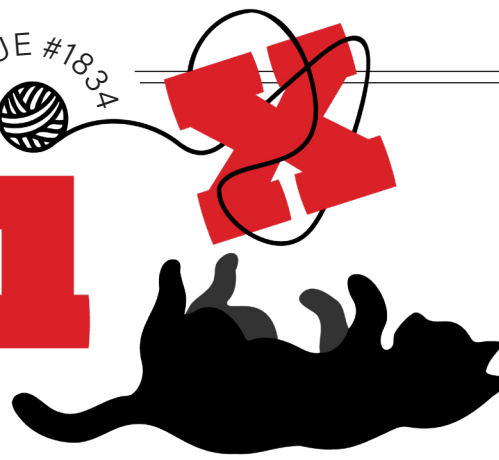


First published in 1949, *Felix* is released weekly during term time and is distributed around Imperial's London campuses. All students, staff, and alumni are welcome to contribute to the paper.

Felix

KEEP THE CAT FREE | SINCE 1949

ISSUE #1834



Imperial scholarship requires support for Xi Jinping



Mike Buzadji

College spends up to £65k per scholar. Candidates are vetted by China's Ministry of Education.

Editor-in-Chief
JAMIE JOHN

Doctoral students on a scholarship programme funded by Imperial must 'have a correct worldview' and 'thoroughly implement Xi Jinping Thought', according

to translated documents from the Chinese Scholarship Council (CSC), a branch of China's education ministry.

Imperial spends up to £65,000 per scholar each year, *Felix* estimates. But it is the CSC, not the College, that has the final say on which candidates are awarded scholarships.

The CSC, which administers the

programme, stipulates that a 'rigorous review of the applicant's political ideology' must be performed, in its 2023 selection guidelines.

Upon arrival, scholars are required to register with the Chinese embassy in the UK and 'voluntarily accept [their] guidance and management', say the guidelines, shared with *Felix* by UK-China Transparency (UKCT), a charity.

If scholarship recipients fail to adhere to the CSC's requirements, their funding will be terminated and they will have to reimburse their fees.

Furthermore, scholarship recipients must

NEWS

Nael Qtati is alive

Gazan Imperial alumnus Nael Qtati, reported as missing in Issue 1832, is alive.

Mohammad Majlisi reports.

→ [READ MORE ON 4](#)

The OT Interviews: Christian Cooper

Cooper talks Union delays, his plans for the year and "the many hats" of the DPCS.

→ [READ MORE ON 6](#)

ENVIRONMENT

Earthshot Prize 2023

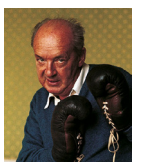
Felix gives readers a rundown of this year's winners, and highlights an opportunity for student start-ups to be nominated next year.

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BOOKS

International Men's Day

Men are sad and we should care about it.



→ [READ MORE ON 17](#)

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At *Felix*, we believe that it is always in the interest of the students to be in the know. Transparency in the workings of the College and the work of your student representatives is key. Therefore I, the *Felix* Editor, on behalf of the team promise that:

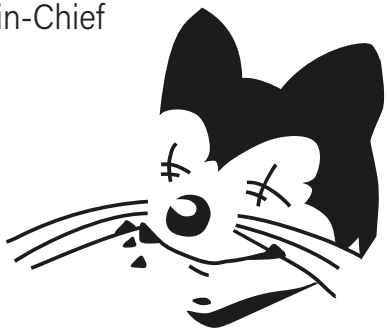
We will, to the best of our ability, tell you the whole truth and nothing but the truth.

We will keep your confidence and will only publish something you say to us if you have explicitly said that we can.

We will work to expose unfairness and discrimination in all forms that it takes at the College.

We will treat fairly any article sent to us, regardless of point of view, and do our best to work with you to prepare it for publication.

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Editor-in-Chief



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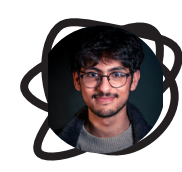
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Located in Beit Quad,
Prince Consort Road
London, SW7 2BB

Printed by Iliffe Media
Winship Road,
Milton, Cambridge
CB24 6PP

Registered Newspaper
ISSN 1040-0711

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EDITORIAL

Where is the sense?

Earlier this week, in a dramatic move, Rishi Sunak appointed David Cameron, the former Prime Minister, to the post of Foreign Secretary. The media was abuzz with commentary on what this would mean for Sunak's premiership, the nation and its standing on the world stage.

Much of the initial discussion focused on the immediate implications of his return, and the brashness of Sunak's gambit. But soon, the conversation turned to Cameron's record both in office and afterward: his tawdry lobbying activities during the pandemic, Brexit, the failure of his flagship austerity policy, and, perhaps most relevant for this week's paper, his relationship with China.

Under the Cameron-Osborne partnership, from 2010 to 2016, the UK enjoyed a 'Golden Era' of relations with the Asian giant. "No economy in the world is as open to Chinese investment as the UK," said Osborne, on a trip to China in 2015.

A huge part of this relationship was a collaboration between British and Chinese scientists. And as the capital's foremost scientific institution, Imperial College London benefited greatly. Chinese businesses lavished money upon the College, and Chinese students, already a significant minority on campus, flocked in their droves to Imperial.

In fact, even after Cameron's term ended in 2016, Chinese students continue to come to Imperial. Between 2010/11 and 2022/23, there was a 270% increase in the College's Chinese student population, compared with only a 62% increase in the size of the overall student body.

Unfortunately for Imperial, Sino-British relations soured in the years following Cameron's time in office. China's brutal crackdown on the 2019/20

Hong Kong democracy protest prompted shock among the UK's political elite, and Huawei was banned from developing the nation's 5G network, after the Chinese company's involvement was deemed a security risk.

"Let's be clear, the so-called 'golden era' is over," said Rishi Sunak, in his first major foreign policy speech 12 months ago.

Imperial now appears a rabbit in the headlights, caught between the Western world's desire to shift away from China, and its own reliance on Chinese cash.

The College is aware of the situation it finds itself in. In his inaugural President's Address last year, Imperial's Hugh Brady recognised "the recent tectonic shift in our world", and raised the "quite legitimate question" of "whether Imperial can continue to compete successfully in the top tier globally given [the] confluence of threats."

"Who and how should we partner? [And] of course, how can we fund it?"

The front-page story this week, however, is testament to Imperial's naivety. The College has been found to be funding a scholarship, administered by a branch of China's education ministry, which stipulates that students 'thoroughly implement Xi Jinping Thought'.

Chinese Scholarship Council (CSC) rules reveal that 'a rigorous review of the applicant's political ideology' must be performed.

Imperial seems to have been oblivious to these rules. It meekly accepted that the CSC would have the final say on which candidates were admitted, even after universities in other countries cancelled their own arrangements, citing 'industrial espionage'

concerns.

The result is that the College is spending up to £65,000 per head for conformist ideologues who reap the benefits of an Imperial education, and then upon the conclusion of their studies, are obliged to leave the country.

What do Imperial and the UK get out of this arrangement? Not much, it would seem.

Let us be clear, this editorial is not a polemic against the students who benefit from these scholarships themselves. Rather, it questions the logic of Imperial's funding decisions.

Granted, the total cost of the scholarships is likely a drop in the ocean to the College.

But when viewed on a per student basis, it is a huge sum. Students are struggling as it is – last year, an Imperial PhD student featured in *The Guardian* said he was effectively forced to sign up for casual work, such was his financial situation.

Surely the money the College spends on the CSC scholarships would be better spent elsewhere?

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to talk about IUDs?**

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Alternatively, get in touch by email at amy.smith20@imperial.ac.uk



NEWS

Gazan alum Nael Qtati is alive

MSc graduate Nael Qtati has spoken to students after two weeks of no contact.

News Writer

MOHAMMAD MAJLISI

Nael Qtati, has communicated with students on the Friends of Palestine Society group chat after 18 days of no contact. Students were concerned about Qtati's welfare, fearing he was injured or dead.

Qtati resumed messaging on Monday 13th October, describing life within the strip since the IDF launched ground op-

erations. Food, water, and fuel are scarce. Qtati says he spends 'about 8-10 hours a day' trying to secure basic supplies.

'No food, no fuel, no nothing'

Fuel prices have inflated 650% and fuel itself is 'not available even if you are willing to pay,' says Qtati. Money 'has no actual value in Gaza', and shops are 'going out of business' as stock runs out, with no way to resupply.

'We have been drinking untreated water for weeks now,' reads a message sent



A UNRWA school now being used as a shelter by the displaced Nael Qtati

by Qtati. 'I remember drinking water with significant taste.'

Qtati, who completed an M.D. at Mansoura University for his undergraduate studies, suspects many people he knows are suffering from kidney problems.

'Shops as shelters'

Gazans evacuating south seek shelter in 'all schools and health centres' or attempt to cross the Gazan wetlands. The United Nations Relief and Works Agency (UNRWA) and the Palestinian Red Crescent have been facilitating refugees.

Qtati described how 50 to 60 people

stay in a single room, and that food is only distributed on limited occasions when available.

Felix understands that abandoned shops are being used as shelters. Mr. Qtati describes how 'you see a local shop... you get closer, there is no business, just people living in a room under a[sic] building.'



We have been drinking untreated water for weeks now.

Felix has been unable to contact Qtati, due to the volatility of telecommunications within the Gaza Strip.



Mr. Qtati's family has been cooking like this when they are able to procure cookable food Nael Qtati

→ FROM P. 1: CSC SCHOLARSHIPS

return to China for at least two years after completing their PhDs.

A total of 37 UK universities have partnerships with the CSC.

Many of those pay only for tuition fees, suggests a report by think tank Civitas – while the CSC funds a maintenance allowance.

However, *Felix* has found that Imperial's departments pay for the maintenance allowance, and the College's Student Financial Support team covers international fees.

'Funding for the scholarships is split between the CSC and the College,' claims Imperial in an internal application form, but it is unclear what the CSC pays for. The College has been approached for comment.

"The two issues at stake here are academic freedom and international engagement," said Josh Freeman, Policy Manager at the Higher Education Policy Institute. "These values are both core to UK higher education but, as this case shows, are sometimes contradictory."

In July this year, one of Germany's largest universities, the University of Erlangen-Nuremberg, suspended its own CSC scholarship programme, citing concerns around 'industrial espionage.'

'The reason behind this decision is that these CSC students sign a contract in which they pledge absolute allegiance to the state, as well as undertaking to remain in contact with the Chinese embassy at all times,' wrote the university in a letter to its staff.

A similar private contract between the CSC and its scholars, obtained by Sweden's Karolinska Institute, stated that two guarantors are obliged to repay the entire scholarship, should the recipient breach its terms.

It commits scholarship recipients to 'regularly submit a "Situation Report" to the Chinese embassy' and 'participate in annual PhD student reviews' there. The Karolinska Institute suspended its CSC arrangement in January 2023.

