sexual exploitation. Joanne, in particular, is based on the story of a victim that Upton met who had recruited other, younger, children into exploitation. Joanne is an interesting character – it's easy to villainise her, easy to see her as part of the problem, as guilty as 'TJ' and the others involved. However, there is a clear undercurrent of desperation and adolescent confusion and, as the play progresses, her own fear and her motivations for what she has done become clearer and it is obvious



All the Little Lights at the Arcola // Robert Day

that she is as much a victim as the other girls.

The quality of the performance unfortunately lets down the subject matter and Upton's writing. Tessie Orange-Turner is powerful as Joanne, but the performances from Sarah Hoare (Lisa) and Esther-Grace Button (Amy) are inconsistent. Button's attempts at capturing 12-year-old Amy often feel forced, and there are many moments of over exaggeration. Hoare's performance as Lisa improves as the play progresses, and the dynamic between Lisa and Joanne intensifies, but many aspects of her performance fall flat.

This is only emphasized

by the staging of the play in the intimate setting of the Arcola's Studio 2, which leaves the actors bare to the audience: the action feels too close and the performers are hampered by the lack of stage space. However, some aspects of the staging work very well: an elevated area serves as the railway lines and is the setting of several of the most powerful moments in the performance. The girls play a version of 'chicken' on the railway lines, daring each other to stay on as a train approaches. Stark lighting enhances the moment and captures the courage and the sheer desperation the girls are feeling.

Strong emotion char-

acterizes all of the best moments of the play. When Lisa talks of the people living in distant houses – the 'little lights' they can see in the distance – Joanne begs Lisa to run away with her, to keep walking up the tracks to the station to take a train and escape the place they've found themselves in; there's so much desperation encapsulated here that you can't help but be moved.

All the Little Lights is a play worth seeing for the subject matter alone and – despite some of the limitations of the performance – it shines a much-needed spotlight on an important issue.

HAPPY HALLOWEEN FROM ICSM WATER POLO



MUSIC

music.felix@imperial.ac.uk

The Hydra x Barbican present: Gas + Huerco S.

MUSIC

Josh Lawrence

Music Writer

Another night, another gig. This time at the temple of austere, brutalist beauty that is the Barbican. If you're a fan of ambient music, this venue is a must – the sculpted wood of the concert hall reverberates with thick, earthy noise, immersing and inducing you into a trance-like state. The perfect setting to witness an artist like Gas.

Gas is the most famous project of electronic musician Wolfgang Voigt, co-founder of revered Cologne label Kompakt and a key player in Germany's ambient and minimal techno scenes. Over the years, Voigt has produced music under

many monikers: although projects such as Mike Ink and Studio 1 had undeniable influence on four-to-the-floor dance-floor techno, Gas remains his most enduring project to date. Armed with the aortic throb of kick drums and the disorienting whirl

“The sculpted wood of the concert hall reverberates with thick, earthy noise”

of synths, Voigt aimed to “bring the German forest to the disco”. And at the Barbican, still reeling from the critically acclaimed release of *Narkopop* (the first Gas album in 17 years), this fantasy world

was unleashed.

Gas' set was preceded by Huerco S., fresh on the heels of *For Those Of You Who Have Never (And Also Those Who Have)*, perhaps the best ambient release of last year. Huerco S. has fused Gas' idiosyncrasies with more conventional techno to create warm looping textures with glitchy clicks and soft hisses. He has a unique talent for making music that, despite not being designed for clubs, captures a distanced, glazed view of the club feeling. Like most 90s ambient, it is music for the chill-out room, for the comedown.

Following a brief interval, Voigt appeared on stage. Like a delicate rustling of leaves, he slowly unveiled his synths and rumbles; these grew with the introduction of hypnotic melodies which gradually became more

chaotic and harder to follow, all the while a fairy-light forest projecting behind him. The noise continued to develop until it swallowed the room. Suddenly, the thud of a heartbeat leapt into the undergrowth. This basic model is at the core of all of Gas' music, and

“Like a delicate rustling of leaves, Voigt, aka Gas, slowly unveiled his synths and rumbles”

yet never fades into the background. Gas deviates from Eno's mantra: it is ambient music which is unignorable.



Narkopop was Gas' first new album in 17 years // Kompakt

After about an hour the journey was over. Voigt left the stage immediately despite what appeared to be a stagehand advising him to stand in the spotlight for applause. He may now be playing internationally regarded concert halls, but he is still the

king of Cologne underground at heart. Shunning individual recognition, hiding behind a variety of monikers, and producing otherworldly music. This is ambient music at its best. A sonic cathedral, within which you can't help but worship.

St. John Sessions: Laurel Halo and Lee Gamble

MUSIC

Josh Lawrence

Music Writer

Hyperdub is odd. It's always been odd. But it has knitted itself so tightly into the fabric of London's musical culture that when two of its artists play experimental sets in an 18th century church, it somehow feels perfectly natural.

I arrived at the St. John Church in Hackney to find a substantial crowd already present, framed in moonlight emanating from a majestic stained glass window. It was the perfect setting for Laurel Halo's transcendental blend of pop, techno, and jazz. Halo appeared on stage with percussionist and sound artist Eli Keszler in tow, placing herself behind an



Laurel Halo, kicking around the dustbowl // Hyperdub

electronics-lathered table while Keszler took to a small drum kit.

The set consisted mostly of songs from her superb 2017 release *Dust* – although the album cuts had been bent almost un-

recognisably out of shape. Halo sculpted electronic landscapes with punchy programmed drums, bottomless bass-lines and sublime synths. Keszler provided an erratic yet conscientious jazz percus-

sion, utilising thin sticks and brushes to produce gentle textures, clashing with Halo's overwhelming noisy flourishes in all the right ways. On album cuts 'From Sun to Solar' and 'Jelly', voice manipulation software transformed Halo's poetic speak-singing into shimmering undulations around the cavernous room.

Describing Halo's current output is not so straightforward. Although the blissed-out reverb and dub techno basslines from previous releases are undoubtedly present, categorising what was played across the hour-long set is nigh on impossible. Laurel Halo has proved herself to be a truly unique talent in electronic music; she is her own genre.

The stark contrast between Halo's near-perfect performance and the following set from Lee

Gamble was mildly upsetting. The London-based producer's *Diversions*

“The stark contrast between Halo's near-perfect performance and the following set from Lee Gamble was mildly upsetting”

1994-1996 remains a fantastic love letter to the 90s Jungle scene, whereas his track choices at St. John were more “Now

That's What I Call UK Bass”. Gamble's dark, Caribbean-inspired cuts, for which he's loved, were refreshing in a time where dancehall and Reggaeton had been saturated with musicians with both eyes on that 'One Dance' cash. However, the ambient and DnB pieces he spewed (between puffs of his vape) on this evening were less impressive, and seemed to misjudge the venue's vibe.

The consistent quality of Hyperdub releases is a result of the label's boldness to explore unknown quarters of electronic music, without regard for the existence of an obvious audience. Though they may not hit the mark on every occasion, if they continue to put on events as audacious as this, their impressive reputation will only continue to thrive.

MUSIC

music.felix@imperial.ac.uk

Nai Palm strikes out on her own

NEEDLE PAW



Artist: Nai Palm. **Label:** Sony Music. **Top Tracks:** Crossfire/So Into You; Blackstar/Pyramid Song/Breathing Underwater. **For Fans Of:** Hiatus Kaiyote; Snarky Puppy; Moses Boyd. *58 minutes*

Alex Montgomerie-Corcoran
Music Writer

Singer, songwriter, and guitarist Nai Palm has come out with her debut solo album, *Needle Paw*: an intimate collection of covers and originals wrapped in rich harmonies that gives a slightly new perspective on her already established compositions, as well as introducing some new and more personal ones. Better known as the lead singer of Hiatus Kaiyote (the Australian group known for their soulful, slightly jazzy vibes, and possibly being the tightest band around today), she has stepped away from the comfort of her band to bare her husky voice in a much more personal setting.

Nai Palm's influences explain the slightly-off rhythms and her vocal-heavy style, which can at first feel a bit jarring. It's her eclectic taste in music which has led to her eclectic style. The influence of Latin and West African rhythms is apparent through most of her songs, leading to the not-quite-normal 4/4 feel, and melody lines picking up seemingly from out of the blue. A focus on intricate vocal melodies derives from her love for Saharan music, with singers like Oumou Sangare inspiring her vocalisations. It's amazing

how natural it comes to her as well; her guitar playing – which can get a little messy – rhythmically flows naturally against the constantly-changing directions of her songs, matching her powerful and fluid voice.

In this album, the guitar is used less as the focus of harmony, more providing small cross-rhythms and short melodic riffs behind the close, thick vocal parts. The guitar playing is very bass heavy, giving context to her harmonies and simple rhythms to mess around on top of. These harmonies, which are the most impressive aspect of the album, are done quite tastefully; to get a venerable sound alongside her more personal lyrics on a song such as 'Homebody', she'll leave her voice exposed for the whole line – just as she's about to ease out of it, the other vocal lines creep in, as if to reassure herself. Other times she'll build up the harmonies enough that her lead part only slightly rides above, dipping in and out of the many layers in an almost overwhelming flood of voices, as heard

at the end of 'Crossfire/So into you'.

My only issue with this album is that Hiatus Kaiyote's *Choose your Weapon*, from which most of the covers come, is a lot more complete and holds many more interesting details musically than this one. And to be fair, the whole album could appear a bit self-conceited; it pretty much replicates her existing work, but now with three fewer people. However, *Needle Paw* is more for herself and her fans, giving us an introspective take on her already established compositions. I can imagine that this is how she hears her songs in her head, millions of beautiful voices piled on top of each other, constantly changing their direction. And even in a stripped back form, the songs hold power under her unaccompanied, masterful control.

So overall I'm happy with what she's come out with, and can't wait for Nai Palm to drop even more fire.



Spooky and kooky // Sony Music

Mura Masa's debut shows he's one to watch

MURA MASA



Artist: Mura Masa. **Label:** Polydor. **Top Tracks:** LoveSick; What If I Go? (ft. Bonzai); Blu (ft. Damon Albarn). **For Fans Of:** Flume; Jamie XX; Chet Faker. *45 minutes*

Jonah Beaudin
Music Writer

Mura Masa's self-titled debut album is a refreshing display of what our generation has to offer. The Guernsey-born DJ started making tunes from his bedroom and came onto the radar when he released his song 'Lotus Eater' on Soundcloud in 2014. Although he has only just turned 21 he has since collaborated with the likes of Stormzy, A\$AP Rocky, Charli XCX, and the lead singer of the Gorillaz, Damon Albarn, just to name a few.

