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Great Barrington author denies ideologically motivated funding source

Ansh Bhatnagar Science Editor Natalia Glazman Science Writer

E XCLUSIVE: In an interview with Felix, the most prominent anti-lockdown scientist Professor Sunetra Gupta denied being funded by "libertarian think tanks" after accusations from scientists opposed to her 'herd immunity' policy proposal, claiming that they have "caused damage" to her and her family.

Gupta, who co-authored the 'Great Barrington Declaration' proposal that was launched at the right-wing think tank American Institute for Economic Research, also denounced New Zealand's successful coronavirus response as "nationalistic", suggesting their border restrictions were impractical.

She also stressed her use of a private PR firm was due to services being delivered "pro bono" in conjunction with the University of Oxford Press Office, which seemingly conflicts with their comments on this matter from March where they claimed that the University "cannot comment on individual arrangements that it is not party to."

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Imperial College Secrets admins: Exposed

Calum Drysdale Editor in Chief

It is difficult to discuss the student culture at Imperial without mentioning Imperial Secrets (IS). Anarchic, it is the place where students can anonymously spread their thoughts, musings and views to the student body.

While always controversial, the page has come under sustained criticism over the last couple of months being accused amongst other things of censorship, unacceptable liberalism, racism and socialism.

With previous Imperial confessions page Imperial College Exposed (ICE) shutting down with the admin blaming burnout from reading through the large amount of distressing and abusive posts, Felix spoke to the admin team of IS to find out how they are coping with the stress and what they thought the page was for.

Confessions pages have always occupied a strange place in a university ecosystem. Outside of direct university control they are yet still affiliated with the university. As seen at ExHonestly the now defunct Exeter confessions page this can cause problems. The admins there let through coded neo-nazi slogans leading to a backlash against the page and a referral to the police by the university.

The Imperial Secrets admin team, made up of Ethan, Seb, Olivia, Rayan, LH and Admin H who would prefer not to be named, are aware of the fine line that they walk. Ethan explained how careful the team have to be to avoid getting "zucced".

CONTINUED ON PAGE 2



Professors Kulldorf, Gupta and Bhattacharya signing the Great Barrington Declaration



NEWS

WHAT IS FELIX?

Felix is the newspaper of Imperial College Student Union. We provide entertainment, information and news while also being a space that members of the Imperial College community can use to publish their views and respond to the views of others.

CAN I WRITE FOR FELIX?

Yes. We welcome all submissions and aim to publish everything we are sent. An editor will work with you to make sure your article is in the best condition it can be for publication. We also produce video and audio content if that interests you more.

HOW DO I SUBMIT AN ARTICLE TO FELIX?

• If you already have an article in mind or have written one already then send it to the section editors via email. These email addresses can be found at the top of each page in a section.

• If you want to write but don't have a topic in mind, check out or section specific writers Facebook groups that we update every week with topics we would like articles about or email the section editors

Send your article to us by 8 o'clock on Tuesday and we can then have it ready for publication that Friday!

We are also always recruiting editors, copy editors, photographers, artists and more. If you would like to get invovled in Felix in a regular capacity, email Felix@ic.ac.uk

Imperial secrets admins respond to page criticism

CONTINUED FROM PAGE 1

He explained how his long history of running meme pages and facebook bots have given him a good understanding of what can and what can't be posted, though he admitted that facebook is "moving fast and fucking breaking things on the daily" so the team have to remain on their toes.

Past admins of Imperial confessions pages have not been careful enough in the past, either due to a lack of experience or care. However, this admin team is careful to avoid their predecessors' fate. They have a clear rule set that is designed to prevent the page being taken down at any cost.

The team also has pedigree. Ethan was originally involved in the original Imperial Secrets page that was run by BNOC Paul Balaji and was made an admin after he created a rudimentary bot that streamlined the posting process. This page was shut down due to lack of moderation leading to someone posting a link to "Indian midget porn".

Originally set up in response to the ICE practice of not posting during the holidays, the new IS page was set up to cater for the demand. Formed during the 2019 easter holidays, the IS team originally just comprised of Ethan and Seb. The page began receiving a high volume of submissions but once term started again people shifted back to using ICE. This pattern continued until mid-2020 when the ICE admin shut down the page and IS became the de-facto Imperial College confessions page.

While the admins are comfortable in their positions, confident that they can evade being taken down and happy to share their names they have given less thought to why they do what they do. Their answers to my questions deal with practicalities, how to avoid being shut down, how to more efficiently publish confessions and how to add

Imperil Secrets post rules

Do not accept bullying

- -No targeted posts i.e including students' full names, etc
 - o porn or sexual related posts a

-No suicide related posts

-No random meaningless spam. The secret should actually have some level of quality

Use your common sense! Nothing that has the slightest possibility of getting the page taken down by Zucc or Imperial themselves.

If someone askes for a post to be removed, remove it

Imperial College staff lax mask discipline

Calum Drysdale Editor in Chief

Members of College staff are wearing masks incorrectly. Felix reporters have found that 42% of staff are not wearing their mask correctly.

College rules on student mask behaviour state that masks should cover both the mouth and nose and should be worn at all times, "especially when transiting between buildings". However, many staff members are failing to follow these guidelines.

Many staff members have little to do, with retail, finance and porters not needed due to the reduced level of in person teaching. These staff members are being employed as guides to new students and can be seen on campus and around the South Kensington area, wearing blue 'Welcome to Imperial' t-shirts.

Due to the little amount of work required of them they face having to stand around whiling away time and many remove their masks.

With the end of the furlough scheme, the College faces having too many employees with no work to occupy them with. This can already be seen in the various shops around campus where up to 9 staff members wait around for the occasional student customer.

more features.

When I asked why they run the page, they struggled to answer. Seb explained that as a group the admins are "mostly for freedom of speech about any topic on the page, with the obvious and well established caveats of inciting violence and slander." But the main motivation seems to be the thrill of doing something better than it has been done before. He went on to say that this problem of what a confessions page is for, whether it should "be purely entertaining, and a liberal safe space, or whether it should allow people to voice unpopular opinions and have them refuted via the page" was one that the admins struggled to answer on a daily basis.

Yet despite this members are committed and dedicated. In 2020 the page has averaged 19 submissions a day, hitting 148 on 6th June and the admins have the air of journalists or dissidents, imbuing their role with sacred purpose behind a veil of inside jokes.

The admins are clearly proud of what they have built. "Having such a high level of automation has allowed us to have way more features than (as far as I know) any other uni confessions page that currently exists. From adding moods, to uploading images and video, to automatic poll creation, to emailing you when the secret has been posted. Most other uni confessions pages use crush ninja to manage submissions, so because they don't have an in house solution like us, they don't get all these cool features. And on top of that, if we think of something cool to add, we can add it in a few hours"

However, spotting the bad posts is not always easy. Admin H explained that "there are sometimes disagreement on what posts count as political, and a lot of the time chains evolve from a non-political post into a political one, for example the time when a bunch of sexist secrets were submitted after one women complained about being catcalled. So it is sometime hard to judge when that starts."

Having a group of admins means that no one person takes the brunt of complaints and reading depressing posts. As a group they can "laugh off the posts attacking us and threatening to go to another page... "But what sucks is seeing how there are genuinely sexist/racist people among the students."

Having a group also helps relieve the stress of the role. When asked about the effect of the role on their mental health idiots have no idea how the page is run, the group did not re-

they

port any trouble, though many mentioned how much sympathised WHAT SUCKS with the ICE admin who had to moder- IS SEEING HOW ate all the submis-**THERE ARE** sions themself. Having a group of people **GENUINELY** means that "when SEXIST/RACIST we get attacked for being a shit page for **PEOPLE AMONG** letting x through **STUDENTS** and not y, we just

they just sit there submitting secrets and complaining. But at the end of the day, if i were forced to feel an emotion towards them, it'd probably just be sympathy" Accusations of censorship also got a short shrift. "We actually chose to not post anything more about BLM

allow those submissions to be posted - because we felt we couldn't make the call it doesn't faze us in the slightest. These between racist incited violence and rac-

ist flawed logic that should be refuted by public discourse."