'UK universities are haemorrhaging millions of pounds a year in subsidised student fees for ideologically acceptable Chinese students to study in the UK – only to return straight back to the PRC [People's Republic of China] once their studies are finished,' wrote Robert Clark, in a Civitas report on CSC scholarships at UK universities.

A Russell Group spokesperson said that before coming to the UK, every Chinese applicant studying for a higher degree in a sensitive area must pass enhanced security checks through the Government's academic technology approval scheme.

A Universities UK spokesperson said: "Any research partnerships and collaborations must comply with stringent regulations, including approval through the UK's export control regime where appropriate."

"While we cannot comment on the specific claims made in the report, we would note that China remains... an important partner for the UK. Our continued bilateral cooperation, when conducted in line with UK regulations and best practice, is in our strategic national interest."

The funding agreement

Imperial's website outlines what the CSC Imperial Scholarship funds:

Each scholarship covers:

1. 'International tuition fees' [covered by Imperial Student Financial Support]
2. 'Maintenance allowance equal to Imperial's minimum stipend allowance in any given year (£20,622 in 2023-24) per year' [Paid for by the nominating Imperial department]
3. 'One economy class return journey to China'

Scholars are funded for three to four years of study.

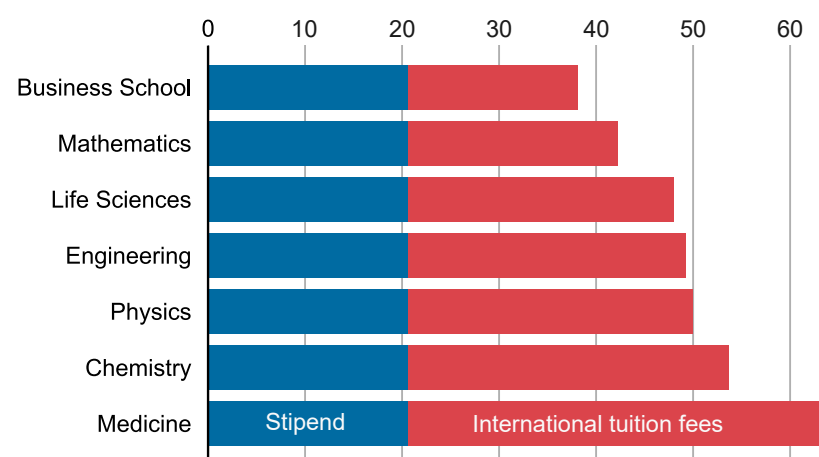
At Imperial, annual PhD tuition fees for overseas students range between £17,500 (Business School) and £44,100 (Faculty of Medicine).

Stipends amount to £20,622 per student this year, and the College is offering 15 new CSC scholarships for 2024/25 – in addition to its ongoing ones.

Assuming that all 15 scholars will pay the lowest tuition fees (Business School, £17,500), and adding the £20,622 stipend to this, *Felix* projects that Imperial will

The cost of a CSC scholarship

Imperial PhD fees, 2023, £'000



Felix

Source: Imperial College London

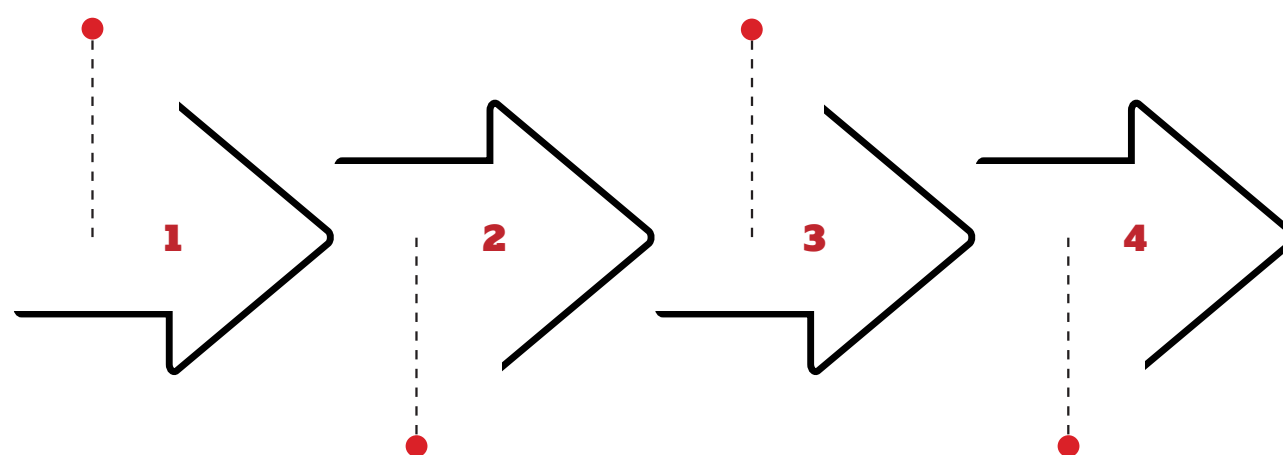
spend £38,122 per head – or over half a million pounds in total – on new scholarships next year.

If instead, all 15 scholars pay the highest tuition fees (Medicine, £44,100), the College is projected to spend £64,722 per head – or close to a million pounds in total.

Felix was unable to obtain information on the total number of CSC scholars at Imperial before the paper went to print.

Applicants must be from mainland China, and must secure a PhD offer – as any other PhD applicant would. Imperial departments then nominate a maximum of three candidates each for the CSC programme.

These students are asked to complete an external application form on the CSC's website.



Nominations are initially assessed by an internal panel which produces a list of students for recommendation.

The CSC conducts its own reviews and informs students of the final outcome.

The OT Interviews

Christian Cooper

Deputy President (Clubs and Societies)

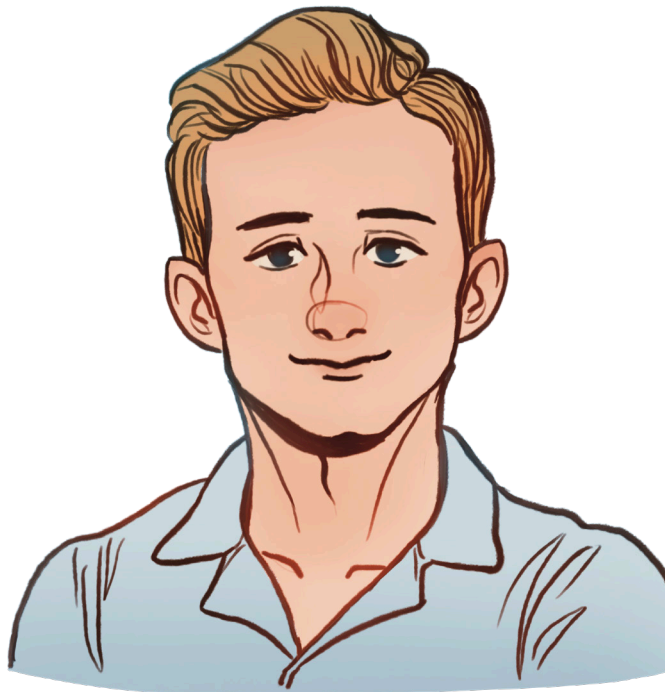


Illustration by Natalie Yu

In this series, Felix talks to the Union's Officer Trustees. This week: Christian Cooper, DPCS.

Editor-in-Chief
JAMIE JOHN

Of all the Officer Trustees (OTs) this year, Christian Cooper stands out for his depth of his résumé. Before becoming Deputy President (Clubs & Societies), he held the roles of Sports Sector Chair, and Sports Sector Treasurer, giving him a wealth of experiences to draw upon.

Cooper says his experiences in the Union shaped his time at Imperial profoundly. He is studying for a degree in Mechanical Engineering – a choice he made “mainly because I had an interest

in Maths and Physics and wanted to do something that would apply those.”

But now, in large part due to his roles at Imperial College Union (ICU), he says he would like to pursue a career in “charity, representation or law, or something similar”.

He remembers the moment it was first put to him that he might be a fit for the DPCS role. “I was sitting in this exact room actually, in March 2022.” [Cooper and I are in a meeting room in the Union Building].

“We were budgeting for sports clubs and the then-DPCS India [Marsden] was joking with me. She said, ‘You’ll be doing my job in a couple of years’ time.’ And

look at me now!”

Cooper had his first introduction to the Union as part of Hockey Club. “I knew I wanted to play hockey when I joined Imperial – I played at school, and for a club in Newcastle, where I’m from, as well.”

“So I decided to join Imperial College Hockey Club. I didn’t know that it was affiliated with the Union. To be honest, I didn’t really know what unions were, and my first proper experience of the Union was a social after a hockey match.”

“At the time, a couple of people on my team were volunteers with the Union, so they were the ones who explained what it was.”

“I was just one of the lucky ones,” admits Cooper, acknowledging that the Union could do more to explain its function. “Many students don’t quite understand and think clubs and societies are run by the College.”

In 2021/22 he ran for a role on the Sports Sector Management Group.

The Union’s Management Groups are run by student volunteers, and act as an intermediary between the clubs, societies and projects (CSPs) within their sector, and the Union’s more senior leadership. They provide a first line of support and assist with basic governance and finance, escalating larger student concerns to the Union’s permanent staff or the relevant OTs.

Seeing that the Treasurer position was unfilled, Cooper decided to run, and won.

“It’s not the most glamorous thing in the world. There’s a lot of day-to-day stuff like approving financial requests, but the big thing that kept me doing it was seeing that I actually had an impact.”

He relates the story of his first big success in the role. “I joined the sports exec near the end of Covid in 2021. And the social nights, the ACCs [monthly sports nights arranged by the Sports Sector Management Group] were completely gone – they hadn’t run for two years.”

“So myself and the rest of the exec team put so much effort into the first Halloween sports night. And it was a huge success. They’ve just built upon it since then, and it’s become really good again.”

Then in January 2022, Cooper became acting Sports Sector Chair due to “unforeseen circumstances”.

“I was singlehandedly doing the Sports Treasurer and Sports Chair roles. The next academic year we managed to fill the whole executive, which was good, and I was formally elected to Sports Chair.”

From here, the DPCS role was a natural transition. “Over the past year (2022/23), I got a lot more involved in the representation side of things, and started to consider it much more seriously. To the point where I was seeing Dylan [DPCS 2022/23] quite regularly, seeing the work he was doing and imagining myself doing that.”

“Working with Dylan was the moment where I thought, ‘Oh, I could really do this.’”

“As much as the Sports Chair role is rewarding, you do feel like you can’t dedicate enough time to it – any student in a volunteering role will tell you the same.”

“I wanted to have a bigger impact and had loads of ideas about how I wanted to change things from my previous experience.”

Cooper says he works a lot with DPFS Stephanie Yeung on a day-to-day basis. “Our roles are intrinsically intertwined – societies make up a huge portion of the Union’s finances, and Stephanie oversees our finances.

“We often talk about the many hats,” he says when I ask him about the responsibilities of his role. “The hat that never comes off is my job as a trustee of Imperial College Union. What this means is that above all else, I have to make sure we’re sticking to our charitable objectives and that we’re running effectively and responsibly.”