The album starts out with a sample taken from a tube stop announcement and then jumps to the first song 'Messy Love.' Throughout the album, you're met with several different styles and genres, so it is difficult to categorise his music. Mura Masa does not shy away from using unconventional instruments like the steel drum, harp, or flute, which makes the music pretty cool. Instead of adhering to a single genre, Mura Masa uses a blend of genres to create a distinct electronic sound, setting him apart from the competition; he is one of the first artists from our generation, and he doesn't adhere to old conventions. Fellow audiophiles will agree that we aren't limited to our record collections anymore but can listen to anything we want, and I believe this is



After *The Life of Pablo*, all albums must look like this // Polydor

manifested in his style.

I also want to touch on the fact that Mura Masa has some sick album art. I respect a man with a good Instagram, and Mura Masa's is peng.

'1 Night' describes Charli XCX's one night stand with a boy, with whom she doesn't want to have a relationship. Asking if their relationship could go back to where it was before they had sex, she sings "It was only one night / But I wanna go back to where we were". In contrast to 'What if I go?', where Bonzai sings quite literally the opposite.

Mura Masa's collaboration with famous rapper

A\$AP Rocky, 'LoveSick', is the most popular song on the album. A\$AP's accompanying rap creates a balanced match for LoveSick's Caribbean-influenced style, together with Mura Masa's signature bass drops, which will have your hips shaking in no time.

Overall, the album is a tribute to what it means to be young these days. A glaring shout to pursue happiness through sex, friendship, and just not caring too much about things. This kid is making some serious waves and it will be worth keeping an eye on him over the next few years.

Ain't that a shame

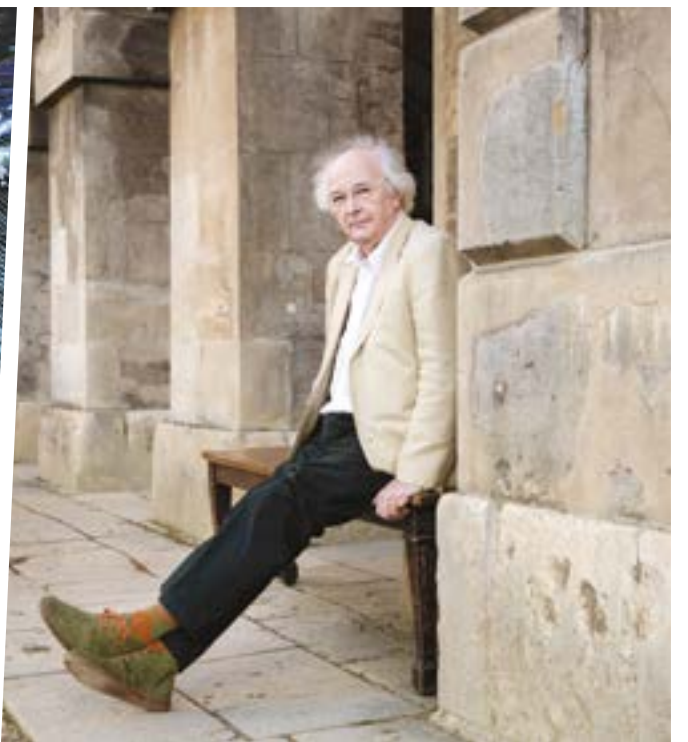
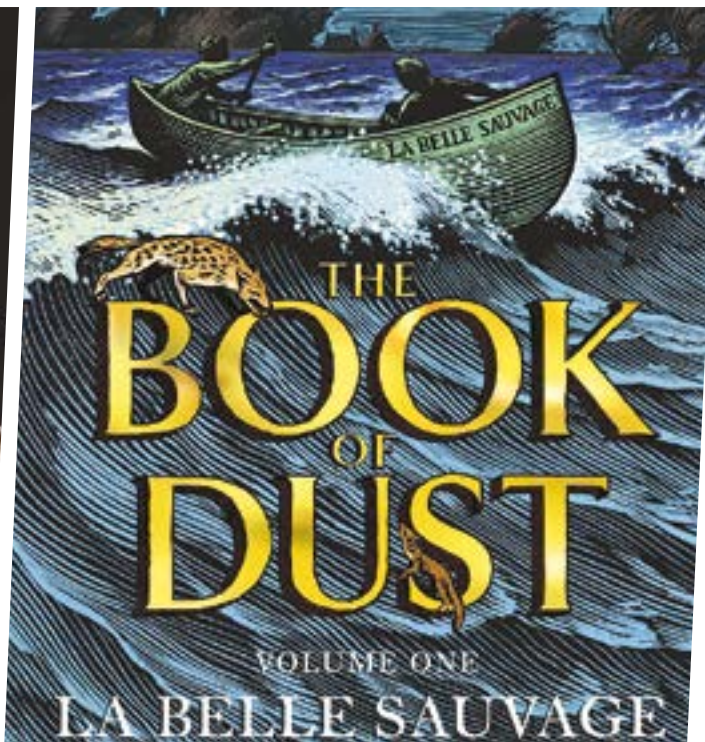
Fats Domino, 1928-2017



Felix Music wish to pay tribute to Fats Domino, a pioneer of New Orleans Rock and Roll, who died this week at the age of 89.

BOOKS

books.felix@imperial.ac.uk

Philip Pullman makes his triumphant return to the world he created in *His Dark Materials* // Caspar Stevens/Pengion/Michael Leckie

Hope amid darkness in Philip Pullman's new series

Best-selling author Philip Pullman graces the London Literature Festival with the launch of his new novel, the prequel to *His Dark Materials*.

BOOKS

Natasha Manuelpillai
Books Writer

Known for his trilogy *His Dark Materials*, a fixture of many of our teenage bookshelves, Pullman is no stranger to the best-seller charts. *La Belle Sauvage* is the much-anticipated first volume of *The Book of Dust*, which Pullman discussed with BBC broadcaster and fellow author Cerys Matthews at a launch event at the Southbank Centre. The evening began with a discussion between the two, followed by a reading of an extract by Pullman, and the discussion was then opened to the audience.

In this new volume, the theory of dust from *His Dark Materials* makes a reappearance after 17 years, in a world where dark matter and consciousness intertwine. The author or, as he prefers, storyteller, combined famous theories of physics, complex politics,

and religion in a world of witches, daemons, and armoured polar bears.

This exciting new trilogy is the unexpected prequel to *His Dark Materials*. The original was famously known for its beloved heroine, Lyra Belacqua, who makes a comeback in the new series as a baby. This latest novel has a more elementary – or as Philip de-

“The latest novel is tangled with the issues of the environment and inequality”

scribed it, “watery” – feel which is tangled with the issues of the environment and inequality in a fiercer tone than before.

The fact that it was his birthday made the evening's atmosphere more magical as the au-

dience's singing echoed in the hall. The viewers' awe was palpable when Philip read an extract of *La Belle Sauvage*. Discussions ranged from Philip's “waywardish” university days to his journeys to the Arctic within the pages of books of the Bodleian Library, at Oxford University. We find how his roots in Oxford inspired a range of settings for *His Dark Materials* and *La Belle Sauvage* as well as the influence of the more exotic scenes from books he's read.

The most intriguing part of Pullman's discussion was the use of rhythm in his sentences and how he needs silence in order to focus on the rhythms of following sentences. In addition, he also touched on children's style of learning and reading – he believes imagination begins when children are read stories by their parents or guardians, which encourages the seeking of adventures and ideas within books. He expressed disappointment at the current educational system, which ranks

children and forces youngsters to form opinions and express them aloud to the teacher – opinions and analysis of poems should remain within the heart of the child, he said, so they can look back and remember the naturality

“Pullman said that knowledge and the seeking of it is what makes us human”

of their own opinion. His stand on the “original sin”, which is mentioned in his previous trilogy, is that it is “almost blasphemous” to call it a sin, because knowledge and the seeking of it is what makes us human. A round of applause followed with bouts of cheering.

The evening's discussion touched on a wide range of topics and themes;

was the darker tone due to the growing cynicism of the author? Does it reflect on the growing cynicism of adults in the modern world? When asked this, he replied that adults don't become more cynical, only more aware, but amongst the darkness of it all there is always hope – interspersed in the darkness of the book, just like in our reality.

Audience's questions also sparked riveting discussions where two in particular caught the author off guard, which he seemed to appreciate: one spectator questioned how the integration of the sexualisation of young people through social media and wider access to porn on the internet would work in the world of magic born from the innocence of children; another asked about the integration of disability, particularly deaf people, and how they would communicate with their daemons. Though the answer to both of these questions was “I don't know”, he commented on how his books were written in an age where

the internet did not exist. As for disability, perhaps daemons could use sign language for communication.

If you're as big as a fan as I am it would be good to know that Pullman disclosed his daemon to us as a “shabby, knock-kneed, feathers missing, dust-covered, old raven”. His second book of *The Book of Dust* is written,

“Amongst the darkness of *La Belle Sauvage* there is always hope, just like in our own reality”

but has yet to be edited. In the meantime, *La Belle Sauvage* will keep us all occupied.

Part of London Literature Festival at the Southbank Centre

BOOKS

books.felix@imperial.ac.uk

Ali Smith's *Autumn* is more than just a post-Brexit manifesto

The innovative and poetic portrayal of a country in turmoil and the lessons learnt is deserving of its Man Booker Prize nomination

BOOKS

AUTUMN

by Ali Smith

Hamish Hamilton. 272 pp.

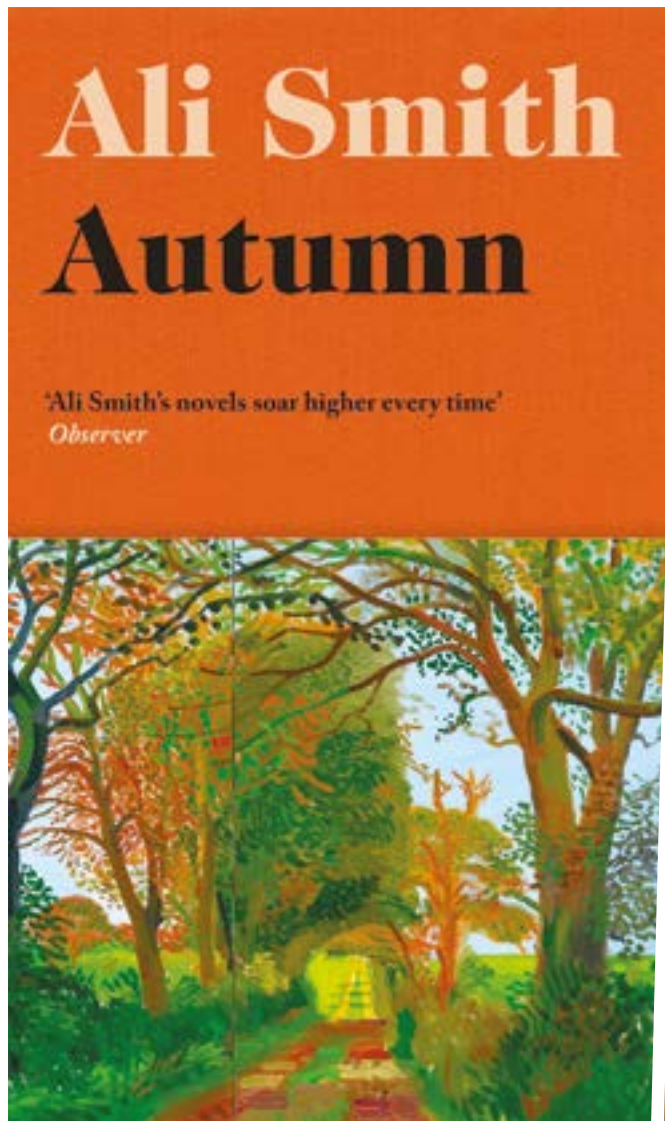
Alice Peberdy

Books Editor

Books which lack speech marks always scare me. It can seem like they're trying too hard just to break a rule and look contemporary. But I should never have doubted Ali Smith, in whose new book, *Autumn*, it feels entirely appropriate. It freed the author to skip between characters and to entwine her own voice with the text. No visual breaks signal a change in the dialogue and the fictional people seep into our reality. It feels like they would fit in.