When asked why they had chosen to reveal their identities now the team was split. Some of them made no effort to hide what they did, saying that the clout was the major reason that they did what they did. Others such as Admin H decided to remain anonymous and admitted that given the nature of some of the submissions they would "not like them associated with me".

As of yet the group has not had any contact with College, and hopes to keep that up.

Credits: Imperial Secrets ✓ Yes ✓ OK, this submission $\overline{\checkmark}$ will $\overline{\checkmark}$ be posted. (Submission ID: 1966808830) Seriously fuck off back to UCL nobody cares about your horrific opinions. EXTRA INFO: Submission ID: -1366448301 1 Is this suitable to post? ✓ Yes No More actions ✓ Yes OK, this submission \checkmark will \checkmark be posted. (Submission ID: -1366448301) [3rd Year] I really hate the people here. It is impossible to have a serious discussion. Whenever there is a post that even slightly disagrees with the mainstream narrative, most of the comments are just butthurt students trying to shame/ridicule the person for his opinion. Maybe if you people actually tried to present some sensible arguments, we could have a healthy discussion. Next time when you see a post, which you disagree with, could you please not comment with "this guy", "wow so stupid", 'absurd" etc. but try to deconstruct the point being made and argue it. EXTRA INFO: Submission ID: -447338716 🚹 Is this suitable to post? ✓ Yes A screenshot from the Imperial Secrets messenger chat

SCIENCE

Are restrictions really necessary to deal with the coronavirus pandemic?

► Felix sat down with Professor Sunetra Gupta, the chief proponent of the anti-restriction 'Great Barrington Declaration', to discuss herd immunity, lockdowns, and the various concerns about her work voiced by mainstream scientists.

Ansh Bhatnagar Science Editor Natalia Glazman Science Writer

he impact of the coronavirus pandemic will be felt for generations to come. From the numerous lives lost to the worst economic crisis since the Great Depression of the 1930s, our society is being shaped on a level unseen in recent history. Yet policymakers remain divided on how to deal with this crisis, with some epidemiologists voicing opposition to the scientific consensus in an open letter policy proposal titled the 'Great Barrington Declaration'.

By April, 3.9 billion people were under stay-at-home orders, alternatively known as a lockdown. These restrictions were

enacted by governments based on advice from their own scientists, representing the consensus view on how to deal with the pandemic. This strategy re- CAUSE IRREPARABLE quires locking down until a functional test and trace system UNDERPRIVILEGED can be implemented to identify and isolate new infections. HARMED After this period, lockdown lifts, while

public health measures such as mandatory masks and restrictions on large gatherings are kept in place. Unlike in countries such as New Zealand, the test and trace system in the UK has not been effective enough to avoid a second lockdown, and thus the system was identified by the Government's Scientific Advisory Group for Emergencies (SAGE) as unable to curb the uncontrolled growth in cases in the last two months. The test-and-trace system is hoped to be temporary, as governments are relying on the approval of a safe and effective COVID vaccine in the next few months, allowing normal life to resume once it is distributed.



On the other side of the scientific community, researchers have been calling for a completely different approach to controlling - or even putting an end to - the pandemic: naturally acquired herd immunity. To find out more about this proposal, Felix interviewed Sunetra Gupta, Professor of Theoretical Epidemiology at the University of Oxford, who has been the most prominent academic critic of the policy consensus and who co-au-

> thored the Great Barrington Declaration. The

> > Declaration rests on the concept of herd immunity. In this approach, all vul-

nerable individuals would be shielded, while the rest of the population resumes normal life with no restrictions, allowing them to become infected, recover, and thereby acquire immunity to COVID. A threshold of 60-70% of the population who have recovered from COVID would need to be surpassed to achieve a reliable level of herd immunity. The term 'herd immunity', as noted by Fine et al in the Clinical Infectious Diseases journal, "is widely used but carries a variety of meanings". To Gupta, "it does not refer to, in this case, a level of exposure or immunity that causes the virus to disappear. It refers to a level of immunity which is

an equilibrium. These are dynamic systems which settle and hover around an endemic equilibrium, and the population level at that endemic equilibrium is what we call the herd immunity threshold", suggesting that her view of herd immunity is one where the infected proportion of the population remains constant, rather than exponentially decaying as other definitions of herd immunity would require.

The Declaration was also co-authored by Gupta's colleagues: Jay Bhattacharya and Martin Kulldorff, professors of medicine at Stanford and Harvard respectively. In it, the professors lay out their proposal, called "Focused Protection" and call on governments all over the world to lift lockdown, as "keeping these measures in place until a vaccine is available will cause irreparable damage, with the underprivileged disproportionately harmed".

This emphasis on the harmful effects of lockdown is seen throughout the Declaration, and throughout the interview with Felix, Gupta emphasised those effects as the primary motivation behind their proposal. "It seems to me that these other strategies are just not addressing the costs of lockdown." she said, referring to the policies enacted by most countries.

It is right that these concerns are brought up and discussed; it is evident that lockdowns contribute to a decline

in mental health, particularly for young people. A survey by mental health charity Young Minds

revealed that 80% of young people in the UK felt the pandemic made their mental health worse, with 87% reporting increased loneliness and isolation in lockdown. Meanwhile, a BBC Panorama investigation found domestic abuse reports soared during lockdown with 3 in 4 victims identifying the restrictions

as a barrier to escaping their abusers. Further, police data showed that BAME people were being disproportionately fined under coronavirus restriction laws, exacerbating the systemic biases in law enforcement. This is not to mention the effect lockdowns can have on economies particularly reliant on the service sector, leading to job losses if adequate government support is not provided alongside the restrictions.

KEEP THE CAT FRE

However, scientists representing the consensus view have been keen to agree with these critiques and have stressed that a cycle of lockdowns is not the answer - rather, a lockdown is a tool to buy time to invest in healthcare services and in test-and-trace systems.

ARGUMENTS FOR RESTRICTIONS

Scientists promoting the so-called 'herd immunity' strategy, particularly the authors of the Great Barrington Declaration, have come under scathing criticism. From the problem of our lack of knowledge around COVID immunity, to disputes about how vulnerable individuals can be identified and fully isolated from the rest of the population, the scientific community has not eased off its criticism since the Declaration was published on October 4th.

> The main concern that many scientists have raised is the duration of immunity. Rupert Beale, Head of the Cell Biology of In-

fection Laboratory at the Francis Crick institute, claimed that the Declaration was not a helpful contribution to the debate on COVID policy, explaining that "we know that immunity to coronaviruses wanes over time, and re-infection is possible – so lasting protection of vulnerable individuals by establishing 'herd





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Illustration credits: Nicolas Geiseler Toran

CONTINUED

immunity' is very unlikely to be achieved in the absence of a vaccine". This Tuesday, a study published by Imperial found that antibody prevalence in the population had dropped from 6% in June to only 4.4% in September. For many, this appeared to be proof that we can't rely on naturally acquired immunity to keep the virus at bay.

According to Gupta, however, antibody levels play a much less significant role in immunity: "There is no link between the level of antibodies and protection, the dynamic of antibodies is not a true reflection of how protected an individual is; it doesn't even tell you whether we have a good antibody response."

While most young, healthy individuals recover from COVID, cases of 'Long COVID' have been extensively

documented since the virus swept throughout the world. Patients report crippling fatigue, breathlessness, complete loss of smell or taste, as well as an

array of other COVID symptoms variations. For Gupta, who explained that post-viral fatigue and other symptoms are common after many viral infections, "it's not unusual. And I don't see a frequency of it that makes me think this is something that we need to be seriously worried about". According to the COV-ID Symptom Study, 'Long COVID' has been found to affect 10% of 18-49-year olds.