“But then in my elected role – the ‘officer’ part of ‘officer trustee’, my main responsibilities are to act as a representative, to ensure that I’m listening to students and actually actioning their feedback – not just doing my own projects, which is the third hat.”

“I’m confident that my own personal advocacy projects are well-received by students, but I’ve got to be cognisant of the fact that I’m not currently a student,

so I do need to wear my rep hat and talk to students.”

Cooper says his biggest responsibility is chairing Clubs, Societies and Projects (CSPs) Board, a subcommittee which oversees all clubs and societies. The board is attended by senior student volunteers – from Management Groups and Constituent Unions. It oversees all CSPs and has a number of other responsibilities, including policy development and fund allocation.

Delays

One of students’ main complaints this year is the slowness of the Union to approve administrative forms. It affected societies at the beginning of term in the lead-up to Welcome Week, and issues such as room booking mix-ups and delays to risk assessment approvals continue.

“First, I think it’s really important to make clear that the Activities team [Union permanent staff] knows this is an issue and that they’re working the hardest I’ve ever seen,” says Christian when I put the problems to him.

“We want students to be able to do as many activities as possible – and what we’ve seen is that they do too.”

“Especially this year, we’ve seen a huge influx of events and activities that students want to do, and it’s just been impossible to keep up.”

“My message to those groups is that we are trying hard to fix this.”

Ultimately, says Cooper, the problem is one of capacity. The Union has insufficient permanent staff members to process the admin, leading to a backlog.

“Our team is working very fast, but it’s just inundated. There are three permanent staff who work specifically on events and activities, and there were 500 proposals in October. Those staff have to deal with lots of external speakers that have to be approved by the College as well as everything else, and comply with College regulations and timelines.”

Cooper says that the Union is updating its strategy this year, moving forward from its previous five-year ‘Back to Basics’ strategy. He hopes that Imperial will increase its block grant as a result, providing more money to recruit more admin staff.

“We’re looking at being a high-performing union, and with that comes an ask for more funding and support.”

He also says the Union’s commercial services (bars and venues) are “getting better and better”, and that this will increase income.

Cooper’s goals

Cooper is clearly ambitious; he describes a number of goals for the year, some of which fall outside of what is stated on his Union webpage.

One of his most wide-reaching goals is to improve support for CSP members. The Union is introducing a host of new workshops this year, and has already run successful

committee and welfare workshops training sessions.

Furthermore, Cooper says that online training courses will be moved to a new digital platform, which will also allow students to report their concerns directly to staff.

He says he wants the Union to be more transparent, and to that end, meets regularly with students to “lay all the cards on the table”.

He also wants to try and make voluntary roles more “relevant”, and to recognise contributions with a new reward system.

“We want to create a volunteering experience that allows people personally develop, and not just be sitting on a finance system approving claims, for example.”

He talks passionately of a plan to diversify the committees of student societies. “I was pulling some data last week, and compared to the overall student demographic, clubs and societies are more populated by home students and undergraduates”

For Cooper, the diversification plan goes beyond his own role. By diversifying committees, he feels he can empower underrepresented groups to shape societies to their represent their own interests, thereby improving the overall Imperial student experience.

He is clearly driven to make his mark, talking in great depth about the Union’s sustainability policy, projects he is running with Move Imperial, plans to reduce barriers to participation, and more.

Unfortunately, we do not have the space to discuss them all in this piece, and so *Felix* refers readers to Cooper’s blog posts on the ICU website, where he will be sharing all his work throughout the year.

Cooper feels that the cost-of-living crisis is the biggest challenge facing the Union, in relation to his own role.

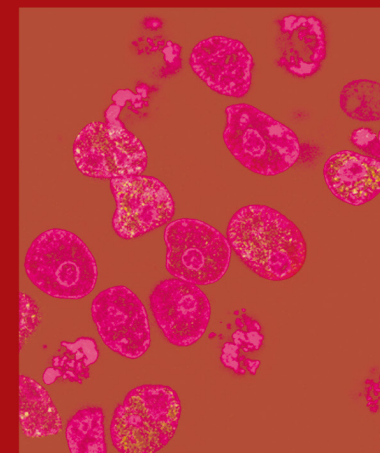
“Students can’t afford to spend as much money, and running activities is more expensive than ever. So for clubs and societies, and the Union as a whole, it’s going to be a really big challenge to see how we can save money, and how we can use what we have more effectively.”

He says the best way to get involved in the Union is “to go on our website and find a few things you really like. Just try them out, and when you do join a club, talk to people on committee, and say, why have you chosen to do this role? What made you want to, and what did you get out of it?”

“You’ll probably find there are a few positions you’re intrigued by. And then, just run for them.”

FRESH BLOOD?

we want it.



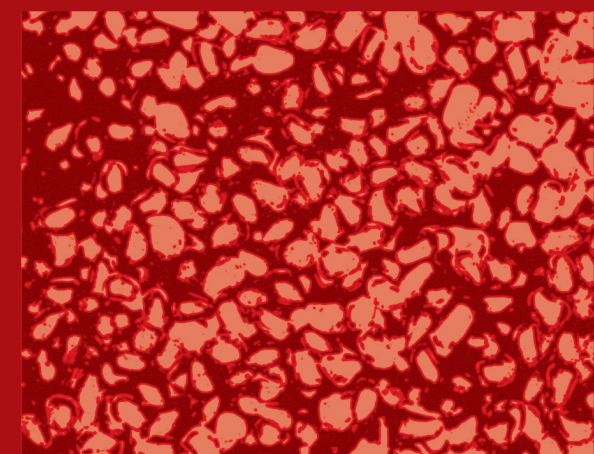
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A new programme for undergraduates to develop into the leaders of the future

Guest Writer

LEONARDO CENTRE ON BUSINESS FOR SOCIETY

Last month, Imperial announced the launch of the Laidlaw Scholars Leadership and Research Programme. The College will join 16 prestigious universities around the world that currently offer the programme. Up to 25 exceptional undergraduate students per year will be selected to participate in it. Applications will be open to undergraduate students from across all four of the College's faculties.

The fully funded 18-month programme is designed to train the next generation of ethical leaders and equip participants with the necessary skills and perspectives to excel in their chosen fields and make meaningful contributions to society.

The Laidlaw Scholars Programme is made possible thanks to support from the Laidlaw Foundation. It is inspiring and challenging, and it aims to give a new generation of leaders the knowledge, skills and experience to support their

future careers and drive meaningful change.

The programme includes:

- bespoke leadership training
- a research project of their choice
- networking with inspirational peers
- a generous stipend (£3,000 per year)
- a real-world Leadership in Action Experience

If any undergraduate students would like to learn more about the programme, please visit the Laidlaw Scholars Programme website. Applications will be open from 24 November; an information session for students is scheduled for 22 November.



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SCIENCE

Brief History of 0

1st year mathematician John Zou delves into the 4000 year history of the number 0.

Science Writer
JOHN ZOU



Statue of Persian polymath and father of Algebra, Al-Khwarizmi. Adam Harangozó

Zero seems fundamental to any number system. However, the use of 0 is more recent than you might expect. Surprisingly, many societies lived without the need for 0 for a long time. From the evidence we have, people from the past had no trouble living without at all. The Babylonians, for example, recorded numbers without even a place holder. For example, “2023” was written as “223”. So, when did 0 come about, and how did it become so important to modern day science?

Sumerians, Babylonians, and the Mayans

The origins of 0 can likely be dated back over 4000 years ago, where the Sumerians used gaps between numbers to denote absences (in the form “2 23”). However, it is likely that the Babylonians were the first to use a symbol for the number 0 (in the form ‘2’23’). Surprisingly, this symbol was never used at the end of a number, and they continued to determine the magnitude of a number from its context. A different symbol with the same purpose was developed in America around 350AD, where the Mayans used the drawing of a conch shell to represent 0 in their calendars. The Mayans believed that time is cyclical, and that events are destined to repeat. Due to their unique worldview, they

used zero to represent both the beginning and the end.

Brahmagupta and Al-Khwarizmi

These uses of 0 remained as a place holder, rather than a number on its own. The acknowledgement of 0 with its unique properties started to develop in the seventh century AD in India. Here, mathematicians not only used small dots to represent zero as a place holder, but they also recognized 0 as having the null value, namely, ‘Sunya’. It is around this time that Indian mathematician, Brahmagupta, showed that subtracting a number from itself resulted in 0, and identified 0 as the ‘additive identity’, meaning a number add 0 gives you the original number. In the very same book, he states that the product of 0 with any number is also 0. Although his understanding of dividing by 0 is very different from the modern one, his work on 0 as well as many other areas of mathematics such as Algebra, had a significant impact on the development of mathematics. From India, Brahmagupta’s understanding of 0 made its way into Chinese mathematics and eventually into the Middle East, where mathematician Al-Khwarizmi studied Indian arithmetic and began linking it to formulas he called ‘al-jabr’, the etymology of modern word “Algebra”.

He is responsible for introducing the Arabic numerals, and began giving zero the symbol ‘0’, the oval shape we all familiar today.

Liber Abaci

Zero then continued to migrate around the world before breaking into European mathematics during the 1100s. Many Italian mathematicians attempted to introduce 0 to the “mainstream mathematics”. In particular, Fibonacci’s book *Liber Abaci* gave many applications to numbers including 0, writing about calculations such as money-changing and commercial bookkeeping. His work was well accepted across Europe and had a significant impact on European mathematics. Since then, the concept of “nothing” became widely accepted. Zero now plays a role in almost every fields from physics to economics to computing.

Throughout its development, zero is one of the most controversial ideas. In Ancient Greece, where all mathematics were based on geometry, the idea of “nothing” meant there was no geometrical correspondence, and hence, no math to ponder. Even till this day, mathematicians continue to debate over whether to classify 0 as a natural number. However, it is undeniable that 0 has hold a crucial place in modern mathematics, and its presence should never be taken for granted.

0	1	2	3	4	5	6	7	8	9	10	11

= 5

= 11

ENVIRONMENT

What the King's Speech means for fossil fuels

— Last week, King Charles – an avid environmentalist – read out a bill to increase oil and gas extraction.



Prime Minister's Office, 10 Downing Street and His Majesty The King, under an Open Government Licence / Envato Elements / Abdallamagdy CC BY-SA 3.0 / Gary Bembridge CC BY 2.0

Environment Editor
SIMRAN PATEL

His Majesty King Charles III made his first parliamentary opening speech as monarch on 7th November. Every year, the speech outlines which laws the government is set to pass over the next year. This year's speech announced the Offshore Petroleum Licensing Bill, which if passed would mandate the North Sea Transition Authority to hold licensing rounds for exploring North Sea oil and gas at least once a year. Prime Minister Rishi Sunak believes that drilling North Sea oil and gas will make the UK's energy supply more secure by reducing imports. The compulsory annual licensing rounds will proceed if the UK meets two conditions – being a net importer of fossil fuels, and its carbon emissions from extracting and refining British gas being less than imported gas.

