



To Beit or not to Beit? - History Group recommends Beit Hall and Huxley Building be renamed

Sam Lovatt Editor-in-Chief

Imperial College's History Group, formed with the directive to assess racial inequality in the university's past, has concluded with a recommendation that Beit Hall and the Huxley Building be renamed.

Suggestions to more prominently celebrate historically sidelined women and people of colour who have contributed to Imperial's history were also made.

The decision comes after nine months of discussion within the group, which was formed from a variety of College staff, students, and associates. Imperial College stress that at this time, the recommendations are just that and that no decisions have yet been made.

The next stage of the process will involve extensive consultation with students to reach definitive

outcomes for all areas of contention.

The History Group was formed from a wide array of Imperial stakeholders and includes external advisors from University College London and Oxford University. A College spokesperson stressed that the decisions which led to the report were not taken lightly and that the whole process was and will be protected by "Imperial's robust code of practice on free speech".

Provost Ian Wamsley stated that the process taken by the Group was "very much not a 'Cancel Culture' approach".

Alice Gast, College President, said "While we cannot change history, we can find ways to clarify what it means, learn lessons from it, and ensure that we are not perpetuating legacies that we find abhorrent. We stand for openness,

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Image credit: Wikimedia Commons



Image credit: Cara Burke



Protesters occupy Science Museum in response to mining company sponsorship

Sam Lovatt Editor-in-Chief

A group of around 30 climate activists occupied the Science Museum over the night of the 26th October in protest of the Museum's acceptance of sponsorship from multinational conglomerate Adani. The group are members of the activist group UK Student Climate Network (UKSCN).

Protesters occupied the Museum

for the night in full and left the next morning. Police were present but stated that no arrests had been made. This follows a similar protest attempted in June this year which was cut short due to police action, where police entered the Museum during the evening of the protest and threatened to arrest the protesters if they did not leave.

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EDITORIAL

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The Felix Editor on The Autumn Budget

When Boris Johnson was elected in 2019, I seem to have made a mistake in assuming that this would be a small 'c' conservative government. I don't think I'm in the minority here - it would be hard to assume

anything different on the basis of the austerity under Cameron and Osborne. Not to mention that conservatism is fundamentally a low-tax, small government belief system and these are some of the most

cardinal ideals that traditional voters will have had in mind when voting for the Tories. For better or for worse, we are incredibly far from that world in October 2021. This week's Autumn budget further cemented the strange, chimeric leadership style seen so far by Boris' government.

Some of it will have gone down well with traditional voters: cuts to business rates in the hospitality and leisure industries; alcohol and fuel duty were cut to ease the rising cost of living (although weirdly, short-haul flight duty was also cut - an interesting bone to throw three days before the most significant climate change summit in history). Then there's some big state announcements that I imagine went down like cold sick with some older backbenchers and probably begrudgingly well with those more

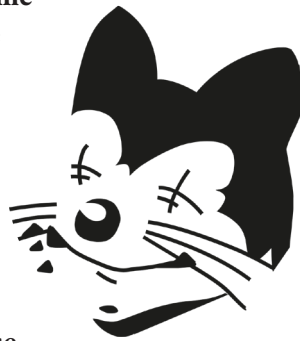
centrist and left: more spending on health and public transport, improving universal credit, increased National Living Wage by a whopping 6.6%, and extending airport financial support for another six months. All this comes after an increase to National Insurance contributions and consideration of propping up big energy suppliers due to increased energy prices that they could, and entirely did, see coming, as prices have been rising since January. Whitehall

will in total spend an extra £150 billion over the course of the current Parliament, which makes the total so big it outstrips even the huge tax take.

Of course it's still all presented as if the government is as Tory as they come - self-proclaimed Thatcherite Sunak shouting "GROWTH. UP. JOBS UP" at Parliament saw to that, and as Labour put it "bankers on short-haul flights sipping Champagne will be cheering".

Tax levels will now be the highest they have been since Clement Attlee's premiership, who, let's not forget, used the high level of capital to establish the NHS. Meanwhile our beer will be about 3p cheaper per pint.

I should be clear, I don't necessarily like or dislike these decisions, I just think it's pretty weird.



The Comment Section

As you may see if you make it that far through the paper, we have quite a spicy Comment section this week. Further to the notice in the section, I would like to reiterate that the opinions in that section DO NOT reflect the view of Felix - in fact the only section that does is the Editorial.

Part of the paper's role in the student community is to provide a platform for debate - we have a monopoly on undergraduate student voice, so taking any agenda too strongly, even informally, would stifle

those in the community that disagree with us. We also stand strongly for free speech (see overleaf for more on that).

I expect a strong response to Comment this week and I would thoroughly encourage anyone who feels a certain way about any piece to write a response that we will include in next week's issue. There is genuinely no benefit in just getting angry about a piece, and if you put how you feel into words you might do good and change some minds.

Statement of Intent

At Felix we believe that it is always in the interest of the students to 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.

Signed by Sam Lovatt
Editor-in-Chief

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Letters to the Editor

This week's star letter!

The last editorial was embarrassing, even for the work of a child. People who complain “polarization” is the the problem are people without meaningful opinions, who value politics for the process rather than for any goals and imagine themselves as very sober because of this, but are dealt regurgitating the conventional wisdom of a completely clapped-out political press because they’ve never thought about anything for themselves and typically are insulated enough from consequences. Their mealy-mouthed centrism reflects the fact that the privatization of the NHS or Brexit don’t actually mean much for them personally. The notion, then, that someone so desperately limited is going to shine a light on the biases of the readership is risible, a beautiful example of the Dunning–Kruger effect.

–31 to 40 year old staff member

Received through the Political Leaning survey

Credit: Envato Elements



CONGRATULATIONS!!!

You won this week's star letter! Come down to the Felix office whenever you're free to collect your prize of a £5 book voucher!

● Letters have not been edited

Keep The Cat Free

Since 1974, “Keep the cat free” has been Felix’s motto and a central tenet of its operation. The phrase applies in three aspects: editorial independence, free to read and free to write.

Editorial independence does not mean unfettered free speech. Just because we can say something doesn’t mean we should. Felix will always be an inclusive environment for as many people as possible. This being said, Felix does not conflate offence with harm, and any content that is not illegal or deeply immoral can be published at the Editor’s discretion, with the following statements in mind.

The paper will never hold a formal political agenda, nor will it be reliant on advertising for funding, despite the occasional inclusion of ads.

These ads will never dictate what is run in the paper.

Felix retains the right to criticise anyone and is accountable to the law in terms of defamation. As part of the Union, Felix is part of a charity that exists to represent and support students. The paper will always seek to strike a balance between public interest and student welfare.

Since 1971 the paper has been free to pick up and read and will remain this way indefinitely.

The paper will always be a place that students, staff and alumni can write freely. This statement applies exclusively to the aforementioned groups, and guest posts, paid or otherwise, are never accepted. In the same spirit, Felix will never financially reward any contributions from the above groups.

NEWS

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To Beit or not to Beit

transparency and freedom of speech – and that will define this dialogue”.

The report comes months after an apparent crack-down by the UK government on threat to free speech at universities, when in February, the then-Education Secretary Gavin Williamson announced changes to the governance of free speech at universities, including rules that demand universities actively promote free speech.

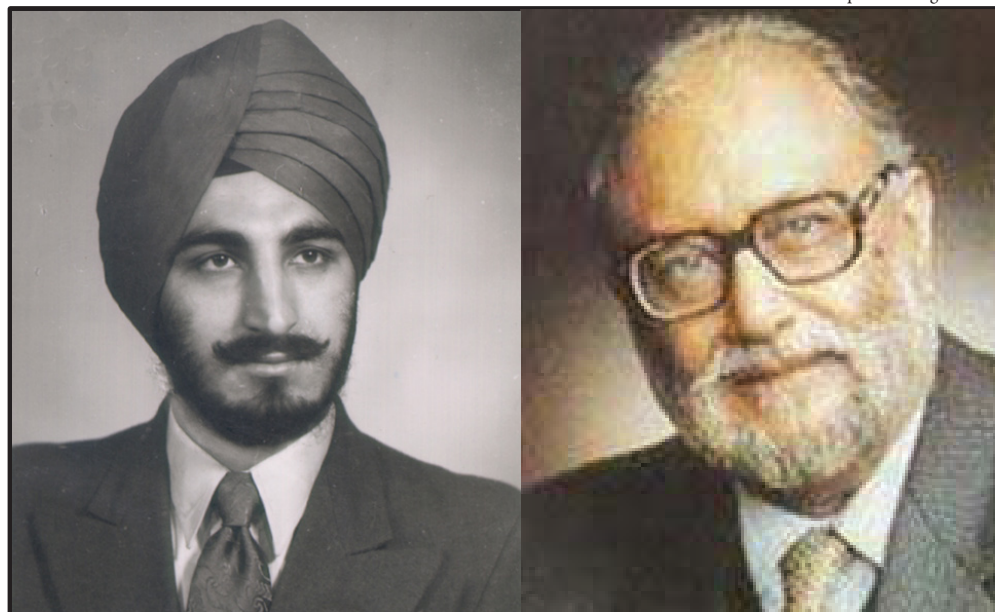
The group was formed from a diverse range of College stakeholders, invited to join by the College leadership.

The report explained that consultation with the student body would not simply be a majority vote on issues such as renaming buildings, suggesting that decisions may be made where the majority of those consulted do not support the conclusion.

In 2020, in the wake of the murder of George Floyd, the College outlined a number of initiatives it was taking to address questionable aspects of its past and to promote equity in the community today. These included the founding of outreach programmes aimed at doubling the number of black students from London coming to the College by 2024, and the establishment of the Presidential Scholarship for Black Students. The decision to remove the motto was also made at this time.

Addressing the name of Imperial College and why it was not changed, Professor Nilay Shah, Chair of the History Group, said “the group focused on people and activities rather than abstract entities”, adding that “we do not wish to erase our history”.

The report notes that the name was briefly set as “The New Institution” before being changed to its current form in 1907.



Unrecognised figures - Narinder Kapany (left) and Abdus Salam

Celebrating women and people of colour

The Group made the recommendation that the College’s buildings and monuments more widely celebrate the accomplishments of women and people of colour who contributed to Imperial’s history but were sidelined at the time.

Narinder Singh Kapany, also known as “the father of fiber optics” studied his PhD in optics at Imperial and significantly improved the capabilities of light transmission through cables. He coined the term “Fiber Optics” and was named by Fortune magazine as one of the seven “unsung heroes who greatly influenced life in the twentieth century”. The group recommended a scholarship be established in his name.

Professor Abdus Salam, 1979 Nobel Prize laureate in Physics and lifetime philanthropist to post-colonial countries, was also highlighted by the report. Salam was celebrated with a blue plaque by English Heritage at the end of 2020, which was installed on his old house in Putney.

Described as “The Muslim science genius forgotten by history” by the BBC, Salam was shunned by his home country of Pakistan. A recent Netflix documentary “Salam - The First Muslim Nobel Laureate” tells his story. The group recommend that the theoretical section of the Physics department be renamed after him and that a scholarship be set up in his name.

Dr Margaret Fishenden studied at the University of Manchester and became an honorary lecturer at Imperial College, where she remained for the rest of her career. Her work in the Mechanical Engineering department contributed to the

function of aircraft gas turbines and flamethrowers in World War 2.

Recommendations for six previously overlooked individuals to be honoured were made, though these decisions again will be subject to discussion with the student body. Refugees from Nazism and Communism are also highlighted, and College interaction with bodies such as the Delhi Committee were noted as needing more research to determine composition, purpose, and achievements of the committee.

To get involved in the consultation, email history.dialogue@imperial.ac.uk Small discussion groups will be held by the College and details of these will be disseminated shortly.



The Union in Beit Quadrangle

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Science Museum
Protest

Attendees of the protest explained that the sit-in had been undertaken because “the Science Museum has consistently refused to engage with any other tactics. We’ve tried petitions, letters, boycotts and protests, all of which have been met with silence”. Another added that “now is the time to abolish fossil fuel companies”.

The Museum accepted funding from Adani to support its new ‘Energy Revolution’ gallery.

Protesters highlight hypocrisy in the deal, due to Adani’s extensive involvement in fossil fuel production, particularly coal mining. The Museum defended the decision by explaining that they were dealing with the green energy wing of the company.

The protest is the latest of a series of controversies surrounding the Museum’s involvement with fossil fuel companies. Sponsorship has previously been accepted from the likes of Shell and BP. Shell funded the establishment of the Atmosphere Gallery at the Museum, which opened in 2010.

Earlier this month the Museum’s now ex-director Chris Rapley stepped down from his role on the advisory board due to concerns over the association with fossil fuel companies. The UCL professor was Director for the Museum 2007 - 2010, during which time he publicly defended the museum’s association with Shell. His resignation came after receiving letters from UKSCN questioning the Museum’s association with fossil fuel companies.

Adani is heavily involved in coal extraction in Australia under the region-specific name Bravus, where as recently as 2014 it commissioned the Carmichael Mine which extracts 10 million tonnes of coal per year. Australia’s lack of movement of commitments to phase out coal have been a point of contention in the run up to this weekend’s COP26 global summit.

The name Bravus, announced by the subsidiary’s CEO as rooted in the Latin for “courageous”, in fact translates to “crooked”.

The group included scientists and campaigners, and was made up of mainly young people.

Boycott over drink spiking to target Imperial College Union and public venues

Sam Lovatt Editor-in-Chief

Following the reported rise in cases of drink spiking across London, multiple sports societies at Imperial College will boycott Metric nightclub, Reynolds Bar and The Redback in Fulham. The boycott will take place on Wednesday 3rd of November. The decision comes following an outcry on social media over a reported rise in cases of drink spiking at British universities. Several incidences of spiking by injection have also been reported across the country, including at the University of Nottingham.

Sports societies including Cheerleading and American Football will be taking part in the boycott. Medic CSPs will boycott Reynolds Bar and non-medic CSPs will boycott Metric Nightclub.

Official demands for the boycott are being decided as fast as possible and will be shared once they are finalised.



Credit: Envato Elements

Reports of spiking by syringe are horrifying many

The Union is currently unaware of actions that students want it to take in order to improve safety of attendees, but is extremely willing to take action to ensure no one feels unsafe in their venues.

According to a Union CSP source, The Redback Fulham, a non-Union venue targeted by the boycott, has been

made aware that concerns have been raised regarding its safety procedures, however is unwilling to invest in better security and support measures.

Union Deputy President for Welfare, Nathalie Podder, said "Taking part in the boycotts is a great way to show solidarity and raise awareness for the

campaign. The Union supports this movement and is taking part by reaching out to neighboring nightclubs and local councils to put pressure on venues to act on the recent increase in cases by improving their safeguarding and security measures around spiking. We will be sharing our improved protocols (including on-site paramedics, test strips and drink covers) with these other venues and strongly encouraging them to put them in place. Another way to support the campaign in addition to participating in these boycotts is to sign the UK government petition to provide free spiking test strips at all bars."

Feelings from some clubs and societies reflect that they feel real change is unlikely to occur without a more long-term, sustained boycott. *Please see Union comms on what to do if you think you or someone you're with has been spiked.*

European Union yet to ratify UK membership of Horizon Europe

Sam Lovatt Editor-in-Chief

The European Union has still not officially ratified the UK's membership on the enormous pan-European research programme Horizons Europe, despite the Withdrawal Agreement being signed almost a year ago. UK membership to the €80 billion programme was included in the Agreement. However, it has been speculated that the EU is delaying UK admission in response to tensions surrounding the Northern Ireland Protocol.

Similar associate memberships of Norway and Iceland, who are also not EU members, have already been ratified. No reason has been given

for the delay in accepting the UK.

As one of the UK's leading STEM universities, Imperial is a large beneficiary of EU Commission funding. Imperial received £98 million in research funding from the European Commission in the first half of the 20/21 academic year.

Imperial College has been ardently in favour of remaining in the EU's orbit since the Brexit vote, with as close scientific ties to the continent as possible. Imperial President Alice Gast recently said on the matter: "European collaboration is the building block to wider global engagement and research excellence for UK science. Over half of all publications Imperial has co-authored with organisations outside of the EU between 2014 and 2019 also have at least one co-author from an organisation within the EU".

Imperial College have produced an interactive map highlighting all the major collaborative endeavours between Imperial and European research bodies and explaining the goals of the ongoing research. This map can be viewed on the College's website.



Credit: EC Public Wiki

Gast added "I hope UK association to Horizon Europe will be finalised soon so our researchers can continue to build their collaborations in the years ahead".

Scientists have stressed that it is not just funding, but the chance for open collaboration with European researchers, which is hitting research initiatives.

The UK committed £2 billion to the programme this year, but this payment has so far been withheld due to the delay in ratification.

Disagreement between Lord Frost, Cabinet Office Minister with responsibility for oversight of the effective conduct of EU related business, and EU member state delegates over the role of the European Court of Justice in arbitrating the Northern Ireland Protocol are rumoured to be stoking tensions and causing the delay.

The malaria vaccine:

► Could malaria become the second disease ever to be eradicated?