Neurological damage and a reduction in lung capacity have also been shown to affect individuals who had only suffered the lighter COVID symptoms. Faced with these challenges, Gupta remains clear in her stance: "I think if you balance the costs of long-term COVID in a few individuals against 130 million people dying of starvation, that puts a different perspective". It appears that according to Gupta, the price we would pay for more rounds of lockdown is much heavier than the risk we would be taking if we adopt her Focused Protection approach.

Gupta also objected to the suggestion that it is 'safe' to follow in the footsteps of New Zealand's successful response, responding with moral concerns over their border restrictions: "I don't approve of that strategy because I think it's hugely nationalistic... [Their strategy] works if you're small, but if you're a bigger nation where it's harder to do that, and where it's already settled in and embedded, it's impossible to do this... I don't think [their] strategy is sustainable."

ACCUSATIONS OF IDEOLOGICAL MOTIVATION

The choice of venue to launch the Declaration was cause for concern in the scientific community, sprouting accusations of ideological motivation behind the proposal. The scientists met at the American Institute for Economic research (AIER), a right-wing libertarian think tank that has also assisted them in launching it; a WHOIS lookup reveals that AIER are the registered owner of the declaration website domain name,

gbdeclaration. org. They have since published articles with titles such as 'The Great Barrington Declaration

Is Not Saying 'Lock Up Grandma', defending the statements made in the declaration against the storm of criticism that it has faced.

of 18-49 year olds affected by 'long COVID'

AIER has been strongly linked to climate change denialism - every climate change report or comment that is published by the think tank downplays the fact that man-made climate change is a risk to the planet, as well as the fact that climate change is a reality at all. The organisation also has financial ties to the Koch brothers, right-wing libertarian businessmen considered to be some of the biggest funders of popular climate change denialism.

"These are not the names one would associate with sound public health policies." say public health experts and scientists Trish Greenhalgh, Martin Mc-Kee, and Michelle Kelly-Irving, in an article published by the Guardian, titled 'The pursuit of herd immunity is a folly – so who's funding this bad science?'. "The science is clear: attaining herd immunity to coronavirus via uncontrolled infection is a fringe view, peddled by a minority with no evidence to back up their position. What's less certain is the political and economic interests that lie behind this declaration. Let the debate begin on those."

When asked about the controversial choice of venue considering she is trying to reach as many people as possible, Gupta stressed the think tank was nothing more than a meeting spot for her and her two colleagues: "One thing we need to get very clear is that this declaration was in no way funded, or even launched by the AIER... Where we happened to meet, it was hosted by this institution. Now I think it's very common among academics to go to meetings at various different institutions. I think we regularly attend meetings at places where the politics, as such, don't align with our own". She recognised their political affiliations: "They are clearly very right wing - they're not libertarian. Libertarianism implies that they're only interested in the individual not the community", and expanded on her own beliefs, emphasising that she does not share their politics. "My politics are extremely left wing - I consider Jeremy Corbyn to be a bit too much to the centre. I think part of what we're seeing is a major crisis precipitated by a withdrawal of funds to the NHS and centralisation of hospitals rather than local authorities looking after local hospitals."

Regarding the website, Gupta stressed this didn't prove anything: "they put it up for us. I don't think that means sponsoring it. It's just a website. It's not an AIER website." However, a website is a resource that costs time and money to maintain, particularly one that has been translated into over 40 languages, so it is doubtful that this response will do much to assuage concerns coming from other scientists.

Another concern, reported in the *Byline Times* and raised by public health expert Anthony Costello, addressed Gupta's use of private PR firm Sugrue Communications. Listed as a primary press contact on Gupta's March COV-ID model, they have been reportedly assisting her throughout the pandemic and were the ones who arranged the *Fe*-



lix interview. "It's actually a friend who is offering pro bono services... Cairbre Sugrue offered to help. He's not taken a single penny for this, and we've been working closely with the University of Oxford Press Office. But it's very hard for the whole University Press Office to manage the volume of requests, since it's a lot of work."

However, this seems to contradict what the University of Oxford Press Office said on this matter to the Byline Times back in March: "All Oxford academics have freedom of expression regarding their areas of specialism, including communication through the media. It is therefore not uncommon for academics to make their own arrangements for contacting the press. The university cannot comment on individual arrangements that it is not party to", implying that they had nothing to do with this ar-

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rangement.

The University of Oxford did not respond to *Felix*'s request for comment.



At the end of the interview, Gupta insisted that

the debate in scientific the community must be more civil: "I have suffered a lot for this. It's been IMPLEMENTING terrible. I've had horrible personal made. IMMUNITY' attacks It's been a real embarrassment to me and my SIMPLY TOO HIGH family, and it's been very tough ...

serious allegation. A very serious slur on my character." She went on about how her interactions with Imperial College epidemiologist Neil Ferguson, one of the most prominent proponents of the consensus strategy, have always been respectful, in contrast to "a bunch of people, including at [my] university,

They're saying I'm a puppet, that I've

been manipulated by some group to say

these things which really, really is a very

have decided to target what we're doing along those lines. I would be completely open to scientific criticism, policy criticism... But the line of attack has been really dramatically personal."

consensus on COVID policy seems to be clear - while maintaining restrictions like mandatory masks and a limit on social gatherings, nations must use tools like test and trace as well as their enhanced healthcare systems to keep infections at bay, and hold out until a safe vaccine can be accessed by all. While being a seemingly logical proposal in an ongoing debate, our lack of knowledge about immunity and the risk of hospitals being overwhelmed by patients means that implementing the 'Focused Protection' approach is simply too high of a risk in a situation as dangerous and unprecedented as the COVID-19 pandemic.

The scientific

NASA announces discovery of water on the Moon's sunlit surface

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APPROACH IS

Lily Shepherd Science Editor

Following days of mysterious whis-pers of an "exciting new discovery about the Moon", NASA finally let us in on their secret on Thursday. It was announced via the NASA TV live stream that two separate studies, both published by Nature Astronomy, had discovered water on the moon, including on the sunlit lunar surface.

The two studies were conducted using data from NASA's Lunar Reconnaissance Orbiter, which has been in orbit around the moon since 2009, and the Stratospheric Observatory for Infrared Astronomy (SOFIA), a converted Boeing-747 which carries a 2.7 metre telescope and is able to fly above 99% of the water vapour in the Earth's atmosphere.

The Lunar Reconnaissance Orbiter took photos and temperature measurements of the dark, cold side of the moon. Previous studies have found evidence for

"cold traps" of ice on this part of the moon, but these were thought to be restricted to deep, wide craters. The new research suggests that there are also "micro-cold traps", which are smaller areas that are permanently shadowed and could therefore contain more easily accessible ice.

Using infrared astronomy, SOFIA detected water molecules in the Clavius Crater, one of the moon's largest craters which is visible from Earth. Previous research had shown that hydrogen was present in these craters, but

scientists had not been

able to rule out the possibility that this was due to the presence of hydroxyl (-OH) rather than water (H20). The infrared spectra produced by SOFIA now give definitive evidence that water is present - but it is unclear how exactly this water is protected from the harsh lunar environment. The researchers have suggested that it could be stored between grains on the surface, or in bubbles of "lunar glass" to protect it.

The discovery of water on the sunlit surface is significant for several reasons. While scientists were previously

aware of the presence of some water on

the moon, these

Photo credits: Wikimedia

new studies suggest that it is much more abundant than previously thought. They also show that the distribution of water across the lunar surface is not limited to cold, shadowy places, which may make it more accessible for extraction. This could make it possible to establish a sustainable human presence on the moon, with water available both for sustaining life and for refuelling aircraft. It would be far cheaper to make rocket fuel on the Moon than to transport it from Earth, so the Moon could potentially become a gas station for travellers to deeper outer space.