However, the carbon emissions from burning this gas or oil are not mentioned in the bill. The International Energy Agency said in their 2021 report that no new oil and gas fields are compatible with net zero by 2050, so critics think the Offshore Petroleum Licensing Bill shows the government's unwillingness to meet international climate goals. If the UK exports any new fossil fuels it extracts, not only will domestic energy security be un-

affected, but the carbon emissions from burning them will not count against the UK's net zero plans as well. The UK currently exports 80% of its North Sea oil.

Chris Skidmore, Chair of the UK's Net Zero Review, opposed the bill in the parliamentary debate following the King's Speech. "I cannot be put in a place of supporting new oil and gas licensing when this is not needed," he said. "You know I'm not some eco-extremist because I signed net zero into law, which is the very bare minimum we could do."



Critics view the Offshore Petroleum Licensing Bill as a stunt to get votes at the expense of the planet.

Given that the Labour Party's green energy strategy includes ending North Sea gas exploration, critics view the Offshore Petroleum Licensing Bill as a stunt to get votes at the expense of the planet. The bill joins this government's recent string of controversial environmental decisions – notably the approval of the Rosebank oil field in the North Sea, the five-year delay on banning petrol and diesel cars, and opposition to expanding the London Ultra Low Emission Zone.

In the King's Speech, His Majesty said, "This Bill will support the future licensing of new oil and gas fields, helping the country to transition to net zero by 2050 without adding undue burdens on households." This sounded unusual given His Majesty has advocated for our planet as Prince of Wales since 1970 – when he spoke of a "growing menace of oil pollution at sea, which ... destroys tens of thousands of sea birds." However, whether or not His Majesty personally opposes the fossil fuel exploration bill

he was made to read out last week will probably never be made public. King Charles will also deliver an opening address at COP28. The Sustainable Markets Initiative, a coalition of private enterprises founded by His Majesty, is a strategic partner of the COP28 Business and Philanthropy Climate Forum running parallel to the main conference.

Although the King is passionate about sustainability, the monarchy and fossil fuel industry both have bad reputations

among some for overexploiting natural resources and hoarding wealth. Therefore, I wanted to conduct a study to find out if opinions on the monarchy and the environment are related. Last Thursday, I asked 60 Imperial College students on whether they support the monarchy and whether they support new oil and gas projects. 29 (48.3%) students condemned new oil and gas projects – of which 15 were against the monarchy and eight supported the monarchy. Of the 16 (26.7%) students who supported new oil and gas, five were against the monarchy and another five supported the monarchy. The remaining 15 (25.0%) students did not express strong opinions on either the monarchy or new oil and gas, with seven feeling neutral about both topics.

The significance of a pompous ceremony to open Parliament and the importance of ending fossil fuel exploration will both be debated for years. But if one of the most respected people in the world cannot prevent possibly planet-wrecking laws, who will? Perhaps William, Prince of Wales will have a greater role as the monarchy's environmental steward. One of the best examples of Prince William supporting green initiatives was held on the same day as his father's speech – see the next page for more.

Exploring the Earthshot Prize 2023, from carbon capture in soil to sustainable fishing

An annual celebration of green initiatives from across the globe.

Deputy Editor-in-Chief
ZANNA BUCKLAND

Tuesday 7th November saw the Earthshot Prize Ceremony 2023 take place at Mediacorp Campus in Singapore, hosted by actor Sterling K. Brown. Launched in 2020 by Prince William, the prize aims to recognise outstanding and innovative contributions in the environmental technologies sector and put the winning start-ups on the map for others in their respective industries.

Last year's winner for the category 'Build a Waste-Free World' was Notpla, a start-up founded by graduates from Imperial College that has developed a biodegradable packaging plastic derived from seaweed. Since being awarded the prize, Notpla has achieved a B-Corp certification, and been named by the Dutch government as the 'first and only' plastic-free single-use plastic alternative.

There are four other prizes to be won besides the waste-free category – these are 'Protect and Restore Nature', 'Clean Our Air', 'Revive Our Oceans', and 'Fix Our Climate'. To advance and support their business development, each winning start-up receives a £1 million grant, and all finalists (three per category) are admitted to The Earthshot Fellowship Programme for a year.

Winners for 2023

Acción Andina, the winner for 'Protect and Restore Nature', have harnessed the Incan 'Ayni and Minka' principles for forest restoration in the Andes mountain range. The start-up's name translates to 'Andean Action', which is fitting given the scale and ambitions of the team. Their hope is that community engagement for effective restoration efforts will solidify the Andes forests as a nature-based climate change solution. The initiative is also providing benefits to local people by improving food and water security.

The WildAid Marine Programme are working towards the '30 by 30' target for protecting 30% of the planet's biodiversity. The non-profit, which is the winner for 'Revive Our Oceans', is targeting marine protected areas, which are typically more difficult to manage and enforce than terrestrial habitats. Operating all over the world, WildAid seeks to equip sustainable fisheries and marine protection agencies with the tools and tech-

nology to support their conservation goals.

The winning team for the 'Fix Our Climate' category are promoting regenerative agriculture; their name, 'Boomitra', means 'friend of the earth' in Sanskrit, and this is exactly what they are – a 'soil carbon marketplace' using the concept of carbon credits to reward farmers for implementing sustainable practices that improve soil health. Healthy soil has the potential to store several gigatonnes of carbon dioxide a year, so incentivising this could hugely benefit climate change mitigation.

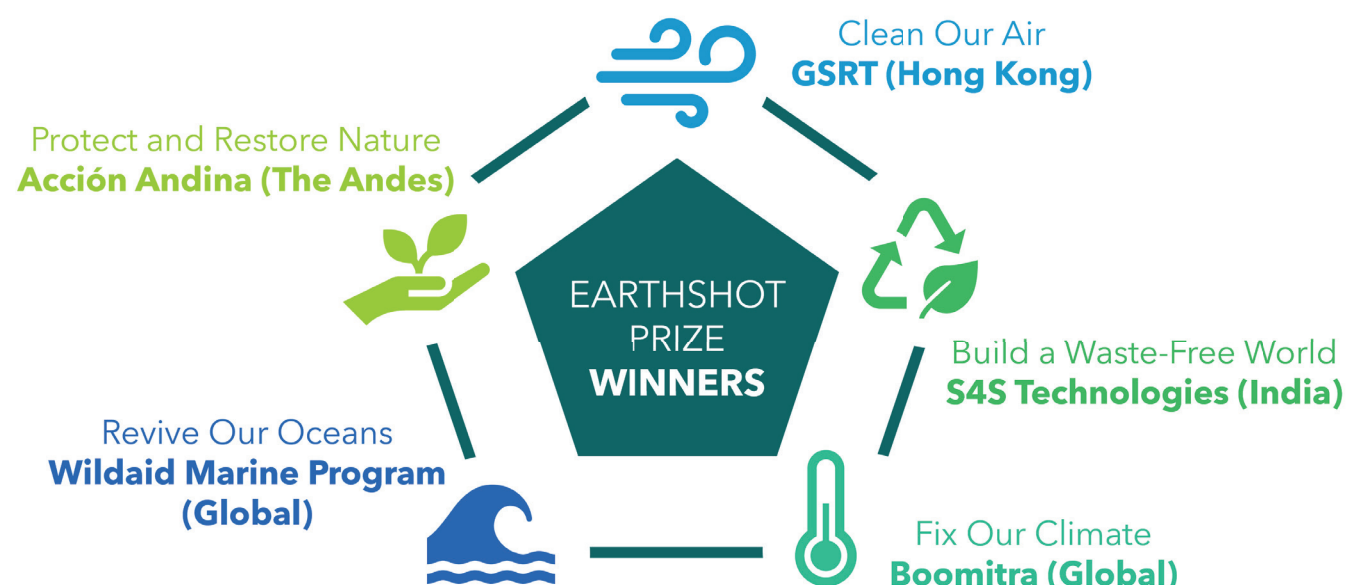
S4S Technologies is a start-up based in India who are combatting food waste through supporting smallholder farms to preserve their produce for longer. The team particularly focuses on empowering female farmers and entrepreneurs, and is even teaching them how to use preserved food waste to produce other commercial food goods like ketchup.

The most exciting announcement for me personally is the winner for 'Clean Our Air', as they are based in my home city, Hong Kong, and are also materials-focused. Green, Renewable, Sustainable Technology (GRST) has created a more sustainable production line for lithium-ion batteries – a key component in electric vehicles – by binding the materials with a water-soluble composite. This makes them easy to separate, and hence more easily repurposed at the end of the battery's life. GRST's method also results in fewer emissions from material extraction and during battery production, as well as an improved battery life.

Get nominated for the prize

Imperial College has also recently been awarded the status of 'Official Nominator', and its nomination panel (featuring Alyssa Gilbert, Dr Fabian Lim, and Dr Gbemi Oluleye)

will be on the hunt for startups founded by its own students that are making significant leaps in climate and environmental technology. If you are interested in being considered, follow this QR code to the panel's nomination form, or direct questions to Dr Fabian Lim, Industry Partnerships and Commercialisation Senior Executive at Imperial.

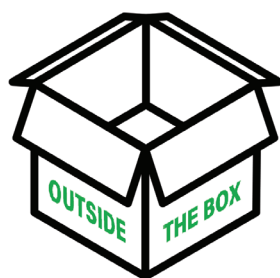


Countless futuristic science-fiction worlds feature tram, light rail, or maglev (trains that utilise magnetic levitation technology) networks as their primary mode of transportation, and maybe there's a reason for that.

Picture this: you leave your house and walk to the nearest tram station, where you wait for 5 to 10 minutes to start your journey. There is no traffic noise, besides the sounds of wheels on tracks, though taxpayer money goes towards making sure there is minimal squeaking and screeching (unlike on the underground) – or better yet, investment in super-conductor maglev technolo-

g fellow commuters, and don't mind striking up conversation with regulars on your route. In fact, your community generally feels friendlier and fuller of life. The reliable nature of the trams means you can afford to feel relaxed on your journey and bide your time reading or enjoying the local wildlife, which has been somewhat restored. Occasional

delays are inevitable, but a collective understanding of this fact, as well as work-



of a London without private cars is unlikely to take hold across the whole city any time soon. However, there are a couple of light rail lines that function in the realm between trains and trams; London Trams (previously Tramlink and Croydon Tramlink) and the Docklands Light Railway. These are part of the larger Transport for London (TfL) network and service only specific areas of the city.

My own experience with trams comes from growing up in Hong Kong, where a tram line introduced at the beginning of the twentieth century still operates through the city's central finance and commerce hub. Though supplement-



A tram in Lisbon, Portugal. ADDICTIVE-STOCK

so aren't hindered by other vehicles on the road. Though slightly delayed in its opening, the tram network scored a 99%

satisfaction score in a survey carried out by

Watchdog Transport Focus, and also made a profit two years earlier than expected.