Elisabeth is a lecturer in history of art, although her job isn't entirely stable. She is on a mission to renew her passport. Daniel is her "artsy art" friend from childhood with a century's worth of wisdom to impart. He is holed up in a care home, always asleep and allegedly close to death. Jumps through time allow glimpses into their relationship and beautifully ordinary lives. Nothing they do seems impossible, although they have some pretty wacky dreams. It is a joy to come across the usual opener of their conversations, "What're you reading?", because what follows is always filled with quiet tenderness.

From their first meeting when Elisabeth is eight, Daniel provides many lessons. He's a patient teacher, and very clearly



And the seasons, they go round and round // Hamish Hamilton/Wikimedia

part of the novel for a reason. To begin with it felt a little too obvious: each time he appeared it was very obviously signposted that you should start thinking. Daniel is teaching Elisabeth, and Daniel is teaching you. Are you following? Once I accepted this, and once I got my head around some of the statements, I was drawn into the finer elements of his character. The mystery of his past and his pitiful future were enough to keep me engaged when he appeared on the page.

Autumn is a "novel of ideas", and every sentence, spoken by

Daniel or not, seems to lead you into some deeper meaning. Towards the end, an entire chapter abandons the fictional characters to turn its focus to two scandalous real-life women: Pauline Boty and Christine Keeler. I had previously heard of neither and the novel has given me a lot of homework. Keeler rocketed into the public sphere through her affair with British politician John Profumo and was the subject of one of Boty's pop-art paintings. Their chapter revolves around the tragedy and beauty of their lives, but felt a little isolated from the rest of the novel, both in its style

and in the fact it was the only segment focussed upon the year 1962.

However, this section was the definitive culmination of many strong hints towards the theme of feminism. It finally struck me that all the main characters – at least the conscious ones – were women. They are clever, witty, and, most importantly, expressive. By the end of the novel, they each have a passion which they joyously work for.

This was not the main topic that I expected from this novel. "Post-Brexit" is a phrase that appears in almost every article that there is on the book.

Its presence was obvious, but the message was not what I expected. Instead of focussing on a political standing, Smith took Brexit, along with the Profumo affair, and decided to explore how a country copes with the lies it is fed. The turmoil presented is juxtaposed with discussions of art, literature, ballet, and other cultural exploits. Expression is portrayed as the carrier truth and a symbol of hope.

Smith illustrates this sentiment with the season for which the novel is named. At the very end of the novel it is November and the

season is changing: leaves are dying, the weather is gloomy. "All the souls are out marauding. But there are roses, there are still roses." Despite the decay, there is persistence and hope.

At times it seemed best to give in to Smith's torrent of educational thought and accept that I wouldn't follow. Instead of stopping, going back a page, and fretting over every minute detail, maximum enjoyment can be drawn from sitting back and enjoying the flow from each word to the next, sentence to sentence. The nuances can wait until another time, another read. The language is simple but strange. Experimental paragraphs mostly containing seemingly random strings of words break the rules of plot and progression.

It truly feels like one long poem, a form remarkably sustained throughout the entire journey.

The most remarkable thing about the novel is that Smith wrote it in such a short period of time. The release date was just four months after the fateful vote. The topic remains a sore subject in Britain and many of the situations portrayed feel all too familiar. It is as the novel itself says "an old story so new that it's still in the middle of happening, writing itself right now with no knowledge of where or how it'll end." The story is just a snapshot of events which continue beyond its end. As time goes on, this book will always remain in 2016 and take anyone who cares to read it back to that time.

I can't say *Autumn* changed my life, but it certainly made me think.

BOOKS

books.felix@imperial.ac.uk



Asha Lul Mohamud Yusuf and Clare Pollard at the Southbank Centre // Kate Stanworth

Words of migratory flight

British-Somali women writers read their works as part of Sea Migrations, a collaboration between the London Literature Festival and Somali Week Festival

BOOKS

Jingjie Cheng
Books Editor

The world is a fleeting glory", reads Asha Lul Mohamud Yusuf's poem, *The Scab*. To the more than 110,000 Somali-born immigrants living in the UK, many of whom fled the Somali Civil War as refugees, this cannot be more true. Stability is an illusion when one has to witness one's own country torn apart by war, leaving its people in turmoil and scattered across the world seeking refuge. But with the movement of its people comes the movement of a culture, of a heritage, of a language, of words – words that were so beautifully showcased in Sea Migrations at the Royal Festival Hall, which featured poetry readings by four contemporary British-Somali women poets.

A collaboration between the London Literature Festival and Somali Week Festival, the event saw readings of poetry and short stories that tackled issues of identity, of the

nature of home, loyalty, love, and family. Despite their different backgrounds and mediums, several themes recurred throughout the evening: where is home and what makes a home? How does one reconcile loyalties to different lands, the culture that one is born in and the culture that one is nurtured in? How does one embrace family when one has to traverse language and culture to reach it? And how does one hold on to one's heritage, when every day is a step further away from home?

The event takes its name from another of Asha's poems, *The Sea-Migrations*, which laments the enormous outflow of Somalis from their motherland and the underdevelopment of a great land with a great culture. "If people abandon their homes and decamp by boat," she asks, "who'll stay behind in our country?" Indeed, all four writers of the evening wrote of home and identity, of the difficulty of straddling loyalty to two lands, and the dilemma of having been forced to leave due to violence yet feeling a responsibility to and identity of their

homeland.

Hanna Ali, the second writer to take the stage, and a PhD student at SOAS, describes her experience as a child refugee in her short story *The Story of Us*, sparing no detail when explaining how her mother watched her uncle die. In another story, she describes how the bloated bellies "reminds us that one can be empty and full at the same time". These conflicting states, the emptiness and fullness, the desire for stability and the attachment to one's homeland, seems to recur in the writing of the diaspora. Despite the violence she describes, Hanna writes that her country "refused to let her forget that she fled, escaping all the problems", words that ring with an almost accusatory tone.

It is difficult to reconcile two vastly different identities, a balancing act that manifests itself in more than just conflicting loyalties. Having grown up in the UK, Hanna decided to study English in college, a decision that her mother could not comprehend. Hanna writes that her parents' love was like "the silence between whispers", acknowledging

the quiet love behind her mother's cold, stoic exterior. "Nobody taught her to be soft", she writes.

Her upbringing in a different environment from her mother inevitably drew an even larger gulf between her mother and herself. Here, the sea imagery of the event title bears even more significance. When thinking about home, Hanna describes the "women at the bottom of the sea", referring not only to the lives lost on migratory journeys, but also, I think, bits of one's culture and heritage that are left behind, lost to the swells as one adopts a new land.

If there was one thing that would give away one's heritage, it would be language, the most visible marker of one's identity. While Asha writes in Somali and read her poems in Somali with the English translations read by Clare Pollard, all the other three women wrote and read in English. Hanna's short stories have been translated into Somali by a third party, and she laments in one of her poems that she "speaks to Somalia in a broken tongue". Another poet of the evening, Farah Gabdon, wrote that "there

is more English in me than I can stand".

Indeed, language is the most obvious, even if sometimes unrepresentative, manifestation of one's identity. The perceived loss of their mother tongue is seen as a marker for the gradual erosion of their ties with their homeland.

On that account, perhaps one way to bring two cultures together, then, is the integration of languages. Farah and Hanna wrote about their experiences of war in English, bringing Somali experiences to a wider audience. Interestingly, Asha writes many of her poems in the gabay form, a traditional Somali oral tradition that alliterates with a certain letter each time. Yet she also deals with contemporary issues, making traditional forms relevant to the modern world. Her poems make use of pastoral imagery, describing the beauty of Somali land, and referring to images of camels, flowers, trees and birds. Perhaps this is an attempt to recreate her home in a foreign country in the form of words, and to share it with others.

It was fascinating to

hear the English translations of Asha's poetry read before the original, as that meant that I was able to better appreciate the musicality of the Somali with some idea of what it was about. The words rolled off Asha's tongue like the waves of the sea. There is magic in hearing poetry in a foreign tongue: it is like a song – musical notes without comprehensible lyrics but still rich in emotion.

With the increased movement of people, whether forced or voluntary, it becomes ever more important to create bridges between the native and the immigrant, between motherland and adopted homeland, between cultural identities. Events such as this hold an even greater significance against the current sociopolitical backdrop of Brexit and xenophobia. The writers have shown us that nationality and race are constructs, false lines that are easily knocked over and impossible to fit within. Their words transcend boundaries, generations, conflict, and even language itself, forming the bridge between identities, peoples, and cultures.

FILM

film.felix@imperial.ac.uk

Sally Potter’s dinner party from hell

The Party, the latest work from the director of Orlando, is a black and white lesson in tension and cynicism.

FILM

THE PARTY

★★★★★

Dir: Sally Potter. Script: Sally Potter. Starring: Kristin Scott Thomas; Timothy Spall; Patricia Clarkson; Emily Mortimer. 71 minutes

Lawrence Good
Film Writer

If you’d just been promoted to Shadow Minister for Health, wouldn’t you feel that a small party might be in order? Just a small get together with your nearest and dearest surely couldn’t hurt. Well, after watching *The Party*, it turns out you may want to reconsider. A sharp and deeply funny chamber piece, this black comedy is brought to life by its stellar cast. Heading up is Janet (Kristin Scott Thomas) as the recently promoted Shadow Minister, thrilled to scale these political heights. Co-hosting the party is her husband Bill (Timothy Spall), a man who gave up his career to help propel her to the top. Joining them is Janet’s cynical childhood friend April (Patricia Clarkson),

who’s brought along her estranged partner, the ‘spiritual’ life-coach Gottfried (played by Bruno Ganz – Hitler from the *Downfall* memes). Rounding off the cast are Cherry Jones and Emily Mortimer as mothers to be Martha and Jinny, and Cillian Murphy as a banker married to Janet’s spin doctor, a man thoroughly tired of all these champagne socialists.