This week's announcement could therefore be very significant for NASA's Artemis Programme, which aims to send the first woman and next man to the moon by 2024, and to create a "gateway" in orbit on the moon to allow for easier travel to Mars. However, more work remains to establish whether the water that has been discovered will be sufficient for sustaining or supporting a human lunar presence.

SCIENC

The Social Dilemma and our fight against surveillance capitalism

Dominic Watters Science Writer

The Social Dilemma shines a light on I he Social Ducining and a world which is addicted to dopamine, one with its democracies under threat, a mental health epidemic, and where fake news travels six times faster than real news. According to former Silicon Valley players, the main cause of these problems are the very social platforms they helped to create. They tell us that in their pursuit of profit, online platforms like Google and Facebook employed a business model that neglected our need for privacy, truth and care. This business model, which Professor Shoshna Zuboff named 'surveillance capitalism', works through the mass surveillance of our online personal experiences and the translation of these experiences into behavioural data. These data are then used through a process of machine intelligence to create prediction products that anticipate what you will do now, soon, and further into the future.

We are told that the buying and selling of these prediction products creates a marfutures, according to the er, the product is perceptible change

in our own behaviour and perception. It with its goals to collect as much of our was Google who created the first markets to trade in human futures, what we now know as online targeted advertising. However, as we saw with the Cambridge Analytica scandal, our data isn't just sold and used in the name of consumerism, but also for political ends which can undermine our democracies. The main problem with surveillance capitalism derives from its imperative - a promise in the certainty of influence. For this promise to hold true, platforms need to both optimise the accuracy of their prediction products and the engagement of users on their platforms.

To demonstrate the ways the pursuit of these aims is manifesting in societal ills, the documentary presents a fictional narrative of two siblings struggling with the consequences of their use of social networks. The main storyline follows a teenage boy who is addicted to his device at the expense of his social life, and then finds himself becoming increasingly involved in a political group called the 'extreme centre' and ultimately arrested at one of their volatile protests. In the storyline, a metaphor of three men at a control desk represent the way machine intelligence algorithms work. Although it's a silly metaphor, it does a good job of showing us how the algorithms structured into the design of these platforms exploit our primordial psychology in order to channel our attention and keep us engaged.

Notifications, news feeds, and recommendations are all tailored to our individual personalities and are designed to keep us online.

> In fact, we are told about a team at Facebook who were working to maximise our dopamine release. Although, Facebook claims that the aim of such research is to create a better user experience, we should be sceptical of the fact this aim coincides

data as possible. The longer we stay on their platform, the more data they can collect, not to mention the additional money our time on their platform gets them from the advertisements we might click. Regardless of what companies like Facebook claim, The Social Dilemma makes it clear that the reality is not a better user experience. The dopamine-oriented design preys on our basic social desires and leads many of us to conflate our self-worth with our online identities; the result being a generation of youth with a warped sense of identity and poor mental health.

Perhaps even more frightening is the way these algorithms can guide people towards extreme ideologies like the 'extreme centre' presented in the film. News feeds tailored to our own interests serve only to reinforce our own beliefs. With this, it's not surprising that when an algorithm comes across someone susceptible to the odd conspiracy theory and feeds them more conspiracies on

their news feed, they're led towards an extreme view that everything being presented in the mainstream is a lie. Unfortunately, conspiracy theories tend to have quite a lot of news value; according to research from

MIT, fake news travels six times faster than real news on social networks. This same logic works for any political ideology. The separate realities our individually tailored news feeds create mean people are entrenched in their own be-

DEMANDING PRIVACY FROM **SURVEILLANCE CAPITALISTS IS "LIKE ASKING A COW TO GIVE UP CHEWING**"

liefs, unable to understand how anyone could possibly think differently from them. The result is an increasingly polarised world where truth has become an ethereal notion. A world where each side is shouting only to themselves and where many of the cries have little factual substance.

Despite what The Social Dilemma claims, the solution to these problems does not lie in big tech. The narrative that big tech can save us is as concerning as the problem that needs solving.

The Social Dilemma is trying to set the boundaries of who gets to be a critic and what criticism looks like; we should not expect tech companies to rehabilitate themselves.

According to Zuboff, demanding privacy from surveillance capitalists is "like asking

giraffe а to have a

shorter neck or a cow to give up chewing. These demands are existential threats that violate the basic mechanisms of the entity's survival."

Many thinkers, a lot of whom are women and people of colour, and who are recognised as leaders when it comes to the insights on these problems were omitted from the documentary- Safiya Noble, Cathy O'Neil and Ruha Benjamin to name a few. Their work is testament to an existing body of literature that combines tech, social and ethical considerations and questions traditional tech wisdom surrounding algorithms, problem-solving and money-making. They highlight the implicit assumptions embedded in algorithms and challenge the notion that market pressures lock us into surveillance capitalism. They also raise the importance of timely government regulation, and the benefits of counter innovation. The development of tools like adblocker, one of the biggest user revolts ever seen, can give individuals more meaningful control in navigating online platforms. This is important because empowering our personal autonomy takes the power out of big tech, and permits the population power in steering social networks towards the vision of society we want to live in.

ketplace of human THE DOPAMINEwhere **ORIENTED** creator of virtual DESIGN PREYS reality, Jaron Lani- ON OUR BASIC the gradual, im- SOCIAL DESIRES

SCIENCE

COVID-19 VACCINE TRACKER: Felix Edition Phase IV - studies on adverse effects, years, a coronavirus vaccine is hoped Phase I – healthy human volunteers Julia Dabrowska Science Editor to be developed within 12-18 months. to determine safety and evaluate imlong-term mmunity and vaccine usage In order to put an end to the globmune response. following the approval and licensing Phase II – hundreds of volunteers to al coronavirus pandemic, researchers Vaccine testing can be split into 5 of the vaccine. around the world are working tirestages: identify correct dosage. The WHO is currently tracking the lessly to develop a vaccine to protect Pre-clinical - animal testing to see Phase III – thousands of volunteers progress of over 170 candidate vaccines; at Felix, we've chosen 5 of the against COVID-19. While vaccine whether the vaccine elicits an immune to confirm safety and efficacy vs. a plaproduction usually takes multiple response. cebo. most promising candidates to follow, so watch this space! University of Oxford & Astra Zeneca, Cansino Biologics & BIB, New Update: This week, the Oxford/ Imperial College London BioNTech & Pfizer & Fosun Pharma AstraZeneca vaccine candidate was reported to have effectiveness in both young and older adults, which was one of the greatest prior concerns. More Moderna Therapeutics & NIAID detailed results from the Phaase II study are to be published in a peer-reviewed journal. Approved **Pre-clinical** Phase 1 Phase 2 Phase 3

Long COVID: What do we know?

Julia Dabrowska Science Editor

WHAT IS LONG COVID?

Research shows that in certain individuals, COVID symptoms can last longer than the typical 3-10 days one would expect from a respiratory illness, dramatically altering their daily lives through a condition known as 'long COVID'.

For some people, long COVID is a prolonged disease state, including symptoms such as lasting loss of sense of taste and smell, breathlessness, and chronic pain. Others may experience resurgences of more 'typical' COVID symptoms, such as a fever or cough. Such resurgences may be mistaken for reinfections, but current knowledge suggests that these are extremely unlikely in such a relatively short time period. Overwhelmingly, however, the most common symptom is debilitating fatigue.

It is estimated that one in 20 people infected with COVID-19 are ill for a minimum of 8 weeks, with many people being affected for many months. A study conducted in 143 people in Rome found that 87% of hospital patients had a minimum of one symptom almost 2 months from the date of discharge. However, long COVID does not only affect those who have undergone intensive care; patients with relatively mild infections may also experience this syndrome.

WHAT FACTORS IN-CREASE THE RISK?