Many European cities employ tram systems – Berlin, Amsterdam, Budapest, Lisbon, to name a few – and some US cities like San Francisco and New Orleans operate streetcars. The possibility of London similarly revolutionising its public transport network is something I often ponder, and it makes for fun thought experiments like the one

Converting roads into tram rails could be revolutionary, so why aren't we doing it?

WITH ZANNA BUCKLAND

gy has obsolete is breathtaking is powered by which, by now, is entirely from resources, and so you when you breathe in, the air feels clean and crisp, and your lungs are happier for it. You exchange smiles with your

you rarely get in trouble for being a little late. The tram windows can be rolled down in summer and there is heating during the winter, and the fares are equitable, making the system accessible to all.

According to a report from the UK Department of Transport, the transportation industry contributed the most greenhouse gases of any sector in 2021. These largely consist of emissions produced by petrol and diesel cars, which emit more per passenger than equivalent travel by public transportation. The two primary solutions to this are adoption of electric vehicles or a switch to modes of transport that are more environmentally friendly, which includes railways, underground trains, and buses, but also trams and light rail networks.

Unfortunately, the utopian imagining

an effective and mode of travel across the district and are also celebrated as an icon of the city. It is described as the 'most affordable, convenient, and greenest public transport mode' Hong Kong has to offer.

Trams have major benefits in being highly energy-efficient (more than most transportation modes), sustainable over long periods of time, and their rails can potentially be recyclable. They can also be built to be longer than regular buses, so can carry more passengers. These qualities also lead to the additional benefit of having lower prices per passenger, making it affordable and accessible to a wide range of transport users.

In 2014, Edinburgh opened Edinburgh Trams, a modern version of the tram system they had over a century ago when roads used to be mixed mode and chaotic. The new trams run on isolated rails,

at the beginning of this article.

Alas, this idealistic reality will likely remain just that, due to the huge infrastructure overhaul and the amount of public engagement and commitment it would require.

If even a small fraction of the people who drive a car to work opted for the Tube or buses instead, the resulting influx of activity and pressure on public transport systems could be a driver for TfL or the UK government to make more deliberate and long-lasting improvements to existing infrastructure. It might take a while to get to the point where we can think about turning the dream of completely clean energy-based transportation into reality, but a change in behaviour among transport users is needed now for a tram-filled London to become a future goal rather than an ideal.



Imagining a utopia featuring eco-friendly trams. Wikimedia Commons

COMMENT

Life used to be binary – it no longer should

We must move on from our black and white approach in seeing the world towards a hexadecimal one

Comment Writer
EMILY JACOBI

Computer Science began with the encoding of information into little binary bits: Zero voltage was encoded into a zero, and any voltage above a threshold was a one. This simple system satisfied the study of computer science until more information was encoded into a more efficient system – introduce the Hexadecimal. Now instead of an on-off system, there were 16 options: 0 to F. The binary system, despite still being the fundamental way to encode information into hardware, is not applicable to our society. The binary system of classifying our people and diverse range of humans that live together in the community of our earth is outdated, even if it is fundamental to our digital world.

He, She or They

Surveys in the 21st century now include a third gender option. Despite the multiple different gender identities present in our society, including them all would add a level of complexity to our data processing algorithms that we may not be equipped with to handle. I am all for including every gender and sexual identity into surveys because they best represent the diversity we surround ourselves with. But processing all that data introduces so many independent variables and categories that we would need to gather a lot of data for each category.

As an example, take running a half-marathon. Last weekend, I ran one and I checked the times on-

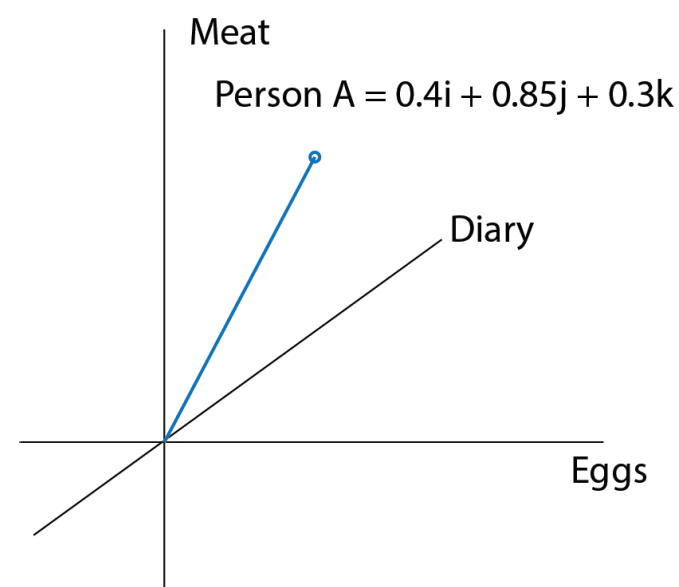
line. Nowadays, marathons split their achievement groups into male, female, and non-binary, which is wonderful and balanced. With this system, men can compare their times to 300 other runners – however, the non-binary group only had two runners. The data was slim. The question I pose is if we added all genders into the half-marathon category, would this aid our society in becoming more inclusive, at the cost of lowering the quantity of specific data we have?

All-or-nothing in diet

On another note, let's talk about veganism and dietary requirements. Even if we listed all requirements into a survey, there is still a degree of "off or on". For example, you may classify yourself as a vegan, yet you still can enjoy that one parmigiano cheese from your home country - a level of complexity added into the equation. Are you full Vegan? No. Vegetarian? Not really. You still abstain from all other animal products but not all.

The binary concept of all-or-nothing, which is an unbalanced and unhealthy way to approach life, has become so rooted into our society that we feel a need to constrict ourselves to labels. There is no directionality. Take my friend Michael, who is a directional vegan. He drinks coconut milk and eats coconut yoghurt, but he loves cheddar cheese and milk chocolate. He does not eat meat or fish from the industry, but he may go for a freshly fished cod from the backyard pond. How would we define that? I thought of perhaps using the vector math with each independent category being represent-

ed by a orthogonal axis and the person as a vector. This allows a spectrum to be applied in multiple dimensions.



For example, taking three categories, we can graph them on a 3D plot, with each orthogonal axis representing a percentage from 0-100. A 3D vector gives a level of "directionality". One dimension per category can give a spectrum on each aspect of our lifestyle.

Are spectrums a solution?

The concept of orienting on a spectrum already exists in the conversation regarding on sexuality. The label bisexual does not always define a 50-50 split of love and attraction to males and females. Instead, it could mean a 30-70 or 90-10 split, whichever way you wish to define it. It also does not include the variable of time. If we graphed our sexuality over time, for some of us it may just be a constant horizontal line. But for others, in an abstract sense, it may be a curve: quadratic, cubic or whatever complex shape it might take. I would be interested to see how individuals feel about broadening the labels existing within our society and if the majority prioritises simplicity over specificity or vice versa.

In the defence of choosing simplicity, it allows us to lose the sharp edges that categorise us. On the other hand, specificity makes the data we gain about our society so much more interesting. Furthermore, within each label, would we be able to add a range? Instead of defining oneself as a 100 percent Swede, can we split our nationalities into a pie? Within our generation it is very common to meet half, mixed, born-here-lived-there people that no longer live in the "on-off" state of being that we are so used to. It would be great if surveys asked two more questions in addition to the typical "What is your nationality?", for example, "Where did you grow up?" and "What culture do you best associate yourself with?". Of course, a null option for the latter question should also be fine for those international students that are split among so many cultures, that they do not find themselves representing any of them.

This topic has long been debatable, and it will for sure continue to stick in my mind. I would be interested to hear other people's opinions – or better off, comments.

We need more sixth form publications like The Sunday Diplomat

The importance of sixth form publishing in nurturing the new wave of journalists

Comment Writer
MAHEDY BASHER

I arrived in the UK in sixth form with not only the aspiration to study medicine, but also a desire to experience student life as far away from home as humanly possible. This meant joining a host of societies – some I stuck with, others, I ended up dropping. One of my regrets was not remaining more involved with student journalism. Upon arrival, I quickly joined my school's publication. I enjoyed writing and was eager to meet other students passionate about social issues and current affairs. However, what I found was something all too common with student publications – an irregular publication schedule, a cliquish network unwelcoming to newcomers, and a lack of structure. I would have loved to write for an outlook like the BBC or the Economist, but this was impractical at my school.

Well, unavailable until now. I recently became familiar with *The Sunday Diplomat*, an online media start-up founded by Si Kai Feng, a student studying in the UK. Feng entered his sixth form and was met with similar frustrations. Whereas I moved on, he founded *The Sunday Diplomat*, initially with a group of friends from other sixth-form schools in the UK. A year later, the news outlet has grown massive and now boasts forty writers and editors from all six continents as the staff of a now officially incorporated company. Publishing daily, and featuring strict writing guidelines, *The Sunday Diplomat* resembles more a professional outlook like *Vice*, or even *The Economist*, than a student publication. Arguably,

its website looks even more professional than the *Daily Mail's*.

They have also gathered a mass following. With tens of thousands of readers from over a hundred countries, they are now the largest sixth-form publication in the nation, surpassing traditional school-backed juggernauts like *Economics*. The *Sunday Diplomat* is now discussing expanding to other verticals such as entertainment and formats like YouTube or podcasts.

The success of *The Sunday Diplomat* should encourage other sixth formers to undertake similar

projects, building organizations across schools, countries, and even continents. A global outlook provides unique opportunities for students to authentically experience the journalism industry, acquiring invaluable work experience and skills, while avoiding the pitfalls that occur when the environment of a single school is too small to support regular and rigorous publication. It can help with inspiring our youth to pursue a career in journalism, supporting this crucial industry that regulates the government and exposes corruption – an industry that is facing an acute shortage of writers today.

The UK and the world need more projects like *The Sunday Diplomat* to give voice to the next generation of thinkers. If you want to learn more about the project which re-imagines what sixth-form journalism in the UK can be, consider giving thesundaydiplomat.com a visit.



The Sunday Diplomat provides a space for young journalists to grow Mahedy Basher

ARTS

October Show review

A double bill of show-stealers

Arts Writer

SOPHIE RECK-POINTON

On the 11th, 13th and 14th of October, Musical Theatre Society (MTSoc) and DramSoc teamed up to present two shows on the same night, creating a unique theatrical experience of like which will likely never be seen again.

The Bald Prima Donna by Eugene Ionesco, performed by DramSoc, opened the evening. The lights dimmed as all eyes turned towards the stage, where Mrs. Smith (Molly Clifford) stepped into the lonely spotlight to deliver the opening lines; this may be the one moment of seeming normality in the play – the rest is a flimsy veneer over the absurdity lying beneath that Ionesco systematically destroys. Conversations chase themselves in circles as Mr. Smith (Jack Finnis) and Mrs. Smith discuss the family of Bobby Watson, whose husband, son, daughter, uncle, aunt, brother, sister and possibly second brother were all also called Bobby Watson. Soon afterwards, Mrs. Martin (Natasha Keith) and Mr. Martin (Dan Cornell) realise, after relating a long series of curious and bizarre coincidences, that they are, in fact, husband and wife, despite having no memory of each other when they first entered the room. Then, the Smith's maid, Mary (Stuti Pathak), reveals that Mr. and Mrs. Martin aren't actually married and that she herself is Sherlock Holmes, and leaves the stage to the sound of the *James Bond* theme tune. The Fire Chief (Michal Horanský) should only be mentioned sparingly,

otherwise this newspaper would become an unending loop of a story about his brother-in-law.