“The Party is filled with tension from the get-go, pitching characters against each other”

As the cynic, April gets the best lines of the bunch, brushing off Martha as “a first-class lesbian but a second-rate thinker”. The clashes between her and the maddeningly-eccentric Gottfried are the funniest in the film, and burst out in almost every scene. These clashes are symptomatic of the script’s scepticism



Things are about to get uncomfortable... // Picturehouse Cinemas

about long term relationships, and maintaining happiness through change. Both written and directed by Sally Potter, who over the years has won shedloads of awards for films including *Orlando* and *The Tango Lesson*, *The Party* is filled with tension from the get-go, pitching characters against each other and bringing out unanimously brilliant performances from every member of the cast. The

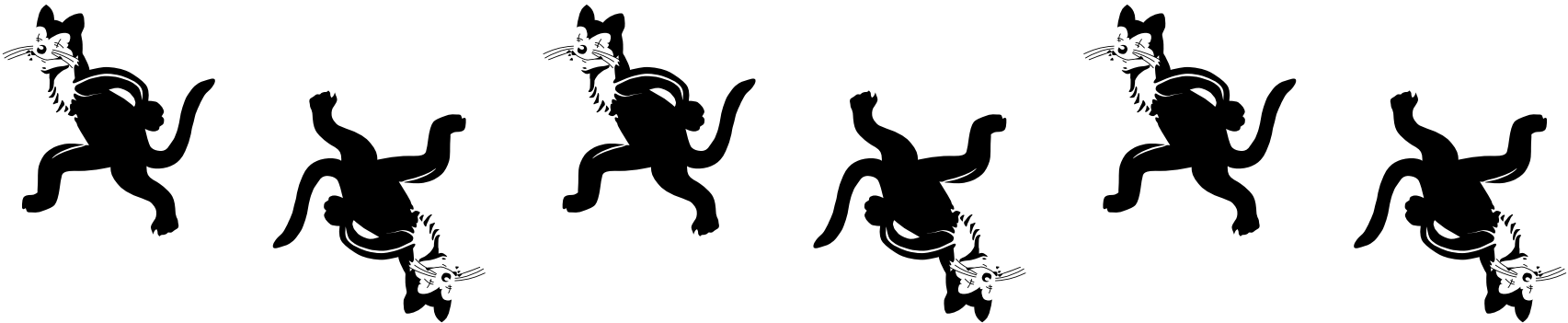
most striking directorial choice however, is using black and white cinematography, giving a kind of eerie timelessness and inevitability to the plot. For all its strengths, the film isn’t perfect. Most noticeably, at time the script can be a bit clunky, especially in the early scenes. As Bill, Timothy Spall affects a spaced-out manner, which is sort of explained but never really justified, and all the char-

acters can have a propensity to dip into caricature at the big moments. Yet the good vastly outweighs the bad. Not only is it laugh-out-loud funny, but sweet and thoughtful. The monochrome filming keeps you far enough away to see the humour, whilst keeping it vivid enough to feel every emotional blow. Staging the party almost entirely in two rooms keeps the tension ratcheted up, and

there’s no flab at all. And best of all, a cute fox named Cherry makes an appearance. All in all, *The Party* is a fantastic little picture, a black comedy filled with sharp twists and delightful lines. With insights into relationships, friendships and politics, and ranging from riotous to shocking, this film is definitely worth a watch.

Come and write for Felix!

Felix is looking for fresh blood! Whether you’re a writer, illustrator, photographer, grammar boff, or a computer wiz, we want to hear from you! Email felix@ic.ac.uk if you’re interested in getting involved



FILM

film.felix@imperial.ac.uk



Hail to the chief // Granada/Miramax

Moving on from Daniel: where do we go now?

As Sir Daniel Day-Lewis retires from acting, who takes up his mantle as the greater actor in the world?

FILM

Ashley Luckyrām
Film Editor

As he named *The Master* the best film of 2012, Peter Bradshaw of *The Guardian* labelled the anticipation around the release of a Paul Thomas Anderson film as “event cinema”, only comparable to the legend surrounding the great Stanley Kubrick. America’s newest master’s latest, esoterically titled *Phantom Thread*, concerns a renowned dressmaker at the centre of British fashion in 1950s London. Anderson is a filmmaker synonymous with great American stories, particularly those set in his home state of California: be it a megalomaniac oil baron going head to head with a young, charismatic young preacher at the turn

of the 20th century, the beginnings of a scientology-like cult in a United States suffering from an identity crisis post-war, or a young man desperately crying out for a family and finding one in the Los Angeles porn scene in the late seventies.

For the first time the *Inherent Vice* director has taken a step out outside of the country that he has analysed so profoundly. If this was in any way daunting for him, he will be reassured by the renewal of his collaboration with the most successful actor in Oscar history: Sir Daniel Day-Lewis. The two combined to startling effect to create Daniel Plainview in *There Will Be Blood*, as Day-Lewis redefined acting. Ten years on, and the three-time Academy Award winner returns to the silver screen after five year hiatus;

yet over the summer we learned that this would not be a lengthy re-emergence. Day-Lewis had said after his last film that he would be taking a break, and it

“Daniel Day-Lewis and Paul Thomas Anderson combined to startling effect in *There Will Be Blood*”

appears that he has only returned to join forces with the man who brought out his career-high role, and that this will be the very last time we see him in a film.

Day-Lewis was a ferocious and committed actor, capable of completely transforming himself and becoming an entirely different man, or sometimes animal, all together. The stories about just how intense his methods were, and how intimidating that could be for other actors, are well documented. He has held the title of the best actor in the world ever since he burst onto the scene to win the Academy Award for *My Left Foot* in 1989, and confirmed this title with stunning performances in an eclectic mix of films, from *The Last of the Mohicans* to *In the Name of the Father*, *The Age of Innocence* to *The Boxer*, *Gangs of New York* to *Lincoln*.

In the time since he last worked, he has continued to be considered the best, as it was thought he would return. So he will, but just

for one final hurrah. In that time, a number of others have emerged to try and steal the crown. If they have careers half as good as Day-Lewis that will be a great achievement. While it is tempting to linger and pay tribute to the great performances of

“If any of the actors working today have careers half as good as Day-Lewis, that will be a great achievement”

such a phenomenal artist, let us look forward to the future, and consider who

now may be considered the greatest actor in the world. The King is dead, long live the King.

Note: This is essentially a list of the best actors of the present day. Screen legends such as Al Pacino and Robert De Niro will not as such be considered for this list in spite of continuing to work. Honourable mentions: Michael Fassbender, Benicio Del Toro, Javier Bardem, Mads Mikkelsen, Jean-Louis Trintignant, Gael Garcia Bernal, Viggo Mortensen, Denzel Washington, Kang Ho Song, Tom Hardy, Ryan Gosling, Oscar Isaac, Ed Norton, Colin Farrell, Steve Carell, Matthew McConaughey, Sean Penn, Michael Shannon, Issey Ogata, Ralph Fiennes, Mark Ruffalo, Josh Brolin, Mark Ruffalo, Ethan Hawke.

FILM

film.felix@imperial.ac.uk



Coach is looking a bit gaunt // Paramount

3) Christian Bale

Best Performances: *American Psycho, The Fighter, American Hustle, The Machinist, The Big Short*

Though Christian Bale was born in Wales, he considers himself English. Looking at his filmography, he may as well consider himself whatever nationality he wants to be. First coming to public

attention at the age of 13 as the lead in Spielberg’s *Empire of the Sun*, in a tremendously demanding role of one so young, Bale later garnered acclaim for what is now a cult performance in *American Psycho*. From then on Bale has managed to mix commercial recognition with critical acclaim, playing Batman in the *Dark Knight* trilogy and starring in *Terminator Salvation*, whilst still

managing to work with interesting filmmakers such as Terrence Malick, Jane Campion, Zhang Yimou, David O. Russell, Christopher Nolan, Ridley Scott, Todd Haynes, Hayao Miyazaki, Werner Herzog, and Michael Mann, as well as garnering an Academy Award win from three nominations. Bale is as renowned for the intensity he applies to his preparation for a film as the acting on camera itself, famously

losing 30kg to become skeletal in *The Machinist* and *The Fighter*, while gaining the same amount of mass for his muscular portrayal of Bruce Wayne and his podgy lead in *American Hustle*. A master of accents and genres, perhaps the only role he has yet to completely convincingly master is the romantic lead.

2) Tony Leung Chiu-Wai

Best Performances: *In the Mood for Love, Chungking Express, Happy Together, Infernal Affairs*

Hailing from Hong Kong, Tony Leung is one of the greatest actors in Asian film history. Often referred to in the media as the Orient’s answer

to Clark Gable, Leung is every bit as handsome and charismatic, but the key is that he is a far better actor than Gable ever was. He has roots in television, and made the step up to film with Hou Hsiao-Hsien’s *A City of Sadness*, which won the Golden Lion at Venice. He gained international recognition for this film, and has remarkably gone on to star in two additional Golden Lion

winners. Perhaps Hong Kong’s two greatest cinematic sons are Wong Kar Wai and John Woo; the former known for his delicate, lyrical romantic dramas, and the latter successful worldwide for his raucous brand of eye-popping action. The fact that Tony Leung is the favourite lead for both of these men is a testament to his versatility. Even as Wong himself

decided to step into the martial arts film realm, so well-trodden before, with *The Grandmaster*, he relied on two things: his unique eye for beautiful imagery and Tony Leung. Able to say as much in a glance as a gunshot, Leung is a truly wonderful actor appreciated everywhere by lovers of cinema.



Smouldering Tony Leung // Universal

1) Joaquin Phoenix

Best Performances: *The Master, Her, Inherent Vice, Walk the Line, You Were Never Really Here, Gladiator*

Spotted performing in the street with his brother and sisters, Joaquin Phoenix appeared on television as a child before coming to prominence with a small but memorable role in Ron Howard’s 1989 comedy *Parenthood*, at the age of 14. It would be another six years before Phoenix returned to the big screen, during

“Where others pretend, Joaquin Phoenix is the real deal – his bark has bite”

which time he witnessed the tragic passing of older brother River on the street outside Johnny Depp’s Viper Room nightclub, following a speedball

overdose. This experience certainly seems to have shaped him, providing him with a brooding darkness and trouble in his eyes. Where others pretend, he is the real deal – his bark has a bite. He stormed back into the public eye with a haunting turn as a problematic high school student in Gus van Sant’s *To Die For*, going on to work with the likes of Oliver Stone, James Gray, and Philip Kaufman, before earning his first Academy Award nomination for Sir Ridley Scott’s Best Picture-winning *Gladiator*. This made him and the late River Phoenix the first and so far only brothers ever to be nominated for Oscars in acting, as well as becoming the first Puerto Rican (he was born in San Juan then raised in the US), alongside Benicio Del Toro in the same year, to be nominated for an Academy Award. He



The King is dead, long live the King

would go on to turn in intriguing performances under the tutelage of interesting filmmakers such as Thomas Vinterberg, James Mangold, Terry George, and M. Night Shyamalan, with a particular highlight being his incredible impersonation, both acting and singing, of Johnny Cash

in a performance that saw him lift the Golden Globe and come oh-so-close to the Oscar.