A recent study performed by scientists at King's College London aims to identify possible individual cases of long COVID early on, subsequently allowing health services to plan for additional care of earlier, more intensive treatment. Here, computational techniques were used to analyse symptomatic and test result data inputted by individuals into the 'Covid Symptom Study' app and predict which of those would go on to experience long COVID. However, despite the model correctly identifying 69% of people who experienced long COVID, around a quarter of results were false positives (i.e. were predicted to have long COV-ID, but in reality, underwent a speedy recovery). Therefore, further research is required to perfect and adapt the model for improved detection efficiency.

Nevertheless, being female, overweight and having underlying respiratory conditions, such as asthma or lung disease, were all shown to increase the risk of long COVID - the former of which may appear surprising given that men generally seem to be at higher risk of severe disease and death from COVID. Perhaps less surprisingly, risk was also found to increase with age. Dr Claire Steves, a scientist involved in the King's College London study, adds: "Having more than five different symptoms in the first week was one of the key risk factors."

WHAT IS THE BIO-LOGICAL BASIS OF LONG COVID?

While this is yet to be definitively confirmed, numerous hypotheses exist. One of these is that despite being cleared from most of the body, the coronavirus still lingers in small spaces or areas. Alternatively, since the virus triggers an intensive immune response, another idea is that the immune system does not fully return to its normal state, so overactive functioning causes further health problems and damage. The WHO has cautioned that widespread inflammation in post-COV-ID patients leads to a higher risk of heart diseases at a younger age. Furthermore, some unexpected organs may be affected in the long term: COVID is thought to alter human metabolism, resulting in post-COVID diabetes or lipid processing, cause abnormal clotting and premature ageing of blood vessels, and perhaps even cause changes in brain structure.

Overall, while curbing the immediate spread of the pandemic remains the primary goal worldwide, discovering the causes behind and treating long COVID will nonetheless yield multiple benefits. Recognising this, the NHS has recently announced the provision of a £10 million package to fund long COVID clinics around the country. Despite time being a crucial component of such investigation, with the copious amounts of further research currently being performed, with every publication we are one step closer to tackling this unexpected pandemic.

COMMEN

Making America Again Time to take out the rubbish Argumentative Indian lalalaletstalkaboutit@gmail.com

ark Twain once joked that "if we would learn what the human race is at the bottom, we need only observe it in election time." "If voting made any difference," he sullenly wrote elsewhere, "they wouldn't let us do it." Putting such scornful reflections aside, elections are, and have always been, the lifeblood of American democracy, embodying the bedrock premise of American political culture that legitimate rule derives from the acquiescence of the governed. The race for the White House has begun in earnest, and while the world waits for the results, it's essential to understand the mechanism behind the voting process.

America at the ballot:

Americans don't directly vote for the Presidential candidates, instead, they vote for people called "electors" in their state who are supporting the candidate they wish to become President - this 'assemblage' is known as the electoral college. The electoral college was created

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THE SPECIFIC

by the Founding Fathers in the year 1787; it was a compromise between electing the president by a vote in Congress or electing through a popular vote by qual- EITHER PARTY ified citizens. The college came into existence because the delegates **PRESEIDENTIAL** wanted to balance the interests of high-population & low-popu- FOCUSING ON lation states, they also believed that not all voters would be educat- SWING STATES ed enough to cast a vote so the electoral college

would act as a buffer between the people dential Election may be a simple choice and electing the president.

The more people that live in a state, the more electors there are. Presently, there are 538 electors in total, made up of 435 Representatives (Congressmen & Congresswomen) and 100 Senators,

plus the three additional electors from the District of Columbia. Each state is allowed a minimum of three electoral votes, and Washington DC also gets three-body votes, forming a total of 538 electors. The candidate with the most number of electors wins all the state's body votes and also the first candidate to win enough states and to get to 270 electoral votes is elected into the office. California, considered to be the most crucial state, has 55 electoral votes, while Texas, the next largest, gets 38 electoral votes. New York and Florida get 29 votes each. All but two states - Maine and Nebraska - use a winner-takes-all system ("Winner takes all" means all Electoral College votes will go to one candidate based on the State's popular vote), so if someone wins the foremost votes during a state, they take its entire haul of body votes.

To be elected President, either candidate must win a majority of the 538 electors - i.e. 270 electors. The body system does usually reflect the popular vote (the popular vote is simply which candidate

has received the most total votes) - Presidents have won the electoral vote while losing the popular vote. A recent instance was in 2016 when Donald Trump won the body and was elected President, even though Hillary Clinton, Democratic his opponent, won the popular vote. The casting of a vote for the Presi-

between candidates from the Democratic Party and the Republican Party, although, occasionally a 3rd party candidate throws their name in the hat, like Kanye West this year, it's quite rare for them to get any traction or make some

Ω major impact. So when Americans will cast their vote on November 3rd, they would technically be voting for "electors", not directly for the Presidential Candidates themselves. Each elector then casts one vote following the final election for one of the two candidates (here, Trump and Biden). The newly elected president and vice-president are said to be inaugurated on January 20, 2021, although the date isn't set in stone, given the fact that a significant number of people have mailed-in their votes, so counting & results would be done a little differently, owing to the pandemic.

The key for either party to win the Presidential Election is by focusing on the specific swing states, also known as the battleground or purple states. Swing states can shift between each election cycle, and they are often determined by analysing past results, opinion polls, political trends and any strengths or weaknesses of the candidates involved, and their policies. These states have unclear party loyalties and have historically swung between voting for Republican and Democrat candidates in past elections. This year North Carolina, Florida, Michigan, Wisconsin, and Arizona could all be decisive within the election's outcome. They're all states in which Mr Trump narrowly won against Hillary Clinton in 2016, helping him secure his

Illustration credits: Lisha Zhong, MRes Bioengineering

Presidency. Retaining them is crucial to his re-election hopes. If the polls are to be trusted, Mr Biden holds a competitive edge over Mr Trump altogether. Pollsters attributed Mr Biden's result in support among white university-educated voters, while Mr Trump's support among white working-class voters is waning. Currently, the 10-poll average indicates that just over 1/2 Americans will back Mr Biden while Mr Trump's support trails this by around five or six points.

COMMENT

Argumentative Indian

lalalaletstalkaboutit@gmail.com

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Making America Again

Donald Trump v/s Joe Biden 2020 Key Policies:

Healthcare

Climate Change

MR TRUMP is a climate change sceptic and has systematically dismantled environmental regulations put in place by former President Barack Obama — and actively defends his decision to exit the Paris climate accord, which would have, in his estimation, sacrificed "tens of millions of jobs, thousands and thousands of companies." He also expresses unreserved support for fracking, a process for extracting natural gas, and he wishes to expand on non-renewable energy and questions the practicality of alternative energy sources - especially wind power — over fossil fuels.

" WE ARE ENERGY INDEPENDENT. **I KNOW MORE ABOUT WIND** THAN YOU DO. **MR TRUMP TO MR BIDEN**

MR BIDEN, on the other hand, supports the universal ban on fracking, says he is committed to a ban on "fracking on federal land." He plans on taking steps to confront environmental racism, and to protect people, especially in minority communities, who "live near chemical plants and refineries that pollute." Mr Biden has laid out an ambitious climate plan which includes overhauling the country's energy industry to achieve 100 per cent emissions-free power by 2035. The plan includes a pledge to invest \$2 trillion in clean-energy infrastructure if Mr Biden wins the White House in November, along with a promise to build 1.5 million new energy-efficient homes and social housing units. In a nod to liberal voters, who have been somewhat unenthusiastic about Mr Biden's candidacy, the Democrat said the expansive climate plan will be funded by a mix of government funding and increasing the corporate income tax rate from 21 to 28 per cent to ask "the wealthiest Americans to pay their fair share". Although, he has shied away from mentioning a ban on fossil fuels such as oil, coal and gas -

a politically sensitive topic in battleground states like Pennsylvania and Michigan instead, focusing on incentives for car manufacturers to produce zero-emission electric vehicles.