Lorena Mejias Martinez Science Writer

Malaria, an infectious parasitic disease transmitted by mosquito bites, remains a leading cause of childhood illness and death in sub-Saharan Africa. With over 260,000 deaths reported annually by the World Health Organization (WHO) and the increasing trend of malaria cases in Africa, the need for a vaccine is urgent. Changing the course of public health history is RTS,S/AS01 (RTS,S), the first malaria vaccine in the world providing partial protection in young children. Originally created in 1987 and developed by British pharmaceutical company GlaxoSmithKline (GSK), RTS,S was finally approved on October 6th by the WHO for children from five months of age. The efficacy this vaccine demonstrates against malaria holds the potential to be game-changing for public health.

"This is a historic moment. The long-awaited malaria vaccine for children is a breakthrough for science, child health and malaria control," said WHO Director General, Dr Tedros Adhanom Ghebreyesus. "It is a gift to the world [...] Its value will be felt most in Africa because that is where the burden of malaria is greatest."

WHAT IS MALARIA AND HOW DOES IT SPREAD?

Malaria is an ancient disease, and these parasites have likely been around for 30 million years, causing 150–300 million deaths in the 20th century alone. In humans, malaria can be caused by five different

species of Plasmodium parasites, transmitted through the bite of blood-sucking Anopheles female mosquitoes. Following a bite, infected mosquitoes will inject malarial parasites known as sporozoites. These sporozoites travel from the skin and multiply in liver cells, where they mature into merozoites, the next stage in their life cycle. This leads to liver cell destruction, following which the merozoites will escape into the bloodstream to invade red blood cells. Individuals with severe malaria may experience abnormal bleeding, convulsions, respiratory distress, and liver failure, carrying a 90% risk of death if untreated.

HOW DOES RTS,S WORK?

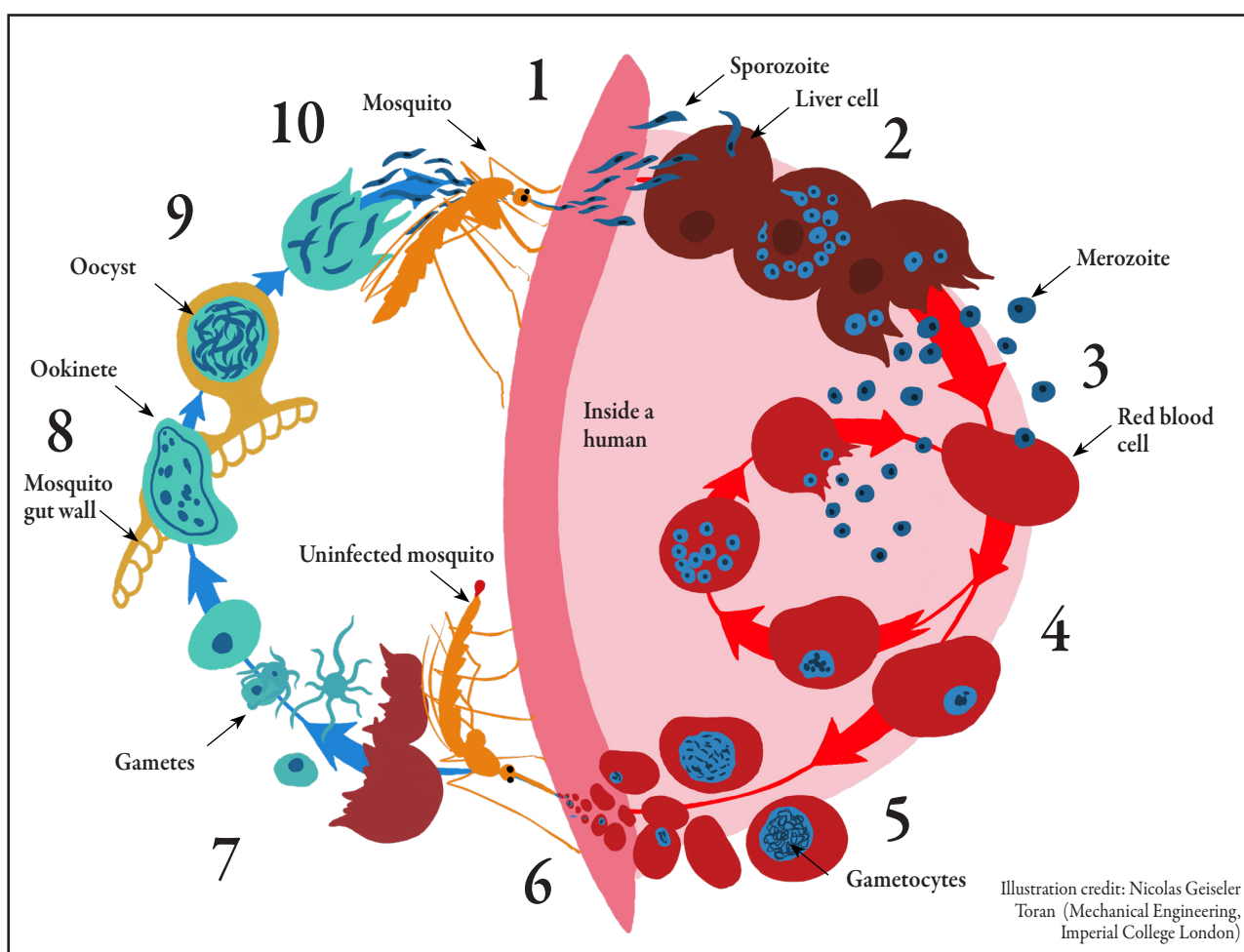
The RTS,S vaccine targets the most common and deadly malaria parasite in Africa, Plasmodium falciparum, which accounts for 99.7% of estimated cases. Whereas COVID-19 vaccines (e.g. Pfizer and Moderna) use mRNA technology, RTS,S is a subunit vaccine which contains purified pieces of the pathogen. More specifically, RTS,S uses the hepatitis B surface antigen as a vaccine platform to display a specific malaria protein on its surface. Similarly to the spike protein targeted by COVID-19 vaccines, RTS,S targets circumsporozoite protein (CSP), a protein secreted by the malaria parasite during the sporozoite

stage. CSP is then recognized by our immune system, triggering a response against the parasite in its early stages, before it can infect the cells of the liver.

According to the WHO, RTS,S is safe, highly cost-effective, feasible to deliver, and has no negative impact on other malaria prevention measures. "For centuries, malaria has stalked sub-Saharan Africa, causing immense personal suffering," said WHO Regional Director for Africa, Dr Matshidiso Moeti. RTS,S "offers a glimmer of hope for the continent which shoulders the heaviest burden of the disease".

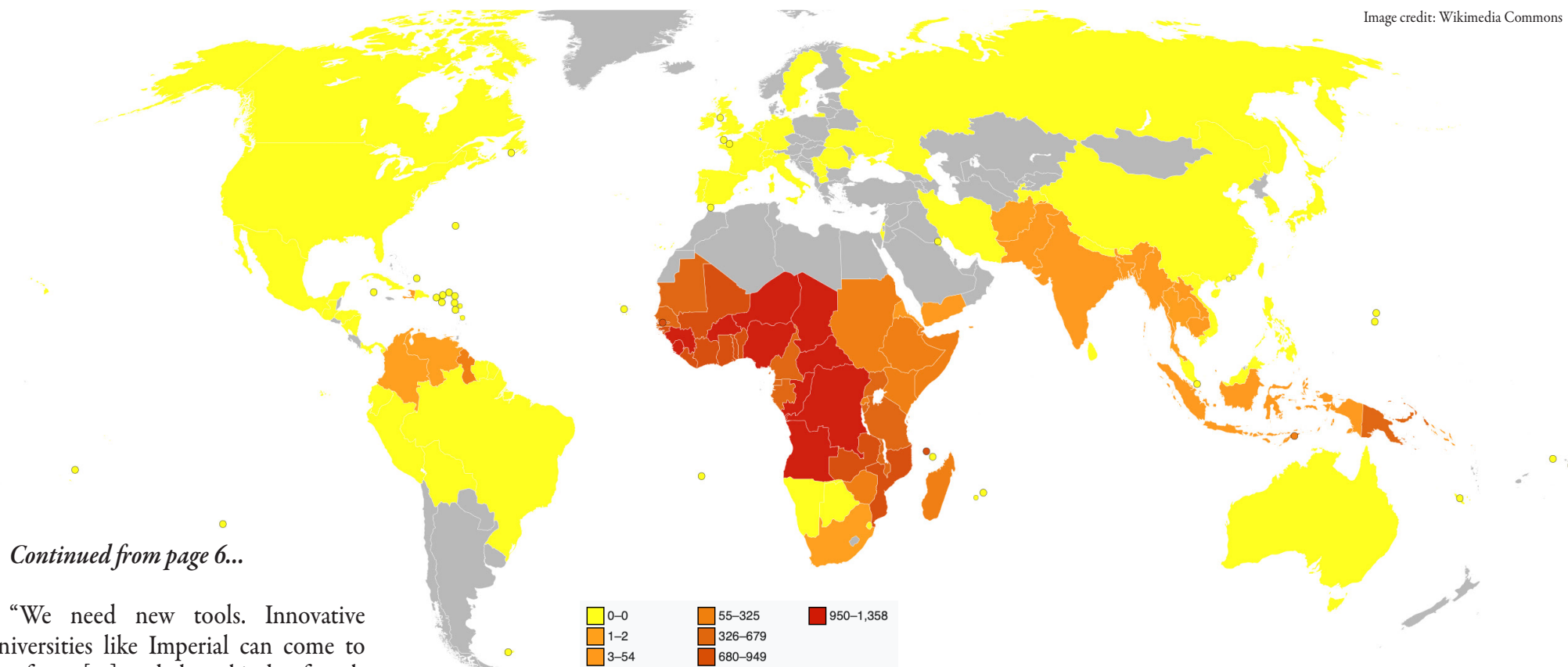
WHY HAS DEVELOPING THIS VACCINE TAKEN SO LONG?

The complex reproductive cycle of malaria, across both humans and mosquitoes, combined with the invasion and destruction of both red blood cells and liver cells, has delayed the development of a successful vaccine against malaria. "In the last 15–20 years [...] we have already had an incredible success in terms of reducing malaria incidence," said Professor Jake Baum, co-director of the Institute of Infection at Imperial, during an interview for Felix. "Most of it has come from bed nets, but also access to better drugs and other public health policies." However, this reduction has plateaued in the last few years with the emergence of insecticide and drug resistance. "I think what that shows you is that if you only use the best drugs that you have in your armamentarium, then you can only get to a certain point in reduction," said Professor Baum.



Malaria parasite transmission cycle: (1) Transmission of the malaria parasite (in its sporozoite form) into the human bloodstream when a mosquito bites a human; (2) Sporozoites travel via bloodstream, infect hepatocyte cells of the liver and replicate; (3) Liver cells erupt, releasing merozoites that invade the red blood cells and replicate; (4) Red blood cells erupt, releasing more merozoites that invade red blood cells and replicate; (5) Some merozoites develop into gametocytes; (6) Transmission of gametocytes into mosquitos when they bite an infected human; (7) The gametocytes mature into gametes in the mosquito gut and fertilisation of the gametes occur for sexual reproduction of the parasite; (8) The ookinete (from fertilisation) migrates to the mosquito gut wall and implants; (9) The ookinete forms an oocyst, in which thousands of sporozoites will form; (10) The oocyst bursts to release sporozoites into the salivary glands of the mosquito

Image credit: Wikimedia Commons



Heat map of deaths caused by malaria per million persons in 2012.

Continued from page 6...

“We need new tools. Innovative universities like Imperial can come to the front [...] and these kinds of tools can get us back on track to reduce the numbers.”

HOW MIGHT RTS,S IMPACT THE WORLD?

Data from the pilot program conducted on over 800,000 children in Ghana, Kenya and Malawi showed RTS,S increased access to treatment for more than two thirds of children who were not sleeping under bed nets. In this way, RTS,S increases equity in access to malaria treatments, reaching children who may not have had access otherwise. Dr Tedros Adhanom Ghebreyesus estimates that “using this vaccine in addition to existing tools to prevent malaria could save tens of thousands of young lives each year”.

Despite this, the vaccine comes with various limitations. In addition to

targeting only a single malaria parasite, RTS,S decreases infections by only 40% and deadly severe malaria by under 30%, which many fear isn’t sufficient. When asked about this, Professor Baum argued that “a 30% reduction in some communities is a big reduction [...] RTS,S will definitely make a big impact.” Even then, this level of efficacy is only reached after a child has received four doses. Various other control methods have effectively reduced malaria incidence, including drugs for prevention and treatment, spray of insecticides and the use of insecticide-treated bed nets. Despite this, malaria is still prevalent across the continent. “You have to go at it from every angle. Mosquito control is a big part of that,” said Professor Baum. “Bed nets have been the major game changer up until now. The vector strategies are really important, but they are not the be all and end all.”

The success of RTS,S should be a step forward for future vaccine research and funding. However, one concern stated by Professor Baum is that the recent licensure of RTS,S by the WHO could lead to the incorrect view that malaria has been

cured. “My hope is that RTS,S [...] fires the starter gun on vaccine innovation,” he stated. “A diversity of vaccines gives us much more tools. I hope RTS,S is the green light for a new era in vaccinology.”

COULD THIS VACCINE LEAD TO COMPLETE ERADICATION OF MALARIA?

Whether this vaccine will completely eradicate malaria is uncertain. “We have the willpower and there is the potential of tools that could lead to malaria eradication, but it’s going to require a huge amount of investment,” stressed Professor Baum. “If we’re going to make a difference there needs to be a change in funding.” When asked whether he believed malaria would be eradicated he stated he hoped so. “If those resources are mobilized, there is no reason why we shouldn’t be able to remove 90% of malaria.”

However, despite the WHO’s commitment to the eradication of “every single malaria parasite from the face of the planet”, it is unlikely we will see the same success as with smallpox, arguably the greatest achievement in international public health history. “Even with our most optimistic scenarios and projections, we face an unavoidable fact. Using current tools, we will still have 11 million cases of malaria in Africa in 2050,” said WHO experts following a

three-year review in 2016 which aimed to determine how eradication may be achieved. It is clear RTS,S is not a replacement for existing measures but an additional weapon in a tool box to combat the heavy socioeconomic burden caused by malaria. “This long-awaited landmark decision can reinvigorate the fight against malaria in the region at a time when progress on malaria control has stalled,” said Thomas Breuer, Chief Global Health Officer at GSK. “RTS,S, alongside other malaria prevention measures, has the potential to save hundreds of thousands of lives.”

WHAT’S NEXT?

The next generation of malaria vaccines may be closer to development than we think. Earlier this year, researchers at the University of Oxford reported a novel malaria vaccine, R21/Matrix-M. R21 was shown to be up to 78% effective in trials, the first to reach the WHO-specified 75% efficacy. “This is an extremely promising result showing high efficacy of a safe, low-cost, scalable vaccine designed to reach the huge numbers of children who are most at risk of the devastating impact of Malaria,” said Lynset Blisand, a senior partner at Wellcome Trust, which funds the research. “Whilst further studies are required, this marks a significant and exciting step forward on a critical global health challenge.”



Malaria parasite (blue) infecting a red blood cell (red) as imaged by an electron micrograph.

SCIENCE

On “Lenna”...

► *The Playboy centrefold which came to be known as “Tech’s Original Sin”*

Jamie John Science Editor

If you have ever forayed into the field of computer vision, you may have come across this image, whether that be as part of a taught course, or through your own independent work. “Lenna” is an image of a young woman wearing a sun hat, which has, over the past 40 or so years, become a standard test image for image processing algorithms. In fact, its legacy goes well beyond the domain of academia; it is said to have been used in the development of the JPEG image format. However, since at least the early 2000s, “Lenna” has been the cause of great controversy.

“Lenna” is actually a cropped scan of a centrefold image from the Playboy magazine. Since its first issue, the US-based publication has featured a pin-up of a female model on its central two pages, typically nude, except for a brief spell from 2015 to 2017. But how did a Playboy centrefold end up on the pages of many a respected science journal?

The story goes that in 1973, electrical engineers at the University of Southern California Signal and Image Processing

Institute were looking for a test image to display their results at a conference. Their existing images had begun to bore them; they lacked the characteristics needed to rigorously test their algorithms, and the engineers wanted a human face. So when someone walked in with a copy of the Playboy magazine, they decided to use the centrefold, cropping the image at the shoulders to ensure that the desired 512×512 resolution was obtained.

Over the following years, visitors to the lab would ask for copies of the image so they could compare their own processing algorithms, and by the 1980s, the image had become something of a standard within the field. Meanwhile the model, Lena Forsén, was completely oblivious to the status of her centrefold.

She had moved to the US from Sweden, initially working as an au pair, but later turned to modelling. Ms Forsén was introduced to Playboy, with whom she took the now-famous image, published in late 1972. She was 21 years old at the time the photo was taken. Forsén went on to model for Kodak in New York, with her images being used to calibrate colour film, alongside those of many

other Caucasian women (these images were known as Shirleys and have become a source of controversy in their own right). At some point, she returned to Sweden.