To summarise, there were times when baffled fascination morphed into a feeling of agonised desperation for some scenes to finally come to an end (though Ionesco may have intended for this all along), but other times when the audience was left in stitches at the farce that was being spun out of polite English society. The acting was superb: the Fire Chief's self-satisfaction was perfect, and Mrs. Smith's volatility fitted wonderfully with the script.

After the much-needed interval, MTSoc's *The Final Heist* began. An original student-written musical by Aleera Ewan (exquisitely interspersed with orchestrations by Solen Marqueste, assisted by Hannan Seyal), *The Final Heist* follows the story of Mia (Cecilia Longoni), a lapsed professional thief, trying to take up the mantle of her older brother (Gabriel Swallow) by robbing a highly sought-after poem. An enjoyably suspicious character going by the pseudonym the Collector (Jonah McDonald) tempts Mia into getting her close-knit group of specialised thieves back in the business by offering her a million dollars to steal the poem, desperate for no one else to read it but him.

Mia's team, who had codenames such as the Spider (Aanaya Miah), the Acrobat (Dana Whigan) and the ecoy (Harry McCarthy), embarked on pulling off the last heist of their careers, evading security guards and lasers through brilliantly executed song and dance (credit due to Amy Thornton, choreographer). As well as allowing each of them to shine, Ewan revealed the flaws and fears

of her characters with startling ease, and every actor rose to the challenge with aplomb.

Everyone in the UCH was blown away by the combination of Ewan's lyrics and Marqueste's music; all ten(!) impressive musical numbers easily could have been extended with the whole thing being turned into a full-length musical, which would have allowed the characters more time to develop and made the Collector's absolution more believable. While the set was minimal and initially off-putting, in the end it hardly mattered as the actors believed a hospital, museum, and a maze-like, booby-trapped basement was onstage, so the audience believed it too. The songs 'Little Proposition' and the titular 'Final Heist' were particularly catchy, but it is admittedly difficult to pick out the brightest stars in a sky full of them. All in all, the musical came across as a fun-filled conversation about self-belief and self-destruction in a world like our own, but better. A half star has to be knocked off for the fact that *The Final Heist* is not on its way to the West End at the time of printing.

The production team must have all been crazy or inspired, but they certainly created something unforgettable. It took a producer, (Meg Spiteri) an assistant producer (Basit Khan), a stage manager (Pip Moss), a lighting designer doubling as an assistant stage manager (Jarek Ciba), a lighting operator (Rachel George), two sound designers (Ka Jun Cheng and Joshua Henry) and a set and props designer (Liberty Wright) to pull the October Show off. Congratulations are in order.

Acknowledgement should be given to the minor miracle that involved building an entirely new stage on



Top: DramSoc cast in *The Bald Prima Donna* DramSoc
Bottom: Imperial MTSoc cast in *The Final Heist* MTSoc

Death and the diva

A review of Marina Abramović's *7 Deaths of Maria Callas*

Arts Editor
GILBERT JACKSON

Conceptual and performance artist Marina Abramović joins with the ENO to recreate seven of Maria Callas' most famously performed arias in a feast for the senses, tying together extracts from various operatic staples, experimental music by Marko Nikodijević and filmed accompaniments directed by Abramović herself and costarring Willem Dafoe.

The name Maria Callas is known throughout the opera world, however it often stirs mixed reactions: In one camp, there are those who hold her to be a paragon of bel canto singing and a revolutionary figure in opera, and there are those who believe her voice to be grating and her life plagued with scandal (although a revisionist would say that they were fabrications of tabloid press.). In present day, Marina Abramović has produced and directed an operatic exhibition into the vibrancy, sexuality and fortitude that Maria brought to her numerous operatic roles.

The production featured well known arias such as *The Habenera* by Bizet, *Un bel dì, vedremo* by Puccini, and, of course, *Casta Diva* by Bellini within a collection of vignettes; each aria sung masterfully by a suite of expert and talented operatic stars who sensitively brought forth a banquet for the ears. Accompanying each aria was a short film segment directed by and starring Abramović herself alongside actor Willem Dafoe. The films themselves complemented the arias in both their sensuality and their dramatic character; although, at points, one could argue that they appeared to be over-indulgent in tone. At several points, particularly during the arias from *Madame Butterfly* and *Tosca*, it detracted

from the appreciation of the music in favour of cinematographic excellence. Moreover, at points one lost meaning of what the films were trying to convey, an issue which was particularly apparent during the *Casta Diva* segment where the roles are reversed and a Dafoe in drag plays the role of Norma instead, it is not clear, of course, why this artistic liberty was taken, and, in trying to ponder such reasonings, it offered merely as a distraction from the beautiful singing of Sophie Bevan.

What made this production shine, however, is its final vignette, 'Maria Callas dies of a broken heart'. The composer Marko Nikodijević beautifully weaved a textured orchestration for the final vignette which intermingled quotations and motifs from all the arias performed previously into a chaotic stream of consciousness which complemented the live acting and speech provided by Abramović. We observe her final moments as she tries to rationalise whether she is dead or alive, and reflects back at her friends and relations who have since left her alone in her apartment – a wonderfully created scene which ends with Abramović on stage with a recording of the diva herself singing *Casta Diva*, which ends abruptly as the stage turns to black.

Throughout the production, one constantly rides a rollercoaster of emotions from start to finish, and sees new light being brought to these staple arias performed by Callas, invigorated by carnality, mortality and melancholy, all of which build up to the final moments as we see the diva herself experience the emotions of her characters one by one. While it is possible to feel distracted from the music being performed, and certain artistic liberties have been taken both with the life of Callas and with the story telling of the arias themselves, it is no doubt a production of epic proportions and one which triumphs in its overall ingenuity.

Marina Abramović at the Royal Academy



23 September 2023 - 1 January 2024
Burlington House
Royal Academy of Arts



Marina Abramovic in the role of Maria Callas Tristram Kenton

BOOKS

The sad men on our bookshelves

To the maestros of male melancholy and mellow self-expression, in honour of International Men's Day.

Books Editor
MOHAMMAD MAJLISI

This Sunday, November 19th, marks International Men's Day, a day which is, ironically, only cared about on International Women's Day, as shown by the spike in Google searches for a men's day in March.

My experiences have shown, and I'm sure women at Imperial can agree, many men lack not only external sympathy, but also internal emotional regulation. Social expectations dictate that men are told not to express themselves, and to repress their negative emotions; that is to say, emotions which are perceived as feminine or weak such as sadness, sympathy, anxiety, or even tenderness until they explode. This idea perpetuates itself in art, literature and philosophy, which (again ironically) are some of the few media through which men have been able to reveal their intimate thoughts. The Western canon is dominated by men, and works by men focus predominantly on ideas rather than feelings. Maleness is associated with thinking and rationality, and the male protagonists of many of these books represent ideologies and social movements, instead of being people of their own right, with all the messy emotions beneath them.

Similarly, the tortured genius is a trope

to this day most associated with men, primarily due to sexist attitudes that led to women's contributions and suffering being overlooked. Think of writers such as Hemingway, artists like Van Gogh, lyricists like Kurt Cobain. There is a 'great canon' of sad men who channel their experiences into beautiful pieces of literature, whether that is novels, essays, their personal diaries, or lyrics. Similar to the Western canon, male suffering is present only to represent an idea - in this case, the idea of the genius.

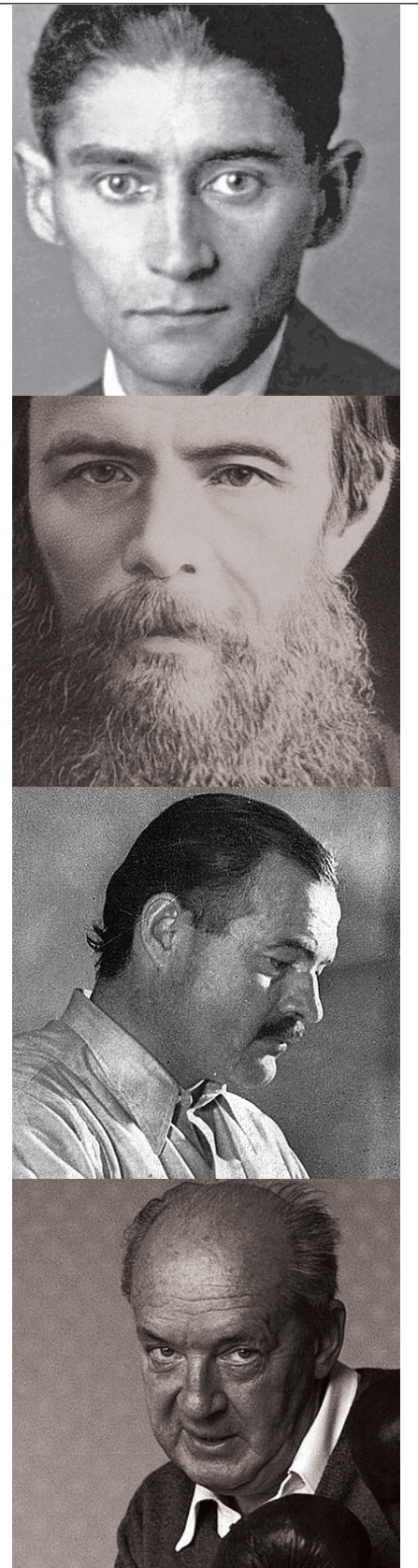
Modernist literature flips this status quo on its head: the works of Kafka and Dostoyevsky (one of my personal favourite 'sad men') are lauded not just because of their technical ability in writing. Kafka, with his obscure prose involving winding sentences, which even in translations mirror the claustrophobic, red-tape-laden worlds his stories take place in, is able to present his alienation with society, and nervousness and tension within.

Dostoyevsky with his wry humour and vivid descriptions of the slums of St. Petersburg captures similar sentiments of alienation, but his standout characters such as the Underground Man capture exactly what it feels like to be bullied and socially isolated. When I was 15 and a mess of anxiety, bullying and self-loathing, I finally felt understood when I read *Crime and Punishment*. Raskolnikov, the protagonist, was like a mirror - a former

student tormented by the notion that he had to achieve success; that, in his egoistic worldview, he alone was to rise up and be a great man. I understood exactly how it was like to be in that situation. That burning desire within me to become known and rise above my school peers who bullied me, despite being top of the class (this is important not because I demand your academic validation, but because Raskolnikov was the same within the social makeup of the student class he belonged to) was for once validated. I had never felt seen in such a raw and vivid way before.