Ever the eccentric, Phoenix then announced his retirement from acting to pursue a career in rap music, which spawned perhaps the most notorious late night show

appearance of all time on David Letterman. This turned out to be a hoax, as Phoenix grew out a huge beard and acted like an asshole, all in the name of performance art. Or he just grew out a huge beard and acted like an asshole, depending on how you see it. He returned with one of the most devastatingly-committed performances of the century in Paul Thomas Anderson’s *The Master*, which saw him in pole position to win the Oscar until he slated the whole notion of awards season in an interview. Since his comeback he has only gone from strength to strength, working again with Anderson, Gray, and van Sant, as well as the likes of Spike Jonze, Woody Allen, Lynne Ramsay, Jacques Audiard, and Garth Davis, embarking on a run comparable to that experience by the likes of Jack Nicholson, Al Pacino, or Robert

De Niro in the ‘70s. A romantic loner who falls in love with his operating system in a near future LA; a devious pimp exploiting an innocent Polish immigrant in 1920s New York; a stoner PI sucked into a hazy mystery in the 1960s hippie era; and a troubled army veteran turned gun-for-hire on a mission to rescue a young girl from a child prostitution ring – these are just some of the meaty roles he has transformed for with such astonishing consistency. This man is a chameleon capable of nigh on anything. Romantic lead, stoner, alcoholic, singer, dancer, professor, Emperor of Rome; he can do it all. The diversity of Phoenix’s filmography is remarkable. The only thing that is the invariable throughout is the undying commitment and fierce intensity with which he manipulates himself to become these characters.

FILM

film.felix@imperial.ac.uk

Like a Heartbeat Drives You Mad – short films on the dark side of love

Film Editor **Michael Purdy** gives his verdict on this series of shorts, screened as part of the London Film Festival, which look at the ugly underbelly of intimacy.

FILM

Michael Purdy
Film Editor

Love can be troublesome, complex, and macabre, and *Like a Heartbeat Drives You Mad* offers extensive insight into this dark side of human intimacy. The series consists of ten short films shot from around the world, from Glasgow to Delhi, through which

“Like a Heartbeat Drives You Mad offers extensive insight into the dark side of human intimacy”

we witness an eclectic range of traumatic love experiences. Regardless of your race, religion, sexuality, or nationality you are guaranteed to relate to at least one of the stories on a profoundly personal basis. Here are some of the highlights:

RETOUCH



Dir: Kaveh Mazaheri.
Country: Iran. 20 minutes

Retouch portrays an Iranian housewife's fight against daily oppression in a deeply disturbing and callous way. From the beginning she is dismissed and condescended to by her husband, who sees her as a commodity destined to do his bidding. In the morning, whilst doing barbell chest-presses in their bedroom, he accidentally puts on too much weight and the bar drops onto his neck brutally

choking him; he screams for her help but she simply walks into the bedroom and watches the life leave his body without any expression on her face. There was no indication of emotional stress or conflict whilst watching

“The sparse dialogue and lack of music create an unnerving atmosphere in *Retouch*”

her husband die, she saw the opportunity to escape the domineering marriage and resolutely took it and then went to her job as usual (which consisted of altering the images of Western female celebrities in magazines so that their shoulders do not show).

The wife serves as both an anti-hero, fighting against male patriarchy, and as a cold sociopath who refuses to help the father of her child as he dies in front of her. There is very little dialogue and no music during any of the scenes creating a deeply eerie and unnerving atmosphere. Middle-Eastern film is relatively uncharted waters for most people in the West, and thus this fascinating critique of Iranian society was undoubtedly one of most memorable and thought-provoking films from the series.

SLAP HAPPY



Dir: Madeline Sims-Fewer; Dusty Mancinelli. **Country:** Canada. 11 minutes

With unconvincing acting and a terrible script, *Slap Happy* was unquestionably the worst from the series. The film

follows a mid-twenties professional couple who are at point in their relationship of no boundaries. The opening scene involved the girlfriend poking fun at her lover by continually referring to him as “gay” for being offended at something trivial, and by the end she slaps him in a fit of anger

“One word perfectly sums up *Slap Happy* – cringeworthy”

whilst they are having an argument. The girlfriend's character is centred around the concept of gender-role reversal in modern relationships (see the abysmal Amy Schumer's *Trainwreck* if you need an explanation), where a woman adopts traditionally male attributes. Generally, this role-reversal is associated with a feminist message and promotes the importance of strength and independence in women; however the female character in *Slap Happy* is portrayed as homophobic, obnoxious, and physically violent. The male actor had a very pale baby face which was boringly unresponsive throughout. One scene involves the girlfriend describing some very obscene fantasies to her lover during sex, but all this created was the feeling that the writer tried to throw in as many ‘shock-factor’ lines as possible. All-in-all one word perfectly sums up *Slap Happy* – Cringeworthy.

LICE



Dir: Daniel Wiesmen.
Country: Israel. 10 minutes

Lice explores the psychological and emotional conflict that exists within a child during a messy parental breakup. The film is shot at late evening in an Israeli apartment and details a young girl undergoing the gruesomely uncomfortable procedure of being deloused by her frazzled mother whilst her (freshly-divorced) father invites her to come for ice-cream by shouting from the street. Intensely aggressive exchanges erupt between the mother and father and the young girl becomes caught in the middle of the crossfire. Her mother eventually gives her the ultimatum and lets her make the decision of whom to stay with, placing the girl in state of confusion, overwhelmed by two forces that love her and hate each

“Lice ends rather abruptly, leaving the viewer wanting a bit more development”

other. The child's acting is brilliant throughout; her deeply descriptive expressions profoundly illustrate how emotionally taxing parental conflict can be. The film was, however, a



Silences create chilling, discomforting voids in *Retouch* // BFI

FILM

film.felix@imperial.ac.uk



him milk from a bottle and cradles him in her arms, illustrating his profound vulnerabilities and obscure sexual comforts. His wife is initially portrayed as an all-serving stay at home mum who is totally loyal to her husband and son; however she displays deep-seeded deceitfulness as she coldly cheats on her husband on a cheap one-night stand on a stag do outside a pub. The victim of this dysfunc-

“The victim of the dysfunctional situation in *British... is the son*”

little bit too short and ends rather abruptly leaving the viewer wanting a bit more development of both characters and story.

GODDESS

★★★★★

Dir: Karishma Dube.
Country: India-USA. 13 minutes

Coming to terms with your sexuality in modern day India, a country that has a space program but where homosexuality is still illegal, is illustrated as an intense and troubled struggle in *Goddess*. The protagonist Tara is an in-subordinate young lesbian in Delhi, who – much to her strictly-Hindu mother’s dismay and confusion – frequently gets involved in physical conflicts with men on the street (after experiencing homophobic abuse) and refuses to dress in traditional Hindu clothes. Tara has an unquenchable passion for one of her family’s housemaids, Devi – a forbidden desire that is tortured, realistic, and is reminiscent of Jake Gyllenhaal

and Heath Ledger’s affair in *Brokeback Mountain*. They eventually share a

“Coming to terms with your sexuality in modern-day India, a country where homosexuality is still illegal, is illustrated in *Goddess*”

kiss at a family wedding, which Tara’s mother finds out about. She initially expresses discontent at her daughter’s sexuality, leading to an emotional argument; however the morning after this they have breakfast together as though nothing had happened, creating conflict of thought – has the mother chosen to forcibly ignore Tara’s sexuality or has she silently accepted her daughter for who she is?

BRITISH BY THE GRACE OF GOD

★★★★★

Dir: Sean Robert Dunn.
Country: UK-USA-UAE. 16 minutes

In the Calton region of Glasgow, just minutes from the city centre, the

average life expectancy is 54. This fact perfectly illustrates how difficult and bleak life can be in working-class Glasgow and *British by the Grace of God* deals with the idea of duplicity and removing yourself from the harsh realities of the city. This film focuses on a typical loyalist family in the heart of Glasgow and begins

with the father (an Orangeman) preparing for a standard day of marching by putting on his sash, singing “God-Save the Queen”, and talking about immigrants in a derogatory way. On the surface he is the archetypical strong Protestant Glaswegian man; however his fetish involves dressing up like a baby whilst his wife feeds

tional domestic situation, and the only character who displays his true and honest feelings, is the couple’s son. Throughout the film he remains in his room blasting heavy-metal music, demonstrating his anger and his wish to remove himself from the reality of his home life; he ultimately commits suicide, ending the film on an extremely dark note.



Kate Dickie is not impressed in *British by the Grace of God* // BFI

Your Union events

Friday 27 October



BPM
RNB, DEEP HOUSE, EDM, DNB & MORE

BPM (BEATS PER MINUTE) WILL GET YOUR HEART RACING WITH ITS CHANGING MUSIC SETS THROUGHOUT THE NIGHT
FRIDAY 27 OCTOBER
20:00 - 02:00
METRIC || FIVESIXEIGHT || THE UNION BAR

£1.50 GUESTLIST
£2.50 ON THE DOOR

imperialcollegeunion.org/whats-on



h-bar's 4th birthday
ABSOLUTE 80'S

10 FRIDAY NOVEMBER
18:00-01:00
Selected Drinks from 20:00

2 selected cocktails £6
Free glass of B-day cake for first 50 attendees

imperialcollegeunion.org/whats-on



REYNOLDS BAR

COCKTAIL NIGHT

Choose from our range of classic, modern and signature cocktails
£4.50 each or 2 for £7.60

Every Friday from 17:30

imperialcollegeunion.org/food-drink

Coming up in our bars



metric **FiveSixEight.** **THE UNION BAR**

Super Quiz

Every Tuesday
20:00-22:00

Cocktail Night

Every Tuesday
18:00-23:00

CSP Wednesday

Every Wednesday
19:00-02:00

BPM

This Friday
20:00-02:00

Find us on Facebook!

fb.com/beitbars

Pub Quiz

Every Thursday
19:30-23:00

PGI Friday

Every Friday
19:00-00:00

h-bar 4th birthday - Absolute 80's

Friday 10 November
18:00-01:00

Find us on Facebook!

fb.com/hbarpub

Quiz Night

Every Monday
18:00-23:00

Board Games & Film Night

Every Tuesday
18:00-23:00

Sports Night

Every Wednesday
18:00 onwards

Cocktail Night

Every Friday
17:00 onwards

Find us on Facebook!

fb.com/reynoldsbarcx

Get exclusive offers, discounts and more on our bars' Facebook Pages.

imperialcollegeunion.org/whats-on



TELEVISION

tv.felix@imperial.ac.uk

Dystopian sci-fi is absolutely necessary

Comment Editor *Charles Titmuss* argues that dystopian futures are vital, even in our modern age, as they allow us to prepare for a possibly-terrible future.