In the meantime, people began to express concern at the use of the image in research publications. The pervasiveness of a pin-up – moreover, a Playboy centrefold – in an important STEM field was considered degrading, objecti-

Photo credits: Original photograph by Playboy and Dwight Hooker. This image is a scan by Alexander Sawchuk and others.



“Lenna”, the original 512×512 pixel image which became a standard test image for image processing algorithms

fying women in the already male-dominated world of science.

In 1996, the Editor-in-Chief of IEEE Transactions on Image Processing, a peer-reviewed image processing journal, noted the concerns, stating that the image had been used because it contained a “nice mixture of detail, flat regions, shading, and texture”, but also because it “is a picture of an attractive woman”.

More recently, in 2015, a high school student wrote a guest editorial in The Washington Post, criticising her school for “marginalising women”, and citing the use of the “Lenna” image in classes, along with “sexual comments” by male students, as a factor in discouraging girls in the school from pursuing STEM subjects. In 2018, Nature Nanotechnology announced that they would no longer consider papers featuring the image, adding to a host of publications which had voiced concerns about its use.

It is unclear when exactly Lena Forsén became aware of the image’s use in image processing, but in 1997, she attended the Society for Imaging Science and Technology’s 50th Anniversary Conference, after being contacted by the society’s president. At that time, she had returned to Sweden, and was working for the government, supervising disabled employees in archiving documents. Since then, she has largely avoided the spotlight, but on past occasions, mentioned that she was “really proud of that picture”, though she wished she had been compensated. Speaking in December 2019 for a documentary on the subject, however, she said, “I retired from modelling a long time ago. It’s time I retired from tech, too.”

WRITE FOR SCIENCE!

If the article above has got you interested in writing about issues or anecdotes from the fields of computer science, mathematics, engineering or the natural sciences, please email us at:

science.felix@imperial.ac.uk

Plants are in danger. What can we do?

Cara Burke Science Editor

Earth's plants are in imminent danger. In September of 2020, Royal Botanical Gardens Kew estimated that 39.4% of plants are threatened with extinction, which is double that of the 2016 estimate of 20%. Artificial intelligence technology improved our assessments of plant distribution and risk, revealing how dire the situation is. To put these numbers into context, there are more threatened plant species than all described vertebrates combined. This estimate came at the end of the 16-year Global Strategy for Plant Conservation's goals, a programme from the Convention on Biological Diversity, which had outlined goals for plant conservation to be met by last year. Although the goals were missed, there was significant progress made towards the assessment and understanding of plant extinction rates.

Plants have the potential to mitigate climate change through carbon sequestration, and hold a host of potential medicines, food, and biofuels. Globally, around 4 billion people rely on herbal medicines as their primary source of healthcare, and 13% of the 5,411 assessed medicinal plants are under threat. We also rely on a painfully small number of edible plants: of the 7,039 edible plants assessed, only 5.9% of them are major food crops, 15 plants provide 90% of humanity's food, and 4 billion people rely entirely on rice, maize and wheat. This reliance leaves us very vulnerable to climate change and malnutrition. It is now a race against time to find, name and describe plant species before they go extinct, and we are rapidly losing our potential bunch of useful species. "Every time we lose a species, we lose an opportunity for humankind," said Professor Alexandre Antonella, Director of Science at Kew.

“
**EVERY TIME WE
LOSE A SPECIES,
WE LOSE AN
OPPORTUNITY
FOR
HUMANKIND.**

So what has been done in the last year to help? Unfortunately, there is no easy or blanket solution to plant conservation. Practical solutions can include protecting biodiverse areas and reconnecting segmented land, but it is important to understand the particular needs of species and areas. The report recommended we rapidly increase our risk assessments. Global assessments currently only assess around 30% of plant species, and we cannot protect species we don't know about. Thankfully, our methods of spatial and temporal plant assessments are improving, as the report demonstrated,

but they need to be done quicker so we can apply practical solutions which will greatly differ area-to-area and plant-to-plant. Some areas even experience greater diversification under a warming climate, but others are devastated by the impacts of climate change. We

need to understand each area's particular ecological and environmental requirements for plants to thrive.

Citizen science is surprisingly very important in this endeavour. Most of the information recorded for the Global Biodiversity Information Facility (GBIF) comes from citizen scientists. Right now, you can help the Botanic Gardens, Kew on a couple of recording projects by following the QR code provided.



This week in Science...

FROM IMPERIAL...

Spotted! Owl that has not been sighted for 150 years photographed in the wild for the first time

On the 16th of October, Shelley's Eagle Owl was seen in the Atewa forest in Ghana by Dr Joseph Tobias from the Department of Life Sciences and freelance ecologist Dr Robert Williams. "When we lifted our binoculars our jaws dropped. There is no other owl in Africa's rainforests that big," said Dr Tobias. The owl was first described in 1872 from a specimen obtained by a local Ghanaian hunter, but there had been no confirmed sightings since.



FROM AROUND THE WORLD...

First planet outside the Milky Way has been discovered

NASA's Chandra X-Ray telescope found a possible exoplanet in the Messier 51 galaxy, 28 million light years away from the Milky Way. This new find was enabled by transits. The material near a neutron star or black hole becomes superheated and glows at X-ray wavelengths. A passing planet blocks these X-rays, and the resultant dip in brightness is detected. This technique detected the transit in the binary system M5-ULS-1. It lasted three days and the X-ray emissions suggest the planet was around the size of Saturn. More data is needed to confirm the transit was in fact a planet.

You'll never get my tusks! The ivory trade drives evolution of tuskless elephants

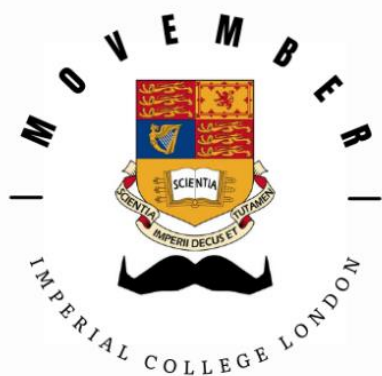
Elephants in Mozambique have evolved towards tusklessness in response to intense hunting pressure, researchers have found. Ivory trading was used to finance the Mozambique civil war between 1970s-1990s, resulting in a 90% population crash in the Gorongosa National Park. 18.5% of female elephants born before the war had tusklessness, compared to 33% after the war. Researchers suspect that tusklessness is due to a mutation on the X-chromosome. Mathematical modelling confirmed the trend was due to hunting pressure. Tusklessness has also been associated with different diets, indicating this response could impact the entire ecosystem.

Jaws: a tale of mistaken identity

Research by Macquarie University in Australia suggests sharks may have a hard time distinguishing between seals and sea lions, and humans. Shark attacks are very rare - a total of 129 shark-human interactions occurred worldwide in 2020, but understanding shark bites can help lead to non-invasive mitigation techniques. The team filmed a sea lion, seal, and people swimming alone or on paddling boards in a tank with a fixed camera and a camera that mimicked the movement of a great white shark. Using video recordings that modelled a shark's visual system, the team found that their prey and humans have similar motions and shape.

UK left out of EU due to delayed Brexit negotiations

MPs say that UK scientists are likely to be "frozen out" of European research programmes because of delays in Brexit negotiations. The EU have indicated that the UK's participation in its £100bn research programme is tied to negotiation over Northern Ireland, raising concern that scientific collaboration is being used as a bargaining chip. The EU's Horizon Europe programme brings together researchers from industry and academic research institutions. The UK's participation was agreed in December of 2020, but a formal agreement has yet to be made.



MOVEMBER

@ IMPERIAL COLLEGE LONDON 2021

Our fathers, partners, brothers and mates are facing a health crisis that isn't being talked about. Men are dying too young. Long before their time. **As the leading charity changing the face of men's health, we're taking action.**

We need to stop men dying too young.



WE NEED YOUR HELP THIS YEAR:

1 JOIN OR CREATE A TEAM

[Join the Big Mo on Campus challenge here](#), you can join an existing team or create your own! We're here to help every step of the way, starting with the Captain's handbook and fundraising guides!

2 MO BRO AND MO SISTA FUNDRAISING

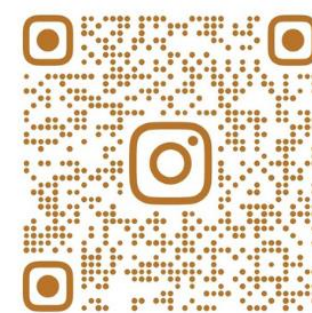
Whether you join as a Mo Bro or a Mo Sista, the Mo the merrier! We'll be supporting your personal fundraising and hosting events you can attend throughout the month - all towards changing the face of men's health.

3 HOWEVER YOU MO, YOU'LL SAVE A BRO

Grow, Move or Host - however you choose to Mo will save a bro!

- 1 - Mo, grow or draw on that moustache you've always thought you'd look fine in.
- 2 - Move 60km however you want for the 60 men we lose to suicide each hour.
- 3 - Host that party or that dinner, gather some mates and have fun with it!

FOLLOW US ON INSTAGRAM
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FOR UPDATES, RESOURCES ON MENTAL
HEALTH, AND COMPETITIONS!



MOVEMBER.IMPERIAL

Exhibition

Arts and crafts for grown-ups

Yoko Ono: MEND PIECE for London

★★★★

Where? Whitechapel Gallery
When? Until 2nd January, 2022
How much? Free (booking required)

Reviewed by **Ioana Esanu** Arts Writer

As you enter Whitechapel Gallery, a sense of calm washes over you – it's small, intimate. Exactly the place you would like to spend a relaxing afternoon in. Only Yoko Ono's MEND PIECE for London doesn't quite live up to the task.

The exhibition is organised in the hallway of the first floor, awkwardly nestled between two actual gallery rooms. Visitors are instructed to take a seat at one of the tables and:

Mend carefully.
 Think of mending the world
 at the same time.

On the pristine white tabletop, various objects jostle for space: broken fragments of ceramic cups and plates, scissors, tape, glue, and twine. The setting seems oddly clinical, not least because you constantly feel like you are being watched. A gallery employee tasked with ensuring safe handling of the materials stands ominously at the edge of the room. Visitors passing through the hallway glance thoughtfully at the exhibit: 'Is this some sort of performative art piece? Are we meant to watch you mend these objects?' Not quite.

The experience improves after more people join the table. Although nobody speaks, there is a mutual un-



Yoko Ono, Mend Piece, 1966/2018, Broken cups and saucers, thread, glue, tape.

derstanding that this is a time for meditation. The ceramic fragments don't seem to fit together, as visitors soon discover the purpose is not to reconstruct a coffee cup, but rather to reinvent, to make art. I found myself absolutely absorbed by the piece of twine my fingers were mindlessly wrapping around a cup handle. At first a simple (if not childish) concept, MEND PIECE becomes mesmerising, profound, an escape from daily life and a chance to just 'be' — even for only half an hour.

Yoko Ono's piece is inspired by the Japanese art of kintsugi: repairing broken pottery with a mix of lac-

quer and precious metals such as silver or gold. Philosophically, it views breakages and repairs as part of an object's history. Scars are not defects; they carry meaning and tell a story. Beautiful as this message may be, I believe MEND PIECE does a mediocre job of expressing it. The mended objects displayed on shelves in the same hallway are less "broken plate turned into art", more "ceramic clutter tied with string". Ono wants you to think of mending the world, but at best you get a brief chance to mend yourself — your tired brain, or perhaps your broken heart. And hey, it's cheaper than therapy.

Theatre

Not broken not all

Broken Lad

★★★★★

Where? Arcola Theatre
When? Until 6th November, 2021
How much? From £15

Reviewed by **Aya Hayakawa** and **Laura Casas** Arts Writers

Broken Lad is a new play written by Robin Hooper, running at the Arcola Theatre's Today I'm Wiser festival. Together with other plays, shows, and exhibitions, the festival focuses on people's

desire for change. The most striking element of Broken Lad is the strong characterisation and uncompromising depiction of their many obvious flaws. Even though the subject matter was handled in a comical and exaggerated way, their portrayals reflected reality and helped to maintain a very relatable, though torturing, narrative. The protagonist is Phil, a 60-year-old divorced comedian played by Patrick Brennan, and the eponymous 'Broken Lad'. Toxic masculinity is the weakness of Phil, who has lost the respect of his community as a result of his selfishness and apparent indifference.

Phil's son Josh (Dave Perry) is an influenceable young

man who wants to follow in his father's footsteps, provoking a rivalry between the father and son that extends beyond their personal relationship and into their work together. Alongside these men on stage are Josh's overprotective yet dependent mum Liz (Carolyn Backhouse), and his dishonest and narcissistic girlfriend Ria (Yasmin Paige). Both Backhouse and Paige stood out for their body language and use of space — particularly in the moments absent of dialogue. The cast is completed by Ned (Adrian McLoughlin): an old man who still has hope in finding a partner. McLoughlin as Ned brought a natural positivity to the play which

Credits: Yoko Ono; Photo / Kyle Morland

consistently helped to lighten the mood. Brennan's performance of Phil was very genuine yet conveyed his arrogance and inelegance in a near perfect way. Whilst the title refers to him, you could consider most of the characters in the play 'Broken Lads'. Perry as Josh, for example, is able to move the audience in one of the most dramatic and intimate scenes of the play.

There was care and attention to detail in every aspect of the play — particularly evidenced by the great use of props (Cecilia Trono) throughout. These included empty beer bottles, a worn-out sofa, a used Tesco bag, and even a Henry Hoover; all of which added to the authenticity of the scenes. On a stage barely the size of a small room, these details played an important role in crafting an atmosphere appropriate for the play. On a rainy and cold evening, the intensity of disputation between the characters came across much stronger, especially with the outdoor theatre and an audience sat very close to the stage. Overall we recommend this obscure comedy for its raw and honest depiction of reality — this cast is not one to miss!

Credits: Photo/David Monteith-Hodge Photography



Yasmin Paige and Dave Perry as Ria and Josh in Broken Lad at the Arcola Theatre

Today I'm Wiser

Broken Lad ran as part of Arcola Theatre's new outdoor festival *Today I'm Wiser*.

"Today I'm Wiser... inspired by the present and fuelled by the collective desire for change, features work across different genres, including bold adaptations of classics, new writing and works-in-progress"

Look out for our review of the show *10 Reasons Why* from the same festival in last week's issue.

WE WANT TO HEAR FROM YOU

Hello readers!

Hope you enjoyed this weeks Arts section.

We want to hear your honest feedback and suggestions for the section.

How often do you read Arts section on the website and from the print paper?

Let us know!

Do you want to see more content of a certain kind?

Let us know!

Is there a writer you like (or hate)?

Let us know!

Do you think we are doing something wrong (or something GREAT)?

Let us know!



*Alex Jackson and Vaidhiswaran Ramesh
Section Editors*

FRIDAY 29TH OCTOBER 2021

ENVIRONMENT

Edited by: MONAMI MIYAMOTO
MARIE MORI
MONIKA YORDANOVA

The IPCC's collaboration with the UN's is a blessing and a curse

View online here!



Shrey Bohra Environment Writer

The UN Intergovernmental Panel on Climate Change (IPCC) is tasked with creating periodic reports, reviewing scientific literature and compiling the latest research to provide to policymakers and the public. The organisation is intended to be objective and independent – it does not carry out any research of its own, and reports are carefully reviewed by thousands of scientists around the world. This has led to it becoming one of the leading authorities on climate change, with its reports influencing crucial pieces of legislature such as the Paris Agreement. The sixth edition of the IPCC's assessment reports is in production, with the first section released ahead of COP26 in Glasgow.

The IPCC's affiliation with the UN is both a blessing and a curse. While the UN's backing grants the IPCC funding and lends its reports legitimacy, it comes at the cost of having to work through the organisation's infamous

bureaucracy. Government officials and other stakeholders are permitted to comment on the reports before they are released. While these changes will not make it into the final report, recent leaks showing suggestions made by some countries give an insight into the lengths some will go to in order to avoid responsibility.

Exporters of some of the world's most carbon intensive resources have lobbied hard to remove references to their products being unsustainable. Representatives from Argentina and Brazil, two of the world's largest beef exporters, made several comments requesting the removal of statements that highlight the destructive nature of their exports. It is not unfair for countries to want to protect their own interests, but doing so by disputing well reviewed scientific opinion will only make coming to an international agreement more difficult. Unfortunately, the UK does not hold the moral high ground in this

regard either, with the Government having buried a report by an internal research group that comes to the same conclusions.

Fossil fuel exporters have also had their say on the results of the report. OPEC members, including Saudi Arabia, have been very vocal in their opposition of the report's conclusions that the use of fossil fuels must be phased out in order to stay within the limits set by the Paris Agreement. These countries – not wanting to give up their cash cow just yet – argue the report is biased in its conclusions. They claim that the same effects can be achieved with Carbon Capture and Storage technologies (CCS); ignoring the fact that only one operational power station in the world employs CCS, and that the majority of CCS projects so far have been used to increase yields from natural gas fields. The Saudi advisor also espouses the benefits of Direct Air Capture (DAC), a technology that is both unproven and incredibly

energy intensive. This, of course, makes perfect sense – if Saudi Arabia's investment into DAC pays off, they can sell both the poison and the cure, while also funding another football club or two along the way. Such selfish interests do not bode well going into COP26.