As James Baldwin eloquently put it: 'You read something which you thought only happened to you, and you discover that it happened 100 years ago to Dostoyevsky. This is a very great liberation for the suffering, struggling person, who always thinks that he is alone.'

Trauma, unspoken of by men, is brought up in literature authored by males both implicitly and explicitly. Nabokov, who himself was sexually abused as a child, went on to write *Lolita*. Kafka, emotionally abused by his father, expresses themes of social pressure, or the oppression from a vague patriarchal figure - whether that be the protagonist's father in the short story *The Judgement*, or the entire court apparatus in *The Trial*. Ernest Hemingway's prose is known for its short, clipped, matter-of-fact nature, writing from a man who saw the horrors of the Great War firsthand. F. Scott Fitzgerald's *Tender is the Night* is essentially a roman-a-clef about the events of Fitzgerald's life after *Gatsby*, and the dissolution of his marriage to Zelda Sayre. The book that inspired me to write this



Top to bottom: Franz Kafka, Fyodor Dostoyevsky, Ernest Hemingway, Vladimir Nabokov [Wikimedia Commons](#)

piece, Leo Tolstoy's *The Death of Ivan Ilyich*, is about a man who is faced with the truth of his own mortality, and the fear his life was lived in vain.

Whilst the Western canon may be studied in schools and promoted ideas which have shaped the world, it is the sad modernist men who had the bravery to write with candour and the dark shadows within their souls that have ultimately provided literature with a vivid relatability. In doing so they have helped shine a light for young men, who I once used to be, trying to find solace in this absurd world we live in.

FOOD&TRAVEL

Let's climb the Bugaboos, ey?

Elliot and co. climbed the Canadian Bugaboo mountain range this August to experience a life that many of us may never; the life of mountaineering.

Travel Editor

CHARLOTTE PROBSTEL

Meant only for the strong-hearted subgroup of the human species, mountaineering is an activity similar to investing in cryptocurrency - high risk, high returns. Yet, there is nothing like it. Often there are neither railings nor wooden bridges to guide the

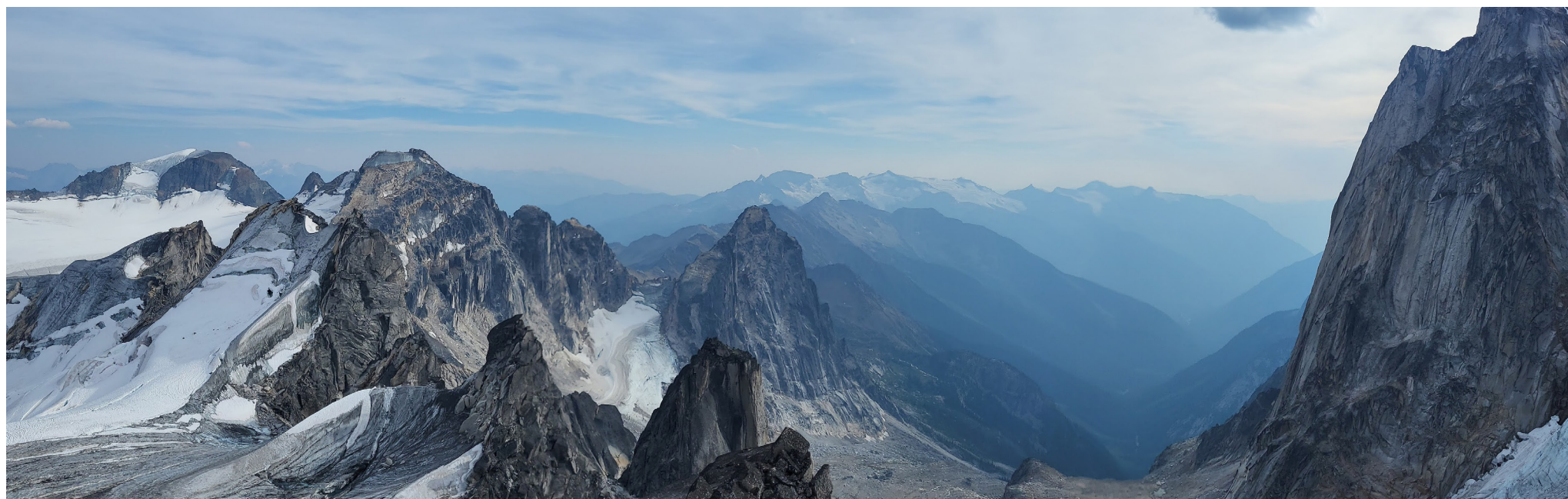
Canada out of a pure enjoyment of mountain climbing.

The choice of Canada as the destination was not arbitrary. The Bugaboos, with their spiked mountainous terrain, presented a thrilling challenge. Elliot explained that the decision to venture outside Europe added an element of novelty to the expedition. The Bugaboos, he noted, were unique, offering an experience distinct from the familiar European landscapes.

Organising such an adventure is no small feat, par-

of the financial burdens. Luckily, all was granted in advance by Imperial's own Expedition Board.

For Elliot, a climber with three to four years of experience, this expedition was a departure from previous summer tours. Bosnia, the destination of the previous year, was overshadowed by the sheer wilderness and challenges of the Bugaboos. The trip, while beginner-friendly, demanded keenness and adaptability. Elliot pointed out that for those inclined towards a more



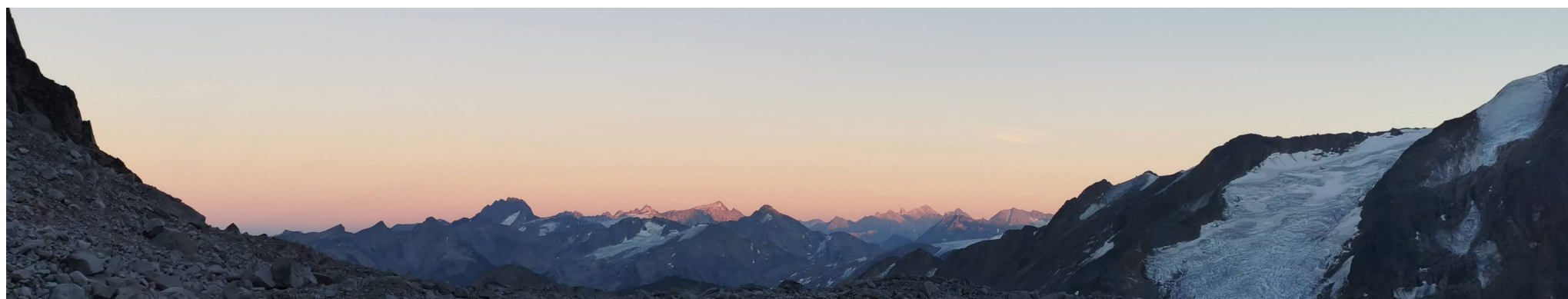
The granite spires are popular to climb. Elliot Badcock, Ben Schuster, Piers Heathcote, Tom Stringer, Reuben Cruise, Nick Koukoulekidis

exploration – only ice and rock for the mountaineers to scramble up on, requiring a level of expertise and sangfroid not common to Imperial students. So, meet Elliot, a third year Mathematics PhD student, who went on a three week expedition with five other post-graduate students to the Purcell Mountains in British Columbia,

particularly when the participants are not well acquainted. The first meeting, a five a.m. rendezvous at the airport, marked the beginning of a journey that required meticulous planning and financial commitment. Flights were £750 per person and additional expenses added up, but a family member of Elliot in Alberta alleviated some

strenuous, alpinist-style climbing, places like Chamonix in France might be more suitable.

However, with the thrill came challenges, and one memorable aspect was the arduous approach to the Bugaboos. A 4km walk from the car park, coupled with a 1km ascent, carrying 70-80 pound backpacks in scorch-



The view at high elevation on the two day climb was amazing. Elliot Badcock, Ben Schuster, Piers Heathcote, Tom Stringer, Reuben Cruise, Nick Koukoulekidis

ing heat, set the tone for the expedition. One particular climb tested their endurance, leading to a three-hour water shortage in a seven-hour ascent. The moment they reached the summit, the feeling of 'being the tallest people in the world' blended with the stark reality of dehydration, a reminder of the unforgiving nature of the wilderness.

Elliot acknowledged the impact of climate change on the conditions they encountered. Glacial deterioration and rockfalls, consequences of a changing climate, added an element of unpredictability. Despite the challenges, he recalls the breathtaking moments - crossing precarious ice bridges, gazing at the stars in the unpolluted night sky, and the surreal experience of climbing through thick wildfire smoke, reminiscent of scenes from *The Lord of the Rings*.

When asked about the possibility of doing things differently, Elliot pointed out the importance of timing, suggesting that an earlier season, perhaps June or July, could mitigate some of the challenges posed by weather and changing glacier conditions. Responsible climbing, meticulous route-planning and a keen sense of safety



The Bugaboos, with their spiked mountainous terrain, presented a thrilling challenge.

were emphasised throughout the expedition.

In their free time, the team engaged in activities ranging from card games to cooking elaborate meals. The camaraderie extended beyond climbing, with stories shared, laughter echoing in their camp, and friendships forming amidst the breathtaking landscapes. Elliot highlighted the importance of packing light on climbing routes, carrying essentials like water, chocolate and granola bars, along with safety equipment like ropes and harnesses.

Reflecting on the journey, Elliot expressed a profound desire to return. The relief of being alive, experienced upon exiting the airport, attested to the intensity of the adventure. As for future destinations, Elliot mentioned a desire to explore the Scottish isles and the mountainous landscapes of Sardinia.



Elliot Badcock, Ben Schuster, Piers Heathcote, Tom Stringer, Reuben Cruise, Nick Koukoulekidis

FOOD&TRAVEL

Let's roll ... cinnamon style!

Delia and Ruth, two avid lifestyle writers explore London's confectioners to bring a review of some of their mouthwatering hidden beauties

Food Writer
DELIA GINCU

Food Writer
RUTH GOH

Pophams

An East London staple, Pophams is no secret among bakery aficionados. Known for its delicious puff pastries, this patisserie has mastered the art of creative flavour combinations, be it sweet or savoury. The maple and bacon swirl, a permanent menu item, is a delectable bun epitomising all things Pophams: perfectly laminated dough, generous on the butter, and a salty-sweet ratio that hits the spot. Get it warmed up and share for the optimal experience. Also, don't neglect the ever-changing weekend specials through which visiting bakers showcase their craft. From apricot danishes to key lime pastries, these creations are any dessert lover's dream. Bonus point: their weekly announcement on Instagram always feels like opening an advent calendar window.



Maple and Bacon swirl cinnamon roll, and an almond croissant from Pophams Delia Gincu and Ruth Goh

To the delight of all lamination enthusiasts among us, London is home to a large number of showstopping bakeries. As self-proclaimed pastry experts, we endeavoured to pick some of our favourites that we consider absolute must-tries. These institutions, scat-

tered all over the city, make for a great afternoon sweet treat or Sunday breakfast, or any meal for that matter. Beware: we don't take any responsibility for any ensuing addictions.