PRESIDENT TRUMP wants to repeal the Affordable Care Act (ACA) passed under President Obama, which increased the federal government's regulation of the private health insurance system, including making it illegal to deny coverage for people with pre-existing medical conditions. He says he wants to improve and replace it, although no details of the plan have been published. The President also aims to lower drug prices by

allowing imports of cheaper ones

MR BIDEN wants to protect and expand the ACA. He wants to lower the eligibility age for Medicare, the policy which provides medical benefits to the elderly, from 65 to 60. He also wishes to provide all Americans with the option to enrol in a public health insurance plan similar to Medicare.

I THINK HEALTH **CARE IS NOT A** PRIVILEGE, IT'S A RIGHT

MR BIDEN

Economy

PRESIDENT TRUMP has pledged to create 10 million jobs in 10 months, and create one million new small businesses. Mr Trump also promises to build on the tax cuts he introduced in his first term, including tax cuts and credits to entice companies to keep jobs in the US rather than overseas. Mr Trump said he will "enact fair trade deals that protect American jobs", but hardly mentions how he sees his trade war with China progressing.

MR BIDEN says he will raise taxes on the wealthiest Americans, which he defines as those with an income of more than \$400,000 per year (the top 1-2 per cent). He wants to impose a marginal tax rate increase - so the more a worker earns over that threshold, the more tax they must pay. He supports raising the federal minimum wage to \$15 (£11.50) an hour from the current rate of \$7.25 $(\pounds 5.50).$

COMMENT

Criminal and Racial Justice

PRESIDENT TRUMP, after continuously stoking the fires of white supremacy, , has promised to address the growing racial unrest by ensuring to "defend" America's police forces in the wake of growing protests against instances of police brutality towards African-Americans. Mr Trump says he doesn't believe racism is a systemic problem within US police forces, and his campaign promises to protect police funding and hire more officers, increase punishments for attacks on police, and take action against political protest movements. The law and order promises also include tough action on illegal immigration and stronger requirements for legal immigrants.

I'M THE LEAST RACIST PERSON IN THE ROOM

MR BIDEN calls for broader access to education, health care and wealth for those who have been denied the opportunity. He also advocates for rehabilitation rather than jail for people convicted of drug-related offences and emphasises the need to get rid of mandatory minimum prison sentences.

THE FACT OF THE MATTER IS, THERE IS INSTITUTIONAL RACISM IN AMERICA

MR BIDEN

MR TRUMP

"Most of the globe will breathe a sigh of relief if Biden is elected," said Stubb, now director of the varsity of Transnational Governance, at the ECU University Institute in Florence. "But I believe we must always all be realistic and understand that we're not going back to the supposed good old days — either way, I do not think American power will return to what it had been."

The entire world is watching the Presidential Race and is trying to figure out what the result will mean for them, every U.S. presidential election has sway on international affairs; the winner despite everything becomes the leader of the world's largest economic and military power. For some, President Donald Trump has ushered in a very new style of politics that they fully support. For others, a Joe Biden victory would be warmly welcomed. In Europe particularly, Trump is extremely unpopular in most countries. Countries like the Asian nation, China and Asian countries could find that a Biden victory would mean closer scrutiny of their human rights records and military actions. The US Director of the National Counterintelligence and Security Center last month warned foreign states were using "covert and overt influence measures" to sway the vote in their favour. His statement asserted that Russia wants to damage Joe Biden. But it also claims China doesn't want Donald Trump returned to power. Beijing, he says, "prefers that President Trump - whom Beijing sees as unpredictable – does not win re-election, and has been "expanding its influence efforts" ahead of the November

vote. Meanwhile, Russia has been attempting to "denigrate" Biden while "seeking to boost President Trump's candidacy on social media". In Iran, many are probably hoping for a Biden victory, a brand new nuclear deal and relief from the crippling sanctions that Trump introduced.

This really is the most important election in US History. The difference between a second Trump term and the election of Biden will have enormous consequences, especially for Washington's involvement in the world. It's kind of a fulcrum moment, if Trump is re-elected, American democracy would cease to exist, and even if Biden is elected, US recovery will be a long time coming.

"One term is bad enough, but if Trump is reelected, Americans and people around the world would no longer be able to say the American electorate made a mistake. Instead, it would be an affirmation this is the direction Americans want to go."

Didn't want to exist in an era where Borat was an acute political satire but here we fucking are I guess but despite the constant negative vibes covfefe. MR BIDEN wants to set up a national contact-tracing programme, establish at least 10 testing centres in every state, and provide free coronavirus testing to all. He supports a nationwide mask mandate,

Coronavirus

which would require face coverings to be worn on federal property.

TET

HAVE AN OPINION ABOUT TRUMP OR BID-EN THAT YOU WOULD LIKE TO DISCUSS WITH THE AUTHOR?

MR TRUMP has time and again down-

played the severity of the surge in covid

cases, amidst a pandemic, he has ignored

the advice of scientists and physicians

and has peddled unsound and danger-

ous medical ideas. Mr Trump did not call

for social distancing or the use of facial

coverings, despite evidence that such

measures reduce the spread of the

disease. He made misleading claims

about the speed with which a vac-

cine would be available to the public

but offered a less optimistic timeline

when pressed by the moderator, Kris-

ten Welker of NBC News.

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Covert Human Intelligence Sources Bill: Not a licence to kill, but worse

▶ Writer Andy Wang gives a critical analysis of the CHIS Bill currently being debated in Parliament.

Andy Wang **Comment Writer**



n 24 September, the government introduced the Covert Human Intelligence Sources (Criminal Conduct) Bill to the House of Commons. Simply put, this Bill will allow certain authorities' intelligence gatherers ("covert human intelligence sources", i.e. undercover police and informants) to conduct criminal activities.

Unsurprisingly this stirred up a huge controversy, with the press dubbing it "licence to kill". MP Zarah Sultana opposed the Bill as it "doesn't prohibit torture, murder or sexual violence". These claims are inaccurate. All public author-

1998 to act in under the European Con- Article 2 allows deprivation of life only vention on Human Rights ("ECHR"). under 3 circumstances. All of which are Article 3 of ECHR

prohibits torture and inhuman or degrading treatment. Unlike most other Rights protected by ECHR THIS TYPE which are qualified, prohibition of tor- OF OVERture is *absolute*. There **DELEGATION** is no circumstance that could justify an OF POWER HAS interference against ... LED TO A Article 3. As such, this Bill can never be PLETHORA OF used as a defence in **ABUSE.** court against torture

ities are bound by Human Rights Act or sexual violence. Regarding murder,

powers authorities already have and this Bill grants nothing additional.

> But none of these safeguards derives from the merits of the Bill itself; they were enshrined into human right legislations and UK's international treaty obligations. Instead, this Bill opens up the bucket of worms that allows for rou-

tine transgressions of the law by the authorities and frustrates options of remediation against abuse of power, things which will quickly erode people's confidence in the state.

Photo credits: Flickr/ UK Parliament / Jessica Taylor

The most significant issue of this Bill is the grant of criminal immunity to an exceptionally wide range of authorities. The Bill applies not just to MI5, MI6 and GCHQ – ones we expect to conduct crimes, but also any police force. The 45 territorial police forces are not centrally managed and have a widely varying level of competence and professionalism. The Bill allows all to independently issue "criminal conduct authorisations" without external oversights.

The government claims, in their Explanatory Notes to the Bill, that author-



The CHIS has passed through the House of Commons, and is currently due a second reading at the House of Lords, date TBA

COMMEN

Photo credits: unsplash/@etiennegodiard

dodged this question in Parliament, so ria like those currently being used by public prosecutors.

> In summary, this is a Bill which grants the power to authorise crimes to all sorts of authorities, under vaguely defined circumstances with no judicial oversight and little legal recourse to victims of abuse of power.