In a rather ironic move, Australia is lobbying to remove references to how its legislature is massively influenced by fossil fuel lobbies. The country, one of the world's largest exporters of coal, has joined forces with Japan, its largest customer, in trying to keep their coal industries afloat in this period of change. This is a sad thing to see: two highly developed countries clinging onto a relic of the past, for a cause that is not necessary. Australia has the largest known Uranium reserves in the world, and before the Fukushima disaster, Japan was building its nuclear generation capacity, supplying the country with a highly reliable and low carbon source of electricity. Public pressure has led to existing reactors shutting down and new projects being cancelled – of the 39 functional reactors in Japan, only 9 are still in operation. This lost capacity has been replaced in part with coal, an energy source that releases more radiation into the atmosphere than nuclear power.

It is important to note that these alterations will not make it into the final IPCC report – the reports are peer reviewed, and scientists making up the review panel will filter out the blatantly political and biased information. What is worrying, however, is the insight that these comments give us on the mindset of governments around the world. If world-leaders approach COP26 with the same combative mindset as they have done with this report, a Glasgow Agreement will not be making history.



Rapidly melting glaciers are just one of the numerous consequences of climate change (Image by Pichetw via Envato)

ENVIRONMENT

Environmental Policy Seminars are back!

Carolina Piamonte Environment Writer

For the first time in over a year, the Policy Seminars of the Centre for Environmental Policy (CEP) and the Environmental Technology MSci at Imperial College are back to in-person sessions. The excitement of a classroom with students is coupled with the anticipation of the intense topics that are to be debated in the seminars. By the time this issue has been published, there will have been two seminars, both regarding one of the most urgent and discussed topics at present: climate change. This is especially relevant as the whole world prepares to tune in to the results of the upcoming United Nations Climate Change Conference (COP26) at Glasgow.

During the first session, Dr Joeri Rogelj, the Director of Research at the

Grantham Institute and Reader in Climate Science and Policy at the Centre for Environmental Policy at Imperial College London, presents the key insights of the latest physical science assessment produced by the Intergovernmental Panel on Climate Change (IPCC).

These insights show how elaborate the physical science assessment reports are, and how multiple groups of experts across the world are summoned to accomplish this task. The report also emphasizes the rapid and unprecedented effects of climate change, evident in the planet's rising temperatures, the magnitude of extreme climate events, and perturbations of biogeochemical cycles. In this sense, this report allows policymakers to understand the urgency and impacts of climate change, the necessity of reducing emissions, and the need to adapt to the

already irreversible impacts of emissions.

However, despite this mounting evidence and unprecedented media communication, action is still lacking at the velocity and efficiency we would expect. This is the topic that is introduced in the second session, by Dan Hamza-Goodacre, a current advisor to the COP Unit and the Energy Transition Council. Hamza-Goodacre also leads the cooling sector work at UN High level Champions (amongst many other things).

His lecture shows that countries and their governments have various practices, products, technologies, and strategies at their disposition to reduce emissions and to partly solve the climate crisis, but that they are not being adopted as fast as we would expect. For more rapid action to be taken, we need to understand and work in influencing human behaviour so

that these already existing practices and technologies can be implemented and used effectively to tackle climate change.

The Policy Seminars organized by the CEP at Imperial are valuable spaces to revise and educate ourselves on current policy issues, which is of the highest importance for our planet's future. Personally, I have left the seminars with more questions and a critical thinking of the current events, media, and information that I am exposed to everyday. These are the insights that are necessary to navigate our rapidly changing world.

View the full
IPCC report
here:



Pushing the onus on consumers again

Monika Yordonova Environment Editor

While the pandemic has been a tough experience, it has taught the public the importance of banding together in a crisis and changing our behaviour to align with emerging science for the public good. Why then does this attitude not apply to our current climate crisis? With a long list of countries on fire in the past few years — some highlights including Australia, Greece, the Russian tundra and most of South America - heat waves in Vancouver, Canada so significant that they caused over 100 deaths (yes, Canada!) and unprecedented mass extinction events, we really must wonder what it would take to see this crisis for what it is – a crisis!

The UK government recently published a blueprint named Net Zero Strategy: Build Back Greener, relating to potential changes in public behaviour including levies on high-carbon foods and frequent flying. Within this scheme, seems that the government is aligning itself with recent science, highlighting the importance of pricing of consumer goods and its mismatch to their environmental cost. However, the blueprint was withdrawn within a few hours of its publication.

The science is clear – animal derived products are energetically inefficient and increase societal carbon footprints. A 2020 study in Nature Communications found that calculating the carbon dioxide equivalents of foods based on IPCC metrics allow them to compare the real-world prices of foods to the prices that would be expected if environmental cost is considered. What they found was that plant products would cost 121 times less than animal products in such a scenario. However, as point-

ed out in a recently published article on the blueprint, a government spokesperson has highlighted that research papers are not government policy and there are “no plans whatsoever to dictate consumer behaviour in such way”.

It sees that the government is trying to enforce the idea that they want to protect the free will of people to behave in any way they want. However, in practice this is not the case, as making ecologically conscious choices is financially disincentivised. All consumables

receive subsidies which ensure they can continue to provide for the public. While it can be scary to think about a rise in meat prices, products will always vary in their price with relation to one another, so increases in some areas should be balanced with subsidies in plant foods that should allow the public to sustain itself. However, making planet-healthy choices at present can be at a significant cost to our wallets, as well as convenience and even normality.

Similarly, the ever-expanding force of the aviation industry is pushing into the public sphere with ever-reducing prices, even for short-haul flights that can easily be replaced with more sustainable modes of transportation. The cheapest price for a plane ticket this weekend to Paris from London would cost me £37, while the cheapest train ticket for the same day would set me back £103.

Unfortunately, while governments support the industries that impose significant costs on the environment, consumers with limited financial abilities will be forced to make choices that cost them less but will cost our planet for generations to come. How free is a choice after all if it means paying significantly more out of pocket?



How much longer will the aviation industry hold power? (Image source: Envato)

Boo Brady brings Spooky Szn to Imperial

Anton Briggs NegaFelix reporter

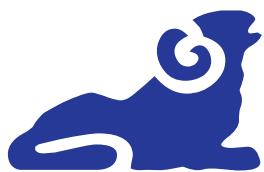
Hugh Brady, Imperial College President-designate, has been observed by multiple independent witnesses gallivanting around the Imperial Campus and scaring students whilst wearing a Squid Game costume. Observers not scared by the UoB President described his costume as “lame as hell” and “way too obvious”, adding that they would have expected more originality from someone who changed his name for the Halloween season.

On the night of Wednesday the 27th October at the Halloween-themed ACC, Brady was seen toilet-papering the Royal Albert Hall, periodically shouting “Loo Brady!” at anyone who approached him. Observers unanimously voiced that this nickname was catching on far slower than ‘Boo’.



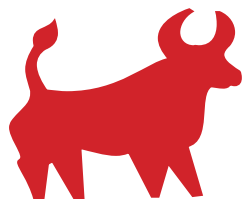
7 Halloween costumes from the Union store inspired by Imperial life

- 1. Ribbon Guy (£30)**
With a skin-tight, black, full-body suit with aqua blue accents and matching velcro fingerless gloves, you'll be instantly recognisable as one of Imperial's favourite DJs. Consider cutting the body suit just below the glutes for a sexy spin to this look. Comes with a free blue ribbon.
- 2. Union Hack (£35)**
This one is a portable billboard and loudspeaker for you to announce that you are, in fact, a Union Hack, and society constitutions and by-laws for you to shove into people's faces. Comes with a free sense of authority and an annoying superiority complex.
- 3. Kimiko Man <3 (£23)**
A black shirt, an apron, and a cute lil hat. Pair this with your favourite jeans. This one will genuinely be a crowd favourite. Comes with a free ladle and teriyaki sauce.
- 4. DocSoc Lab Hoarder (£18)**
This is an extremely versatile costume with many different T-shirt and prop options. For instance, you could pair the Jane Street shirt with the NetCraft mug, or the ICHack shirt with the BlackRock rubber duck. The combinations are endless. Comes with a subscription to Jordan Peterson's Patreon.
- 5. Your ex (£5)**
It's actually just a costume for a spineless little slug. The size of the costume will allow you to easily trample over other people without any regard for them. Comes with a free small peepee and the audacity.
- 6. Alice Gast (£69)**
Potentially the scariest face mask you've ever come across, with tunnel vision goggles to give you a horrifyingly low amount of self awareness. Comes with a free 7-day executive online course on Bullying Someone.



ARIES

This week you put off removing the hair clog in your drain because you secretly enjoy the free foot spa



TAURUS

This week you realise it's not that your dick is too small to see, it's that it's so incredibly big it's off-frame



GEMINI

This week you struggle to reconcile your increasing hunger with the huge number of packing peanuts you have eaten



CANCER

This week's smash and grab is a lot less smash and heavy on the grab



LEO

This week a delightful pan sauce elevates an otherwise unremarkable vomit



VIRGO

This week you star in ITV's new show, Hate Island, where you try to couple up with your one true nemesis



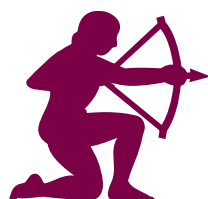
LIBRA

This week you run out of younger brothers to sell in your family business



SCORPIO

This week you spook things up by adapting your horsona (horse persona)



SAGITTARIUS

This week you rename your uni email to Hydra because everytime you delete one fucking college spam another two take its goddamn place



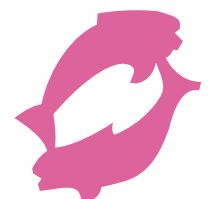
CAPRICORN

This week your fridge breaks so you and your flatmates take turns blowing on the milk instead



AQUARIUS

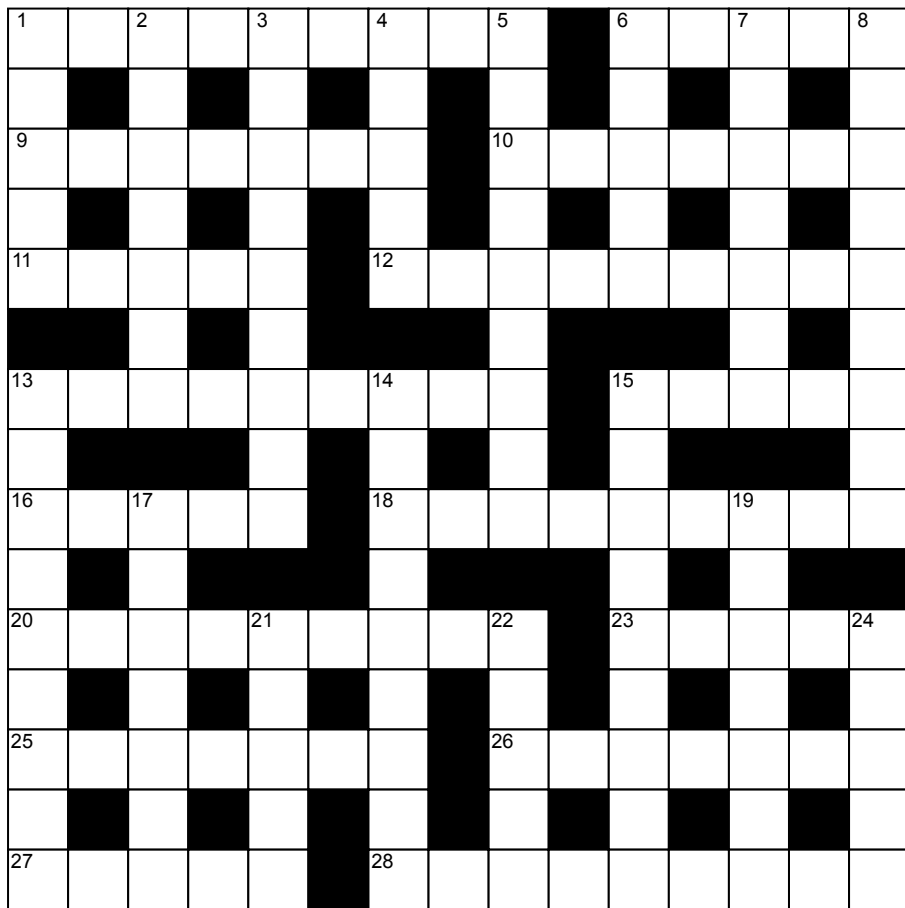
This week you attend a TEDx talk on How to Make Friends



PISCES

This week you forget to change your Zoom name from "ButtFucker3000" before calling your supervisor

CRYPTIC Crossword Grid



CRYPTIC Crossword Clues

Across

- 1. Eat loudly while you dine, causing a scowl. [7 2]
- 6. See the ruffian has status. [5]
- 9. Equipped, in conclusion, to get the ring to marry. [7]
- 10. So, Dixie is crazy for rust? [7]
- 11. Top battle trophy. [5]
- 12. Giggled about chocolate bar? [9]
- 13. Workers getting ale and knocking it back for starters. [9]
- 15. You might be puzzled by a tower in this city. [5]
- 16. A hundred and one grand for a gun that smokes! [5]
- 18. Have multiple partners, but they're inexperienced. [9]
- 20. Curiously, I peer through Dora's ringless curtains. [9]
- 23. You normally get an A for this at school! [5]
- 25. Compass Point recording a song for a god. [7]
- 26. Orcs hid among the flowers. [7]
- 27. This guy knows almost everyone inside. [5]
- 28. Divisions of one's golden years? [5 4]

Down

- 1. Tramples the pests violently. [5]
- 2. Beautiful creature and I, dancing inside. [7]
- 3. What you've picked up this week! [9]
- 4. Underworld dweller in terrible shade. [5]
- 5. Distance at which satellite orbits one university. [9]
- 6. It's found in this neck of the woods! [5]
- 7. No measure of a letter. [7]
- 8. It shows a tendency for Len to have fun with Tinder. [9]
- 13. Collisions with dialects I'd put in. [9]
- 14. Basalt, in essence, has a briny taste. [9]
- 15. Frivolously hire the top Yankee onto the corporate ladder. [9]
- 17. Lay hold of the cored, greener apple. [7]
- 19. Paper IKEA removes frequent letters from to get some spice! [7]
- 21. Escape deluded centre. [5]
- 22. Snoop about for this implement. [5]
- 24. Sees a commotion and calms it down. [5]

REGULAR Crossword Clues (Hint: finding your bearings)

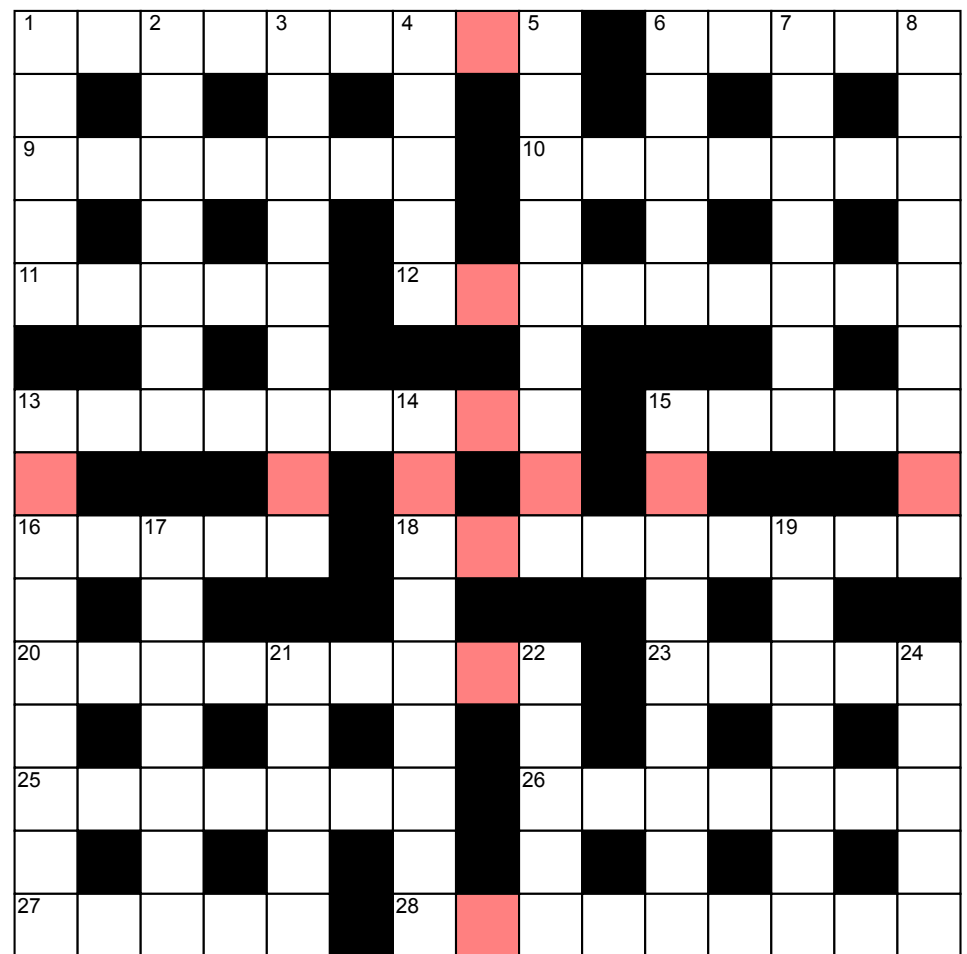
Across

- 1. Despicable, esp. of one's moral conduct. [9]
- 6. It's often blocked in a browser. [5]
- 9. Uses a raising agent. [7]
- 10. Match overseer. [7]
- 11. Stud, as on a boot. [5]
- 12. Nameless. [9]
- 13. Essential kitchen items. [9]
- 15. Prefix with well, way or case. [5]
- 16. Cultural spirit, and Imperial gym! [5]
- 18. Constructed. [9]
- 20. Least trivial. [9]
- 23. 'Mitchell' from EastEnders, with catchphrase "get out of my pub!" [5]
- 25. At an unreasonable price, sells to. [4 3]
- 26. Mexican salamander. [7]
- 27. Southern Scandinavians. [5]
- 28. Coffees typically served in small amounts. [9]