TELEVISION

Charles Titmuss
Comment Editor

In an article published last week, the current TV Editor proposed that the dystopian futures shown in contemporary sci-fi are no longer necessary, for a wide range of reasons. I disagree: the purpose of this article is to highlight instead the value of these forms of entertainment, especially in the present day.

Sci-fi as a genre is successful when it anticipates the social impact of technological developments on humanity. The article last week made the point that currently, TV shows such as *Black Mirror* are too close to reality to be valuable in that role. On the contrary, the fact that these programmes can predict the potential horrors of the near future so accurately perfectly

describes their necessity. If a piece of media allows for the discussion about a future technology or its use, then that is an incredibly valuable function.

The author also seems to propose that reality is already much worse than posited within *Black Mirror*, or any dystopian sci-fi, particularly with respect to misinformation, or to quote someone famous: "Fake News". I would disagree again with the specific points the article makes, in that I believe economic inequality and lack of opportunity, coupled with an effective election strategy that actually targeted young people as opposed to neglecting them, contributed to the large rise in political engagement.

Fake news has always been a problem, ever since the ability to identify with and spread ideas was invented. The problem is not with technology, it is with people's need to

self-validate their ideas, a point which the article makes. Social media does give increased access to other communities that share similar views, but when I was researching the impact of social media and the internet on terrorism in the UK, I came across information that suggested that it was the physical social group that truly drove their warped views forward. I am not saying that this can necessarily be applied to other ideological groups, but certainly I think that by attributing these issues solely to social media, we miss a significant portion of the problem.

The article goes on to reference classic dystopias, such as the *Matrix*

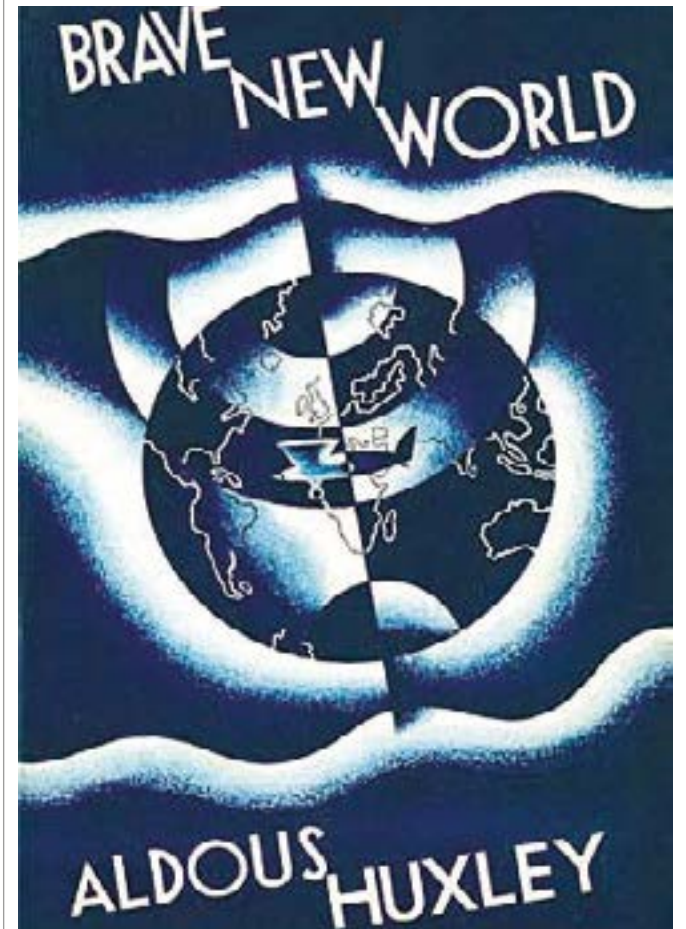
"As much as technology has the potential to improve, it also has the potential to destroy"

or, my personal favourite, 1984. Exploring the differences between these two dystopias results in the consideration that there are two kinds of dystopia: the first type are mostly self-satisfying stories, with examples including *The Hunger Games*, or the film *Elysium*. They give into the illusion an individual's choices are important in the face of a seemingly all-powerful state or AI that inexplicably has a fundamental weakness. A true dystopia, for me at least, is the absolute horror of the Western World:

that individualism is an irrelevant philosophy. Choices mean nothing in the face of a powerful state, caste, or organisation using technology to engineer the perfect societal succession. This is best represented in 1984 or *Brave New World*, one exploring the impact of terror and surveillance to keep people in order, the other relying on genetically engineered castes and the happiness drug soma.

These two novels underline the narrative and philosophical value of dystopian sci-fi. It allows the author to place characters in a context completely alien to us and examine their reactions. It forces us to compare our current values with those of another hypothetical social order, that is not interested in the good of the individual. That is the true horror of dystopian sci-fi: it forces us to come to terms with the answers to awful questions, such as 1984's what is love when compared to pain, or *Brave New World's* unsettling vision of a society where happiness is universal, but freedom is extinct. In the end we must love Big Brother, or swallow our soma tablet.

I think the article's point about optimism when it comes to technology is well founded: it is important not to be too pessimistic about technology, as some of the advances have the potential to improve our lives. I, however, am a pessimist and believe that as much as something has the potential to improve, it also has the potential to destroy. Whenever technology advances a large amount, an economic revolution occurs, changing the established order. This in turn renders some jobs



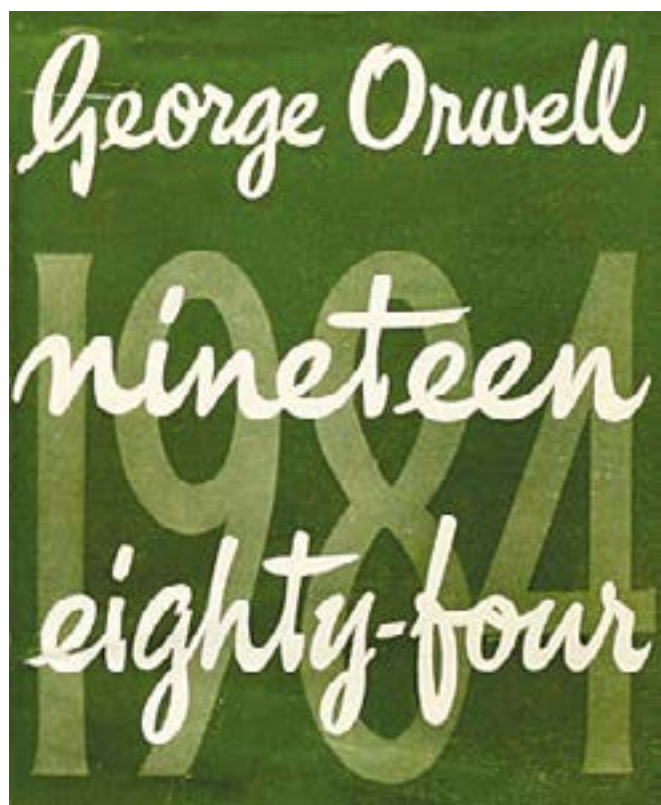
Yeah I know this is a book, not a TV show // Wikimedia

extinct. This occurred during the industrial revolution with the extinction of the European cottage industry, and is occurring now with the increased automation of the workplace. The net result is greater wealth for those that own the machines and the methods of their manufacture, and destitution and poverty for those whose livelihoods are destroyed. A question that no one currently has an answer to is how exactly society and capitalism will function when 80%, 90%, or even 95% of individuals don't have a job due to AI? Is democracy a feasible system of government in the face of an elite that possesses all of the wealth as opposed to merely most of it? Is there a point in maintaining a large population of essentially useless mouths for those that possess this

vast wealth?

To conclude, there are big questions to be answered about our future, the role that technology will play, and how our society will adapt to it. If we believe that the values we currently hold dear are important to pass on to future generations, dystopias must be a part of the current media environment so that we can properly anticipate the challenges that the future will bring. Dystopias do not provide answers to these questions, but they make us realise no matter how bad things are, they can always get worse. We must fight to keep the world the way we want it to be.

1984 can be found at your local library or downloaded illegally from bigbrotherstotallylegitimatebooks.com



Can't believe Orwell wrote a book about that Apple commercial // Wikimedia

TRAVEL

travel.felix@imperial.ac.uk

Time to get your hops up: Felix’s guide to Hop-on Hop-off bus tours

When family or friends come to visit, fitting sightseeing into our busy schedules might be challenging. Bus tours to the rescue!

TRAVEL

Elina Michaelidou
Travel Writer

What is a Hop-on Hop-off bus tour?

A Hop-on Hop-off bus tour is a city sightseeing tour, usually on a double-decker bus with the upper level left open. The tour involves a free audio guide in different languages, with the number and variety of the languages depending on the city that the tour bus operates in. In large cities, the buses are frequent during the high season and may have more than one route. What’s special about them is that you can hop on and off at various stops whenever you want throughout your ticket validity. 24h tickets

are the most common, with 48h tickets also available in some cities.

When should I take a Hop-on Hop-off bus tour?

Such tours are incredibly useful when you have a limited amount of time to spend in a place you’re visiting. The tour usually lasts for one hour, but I’ve recently been on one that lasted for two hours, so you should check the time with the bus driver or other people working for the company. You can find tour operating times and ticket prices on the company’s website or spot them in advertisements across the city you’re visiting.

These tours are also a promising choice if you want to visit many

different attractions that are far apart. There are cases when the public transport is not reliable or where you simply want to learn something whilst on the go, which you can do by listening to the audio guide on the tour bus.

What are the advantages and disadvantages?

Advantages of Hop-on Hop-off bus tours include visiting the major sights of a city in a short amount of time, while also hearing a few historical facts about them; connecting with the major city attractions; and having the choice of many different audio guide languages.

However, there are a few disadvantages. Firstly, weather conditions, such as bright sunlight, rain,



An example of a ‘good’ photo taken on a Hop-on Hop-off bus in Bournemouth // Elina Michaelidou

and strong winds, can spoil your tour, especially when the bus is moving. Most buses don’t have a roof on the top floor, so when it’s hot make sure to bring a hat and wear lots of sun cream; and when it’s rainy, make sure to bring a waterproof jacket. I personally don’t recommend sitting on the lower level as the view can be limited. Secondly, the bus tours are generally not suitable for taking good photos. Finally, such tours can be expensive. However, some of them include discounts for other attractions when you show your bus ticket at the door or apply for a provided discount voucher online, so check this in advance. Ed: In London, day tickets cost around £30 per person, though they usually also include a Thames cruise, walking tours, and whatnot.

When to book?