> But worry not, our beloved Home Secretary Priti Patel has promised us at the beginning of the bill:

> "In my view the provisions of the Covert Human Intelligence Sources (Criminal Conduct) Bill are compatible with the European Convention on Human Rights."

> If you think you can wrtie, and you can write what you think, send us your opinions to fcomment@ic.ac.uk

POLICI

ising criminal activities "is not a new activity" and the Bill "puts existing practice on a clear and consistent statutory footing". This is blatantly misleading. Ordinary police forces have always operated under the assumption that they cannot authorise anyone to break the law. If there is a frequent need for ordinary police forces' undercover officers and informants to commit certain crimes, then the Parliament should grant them power specific and limited to those particular crimes they need to commit, rather than a blank cheque on all crimes. One example of this was the Sexual Offences Act 2003, which explicitly granted members of MI5 and GCHQ immunity for making indecent (pseudo-)photographs of children - not all police forces, and not even the MI6, as such immunity would not be necessary or proportionate for their functions. This implies the Parliament was operating under the understanding that it is not lawful for public authorities to commit crimes as they saw necessary, but only when so permitted

by legislation; otherwise the explicit exemption would not have been necessary.

This type of over-delegation of power led to a plethtion of Invesers Act 2000 ("RIPA"), which Bill amends, provides legal safeguards activities on

has its prece- ... PARLIAMENT dence and has SHOULD GRANT ora of abuse. THEM POWER The Regula- SPECIFIC AND tigatory Pow- LIMITED TO THOSE **PARTICULAR CRIMES** this ... RATHER THAN A **BLANK CHEQUE ON** grounds and ALL CRIMES

such as wiretapping and intrusive surveillance. Much of the power set out by RIPA was granted to almost all public authorities, including local councils. Councils then happily made good use of these surveillance powers to, among other things, spy on council employees' car parking, working hours and sick pay claims; find out the pigeon feeder; and in one case in Poole, the council followed a mother's movement, watched her in her house and drew up a profile of her activities over 2 weeks to find out if she lied on her daughter's school application form.

The second major issue was the creeping scope of circumstances under which criminal immunities are granted.

RIPA permits the most intrusive forms of surveillance to be performed when it is necessary to prevent and detect serious crimes. The phrase "serious crime" is not a vague catch-all but a well-defined term: it means a crime for which a 21-year-old with no previous convictions could expect to be sentenced for at least 3 years, or violence that either results in substantial financial gain or is conducted by a large group of people.

In contrast, the Bill permits a criminal conduct authorisation to be issued for "preventing or detecting crime or of preventing disorder". This means any crime whatsoever. One has to ask, is it ever necessary or proportionate to commit a (potentially serious) crime in order to prevent or detect a non-serious crime? Indeed, the Bill requires any authorised criminal conduct to be proportionate to its ends, but it stopped short of limiting power to its original

scope.

The third issue is the lack of judicial oversight and what I regard as a gross interference against the judiciary.

The Investigatory Powers Act 2016 aka. "Snoopers Charter" updated the framework under which intelligence agencies can intercept communications. Interception Warrants need to be approved in ad-

vance by both the Home Secretary and a senior judge. There is no similar safeguard in the Bill for committing crimes. All judicial scrutiny will have to be done post-mortem, after the crime has been committed.

In the Explanatory Note, the government claims that activities conducted outside an authorisation are not immune from prosecutions. But what about activities conducted under an unlawful authorisation? The government

nity. The authorisation itself can only be challenged through the secretive Investigatory Power's Tribunal - a process neither short, nor easy, nor cheap. The House of Commons Library thinks "the Bill would limit redress for

it's likely that such activities carry impu-

victims by preventing civil claims for injury or other harm". If this is correct, it means no one can bring a civil lawsuit against an agent for committing crimes under the authorisation, even when the victim is an innocent "collateral damage". The ability to bring civil claim is important because under criminal proceedings, the high standard of proof ("beyond reasonable doubt", i.e. "sure") means that a conviction could be difficult; whereas the victim is much more likely to win in a civil court presenting the same set of evidence, due to lower standard of proof ("on the balance of probabilities", i.e. "likely"). For instance, some victims of sexual assault in Scotland have been advised to bring a civil lawsuit against the abuser when the evidence is convincing but leaves room for reasonable doubts.

As the Chair of the Parliamentary Security and Intelligence Committee Julian Lewis pointed out during the debate, the intelligence agencies knew that they possess no legal immunity and are bound by all civil and criminal laws equally; rather, they rely on convincing the prosecutor that it is not in the public interest to prosecute. This is, in my opinion, the right approach, as it applies pressure and boundary to all actions made by a covert agent to be within the public interest, which would have to then be tested by the prosecutors in the usual

manner as they conduct the public interest test to any other charging decisions. The Bill did not

even mention "public interest" let alone setting out test cri-

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COMMENT

We need to consider alternatives to a lockdown

Comment writer Marwan Riach gives his view on why further lockdowns will be counterproductive in dealing with the pandemic.

Photo credits: Marwan Riach



There are those that believe that stricter lockdowns will save lives and there are others that believe that a different approach is better. Though I fall into the latter category, I would like to preface this article by saying that neither side is evil.

Both sides argue from different points of principle, but with a common goal: to save lives. Abuse that is mudslung from one side of the debate to the other does nothing but polarise debate and make a viable solution less likely.

In late March when the UK and over half of the European countries had closed the door on the world in order that they avert the virus and keep others safe, the messaging from national governments was clear: we are locking you down to increase hospital capacity and stem the flow of the virus. At this time, the government had my full support in its approach; we did not know of the dangers of this virus and bucking the global trend was not a political price worth paying.

And so, from late March, we all did our duty to our Queen and country and stayed within our four walls in the hope that in the meantime, NHS capacity would be ramped up to withstand a potential inundation of hospitalisations further down the line.

The government succeeded in this and save for a couple of hospitals in the north-west of the capital, not one hospital was overwhelmed with coronavirus patients at the peak of the pandemic in mid April. With the ramping up of capacity, it wasn't just the nurses and doctors who were on the front line: the army had been drafted in to assist in the construction of the Nightingale Hospital in the Excel centre. The capacity was and is now available and the speed with which it was done should be commended.

So what is the plan now? If the original plan was to ensure our hospitals were readily equipped for a surge in hospital admissions,

then that has been achieved. If the plan is now to eradicate this virus altogether and ... I NOW BELIEVE therefore hold out THAT THE for a vaccine, then I am convinced NARRATIVE MUST we will kill more **SHIFT FROM** people with this than FEARING THIS approach which we intend VIRUS TO LEARNING to save. TO LIVE WITH IT.

A safe and trialled vaccine on



id anti-lockdown campaigner and conspiracy enthusiast Piers Corbyn (Right) with Marwan Riach (Left) .

average takes between ten to fifteen years to develop. Living with these restrictions for such a period of time will lay waste thousands upon thousands of small/medium sized businesses, soar unemployment figures, and send people's mental health into the doldrums. Just this last

week, the suicide prevention charity, Papyrus, said that it was "run off its feet" with 90

percent of all calls being linked to the lockdown.

With this in mind, I now believe that the narrative must shift from fearing this virus to learning to live with it. Compromises such as fur-

loughing those that fall into vulnerable categories during a spike in cases can be made, but quarantining the entire, healthy population should no longer be a viable solution.

Any further lockdowns will delay any spread rather than prevent it and given the uncertainty of the emergence of a vaccine in the next year or so, we can ill afford to carry on like this.

An alternative approach that I am pledging my support to is the Great Barrington Declaration which states its intention of 'focused protection' and whose signatories include highly acclaimed epidemiologists such as Dr Sunetra Gupta and Dr. Jay Bhattacharya. I would urge all readers and students alike to peruse the declaration in their spare time and share it widely.