Down

- 1. Ancient artefact. [5]
- 2. Level landform. [7]
- 3. Expression foretelling happy tidings. [5 4]
- 4. Where sailors can be found. [2 3]
- 5. Animals whose name in German literally translates to 'shield-toads'. [9]
- 6. Word describing the eyes of a hay fever sufferer. [5]
- 7. Character. [7]
- 8. Given satisfaction. [9]
- 13. Severely felt the heat. [9]
- 14. "She isn't even ___!" - lament of the desperately infatuated. [5 2 2]
- 15. Visual communication system [9].
- 17. It holds locks in place. [7]
- 19. Bays. [7]
- 21. Rotatable protrusions. [5]
- 22. Trudge. [5]
- 24. Shouts. [5]

REGULAR Crossword Grid



Points

Easy, Normal, Difficult sudokus	2, 3, 4 pts each
Cryptic Crossword	5 pts
Regular crossword	3 pts
Nonogram	4 pts

Puzzles Notices

We thank our contributors: **Mihaly Ormay** for the nonogram
Lito Chatzidavari for laying out this section
Freya Morris for the sudokus
Stanley Scott for the crosswords
 Hope you have fun with our puzzles and wish you a spooky Halloween!

FUCWIT

1. Plont Palace	44
2. Deep-Fried Charizard	33
3. Pancakes, surely?	32

Congrats to this week's leaders! As always, you can send your solutions to fsudoku@ic.ac.uk before Wednesday 3rd at 12:00.

THROWBACK

WHAT WAS IMPERIAL COLLEGE LIKE IN THE PAST? EARLY ISSUES OF FELIX PROVIDE A GLIMPSE INTO STUDENT LIFE FROM DECADES AGO..

HALL RENTS

Jacqui Gerrard

Students who are residing in house or hall next session have been sent a copy of the 1974-75 Imperial College, Student Residence, Halls and Houses, Regulations and Information.

On page 10,11 it is written 'Subject to the terms of the Rent Act, the fees for 1974/75 will be as follows:-'. The fees then quoted are not the fees that will be actually charged for the first term. The following fees will be charged:

Beit Hall	
New Hostel	39.25
Old Hostel	
1st – 5th Floors	38.25
Ground Floor	37.25
Basement	35.75

These are the same as before.

Garden Hall	
Single Rooms	38.25
Shared Rooms	35.75

These are the same as before.

Linstead Hall 69.25
This has gone up because of increased cost of meals.

All the other prices are the same for the first term as before, but there are some differences for fees of guests.

These rents may well go up in January when the Rent Freeze ends.

Year 1974
Felix Issue 362

We wish we could pay £69/term for a room in Princes Gardens!

If you've found interesting articles in the Felix Archive, send us an email and we'll publish it!

SEXISM AT IC!

Anon

ANY GIRL who comes to IC is going to have a hard time to begin with – adapting to an all male environment isn't easy. One is not expected to miss female company because there is a popular myth that 'women don't like women' so generally one doesn't admit to it. When you're starting university and living away from home, it's quite hard to adapt – when you're part of a minority group it's much worse. Settling in isn't so bad for the men, who can easily find others to talk to, or who can live in isolation. It's when you're one in ten or even one in thirty, as on some engineering courses, that you feel conspicuous. Most cope with this; however, no girl can properly adapt to a male dominated society, which assumes the female element is there purely for the man's benefit. Most of the activities

at IC seem to be organised in this way, and it takes a great deal of self-deception to enjoy them and similarly inter-collegiate activities. In these the women involved to be tee-shirted, beer drinking, all-lads-together types like the men they mix with. I condemn these activities because they sum up the total attitude towards women at IC. We need something a lot better for the women here, (unless the attitudes are vastly changed there's no point in

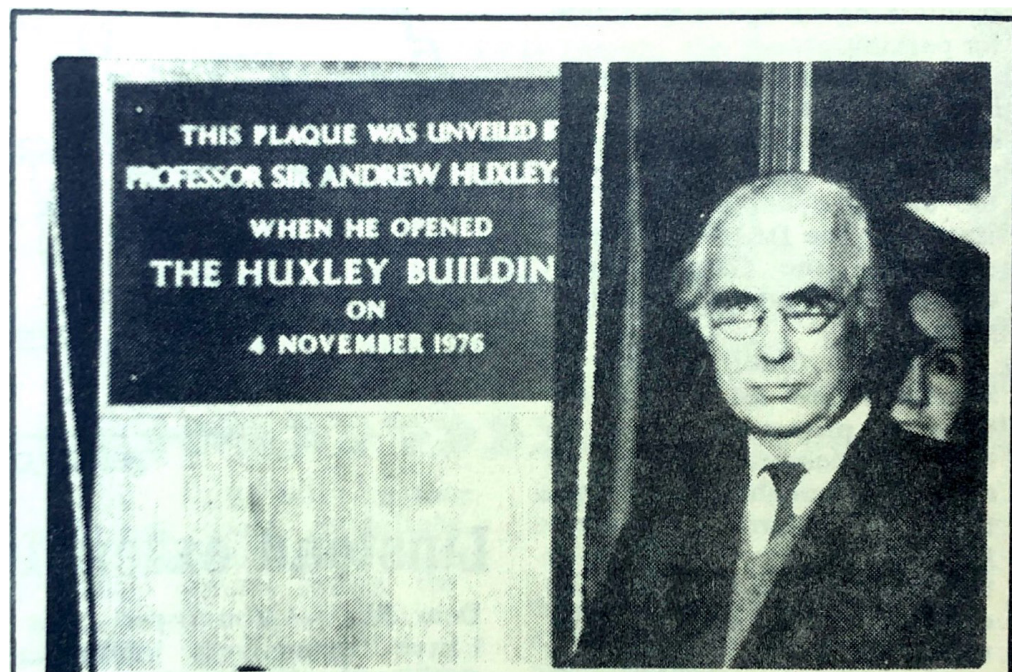
encouraging women to come to IC). Please don't blame the women by saying that they could do something about it. We're in a bad position and we need it improved. If and when something positive does happen, perhaps then we'll discover what it's like living in a mixed community and not just a male one.

I'm not saying that life is impossible for women at IC, I'm just saying that it's difficult. When I see intelligent and alert females leaving after six weeks because they can't stand it any longer, I know how they feel.

The attitude towards women at IC is purely sexist, and it's getting worse all the time. The activities such as the Rag Queen, Bo Belle and Queen of Jez competitions are thoroughly degrading and insulting to the women here. Other insults are the pictures in FELIX with their sickly, patronising dribble on some misguided female who's been stupid enough to pose for it (*I thought you said, they were intelligent and alert!* – Ed). And of course there's the Men's Bar – No comment.

Year 1976
Felix Issue 434

Copyediting has hopefully improved since we last spelled Sir Andrew Huxley's name!



Professor Sir Andrew Huxley, FRS, who last Thursday opened the new Huxley Building in Queensgate. The building is named after Thomas Huxley, a professor in Biology, who was Dean of RCS and RSM from 1881 – 1895. Sir Adrew is the grandson of Thomas Huxley.

The new building houses the departments of Maths, Physics and Computing & Control.

Your Union

Nights out should be safe for everyone

Drink spiking awareness & support



Stay safe!

****Content warning: Discussion of spiking and date rape drugs****

Your Deputy President (Welfare), Nathalie, has written a blog post in light of the recent increase of spiking around the country. Read the blog post on our website. You'll find some guidance on what to do on our social media platforms.

Spiking is not a new problem, and we understand that pre-emptive measures are not enough. We are committed to working with our Officer Trustee team, the Imperial College London, and local authorities to ensure everyone feels safe in our venues.

If you have any concerns or suggestions don't hesitate to contact the Union, your Wellbeing Reps, Officer Trustees or our Advice Centre.



Wanna live for free in the Halls?

College is looking for **College Representatives** to act as points of contact at a hall of residence, Chapter Islington, for Imperial student related matters with a primary focus on student wellbeing and pastoral support. The post is available now with negotiable start dates. All Imperial staff and PhD students with at least one year of their substantive employment contract/studies remaining are eligible for the role. Applications close on Friday 5 November.

They're also looking for a Sub-Warden to join the Wardening team in Wilson House, with the post beginning in January. Sub-Wardens support the Warden in maintaining good discipline and play a key role in community development and delivering pastoral support to student residents. All PhD students with at least one year of their studies remaining are eligible for the role.

These are voluntary positions and post holders are provided with accommodation at no cost (including rent, furnishings and essential amenities). For the full role descriptions and details on how to apply, please look up Halls Recruitment on the College website.



Are you a newly elected Rep?

Just reminding you that from 5 November we'll be holding a few training sessions that are compulsory to your newly elected Wellbeing and Academic Representatives.

As a wellbeing rep this will support you to understand the boundaries of your role, and ensure that you are able to support vulnerable students appropriately without putting them, or you, at risk. If you are an Academic Rep, this will support you to fulfill your role effectively and develop your skills, whilst also giving you the opportunity to get to know key members of the Union and your faculty.

Have a look on our website imperialcollegeunion.org/whatson to find your training session!

shop

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Your Union



MUSICAL HALLOWEEN BINGO

Friday 29 OCTOBER 2021 | 20:00 - 23:00 | Metric

Join us and the Blingo crew for a hilarious night of bingo, beats and bling. Expect lip sync battles, dance offs, more bling than you can throw a zimmer frame at and an out-of-your-seat bingo experience driven by an all killer, no filler Hip Hop, RnB soundtrack, with a spooky Halloween twist. Stick around afterwards for our Metric Club Night! **Grab your £5 tickets here:**

imperialcollegeunion.org/whats-on/event/10363



HALLOWEEN SPOOKTACULAR

Saturday 30 OCTOBER 2021 | 19:00 - 01:00 | Metric

Dick and Dom host a spooky evening in da Metric, the perfect way to celebrate Halloween. Beware – we can't guarantee they won't Beit! Join us if you dare...

Grab your £10 tickets here:

imperialcollegeunion.org/whats-on/event/10365



UNIVERSITY CHALLENGE TRIALS (1ST ROUND)

Monday 1 NOVEMBER 2021 | 18:00 - 20:00 | Charing Cross Campus

If you'd like the chance to appear on the next series, sign up for this year's trials! We encourage everyone to give it a go, regardless of background, age, experience or specialism. You will only need to attend one first-round session; this will be a written test. If you perform well enough, you will be invited to a buzzer round on Thu, 4 November at South Kensington. More details:

imperialcollegeunion.org/whats-on/event/10304

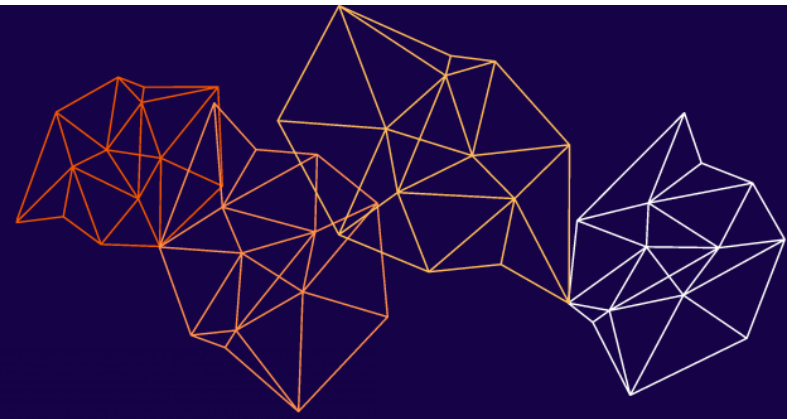


UNION COUNCIL

Tuesday 2 NOVEMBER 2021 | 18:00 - 20:30 | Union Dining Hall

Union Council represents the voice of students to set the policy of Imperial College Union through bringing together student leaders from across all of our activities. Any student of Imperial College London can attend, and any member can propose a paper for discussion. If you would like to attend a Council meeting, please email the Chair, Michaela Flegrova for more information.

More info & events: imperialcollegeunion.org/whatson



I, SCIENCE

THE SCIENCE MAGAZINE OF IMPERIAL COLLEGE

WRITERS WANTED FOR OUR AUTUMN ISSUE

I, Science is looking for writers for our 50th magazine issue. The theme - Spectrum.

Everyone is welcome to send us their article pitches, and no previous writing experience is required!

Send your ideas to iscience@imperial.ac.uk by 8 November. For more details, drop us an email or find us on social media!

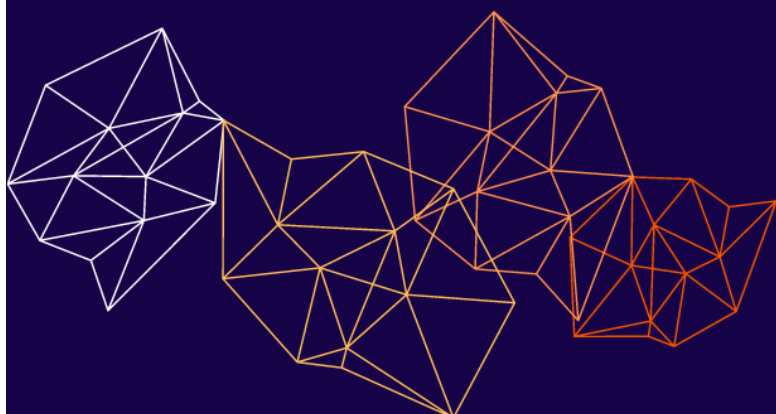
fb.com/isciencemedia



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[@isciencemedia](https://www.instagram.com/isciencemedia)



FILM

Edited by: EVA BORRAS

Halloween Film Recommendations

Aurélia Bordes Film Writer

Get Out

Directed by: *Jordan Peele*

Starring: *Daniel Kaluuya, Allison Williams, Catherine Keener, Bradley Whitford*

Get out is a social horror movie about racism. The plot is simple: Chris is a Black man nervous at the idea of meeting the family of his white middle-class girlfriend, Rose. While her parents seem to be supportive, something feels off. Undoubtedly, the viewers will share with Chris this feeling of uneasiness that will slowly turn into straight-up horror.

One thing that differentiates 'Get out' from other movies of the horror genre is that it focuses on depicting casual racism. The white people of this film never hate on the black people (on the contrary!) but they vaunt Chris as a trophy, completely dehumanizing him. For instance, the family acknowledges Chris' physical traits such as being athletically fit and like to remind him that they « would have voted for Obama for a third term if [they] could. Best president in [their] lifetime, hands down ». The whole movie is sprinkled with similar remarks and creates a fantastic build-up for what's coming next – the actual horror.

As the director Jordan Peele said, "Part of being black in this country, and I presume being any minority, is constantly being told that... we're seeing racism where there just isn't racism."

In terms of filmmaking, 'Get out' is quite good. The oppressing atmosphere is rendered through some well-thought scene compositions. In terms of the music, the main theme « Sikiliza Kwa Wahenga » evokes mysteries and secrets. Finally, the movie is full of symbolism that I won't talk about here to avoid any spoilers but if you are interested there are lots of articles online. I strongly advise you to not get spoiled before you watch it.

Want some interesting facts about this movie? It was shot in only 23 days. It was made for just \$4.5 million and earned more than \$255 million worldwide. It is the first film by Jordan Peele and with it he became the first Black screenwriter to win an Academy Award for Best Original Screenplay.

If you don't know what to watch for spooky Halloween and Black history month, do consider 'Get out'!



Grave (Raw)

Directed by: *Julia Ducournau*

Starring: *Garance Marillier, Ella Rumpf, Rabah Nait Oufella*



This French body horror movie is definitely not for everyone. It is a little gory, rather graphic and pretty disturbing, as some scenes can be hard on the stomach. In fact, a couple of people passed out during its screening in Toronto.