Chocolate and pistachio swirl from Miel Instagram

Miel

When Nigella Lawson is a repeat customer, you know it's good stuff. Miel, a Fitzrovia bakery specialising in French pastries, does baking right. Its dedication to sourcing quality products (some coming all the way from the south of France) and small-batch cooking ensures fresh and palatable viennoiseries all day long. The pistachio chocolate swirl has the perfect amount of sweetness while still allowing for the nuts' taste to shine through. For those who don't love bitter chocolate, the kouign-amann, embodying French dessert mastery, is a moreish pastry that will satisfy any sweet tooth. Resident of an unmistakable blue shop on Warren Street, Miel not only excels at making mouths water, but also offers baking workshops for any aspiring pastry chefs.

Buns from Home

Buns from Home claims to make the best hand-rolled cinnamon buns in the whole country. While they set the bar high for themselves, their perfectly buttery yet light buns did not disappoint. This bakery uses the cinnamon bun as the foundational element of their menu, playing up various sweet and savoury flavours to suit different palates. For all those with a sweet tooth, the 'Chocolate and Hazelnut' and 'Dulce de Leche' buns are bestsellers, and felt worth the detour to their takeaway-only Sloane Square outlet for. Their flaky croissant-esque exteriors and sweet muffin-like interiors created a surprisingly delightful textural contrast. Vegetarian and vegan options are aplenty. Just be prepared to get your clothes flaky and your face smeared with decadent pastry cream as you munch their pastry on-the-go!



The Dulche de Leche cinnamon bun, seconds before we wolfed it down on the Tube Delia Gincu and Ruth Goh

PHOTOGRAPHY

Shout

If you've been silent too long, shouting is medicine for the soul.



Resistance. Natalia Kubica



Private Conversation. Charlotte Probstel

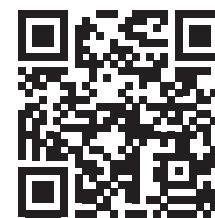
Head Photographer ROLANDO CHARLES

The act of shouting has a bad reputation, and sure, I might shout a little when I'm angry, but that's not the only valid scenario for the action. We might shout when we're rooting for someone. We shout when we're having fun, like on roller coasters or anything else that pumps adrenaline through our veins. We shout when we want other people to shout with us, and we shout when we're scared. Sometimes, we're told we're shouting when we don't think we are, and sometimes we don't shout even when we ought to.

I didn't think a single image could do justice to this theme, so in this issue I dedicate two photos to the complex action that is able to represent such a wide range of emotions.

Natalia's photo is the classic 'shout', and it's what we expect from someone at a protest, who's unhappy about the state of things. It's important to point out that this picture has more nuance than first meets the eye. The subject is shouting, obviously, but there is a faint glimmer in her eyes, a slight grin on her face. Somewhere behind that shout, there is happiness – the satisfaction that comes from opposing what we believe to be wrong

Scan the QR code to submit for the next theme 'A Sensory Experience':



and facing injustice. We love to see protagonists rise up against all odds and fight an antagonist, and I think we all ought to do more of that ourselves.

Charlotte's photo, on the other hand, presents us with a completely different kind of shout, one that cannot be heard by anyone except for the person shouting. Actually, we don't know whether they are shouting at all, but wouldn't it feel great to be suspended for a moment in time (and space) and shout it all out? It could be our sorrow, our happiness, our grief – it doesn't really matter what needs a shout. We can speculate that this is what's happening in Charlotte's picture.

It is these contrasts in interpretation that I want to make this section about. I believe all artistic media walk the boundary between the obvious and the obscure, and I implore artists to find that limit and show it to others, whether that is in writing, on film, as a painting, or in a photo.

CATNIP

Newspapers not just used for reading at STEM university

Recycling Correspondant NEGAFELIX

Researchers at Imperial College have been testing a novel application for Felix newspapers. The fibrous sheet material has proven to be robust and versatile, already commonly being used in such applications as makeshift umbrellas, decorative wallpaper, protective packaging, and as an escape from exceptionally mundane lecturers (the Puzzles section has proved particularly useful for this).

Scientists from the Department of Environmental Studies tested the multi-functional material as a sustainable alternative to using blank white sheets of A4 paper – reportedly to reduce wastage and promote a circular economy. The research team’s experiment involved building bridges out of the papers and testing their strength using water bottles, arguably lacking in robust scientific method. Unfortunately, the potential for recycling became moot when the researchers found the use of tape and Blu-tack was necessary to preserve the structural integrity of the bridges.

Editors at Felix have contested the morality and ethics of the research group’s methods given that the experiments involved destroying hours of their work, especially since these hours came from missed lectures and a lack of social engagements. Some commenters, who wished to remain anonymous, threatened to ‘destroy their public image in the next issue’, and emphasised that ‘no one will be forgiven’ for this. Another editor pointed out that ‘they also used ineffective designs where a simple suspension bridge or half-assed truss structure would have sufficed’.

This isn’t the first time an innovative application of the paper has caused Felix editors pain; Dalum Crysedale spoke out about their past experience of this, telling Catnip, ‘my mum has used it to stop our shoe rack from getting dirty – a copy of my first-ever article in the paper too’.

It remains to be seen whether any further innovative applications will be found for the paper. For now, Felix requests that researchers refrain from co-opting large quantities of the limited resource for purposes other than keeping up to date with Imperial news.



ARIES

This week your train of thought is interrupted by strikes



TAURUS

This week Israel rereleases its Lord of the Rings dub which changes to Arabic when the orcs are speaking



GEMINI

This week your hands are too weak to carry all the food you bought



CANCER

This week, bad news for anyone with Rwänderlust



LEO

This week you finally understand that there are two types of women (your second girlfriend just dumped you)



VIRGO

This week will bring wealth, fortune and gout



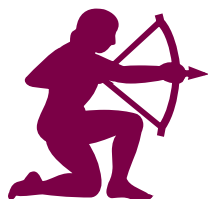
LIBRA

This week marks the end of ‘easy mode’



SCORPIO

This week the vibe shift causes largely superficial injuries



SAGITTARIUS

This week the homies humble you after misapprehending as Lynchian that which was Borgesian



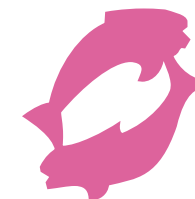
CAPRICORN

This week a constitutional crisis heralds an oncoming charismatic crisis



AQUARIUS

This week you Shazam the drone footage of the artillery strikes on the Russian trench



PISCES

This week you ruffle the hair of the little lad with the gammy leg

Students on this year's Environmental Technology MSc are taking part in Movember to raise funds and awareness for men's health.



Members of the cohort are growing moustaches, or undertaking distance challenges, to draw attention to key issues in men's health, notably prostate cancer and men's mental health.

The first is the 2nd most common cancer that men have worldwide, and represents 15% of newly diagnosed cancers cases in men. The latter represents a continued fight against the stigma around men's mental health, and in particular to avoid cases where men take their own lives, and represent 75% of cases in the U.K.

The Movember foundation creates programmes that target sensitive intervention points around both these issues to help save lives and improve men's health overall. The students are aiming to raise £1000 in support by the end of the month.

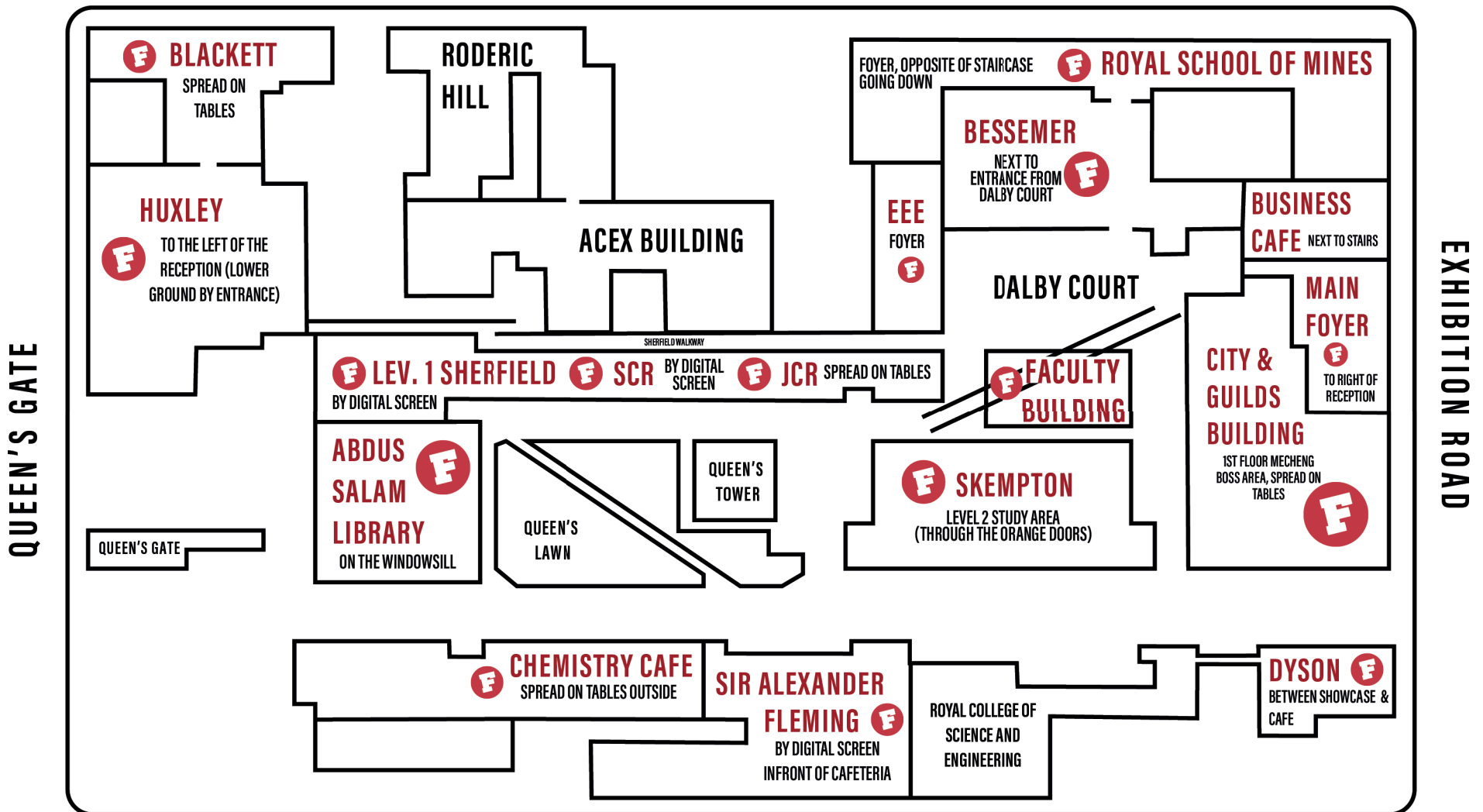


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