Tickets can be bought anytime from the bus driver. However, advance

booking is recommended, especially during the high season and for popular destinations. Online bookings may also offer a discount. But for some cities/companies, online booking may not be available, so buying tickets from the driver may be the only option.

How do I take better photos?

As mentioned earlier, bus tours aren’t good for taking photos. When you’re trying to take a photo, the bus will be moving, and when it stops, inevitably either a car or a tree will be blocking the view. So here are some tips:

Firstly, put your camera into standby mode, so you can act quickly when needed. Secondly, aim to take photos when the bus isn’t moving, e.g. at traffic lights, before making a turn, or at stops. Most buses stop at popular tourist attractions or even viewing points, though

this is subject to the city and their regulations. Take advantage of all those stops and take a few photos if there’s anything special out there.

Moreover, choose your seat wisely. On a full bus, this may not be an option, but if you take the bus from its starting point, you may have a few more choices. For instance, sitting in the front row gives you a full view of what’s ahead. The only disadvantages are that the front window usually isn’t clean, and you can also see your reflection when taking photos.

Finally, keep your camera still, like on the edge of the bus. WARNING: Only do this if your camera has a strap that you can wrap around your wrist/neck/shoulder, and remember to hold it tightly!

Ed: For more travel stories and tips, visit Elina’s blog at <https://empnefsysandtravel.com/>.



The upper deck usually offers the best views, especially if you’re lucky to get a ‘window’ seat // Pixabay

FOOD

food.felix@imperial.ac.uk

‘Tis the season... again

It’s difficult to get away from vampire Frappucinos and Halloween chocolates – but if you can’t beat them, join them! Here are Felix Food’s spooky recipes for a night in avoiding trick-or-treaters.

FOOD

Chun Yin Hii
Food Editor

Andrada Balmez
Food Editor

I’ll bet my lunch that you have already seen those shop-fronts decorated in orangey strips, the vampire Frappucino adverts outside Starbucks, your friends marking ‘Interested’ on Halloween-themed Facebook events, and those tacky, plasticky, not-even-scary masks lining the aisles of Tesco. Well okay, this is typical, nothing wrong here.

Except for one single tiny detail: do we actually know what all this fuss is about?

Felix wanted to do a Halloween issue – that’s great! But after we actually did some research, we realised that a lot of Halloween celebrations around the world are, in


one way or another, just a try-hard attempt to follow the North American trend of trick-or-treating and scary costumes. Most of the time we don’t know the

“Maybe our Halloween recipes will comfort you after you see one too many Pennywises running wild”

reasons behind customs, but hey, everyone is doing it so why not?

So, enough of my ranting. Here are some ‘Halloween’ recipes, so we don’t look too out of place. Maybe this will comfort you after you see one too many Pennywises running wild on the streets on 31st October.

PUMPKIN PIE



You will need...

- Pastry – you can normally buy it pre-made in any shop, but you can also make it if you have a lot of time to spare
- Pumpkin – grated or shredded, depending on how pretentious you are
- Sugar
- Cinnamon

1. Preheat the oven to 170°C.
2. Unroll the pastry and flatten a little bit. Place in the tin(s) you are using.
3. Divide the pumpkin evenly, depending on how many you are making.
4. Add sugar and cinnamon. I would like to be more precise about the quantities, but it’s really just a matter of taste. For the cinnamon, I just go with ‘the more, the merrier’.
5. Bake for 30-40 mins, until the pastry is golden, and the filling cooked.

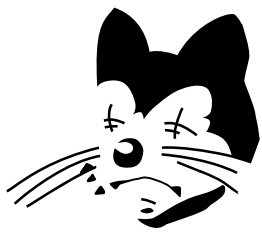
SCARY...EVERYTHING



You will need...

- 150g butter – preferably softened
- 300g icing sugar
- 1 tbsp milk
- Food colouring – you probably want orange for pumpkin related decorations and black for spider webs and so on; for white ghosts, you don’t need to add anything!

1. Beat the butter in a large bowl until soft - you can use an electrical mixer for this bit.
2. Add half the icing sugar and keep mixing until it is smooth.
3. Add the rest of the icing sugar one spoon at a time and the spoon of milk.
4. Beat the mixture until it is smooth and soft. If you think that the mixture is not soft enough, you can add more milk but keep in mind that you want it to stay on the sweet side.
5. Add the food colouring.
6. Now you are ready to have fun with your friends! Remember, the one that makes the least scary treat will have to clean the dishes, so don’t fuck it up!



Hangman



The survey is available online, but the Union has also spent £10,000 printing out hard copies, which come in at 120 pages each // Creative Commons

Union announce survey into whether surveys work

HANGMAN

NegaFelix
Editor-in-Chief

The Union launched their 'Student Survey Survey (Student Edition)' earlier this week, which aims to determine whether surveys are good ways of gathering data

Imperial College Union this week announced the launch of their Student Survey Survey (Student Edition), which aims to determine whether students think surveys are a good form of collecting data.

The survey, which is available on the Union's website, consists of 152 branching questions,

including multiple choice, ranked pairs, and free-text space. Some of the topics covered include how many surveys the student has

"The survey asks a series of esoteric questions, like 'If a survey is in the forest, and nobody fills it in, has democracy been deepened?'"

filled out in the last week, how satisfied the surveys made them feel, on a scale

of one to ten, and whether they had suffered any repetitive strain injury through filling out too many surveys.

However, there are also more esoteric questions, such as "Can a survey feel pain?", "Do answer boxes have souls?", and "If a survey is in the forest, and nobody fills it in, has democracy been deepened?"

The survey, which went live last Wednesday, seems to have been well-received: one student *Felix* spoke to said "I was so outraged over being told I was too wankered to use the ski-slope at ACC night this week, I was ready to mail anthrax to the Union reception. I was just about to put it in the post when I got the email about the Survey Survey – I'm 45 questions in now, and can't remember what I was angry about, or where

I am."

Other students didn't seem too pleased, however. Adam Martin, a PhD student at Imperial's Data Science Institute, was upset about the amount of work analysing

"The move was welcomed by Martin Smithson, Imperial's Vice Provost (Survey-Formulation)"

the data involved: "when I first came to Imperial, I was expecting to change the world of data visualis-

ation," he told *Felix*, "but now I'm spending most of my time teaching undergraduates the finer points of using Qualtrics and crying in the bathroom."

The move was welcomed by Martin Smithson, Imperial College's Vice Provost (Survey-Formulation), who issued a statement saying "at Imperial we are committed to continually improving what we have on offer, and excellence in everything we do it at the heart of our mission. Survey-taking isn't the only way we ensure we can continue to deliver world-class research, but it is the main way."

When asked about the time-frame for the survey, a Union representative told *Felix*: "It's very important that we ensure that our members' voices are heard, so we will

be leaving the Student Survey Survey (Student Edition) open until we receive enough data to take to College. Unfortunately, the amount of data required is an unknown quantity at the moment –

"Survey-taking isn't the only way we ensure we can continue to deliver world-class research, but it is the main way"

we've issued a survey to find out how much this might be."

HANGMAN

negafelix@imperial.ac.uk

Union Council accidentally dissolves itself during first session

HANGMAN

NegaFelix

Editor-in-Chief

Council will be on indefinite hiatus after banning all student positions

Union Council marked their first session of the year this week by inadvertently passing a motion calling for its own immediate dissolution. The surprise motion was raised after a lengthy discussion on what student democracy is, and

how it could be fired up. Thomas Rhidian, Chair of Left Forum and the Union’s ‘Arbiter of Moral Judgement’, put forward a motion to immediately

“The surprise motion was raised after a lengthy discussion on what student democracy is, and how we can fire it up”

bring about direct democracy at Imperial, through the abolition of all representative roles, and thus Council itself. The Union’s Deputy President (Finances and Services) repeatedly tried to point out that the motion would render Council useless, but Rhidian drowned him out with a steady chant of “when will we divest?” At the mention of direct democracy, a number of the sabbatical officers made impassioned speeches in favour of the motion, noting that making democracy direct sounded quite similar to making it deep. One Council member spoke to *Felix* following

the vote: “I’m quite new to Council, and I didn’t really understand what was going on. I thought it was going to be the highest student-led decision-making body at the university, but when I got here we were put in a windowless lecture theatre and someone kept banging the table with a hammer. I didn’t know what they were talking about, but I knew from their voices that everything was getting very heated. I thought pressing A on my voting pad would be the only way to make it stop.” We asked a student for their opinion on the events. They said “I don’t know what Council is.”



Rhidian issued a statement later that evening: “our political system at Imperial is sick. The only way we can cure democracy is to kill democracy. The dissolution of Council

is the first step in a journey that will culminate in Imperial being the world’s first anarchist university.” Council is now on indefinite hiatus.

ARIES

This week you’re the registrar in Chelsea and Westminster A&E. You have to work through to Thursday morning after fifteen men dressed as smurfs are admitted, all with broken ankles, saying something about a ski-slope.

TAURUS

This week you’re the press officer for snowsports, and you keep telling everyone about the ‘6 days of powder’ on your upcoming tour. The government’s drugs task force has your number.

GEMINI

This week you keep on thinking the freshers are getting younger-looking each year. Then you realise: it’s half term.

CANCER

This week you decide to make the most of the clocks going back, and spend an extra hour cry-wanking in the shower on Monday.

LEO

This week you’re the *Felix* Sports Editor. You plan to write a drunken review of ACC night, but have one slime too many, and wake up somewhere in Tooting.

VIRGO

This week you’re from the Business School, and you resist bringing up that fact within the first five minutes of meeting someone. Well done you.

LIBRA

This week you attend your first Union Council meeting. You miss what’s going on, because you’re too busy thinking of *fire* tweets and making dank memes.

SCORPIO

This week, you realise that the election turnout means that democracy has gone too deep, and is now trapped in the Sherfield Basement. COME BACK DEMOCRACY, WE LOVE YOU.

SAGITTARIUS

This week the library announce the next phase of their renovations will include closing the library cafe. It’s the last straw, and things finally go all *Lord of the Flies*.

CAPRICORN

This week you realise that Ethos does online inductions now. Pity they don’t do online gym sessions too.

AQUARIUS

This week you go to ACC night to try out the outdoor ski-slope. Beats a slip-and-slide covered in beer and piss.

PISCES

This week your Imperial journey truly begins, as course-loads begin to crush your soul. There is no joke. This is your life now.