What is 'Grave' about? Justine, a vegetarian, joins a veterinary school and is forced during her ragging to eat raw meat. The consequences are as unexpected for Justine as for the viewers. I won't say much more of the scenario because I think it is better to just let the movie take you wherever it wants.

You might be wondering, why is it interesting to watch? The story is unusual, the cast are talented and the filmmaking creates a creepy atmosphere. Particular attention has been brought to the colours and the light used. Moreover, the main theme by Jim Williams suits the movie perfectly. However it is not perfect as some scenes can seem to be unnecessary or/and just there to shock the viewers. But it is still definitely worth watching if you are interested in horror films.

Another interesting point that deserves to be brought to light is that it is the first film by Julia Ducournau and its lead actress, Garance Marillier. Julia Ducournau won Palme d'Or prize at the Cannes Film Festival this year (2021) with her second movie: 'Titane'. She is the second woman to ever win the festival, the first one being Jane Campion with 'The piano' in 1993.

Next time someone says that France only makes comedies, don't forget about bloody 'Raw'!

What's on?

Rebecca Vickery ICU Cinema Chair

ICU Cinema

showing of 'The Rocky Horror Picture Show': Monday 1st November at 7pm in the Union Concert Hall.

The 'Rocky Horror Picture Show' is no ordinary movie. The 1975 classic has amassed a cult following with its catchy tunes, fantastic humour and its breath-taking but never too disturbing weirdness.

Behind all the madness there is a plot to this movie: a young couple (played by Susan Sarandon and Bill Bostwick) stumble upon a creepy old house full of alien revellers from the planet Transylvania, just in time for the grand unveiling of Dr Frank-N-Furter's (Tim Curry's) newest creation: Rocky Horror. This creation represents the epitome as an ultimate, seductive sex symbol. As the film progresses the young sweethearts slowly embrace the unbounded sensuality and fascination with absolute pleasure.

With a stunning soundtrack including "The Time Warp", it's a real booty-shaker of the cinematic world.

If this classic has a certain place in your heart or if you haven't had the pleasure of watching it, ICU Cinema is showing it on Monday 1st November in the Union Concert Hall. Doors open at 18:50, ads and trailers at 19:00 with the title feature starting at 19:20.

Tickets can be bought on the door for £5 CASH, and we have a selection of drinks and snacks. Bonus! If you come in costume, you get £1 off your ticket price!

It's sure to be a hell of an evening and if you're a fan of either the film or wearing something a little bit special for one evening, you'll love this.



MUSIC

Edited by: ROSIE MILLNS
& TARA PAL CHAUDHURI

DON'T MISS THE GIG - GRANDMAS HOUSE @ THE WINDMILL, 3RD NOVEMBER

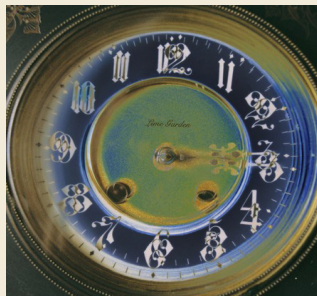
ALL FEMALE PUNK
GROUP GRANDMAS
HOUSE TRAVEL TO
LONDON TO HEADLINE
THE WINDMILL WITH
THEIR DEBUT SELF-
TITLED EP, RELEASED
ON 15TH OCTOBER VIA BRACE YOURSELF
RECORDS. THEIR 2020 SINGLE 'NO
PLACE LIKE HOME' REMINDED US OF THE
WYCHES' EARLY MUSIC, AND WAS ONE OF



Single of the Week

Clockwork by Lime Garden

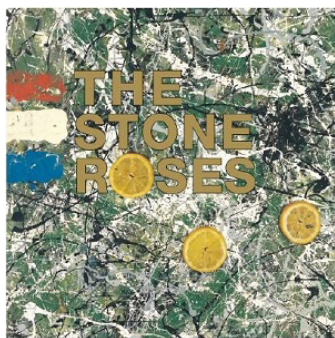
Brighton's Lime Garden
have been making their
mark on the scene for a
little while now, reliably
releasing a stream



of guitar-driven, witty, danceable indie-rock
bangers. Their newest single, 'Clockwork', is more
subdued than previous funky single 'Pulp', but is
still a gritty and groovy bop.

TODAY IN MUSIC HISTORY

IN 1996, THE
STONE ROSES
SPLIT UP, 13 YEARS
AFTER THEIR
FORMATION AND
6 MONTHS AFTER
GUITARIST JOHN
SQUIRE LEFT.



SHORTLY BEFORE
THE BREAKUP, THE BAND'S PERFORMANCES
HAD GOT SO DIRE THAT NME DESCRIBED
'I AM THE RESURRECTION' AS "MORE LIKE
THE ETERNAL CRUCIFIXION." THE BAND
WOULD REFORM IN 2011, BEFORE QUIETLY
DISBANDING IN JUNE 2019.

Review

Live Music Society host Random Band Night

Written by [Tara Pal Chaudhuri](#) Music Editor

There's something exciting about seeing music equipment sprawled across the Metric stage (maybe it's just my mid-pandemic live music deprivation). But I'm more than happy to marinate in its characteristic blue light, waiting for the bands to get their acts together. I feel like I'm clubbing but crouched with my iPad. Nearby, someone's tapping their drumsticks against a not-drum surface, someone's playing an unplugged electric guitar, and someone needs to stop handling live aux cords. It's still definitely a step ahead of standing under the Edison bulbs in the bar for about an hour and a half, talking to musicians about their niche tastes – "what's Sungazer, sorry?" "It's electro-jazz." A friend looks at me and clarifies, "beep-boop jazz". I nod, knowingly.

Random Band Night is an annual event held by Live Music Society, inviting musicians from across Imperial to prepare and perform a song with a randomly allocated band in an hour. As a talentless reporter, my instrument is my iPad, which I hold with a superiority complex over the guitar cases that peek overhead in this crowd. So before I pass critique, I'd like to inform you that the only experience I had learning an instrument was a rather slow, resentful journey to Grade 5 on piano.

The first band begins to play 'Last Night' by the Strokes as the musicians take their time returning to Metric, setting a standard for the rest of the night that is surprisingly hard to surpass for the remaining bands. Most are limited by their poor vocalists who struggle to maintain the rhythm of the song despite being held up by genuinely compelling drummers. A fairly static audience (of mainly just other musicians waiting to perform) watches these vocalists become more confident reading lyrics off Google in a deadpan voice, making me feel like I'm at an unnecessarily elaborate karaoke session.



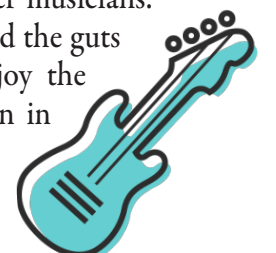
View online here!



The instrumentalists on the other hand, are taking a different turn. Band 11 is a "put-them-together-and-see-what-happens" concoction of a vihuela player, classical guitarist, drummer and saxophonist. Their rendition of 'Fly Me to the Moon' is a much-needed change of pace and the most noteworthy performance of the night. Band 5's 'Californication' contains a much-applauded electric guitar solo, Band 10's '505' by the Arctic Monkeys (which I'm biased towards) has a phenomenal guitarist, and a number of performances make me turn to my friend and gape for a moment.

Towards the end of the night, the thinning audience begins to take an active interest in the music and it feels more like a micro-concert – a post-credit scene to the more or less subdued night. Band 13's performance of 'Holiday' by Green Day features, at the least, an enthusiastic vocalist supplemented by a small group of people that know the song well enough to fill in Billie Joe Armstrong's missing shouts at exactly the right time. Band 14's cover of 'Smell Like Teen Spirit', meanwhile, introduces a 10-person mosh pit (which is just as dangerous for a person my height as a regular-sized one). My favourite - a two-guitar performance of Bob Dylan's 'All Along the Watchtower' - punctuates the metal that was saved for the end.

Random Band Night isn't meant to be a show of talent as much as just a fun celebration of rock classics everyone knows. It's easy to forget these performances had an hour of preparation and are honestly just a great way to interact with other musicians. So, to all the musicians who had the guts to perform and stayed to enjoy the music, I hope to see you again in Metric.



MUSIC

Felix Recommends

Happier Than Ever by Billie Eilish

Written by **Matija Conic** Music Writer

There aren't very many artists who are as consistently in the spotlight as Billie Eilish is. Her distinctive aesthetic and style have gained her a lot of avid fans, but have also led to profoundly toxic body shaming and rather annoying criticisms of her opus that all too often lie in either a disdain of her "13-year-old girl fanbase" or her being an industry plant or what not. When it comes to doing productive music criticism, however, we should always aim to focus on one thing only – the music – and do our best to distance ourselves from any prevalent lines of discourse that are there to take uncharitable stabs at the artist. And the fact is, in my opinion at least, that Billie and Finneas are a remarkably innovative duo in the sphere of pop, constantly venturing into new territories and experimenting with sound, far more than most other renowned pop figures at the moment. *WHEN WE ALL FALL ASLEEP, WHERE DO WE GO?* is one of the bolder and more exciting records of 2020, both lyrically and production-wise, which left me at the edge of my seat for this new record to drop. As the songs from *Happier Than Ever* were released, however, I found it hard to capture the overall vibe of the album, which left me in a state of confusion, but also curiosity.

The first single, 'Your Power', is a very eerie depiction of abuse and manipulation within the music industry, but sonically, I found the acoustic guitar to be a bit monotonous and forgettable. I felt much the same about 'my future', which has already evaporated from my memory. The next two singles to drop, however, very much blew me away. 'Therefore I Am' is all that you want from a good Billie track – a punchy, dirty beat, with Billie's dark, intimate, in-your-face vocals telling her body shamers to fuck off ("I'm not your friend", "Stop / What the hell are you talking about? / Get my pretty name out of your mouth..."), while



Descartes' "I think therefore I am" adds to the potency of that "fuck you" (albeit not saying anything much more profound than that).

In contrast to the recognisable Billie vibe of this track, 'Lost Cause' gives us something completely different – a wonderful, soulful sound completely uncharacteristic to the duo so far. The album keeps doing this, shuttling back and forth between the typical dark and edgy Billie sound, and this new mellow, vintage aesthetic. Although the duo succeeds remarkably well at times at creating a pretty and lush vibe on these more adventurous tracks (and it does so best with 'Lost Cause', in my opinion), these jumps do feel awkward at times when it comes to the flow of the album and, within the tracks themselves, it often seems like they are struggling a bit at navigating this new territory. 'Halley's Comet', for instance, is a wonderful tune that conveys the confining feeling of fame really well (with her getting a break from it all about as rarely as Halley's Comet passes

by Earth – i.e. twice in a lifetime), but as the track progresses it abruptly changes in tone which kind of disrupts the immersion, making it feel incomplete. In contrast, 'NDA', which deals with similar struggles and Billie having to make her lovers sign a non-disclosure agreement before they leave, has some of the best production I've heard this year, complemented remarkably well with Billie's elegantly autotuned vocals and the incredibly choreographed, anxiety-inducing music video where Billie is walking down a highway amidst speeding cars. Without trying to be relatable in any way (which Billie's lifestyle for sure isn't to most of us) or suggesting this to be some universal experience, the song simply opens up a window into Billie's psyche, using the non-disclosure agreement as a tool to convey how absurdly claustrophobic her life has become.

Another brilliant example of this overarching theme is the opener, 'Getting older', which is an intensely sad and introspective piece on how fame has influenced her and, in some ways, drained her ("Things I once enjoyed just keep me employed now"). The beat is very bare and intimate, but the simplicity does not stop this tune from being among my album favourites. Then of course, there is the continued theme of body shaming which is very explicitly addressed in the monologue piece 'Not My Responsibility', followed by 'OverHeated', which

“

**'THINGS I
ONCE ENJOYED
JUST KEEP ME
EMPLOYED
NOW'**

“

**HAPPIER THAN
EVER DOES NOT
STOP DELIVERING
BANGERS WHICH,
EVEN WHEN
LACKING IN
LYRICAL CONTENT,
FEEL EXCITING
AND POWERFUL**



depicts a concrete paparazzi incident that initiated a stream of online abuse. Though these messages are everything but disagreeable and, in fact, a very much necessary inclusion on the album, I do wonder if they could have been delivered more creatively, as throwing

a monologue in the middle of a record felt a bit lacking in potency.

Criticisms aside, however, *Happier Than Ever* does not stop delivering bangers which, even when lacking in lyrical content, feel exciting and powerful. 'Oxytocin' is easily my favourite song on the album, with an amazingly visceral, sinister and sexy vibe. And finally, there is the title track which, admittedly, has some annoyingly shallow lyrics, but nonetheless Billie does not fail to surprise. The track is so Olivia Rodrigo, start to end, both in terms of the anger expressed

and the climactic rock vibe. Furthermore, Billie's vocals on this one are outstandingly different; she completely ditches her regular decibel range and lets her voice go loose, finishing it up with a roaring scream ("Just fucking leave me alooone..."). Shallow though it is, this track, alongside gems like 'Lost Cause', is proof that Billie has the talent to give us bangers that are radically different stylistically but hit just as well as older tracks I'm still enamoured with like 'you should see me in a crown'. Though occasionally clumsy and flawed, I really did enjoy the duo's exploration of new sonic avenues on this album and, given their limited experience outside their typical genre, I am very excited and hopeful for the next record where they may acquire greater mastery over these newer styles.

Music of the Spheres: When Stargazing Goes Too Far MUSIC

Written by **Giovanni França** Music Writer



O Coldplay, my Coldplay! Love them or hate them, these guys do not need an introduction, especially after last week's front page.

I have to say that I do enjoy a good portion of their albums, but I naturally did not have high expectations for the new one, as they are a band originating from the clammy UCL halls of residence. Nonetheless, I came with an open mind. Even if the promotion was rather subtle this time – booking just a few screens at Times Square and a quick light show at the Empire State Building – I had some crumbs of hope left in my pocket. After all, there *must* be something good in the music coming from a band who put such a valiant effort into sustainability.

Music of the Spheres starts with a 1-minute-long palate cleanse. A cheeky communion bread tasting session. The only remarking characteristic of the track is its title – the ringed planet emoji. This fantastic idea has been linked to Coldplay's "love of reinvention" by the art critic experts over at The Sun. Of course, the band did not stop at naming just a single song with funky characters, but feature four emoji titles: 'Sparkles', 'Red Heart', 'Globe Showing Americas' (I wonder why) and 'Infinity'. I have not quite delved into emoji critique, so I am leaving it an exercise to the reader.

Back to actual music, Chris Martin decides to start singing in the second track. With a full-blown radio pop wannabe hit, the band declares their return to commercial music, after an *Everyday Life* interlude. Indeed, they do seem to try and capitalise on the 80s synthpop trend started by The Weeknd's 'Blinding Lights', but without nearly as much style or personality. Another very derivative song with a pseudo-astro-spiritual flair

is the one featuring BTS. It has a glitchy outro that lasts less than 20 seconds, which I wish were used at the core of the piece. And let us not forget about the ballad with Selena Gomez, the most forgettable part of the record. The features in the last two tracks mentioned are rather random and superfluous to the album, yet make perfect sense: it's all about the [Money Bag Emoji].

The project has some decent tracks, such as 'Biutyful'. It took me some time to find any enjoyment in it, especially because I do not see the need of having Martin duet with a pitched-up version of himself. Why not get Gomez to sing here instead?

'Red Heart' has the best features of the album. Jacob Collier and We Are KING aid with a skilful, gorgeous, quasi-*a cappella* performance. The lyrics are corny, though nowhere near the corniness of 'People of the Pride'. The track is the fake-woke cousin of Tame Impala's 'Elephant' – a homeopathic dilution of a 2010's classic. The song clearly wants to make a statement, but

the overall message is convoluted and struggles to connect with its title. It is undoubtedly my least favourite section of *Music of the Spheres*. Interestingly, that title belonged briefly to 'Infinity', the last emoji track. As a South American, when I heard the "olé, olé, olé, olé" crowd chant, I was ready to frown upon a weird display of exoticism – but it somehow avoids that. Acclaimed producer and musician Jon Hopkins constructs a trance beat onto the sample, moving the listener towards the introspective atmosphere that the project had

been struggling to achieve.

'Infinity' segues into the final track, 'Coloratura', with a drone, before the introduction of a piano-harp motif at around the one-minute mark. Martin's performance



is a throwback to the early years of Coldplay: the lyrics finally have substance to them, and the overall sound is quite uplifting. Going all out with a refreshingly modern take on piano rock, the band develops a 10-minute epic, which feels very out of place next to the rest of the tracklist, but is ultimately my favourite song on the album. It gives me the hope that I would rather not have for their next album, because this one was not great.

Nonetheless, I must give credit where it is due. *Music of the Spheres* is entertaining and has good sequencing. It all feels in place, even if the music itself is not superb. My main gripe is with the entirety of the extraplanetary gimmick. It was not executed to its full potential, as most tracks felt like industry-manufactured music boxes with "spacey" designs you find on Etsy splattered on them. Funnily enough, Chris Martin has said that taking magic mushrooms "confirmed his suspicions about the universe". Maybe his suspicions were that his band would never make a critically acclaimed album ever again. It is Coldplay being Coldplay, with their little Sisyphean task.

“
MOST TRACKS FELT LIKE INDUSTRY-MANUFACTURED MUSIC BOXES WITH 'SPACEY' DESIGNS YOU FIND ON ETSY SPLATTERED ON THEM

Friends That Break Your Heart

Written by **Pallavi Ojha** Music Writer



I can always count on James Blake to somehow produce the perfect soundtrack to London at night. As someone who regularly sticks on an album for an evening run, I welcome the magical quality of music that feels as if it were made underwater. *Friends That Break Your Heart* is no exception. Blake flexes his outstanding talent as a dynamic producer and incredible collaborator in his fifth studio album. SZA's vocals shine over gorgeous chord progressions in

“
I WAS MADE TO FEEL THAT VULNERABILITY WAS A SHAMEFUL FEELING, AS A MAN ESPECIALLY

'Coming Back'. SwaVay and JID's lyricism feel effortless against Blake's signature murky melodies in 'Frozen'.

The themes of this album are much stronger than his previous releases. In an interview, Blake remarks that he had found peace in letting go of the need to construct a manicured identity. There has been an undeniable shift in the way we talk about men's mental health and Blake is eager to drop this facade and lean into emotional truth. This directness is undeniably present here, Blake says "The



MUSIC

way that I grew up, I was made to feel that vulnerability was a shameful feeling, as a man especially, and so I just think I unconsciously covered those feelings up with language that wasn't accessible". This emotional truth shows itself in a devastating and cathartic way in 'Say What You Will', possibly one of the best tracks on the album.

Yet I find myself missing the edgier, moodier vibes of *Retrograde* and even the softer poetic aura of *The Colour In Anything*, an album that felt like an electronic ode to nature. This new release appears to be an extension of *Assume Form*. This is not necessarily a bad thing. Blake has matured past the abstracted dubstep of his earlier releases, but this maturity comes across, perhaps, as a sanitisation in response to his rise to fame. My biggest

disappointment was with the title track. I usually have no problem with stripped-down vocals and a piano (if that is also your thing, I recommend his LP, *Covers*). However, this ballad seems so out of place and complete break from his usual style.

Thematically, is one of the strongest Blake has ever released. That familiar pain of losing a friend you thought you'd have forever is ever present in this record. But it's a little sad that the challenging, experimental sound of his earlier releases is not coming back.

James Blake will play
London's Alexandra Palace
on May 17th 2022. Tickets
are £34.50 and are available
through his website

Opinion

Live Music is Better Alone

Written by **Rosie Millns** Music Editor

Last Monday, I went to a gig alone for the first time in my life. I've watched sets on my own before, losing my friends in the crowd and spending the night preoccupied with trying to find them, but also having the reassurance that I would have somebody to travel home with afterwards. I have travelled to gigs on my own before too, lying to my parents about going to a friend's home but instead meeting people I vaguely knew via Twitter music circles in London to see a band together in a venue we were too young to get into (I know my dad reads this – sorry dad). But knowing I was consciously going alone to a gig terrified me.

I spent the entire day in my pyjamas, counting down the minutes and feeling sick at the idea that in exactly 3 hours and 57 minutes I would have to stand in a room of 149 strangers alone, my face buried in my phone between sets, clutching a strong drink both for my nerves and for something to do with my hands.

It is not like I dislike going places alone. I enjoy going to cafes alone, or museums alone, or exploring new places alone. I am not sure why a gig felt so different. Perhaps it is the thought of standing out in a room of strangers, all of them being trendy people seeing a trendy band with their trendy friends.

It is not a matter of unfamiliarity. The venue is one I feel at ease in. I go there regularly – in fact, on the day I saw Peeping Drexels, I had already been there earlier in the week, and had a gig booked there later in the week too. The anxiety was not from fear of the unknown. I can trace the way there in my head. I don't need to do a search to know that I should get the 109 from Brixton station to Croydon, stopping at Blenheim Gardens and walking 5 minutes down the road before reaching the familiar doors of The Windmill, hearing the familiar bounce of the tennis ball on the street from Roof Dog, who lives

upstairs and peeks at gig-goers over the roof, dropping his ball down onto the street to encourage people to throw it up and get stuck in a game of catch with him.

It is also not a matter of safety. The Windmill is the type of venue where I feel comfortable to put my bag down at a random bench at the back of the venue whilst I go into the crowd, trusting the people who visit there enough that I know it won't be stolen before I get back. I feel safe there, even as a 5'2 woman on my own. Travelling to and from the venue alone wasn't the root of my anxiety either. I live in a different part of London to many of my friends, so I am used to travelling to and from places alone. If I am comfortable being alone in so many situations, why did live music feel so different?

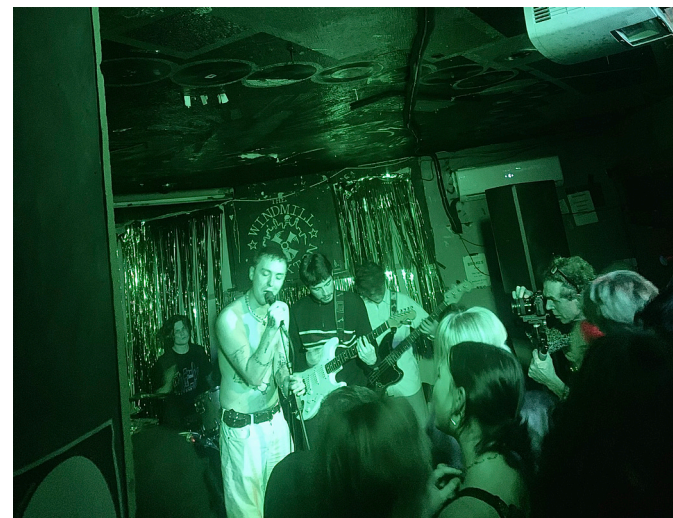
I tried my best to time my arrival exactly for when the band was on, but I managed to arrive just as the support was finishing, meaning I was anticipating the entirety of the 30-minute set break to be awkwardly standing alone, my phone not having enough service to mindlessly scroll social media to seem busy and pass the time, and buying enough drinks to take the edge off the anxiety but not enough to get drunk and be vulnerable

on my own. I was anticipating feeling self-conscious, paranoid the entire gig that the 100 people behind me were burning their eyes into the back of my head, judging me for not being able to find an acquaintance to take my spare ticket.

I might have just gotten lucky with the crowd for my first solo gig trip. By chance, I bumped into people I had met at a friend's band's show the previous week. I

didn't spend the night with them, but having a friendly face at the back of the room comforted me a lot. It ended up being my favourite gig that week, better than the other ones I had been to with friends.

Going to social spaces alone feels like a celebration of freedom. I did not have to worry about how my



friends were experiencing it - if they were enjoying it or not, if I was going to lose them in the crowd, or if the acquaintance I vaguely knew and gave a spare ticket to was judging my dancing. I could slip in and out of the crowd as much as I wanted, snaking my way through to the front without annoying the people around me when I wanted, and entering the moshpit whenever I wanted. I was free to speak to the band after the set without hounding them (though unfortunately I couldn't get a clear answer about what a Drexel was). In fact, once the set started, I probably felt less self-conscious than I normally do at live music events, and the music was better for it.

Peeping Drexels were insane. The crowd was energetic, but not violent; attendees shouted the words along loudly, but didn't speak over the music throughout the set. It was the last time Peeping Drexels were playing their EP *Bad Time*, and I would have regretted it so much if I had missed it.

In a study of 500 18–24-year-olds, 65% have been to a gig alone, and 98% would be happy to do it again. I understand why. The experience was empowering, if not infectious. I think it has kickstarted a journey of not being afraid being alone and of learning to love my own company and indulge in my interests without being inhibited by the availability or interests of my friends.

I think I prefer going to gigs alone.

“
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FRIDAY 29TH OCTOBER 2021

COMMENT

» IS FEMINISM FLAWED?
 BY SRIGAN MOHARIR
 OPINION ON WHAT MODERN FEMINISTS
 HAVE GOTTEN WRONG - FIND IT ON

30

Edited by: KHAMA GUNDE

Eat Every Grain of Rice

► *Enjoy the taste of hometown.*

Runtian Wu

Comment writer



“Eat every grain of rice, or do not leave!”

Perhaps my nonchalance to having nice meals originates from my childhood, thanks to those uncomfortable memories bestowed by my grandpa. I can well remember how serious he would become every time he discovered me having any left-over food in my bowl. It was like, all of a sudden, all the kindness that always surrounded him would disappear; indeed, if there were left-over rice, even when there were merely one or two grains left, he would ask me to go back and finish them, regardless of how much I resisted. Just imagine every meal, there is somebody to observe you, or rather, stare at your bowl at all times! But those were not the deepest memories. If there were any grain that was accidentally dropped to the floor, no matter who dropped it, my grandpa would quickly pick it up and put it into his mouth when the family members were not paying attention—just to clarify, we're not poor at all.

There is a long story behind the rice. My grandpa's generation experienced the dark period when China was being invaded by Japan, and later the Great Leap Forward. It was the time when the horrendous famine took away tens of millions of lives. There was only one bowl of rice for a whole village per day. Lots of people died. My grandpa survived by eating leaves and grass. At that time, all that he dreamed of was a plain bowl of rice. Later, I got a chance to visit the village where my grandpa grew up. There, crops were not just food but God. People pay tribute to crops when kids are born. People sleep with crops forever underneath the earth after they pass away. They said those crops were the souls of our ancestors. They said if the crops survived, no matter how much difficulty they faced, they knew they could survive.

There is something divine deeply

rooted in my grandpa's heart. Mine, too.

Though I'm not so enthusiastic about food, I missed the rice I eat back home so much. Somehow, I managed to buy a bag of rice imported from Heilongjiang Province. I enjoyed that familiar taste, the familiar taste from my homeland, which I have left for exactly one month now. It brings me the feeling and the memory, somehow distant ago across thousands of years, of people working on the field, singing the farming songs. They enjoyed the same taste of rice as I do today. Whenever I eat the rice, we unite.

I have invited many of my friends to have meals with me, with the hidden reason—to share the taste of my homeland. Many of us are international students traveling thousands of miles away from home to pursue our dreams. Maybe we'll be in a foreign land for decades, and who knows where we'll be for years to come? But no matter where we are, we should not forget where we are from. That is why this is the rule if you come to have meals with me: eat every grain of rice.

Photo credits: Jocelyn Morales on Unsplash



I wrote a poem months ago after visiting some villages. Many families there had to let their children flee abroad because of war and famine decades ago. They have lost all contact since then. Thinking of the hometown, I want to share the poem here. It's about China Town, a place buried with memories.

CHINA TOWN

You bid farewell to your parents with bitterness

Farewell to the hometown where you're grown

Take the compass and set foot on the boat,

Sailing into the distance in the flames of war

Who knows what destinations you'll head on to?

Walked into the dilapidated village,

I caught a glimpse of an old man in the corner

Putting a stick of incense in front of a yellowed portrait

Praying silently to heaven

May the best wishes be with his beloved child

The lantern hangs high, the dragon dances and flies,

But this is no longer the hometown

You say, wherever you go, wherever you root

But in the quiet night,

Who is trembling by the window,

Shedding tears but unable to cry

Who is sitting silently by the lake,

Raising the head from time to time,

Hoping to see him back again?

The vicissitudes of the years,

Took away the magnificent palaces,

Took away the immortal kings

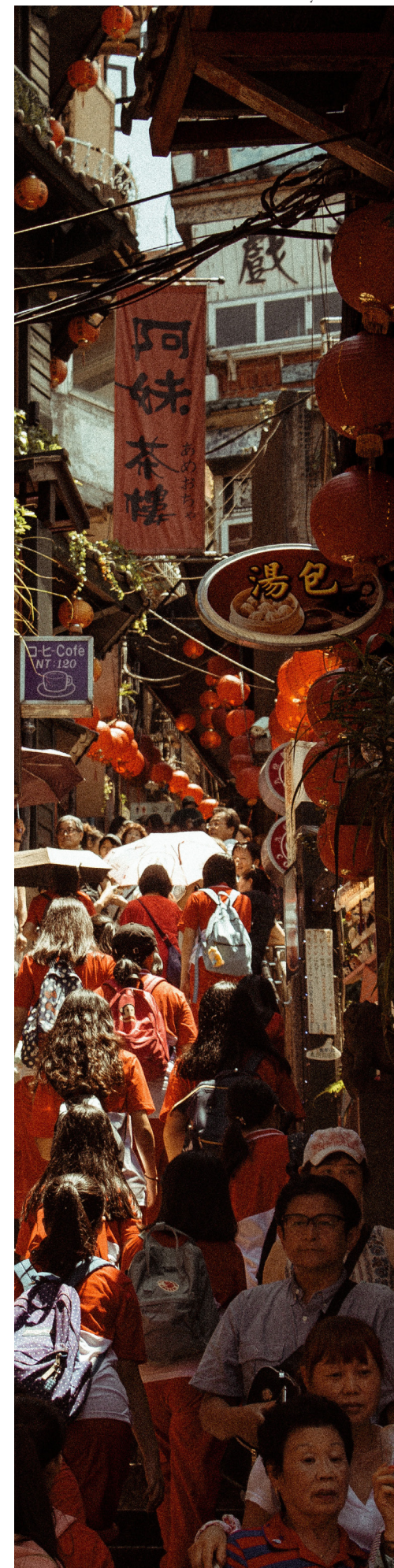
Yet the moonlight

Shall forever shine

On your face

and on the land of your hometown

Photo credits: Wendy Wei on Pexels



COMMENT

One Use, Five Hundred Years in a Landfill

► *On the government's proposal to combat plastic waste, and why they need to do more.*

Zanna Buckland
Books Editor



How many times have you used a plastic fork for a single 20-minute meal and then immediately thrown it out? Or picked up a plastic stirrer to stir some sugar into a coffee, then thrown that out? Or grabbed a pack of plastic cups from the supermarket to be used for a single party, and had them all thrown out too? Easy, isn't it?

Well, those individual single-uses of plastic utensils contribute to our collective global 300 million tonnes of plastic waste every year, and that number isn't shrinking. This plastic waste ends up in landfills, not only taking up much-needed space, but also in woodland, rivers, oceans, etc., and has harmful effects on the natural world. Most of us already know this; these facts and statistics could almost be considered common knowledge. Regardless, it's not easy to change habits – even those only developed in the last 50 years or so. The extent of many individuals' attempt at positive environmental change is simply to buy a set of metal straws.

In the last few years, following the rise in awareness surrounding climate change and related environmental issues, many businesses have taken initiative towards reducing their plastic waste. Large corporations have made small modifications to the way they function on a consumer level, examples being McDonald's removing their plastic straw dispensers and H&M taking in old clothing to 'reuse and recycle' in exchange for clothes vouchers. These acts look good on the surface, but don't actually contribute much in the grand scheme of things. Plastic straws and packaging

still litter landfills, and fast fashion prevails throughout the fashion industry.

The pandemic has also had a detrimental effect on the environment. While CO₂ emissions fell by a small amount due to the lack of travel, our global plastic consumption rose, mainly in the form of PPE, food take-out containers and cutlery, and packaging from online shopping deliveries. The percentage of recyclable and recycled plastics being used have also dropped, and economic rebound around the world will likely involve increased carbon emissions, increased fossil fuel consumption, and higher rates of pollution than before the pandemic began.

The UK government has recently proposed a nation-wide ban on a number of single-use plastics in cutlery, packaging, and other items, as well as a £200 tax on each ton of plastic packaging produced containing less than 30% recycled material. This follows their 10p charge on plastic carrier bags, which did significantly reduce sales of single-use carrier bags around the country. Blanket bans and taxes essentially force corporations to

look for alternatives, such as reverting back to paper and glass packaging, or investing in biodegradable plastics, while maintaining their position against competitors. This could be convenient timing given that most businesses are being remodeled post-pandemic. Unfortunately, the packaging tax only comes into effect in April 2022, and the single-use plastic ban has yet to be approved by Parliament.

Some may argue that this move is much too little, too late, and the UK government lags behind the EU, who have implemented their single-use plastic restrictions from July of this year. The of-



An aerial view of a landfill site in South Tangerang, Indonesia.

ficial EU website states: 'single-use plastic plates, cutlery, straws, balloon sticks, and cotton buds cannot be placed on the markets of the EU Member States. In addition, the same measure applies to cups, food and beverage containers made of expanded polystyrene, and all products made of oxo-degradable plastic.'

In our current economy, it is, of course, a tall order to eliminate ALL single-use plastics, but those products that can feasibly utilise environmentally friendly alternatives should do so. Any institutional move towards a greener economy and improving eco-friendliness is surely a welcome one. However, the problem is not the action itself, but the failure to proceed with it sooner and failure to take further action in tackling climate change.