PUZZLES

fsudoku@imperial.ac.uk

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

17. More secure (5)

19. Sweet dish named after a ballerina (7)

21. Everywhere (3,4)

22. Corner pieces (5)

23. Hang loosely (6)

24. Putrid (6)

Across

1. Expensive (6)

4. Hammock dweller (6)

8. Proclamation (5)

9. Below urban (7)

10. Barbed spear (7)

11. Underage (5)

12. Deferred (9)

9

8

7

3

2

9

4

1

6

3

1

6

4

1

3

6

7

8

9

2

5

13. Shrink and wrinkle (7)

14. Pass on degree (4,3)

15. Not sea (6)

16. IBM computer (6)

18. Criminal (5)

20. Sixth sign of the zodiac (5)

Down

1. Child dump (6)

2. Rider's footrest (7)

3. Numbers game (5)

5. The white (7)

6. Sophia ____, Italian actress (5)

7. Holiday destination (6)

9. Wading bird (9)

FUCWIT

1 Nonogram of Ketamine

2 Anti-Gravity Acorns

3 Luncheon Pals

4 HOTRIG

5 TioUdin

6 Whale and Male

8 Q

9 Puzzle Snuggle Cuddle Couple

11 The Indoor Sundial

12 Sports Night is Moist Night

13 The Harambe Memorial Team Name

15 Konmai

15 The Drama Llamas

17 Imperial Stormtroopers

18 Doctor Sudokwho

21 Bring Back Stella

21 RBS Investment Wank

81

64

44

42

41

39

37

32

30

29

26

21

21

18

16

7

7

Only top four and new entries shown.

Send a picture of your solutions and teamname to fsudoku@imperial.ac.uk before midday Wednesday to get a spot on the leaderboard!

Points Available

Crossword

Sudoku

Nonogram

TOTAL

4

2

6

12

Nonogram

Fill in neighbouring cells in each row/column to make blocks. Each block is separated by one or more empty cells. The numbers indicate the ordered lengths of the blocks to appear in that row/column. We've filled in a few to get you going!

Solutions

T	O	P	S		T	E	R	R	A	P	I	N		
W		R		S		N		A		U		O		
O	R	I	G	A	M	I		T	A	C	I	T		
F		O		N		G		E		C		E		
A	C	R	I	D		M	A	D	R	I	D			
C				A						N		G		
E	N	A	B	L	E				G	E	M	I	N	I
D		W					C		A				N	
	S	K	E	T	C	H			R	E	C	U	R	
A		W		A			E			W		A		U
C	R	A	W	L			E	P	I	G	R	A	M	
R		R		O		S		G		G			M	
E	N	D	A	N	G	E	R			H	O	L	Y	

1	1	1	1	1	1	2	1	1	1	3	1	1	1	1
1	1	3	1	1	1	1	1	1	3	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
1	1	1	1	3	3	2	1	1	3	3	1	1		

38

SPORTS

sport.felix@imperial.ac.uk

1st XV Rugby Woes Continue Against Surrey

IC Rugby make another brave attempt, but Surrey's strength lead to commiseratory pints and A&E visits.

SPORTS

Aleksei Zaboronsky
ICURFC Press Officer

19

Surrey Rugby 1st XV

V

12

Imperial Rugby 1st XV

Last week's fixture against Surrey saw a determined Imperial 1st XV turn up in force, ready to put the previous week's fixture against Reading behind them and get some points in the league table. A sharp, no-messing-about warm up reflected this mood, as did the start of the match; after kicking off, our aggressive blitz defence paid dividends as Surrey coughed up possession. Quick to respond, we counter-attacked, which saw the ball whipped out wide and then halted five metres from the line. Several pick-and-goes later and Michael Radigan was bundled over the line. With the try converted by fresher João's idol James Field, we were 7-0 up within five minutes. Shortly after the restart, Slytherin mudblood Ben Jones was forced off

the field with a shoulder injury. Alex Amato, sensing Ben's serpentine tendencies long before that evening's social, offered no condolences to his teammate as he slithered off the field. Sensing a chance to swing the momentum in their favour, Surrey attacked with vigour and were rewarded with an unconverted try in the corner to get within two points. The referee, keen to get involved, began dictating the game by awarding penalty after penalty, whipping himself into a frenzy of officiating. Nathan

"The referee, keen to begin dictating the match, started awarding penalty after penalty"

Tomlinson, unaware of this carnage, and perhaps after one too many grees, rashly smashed through a ruck and earned himself a 10 minute opportunity to reflect on his actions.



Go team! Chase the egg!//ICURFC

Surrey took full advantage of Imperial's depleted ranks, a penalty ensuring they reached halftime with a slight advantage, leading 8-7. The second half got underway smoothly, Imperial once again building pressure with good attacking structure. However, with everyone in the team deciding to follow club captain Toby's example by dislocating their shoulders, it was

"The team were inspired to respond, Allingham and McGrail creating line breaks left and right with well-timed pops"

Surrey who drew first blood after the break, another penalty pushing them to an 11-7 lead. This inspired the team to respond, Allingham and McGrail creating line breaks left and right with well-timed pops. This led to Amato showing his blistering pace to score a superb try and give IC a slim 12-11 lead with 10 minutes remaining. However, as is becoming the norm, we were simply

unable to see the game out, and succumbed to a penalty and a last-play try to stumble to a 19-12 loss and walk away only with a single bonus point. Commiseratory pints were on self-made barman Louis Benson, whilst Nate joined banned-from-union squad in A&E for the second week running. Sylvia sleeps on. To keep up to date with Imperial Rugby, follow us on Instagram @IC_rugby

YOUR WEEK AHEAD

Clubs & Socs is a bit smaller this week – if you want to get a report or advert in, please email felix@ic.ac.uk!

MONDAY 30 TH OCTOBER	TUESDAY 31 ST OCTOBER	WEDNESDAY 1 ST NOVEMBER	THURSDAY 2 ND NOVEMBER	FRIDAY 3 RD NOVEMBER
BEYOND THE VIOLENCE Psychiatry Society 18.00, SAF G16 Come join us at 'Beyond the Violence', where special guess speakers will discuss their experiences of the humanitarian crisis in Syria, and the mental health issues faced by refugees.	HALLOWEEN Devilry Time to hide inside your house, hoarding your spider-shaped chocolates with the lights off, ignoring it every time a kid rings your doorbell! Oh, that's just me? Ok then...	HOCKEY MATCHES ICSM Ladies Hockey Ladies Hockey are playing the following: 2 nd XI v Royal Holloway; MY Astro, TW20 9TR; 15.00 3 rd XI v Portsmouth; Langstone, PO4 8LW; 16.00 Players welcome! Email jko13@ic.ac.uk	TRAMPOLINING SOCIAL IC Synchronised Swimming 18.30, West Acton Station Join the IC Synchronised Swimming team for their trampolining social at Oxygen Free Jumping in Acton. Only £8 for an hour of jumping and FREE PIZZA included! RSVP via syncswim@ic.ac.uk	ZOMBIE A-BOP-ALYPSE ICSM Ladies Hockey 19.30, Reynolds, CX Come to Ladies Hockey's spooky Halloween bop! Doors open at 7.30 pm £3 entry before 10 pm, £5 entry after! Free pitcher for the first 20 groups of 4 before 10 pm!

SPORTS

sport.felix@imperial.ac.uk

Mud, sweat, and beers: the Cross-Country racing season begins at Parliament Hill

ICXCAC kick off their year with a steep uphill climb, and plenty of baked goods to follow.

SPORTS

Fergus Johnson

ICXCAC Secretary

It was a dreary Wednesday afternoon, and a crowd of chilly-looking runners were gathering in Beit Quad, sporting distinctive navy and red vests rather than the gowns and mortarboards donned by a large proportion of the graduating students around campus. That could only mean one thing: it must be the start of another year and another cross-country season filled with mud, sweat, and beers. And cake.

The first challenge facing the squad of 70 was navigating the London Underground to reach cross-country Mecca: Parliament Hill. After

some confusion getting the correct Tube line and Oyster card top-up-related delays, the team made it back above ground at Belsize Park and completed the remainder of the journey on foot. They arrived in good time before the starting gun, leaving the freshers and new members plenty of time to ogle at the size of the challenging hill that faced them from the start line. After some brief warming-up, an obligatory pre-race team photo taken by a rival team captain, and plenty of toilet stops, the squad headed for the start line at the base of the mammoth Mount Parly Hill.

The race organiser's instructions were barely audible after chants of "I-C-X-C" broke out amongst the Imperial ranks, and another slightly

more explicit ode started up amongst the team of King's College. Yet without much further ado the race was underway with a short blast on a whistle, and the shouts and songs of the athletes gave way to the rapid thuds of 260 pairs of athletic legs ascending the rather steep slope. Having donned the notorious home-made "King of the Hill" T-shirt, ICXC-fresher Robbie Holland took on the tradition of racing to the top of the hill, and impressively made it up in 2nd place! He later went on to remark that the athlete who beat him to the summit managed to maintain the ridiculous pace whilst Rob himself struggled around the remaining 8km at a considerably slower speed than the initial surge.

Once at the peak, the race leaders struggled to



ICXC's baking elite exhibit their finest post-race sweet treats // ICXCAC

follow the questionable signage but after a short diversion around some minor foliage they were back on track, zooming down the grassy tracks, across the barren heathland and through muddy ditches. Corner-cutting was rife, but as any experienced racer knows: if a marshal doesn't see it; it didn't happen. The course was a newly refined version of the route from previous years, with the girls completing 2 grueling laps of the park and the boys undertaking an even more gruelling 3.

In the Men's race of 146, star performer Chris Olley led the way home in just under 29 minutes, and was reasonably closely followed by Chris Thomas in 5th place, and club favourite Harry Scriven in 9th place. Oliver Newton placed 18th and Daniel Ayers had no problems competing against his alma mater King's, finishing in 25th and rounding off Imperial's A team. This placed the team in 2nd place in the league and just 3 points behind Brunel in 1st, but more importantly 14 points ahead of arch-rivals UCL (who currently

sit in the bronze medal position). In the Women's race of 113, Sarah Johnson breezed to 2nd place in 22:24, followed by Kate Olding in 5th, Women's Captain Anna in 9th and highest-ranking fresher Georgia Curry in 10th. Unsurprisingly, with all 4 team members in the top 10, the Women's A team now sit top of the league,

"After the valiant athletes had regained their breath, the cake bingeing soon began"

11 points ahead of UCL. Imperial's B team finished 3rd and just one point ahead of King's in 4th. Perhaps more impressively still, Imperial fielded more runners in both the boys (36) and girls (30) race than any other university!

After the valiant athletes had roared the

rest of the squad to a sprint finish and regained their breath, the cake bingeing soon began. The first baking session of the season was of a very high calibre, with top quality baked goods brought from all corners of the club from freshers to finalists. For the post race socials the squad's thoughts initially remained with food; heading to the local GBK to the joy of the manager (who made the team pose through an Instagram frame without offering sponsorship). After filling their stomachs to satisfaction, thoughts quickly turned to sourcing refreshing beverages, with the team meeting at Acton's finest bowling alley for a couple of games of skittles and more than a couple of the aforementioned beers to celebrate a thoroughly successful start to the cross-country season.

The next race in the LUCA XC League is on 1st November, meeting in Beit Quad at 1pm. For more information about the club and join our mailing list please email run@ic.ac.uk.



Robbie Holland revels in the glory of his club-endowed accolade // ICXCAC