Another substantial source of plastic packaging is supermarkets, which sell enormous amounts of consumables that need to be kept fresh and protected from bacteria and viruses (particularly during COVID). These plastics aren't technically single-use – they're used as storage for extended periods of time – so they won't be included in the ban, but they still contribute significantly to plastic waste. It is difficult for supermarkets to control this, due to products being sourced from a variety of suppliers. While some have made efforts to improve eco-friendliness (e.g., using cardboard instead of plastic), the majority of food packaging gets trashed anyway, especially since recy-

cling requires the materials to be clean.

Supermarket corporations might do well to consider reverting back to a more 'old-fashioned' system where they can, in which customers collect supplies from large dispensers, using their own containers. Zero-waste stores have adopted this on a small scale for products such as shampoo, seeds and nuts, and pasta. However, these stores tend to be much more expensive than your average Tesco or Sainsbury's, and have limited options in comparison.

While these policies will have economic impacts on the food & beverage and hospitality industries, won't the environmental benefits outweigh the cost? They may require us to start buying more reusable utensils and containers to carry around, but the amount of energy and resources that go into making those once will be minute compared to the amount used to producing single-use packaging over and over again, and they will be much less polluting in the long run.

Scientific studies will tell us that we're past the point of no return, that nothing an individual person does can make a difference, but why should that stop us reducing, reusing, and recycling? Until governments and corporations start making better choices and moving towards significant change, all we can do is try to make as many eco-friendly choices as possible.

Photo credits: Tom Fisk on Pexels

Is Modern Day Feminism Flawed?

► *Is feminism meeting its definition? Writer Srigan Moharir argues that modern day feminism is failing to do so.*

Srigan Moharir

Writer

“The worst form of inequality is to try to make unequal things equal”
- Aristotle

Let me start off proceedings by stating the textbook definition of feminism which states that ‘Feminism is the advocacy of women’s rights on the ground of the equality of sexes.’ Let me make things clear; I won’t be dwelling on the past and the history of feminism. This article is a sincere attempt to ascertain the issues with regards to “Modern Day Feminism”. If you somehow end up reading this article to the end, just make sure you try to understand the points I am trying to document in this article rather than reading it to respond to a few points which might not fit with your line of thinking.

I believe the modern day narrative of feminism is pretty skewed. With the ever-increasing influence of social media, people (mostly girls) are being misled into perceiving that feminism is a concept wherein women are supposed to be superior to men. But the entirety of this concept in the contemporary world revolves around the fact that these “Social Media Warriors” are willing to address only those issues which are under the umbrella of their comfort zone.

When people (with more emphasis on feminists) talk about standing up against injustice, it is majorly biased towards issues affecting women. When they talk about injustice, feminists usually turn a blind eye to the sufferings of men. The definition of feminism talks about equality of the sexes, which should also include raising awareness and voicing your opinion about the problems that men deal with. Unfortunately however, that is not something I see quite often. If you’re still glued to this article, let me tell you that at no point am I generalizing. There are always anomalies. That is what we Chemical Engineers like to call it.

Another point that I have noticed feminists tend to bring up is the existence of a patriarchy (a system of male-dominated society). But is our society actually male-dominated? The reverberating answer that I might get is that an enormous amount of wealth is possessed by men and that ladies do more unpaid work. But when they propose this contention, they to some degree fall flat to get that what they’re talking about may be an exceptionally tiny populace of men.

On the flip side, gravely antagonistic individuals are men. Most individuals within prisons are men. Most people who die in wars are men. Most people who are destitute are men. Most individuals who commit suicide are men. How often do we see feminists stand up for the hardships of men? What women rights activists are doing these days is that they’re considering an awfully small substratum of extremely successful men and using them to speak about the entire structure. Even if we were to say that we have a patriarchal structure (to some degree or extent) the fundamental basis of that structure is not dominance, it’s the result

of proficiency.

Egalitarianism is a principle that revolves around the notion that all people are equal. There have been a few countries that have tried to become egalitarian. For example, the Scandinavian countries have moved towards an extraordinary bargain of sex uniformity, but scientific data shows the identity contrasts have expanded instead of decreased. For example, the proportion of women who are opting for STEM

fields (Science, Technology, Engineering and Mathematics) has decreased rather than increased. Why is this something that no feminist talks about?

Lastly, I would like to shower light upon a vital issue that comes up during feminist discourse - rape. Rape is a heinous crime and if proven guilty, the person should be hanged to death. But on the other hand, addressing issues like fraudulent or false rape accusations is equally as important. The other day I was watching a TEDx talk by Deepika Bhardwaj titled, ‘Men - the forgotten gender’. I was taken aback when she asserted a statistic put out by the Delhi Commission of Women which says that of the rape cases filed between April 2013 and July 2014 in Delhi (also informally known as the ‘Rape Capital of India’), a whopping 53% cases were false. How does one justify this?

I will abstain from saying anything further. I would like you to take a moment and ponder over the points that I have brought to the table rather than being outraged against points which “you” felt were absurd.

The argument that the concept of modern day feminism is genuine and moving on the right path is utterly fallacious. While the flip side of it, which apparently our minds can’t reconcile, is something we need to ponder upon.

Felix strongly stresses that the views put forward in this section, and in all sections other than the Editorial, do not reflect the views of the paper. We strongly encourage anyone with differing opinions to write a counter article which we will publish in the next issue. These can be submitted to either Felix@ic.ac.uk or comment.felix@ic.ac.uk!

“

HOW OFTEN DO WE SEE FEMINISTS STAND UP FOR THE HARDSHIPS OF MEN?



Signs at a Women's March in Kuala Lumpur, Malaysia 2019.

Photo credits: Michelle Ding on Unsplash

COMMENT

UCU strikes are an unfortunate last resort

► Our lecturers, teachers, administrators, technical staff, and researchers are voting on whether to go on strike.

Vijay Tymms

Principal Teaching Fellow in Physics, and branch president of Imperial College UCU

It really doesn't have to be this way. Staff members of the University and College Union (UCU) voting on whether to go on strike over huge cuts to pensions. But that is what is happening, at Imperial, and in universities across the UK. Voting started on 18th October and runs until Thursday 4th November. If enough votes are in favour, lecturers, teachers, administrators, technical staff, and researchers will be taking the drastic step of withdrawing their labour and forming picket lines to pressure university management to stop their severe and unnecessary cuts.

No-one wants to strike. It is always a last resort. Unfortunately, staff are having to consider industrial action due to intransigence by university employers — including Imperial — and their refusal to take an evidence-based approach to the University Superannuation Scheme (USS) pension scheme.

The USS pension scheme

A Defined Benefit pension scheme like the USS is a form of “deferred pay”: an employee agrees to defer, or put aside, some of their salary now, in return for a guaranteed income — a proportion of their average salary over their career — on retirement. Most academic and academic-related staff in pre-1992 universities in the UK, including Imperial College, are members of the USS. An employee and their employer make contributions into the scheme, which are collectively invested and, when the employee retires, their pension is paid out of collective USS assets. Imperial College — as part of the university

employers' organisation Universities UK (UUK) — wants to slash the benefits to its employees. The UCU estimates that, for example, a 35-year-old lecturer starting work now on spine point 29 at Imperial College is set to lose around 45% of their guaranteed pension income. This can be seen using an online UCU model for predicting pension benefits.

What is the dispute over?

Pensions are complicated. But in this case, this time around, UCU believes that the situation is relatively simple.

The main organisations involved in the current dispute are USS itself, UUK (representing employers), UCU (representing working and retired members of USS) and the Government via the Pensions Regulator (tPR). The Regulator requires USS to assess the value of its fund every 3 years to decide whether they're making prudent assumptions about how the fund will behave in the future, and whether it can pay out the pensions that it has guaranteed to pay. The last valuation was in 2018. USS then opted to perform an early valuation, in March 2020, just as the stock market fell, mainly due to uncertainties caused by the global coronavirus pandemic. USS's March 2020 valuation reported a deficit

of £15.4bn. UCU and other commentators have criticised this valuation as unscientific and unreliable, as well as being untimely.

However, UCU and its members are on very strong ground: even if one takes this March 2020 headline deficit of £15.4bn, calculated by the flawed USS methodology, at face value, 17 months

later on in August 31st 2021, USS assets were valued at £89.6bn which is £23.1bn higher than in March 2020:

The prima facie evidence is that USS



In 2018, looking like a man who had his pension taken away from him

is now in surplus by many billions. And a more sensible scientific valuation methodology — as recommended by the Joint Expert Panel (JEP) set up after the 2018 strike over USS — would likely show USS now to be in surplus by even more.

The scarcely credible situation right now is that Imperial College supports slashing its employees' pension benefits on the basis of a valuation in 2020 that has been overturned by the events of the last year and a half. It is totally unnecessary. Staff are asking employers to not make the cuts and to work with UCU to make these damaging disputes a thing of the past. But employers are going ahead anyway. When pension cuts were proposed by UUK in 2018, on the basis of similarly flawed arguments, members of UCU went on strike to defend their pensions and won: the proposed cuts were not made and the JEP was set up, giving staff hope that economic sense, financial sense, scientific rigour, and greater transparency would prevail at USS. But now

in 2021, even more severe cuts are being proposed on even flimsier grounds.

What is happening now and what you can do

If the vote for industrial action is successful, UCU will go back to UUK and USS after 4th November and ask them to withdraw the planned cuts and work together. If they don't then we'll be in the situation no-one wants, and UCU members will withdraw our labour and picket campus. If staff do go on strike, we will be standing up for ourselves and for the College which needs a good, affordable, guaranteed pension scheme so that people want to work here and so that an academic or academic-related career is desirable and attainable for future generations. But we don't want to strike. You can help by writing to the Provost and President to ask them to be scientific, to look at the evidence and to show leadership by asking that UUK work with UCU to avoid this dispute.

Photo credits: Vijay Tymms



... SET TO LOSE AROUND 45% OF THEIR GUARANTEED PENSION INCOME



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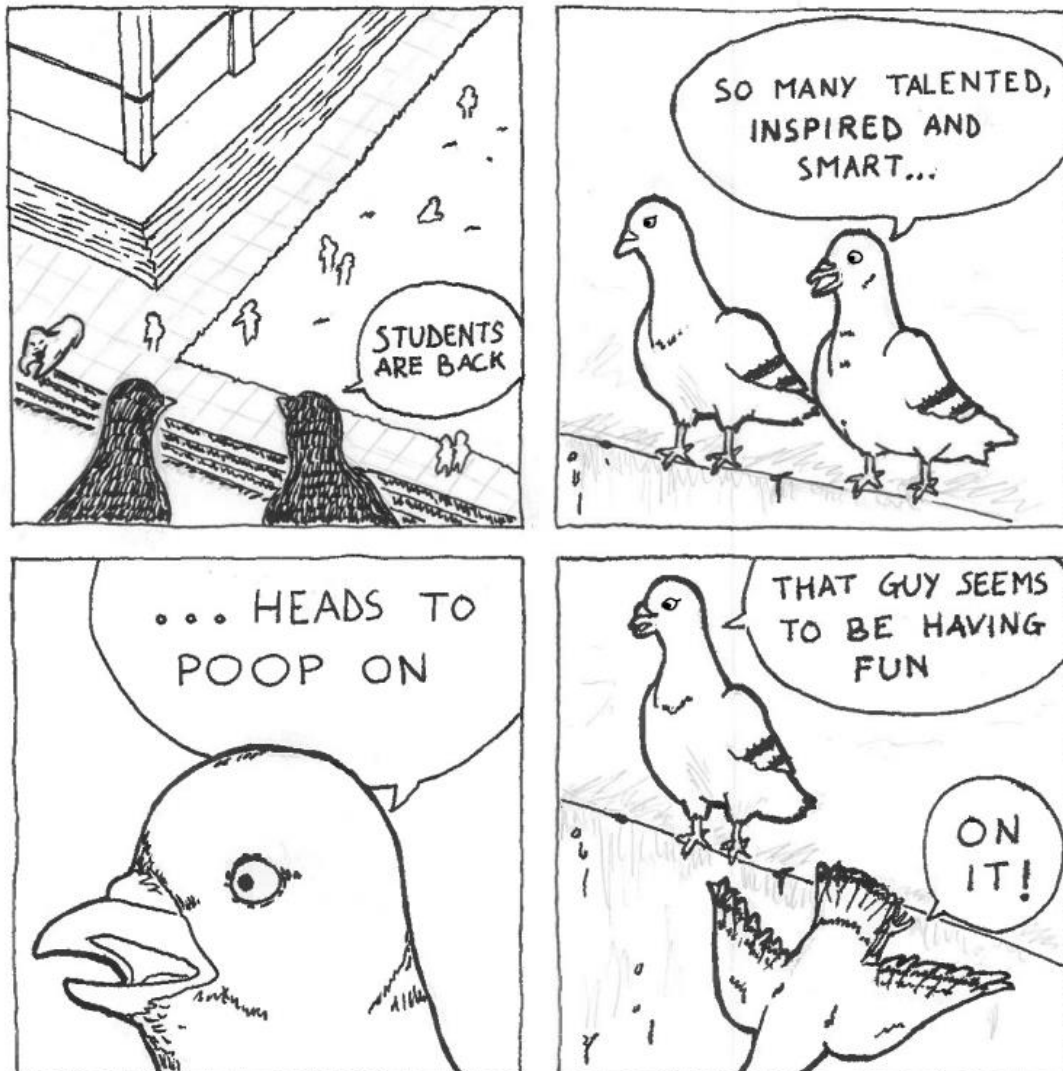


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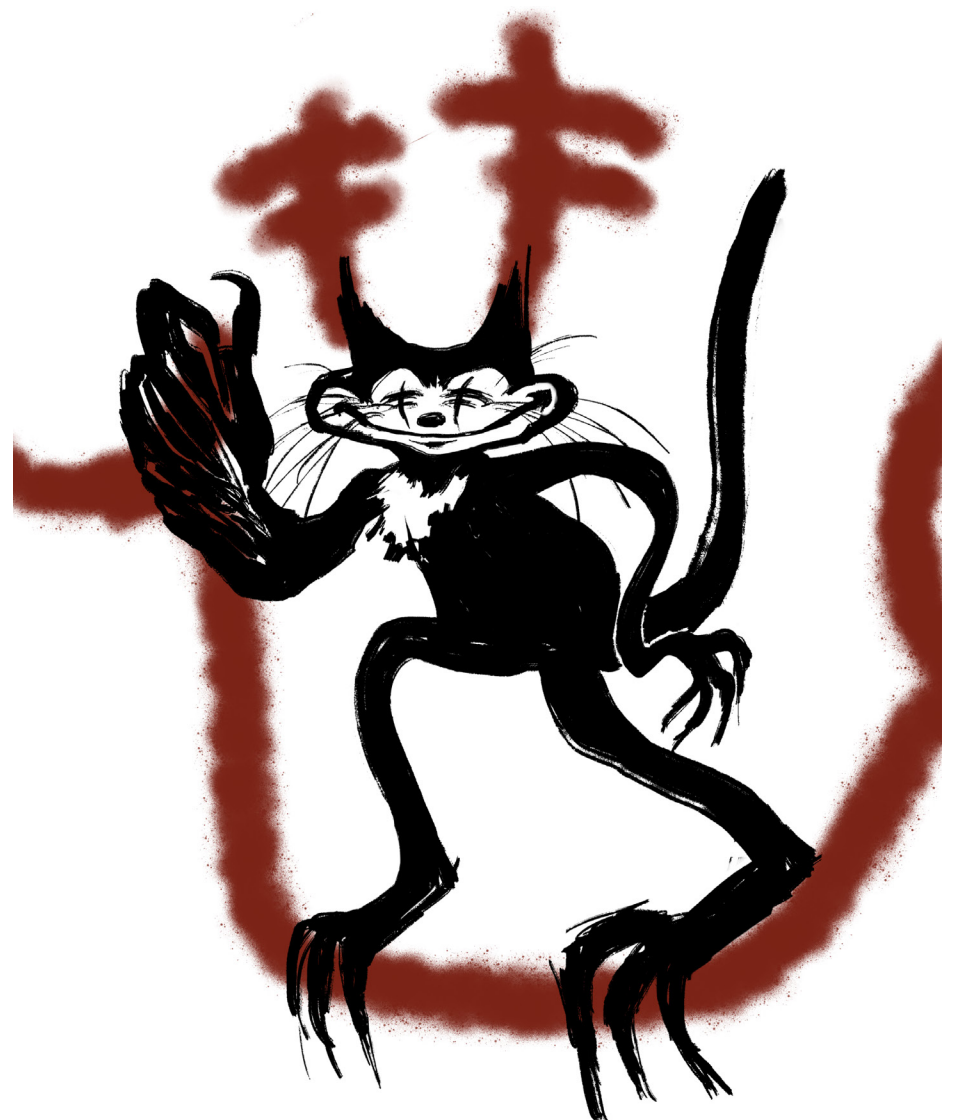
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Comic Strip



Drawn by Zhaoyang Jacopo Hu

Happy Halloween from Felix



Illustrated by Victoria Xu