Endemic to our society is the coronavirus, and endemic to life is risk. I now believe that we must learn to accept this risk as much as we do every other for a life without risk, is a life not worth living.

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This edition was produced thanks to the work of

Isabelle Zhang	Deputy editor
	••••••
Maeve Johnston	News writer
Nick Manrique	News writer
Andrew Melville	Comment editor
••••••	
Sung Soo Moon	Comment editor
1	Comment
Eamon Farhat	editor
Khama Gunder	Comment
	editor
Ansh Bhatnagar	Science
Alisii Dilatilagai	editor
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Vaidhiswaran	Head of Arts
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Ita Oi Tan	Head of
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uruparan	
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	tainability
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Hoendorff	Sports editor
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Enny Tran	Copy editor
	Head of
Kavan Clark	Сору
And our numerou	
contributors	

The Felix Editor on

Half way through term, things are looking up

The interview I had with members of the Imperial Secrets team filled me with a strange happiness. Though they are potentially not the best adverts for the student experience at Imperial, joking about disuading relatives from applying to Imperial and the atrotious state of mental health provision, what they have achieved leaves me in awe of them. As a biochemistry student I am always impressed by those that seem to have built or made somethings by applying what they have learnt as part of their degrees. Making something using the knowledge we gain at Imperial is a very clear case of "applying your degree", something that not all of us will ever get to do. I certainly feel saddened about my percieved lack of opportunities to apply what I have learnt. That is, I feel, one of the major reasons that I enjoy writing and working at Felix. The opportunity to learn skills in various Adobe softwares, writing and design are matched by opportunities to apply those skills in the weekly production of a newspaper.

I am hugely saddened by the lack of

a print newspaper this week and the forseeable future. When I was elected to this role, a major source of excitement for me was the physical end-product. Printed word holds an incredible allure and power that I have not seen matched by technological

competitors. For that reason I will fight tooth and nail to keep Felix as a print paper. Facing another national lockdown, we will endeavour to keep the newspaper running, providing you with more College and Union news as well as the rest of our usual fantastic content.

Everything that we usually put out should be available on our website felixonline.co.uk which has all of our latest news as well as digital only content. Look at our social media feeds on Twitter, Facebook and Instagram for even more Felix content. Finally, in the next coming weeks I will be trying to fill the news section with more pieces written by influential figures in the College and the Union to provide you with an up to date understanding of the decisions relevant to your student experience that are being made. Watch this space.

Statement of Intent

We here at Felix believe that it is always in the interests of the students to know. That cover-up and paternalistic obfuscation is never right and that as intelligent people students should be treated with respect and given the ability to make up their own minds. 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 both at the College and elsewhere.

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 it in our pages.

Signed by Calum Drysdale Editor-in Chief

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

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

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No printed paper this week

This week we are unable to bring you a printed paper. We are yet to recieve approval from the College to distribute the newspaper and so have been asked by the Union to not print. Relunctantly we have agreed. This is frustrating for all students working at Felix and can be easily remidied by the College giving us approval to distribute again. The World Health Organisation has stated that printed paper is highly sterile due to the nature of the printing process and all of our newspapers have Covid-19 warnings clearly print-

ed on them, encouraging people who touch any of the newspapers to take them away with them to avoid causing cross contamination and infection of any sort.

In addition, all distribution is done by masked and gloved Felix volunteers, further eliminating contamination risk. We call on the College to allow Felix to return to its rightful place on campus by granting permission for distribution of physical copies on campus.

HANGMAN

NASA: Moon "smaller, closer" than thought

Moon Moon Hangman's Man on the Moon

n a hotly anticipated press conference on Monday, **L**NASA announced that the Moon (large, grey disc in the sky)was actually "much smaller and closer" than previously thought. They went on to explain that despite years of research to the contrary, and multiple successful missions to the lunar surface, the mysterious ball of cheese was in reality only 600 miles away. This is over 3 times less than the comonly accepted distance.

It is thought that this shortfall is what allowed the space guys at NASA to reach the lunar milestone before the Soviets. "They just assumed it was further away" said NASA Rocket Engineer Harold von Luneberg, ex-

plaining why Russian rockets were built so large. "They built them so large that it side than to send them into orbit", he continued. It was at this point he became quite irate and the interview ended prematurely.

This is not the first time that NASA has waded into a public debate on the Earth's INTO ORBIT closest ally. Despite the Moon "definitely [being] there", it is often mistaken

was quicker to walk up the THEY JUST ASSUMED IT WAS FURTHER AWAY[...] **IT WAS QUICKER TO** WALK UP THE SIDE THAN TO SEND THEM

Credits: wikimedia

for a large searchlight that is looking for the Moon. This is in turn not to be mistaken for the large searchlight heralding the Moon-based superhero, Moon-Man, who is responsible for this years reduction in bootleg alcohol related crimes.

Whilst NASA has repeatedly expressed dismay at the recent rise in Moon-crime, the space body is reticent

to endorse Moon-vigilantism, instead asserting that Moon-crimes should be dealt with by the appropriate Moon-authorities.

In an exclusive interview with Hangman, the Moon stated that it was "looking forward" to re-starting its waning solo career, adding that fans can expect its debut self-titled funk album "The celestial body previously known as the Moon" in time for Christmas.

The move will come as a shock to Moon enthusiasts, aka 'Moonies', who have long lemented the Exxon Mobil announcement that they have paid an undisclosed sum to rename the Moon "Exxon Moonbil".

The oil giant was expected to complete work on its Moon-Pipeline before it ran into difficulties circumnavigating the web of planning permission needed as a result of the Moon's recent classification as a Grade 2 listed building. This cast a larger shadow on plans to demolish the Moon and replace it with a massive Moon-Westfield, plans that have been met with Moon-criticism by Moon-activists.



ALRIGHT SCREENWRITER, I WANT A POLITICALLY CHARGED SUPERHERO MOVIE, WITH VERY FLAWED CHARACTERS, AND LOT'S OF GIRL POWER!



CRITICALLY ACCLAIMED





-NIC G-T

17

Bond Fans want more

Mulum Calac NegaFelix Reporter

he release of the newest addition to the James Bond franchise, No Time to Die, has been postponed until next year. Met-

ro-Goldwyn-Mayer claims that the delay is due to the ongoing coronavirus pandemic, but some say that hasty reshoots after poor test screenings are to blame.

dustry insider who said that the film currently suffered A] NO-BOOBY from "confused themes", spe- PHILOSOPHY cifically referring to the dedication of 80% of its runtime to "nuanced discussions of yield

curve risk and hedging strategies". A leaked copy of the film's first draft saw the iconic MI6 agent, played by Daniel Craig, spending most of his scenes sat on the phone to Rami Malek's maniacal auditor Safin, with less sex and violence than any film in the franchise to date. While some praised the "brave" new direction taken by the filmmakers, noting the "raw" and "boring; God, so, so boring" portray-

al of financial reality, dissent from this opinion has been near-universal.

> One test screening viewer was disappointed in what he called the film's "no-booby philosophy", adding that in previous years "you could always rely on Bond girls to deliver a low yield to maturity". Our sources confirm that reshoots are wrapping up now, with a new plotline based pri-

marily on "the differences between electron sharing and electrovalence". It remains to be seen whether the improvements land on welcoming eyes.

Caption Contest



Think you're funny? Submit up to 3 funny captions to the above comic to felix@ic.ac.uk before 6pm on Wednesday 5th November. The winning caption will be published in next week's issue!



ARIES

This week dress for the job you want by changing your Zoom background to the interviewer's living room



TAURUS

This week you remove your mask to reveal a second, smaller mask underneath.



GEMINI

This week the government predicts a dinosaur-shaped recovery.



CANCER

This week to avoid taking off your mask in public, vou make a small incision on your abdomen to ram in a meal deal.



This week NASA announces water on the moon and semen in Uranus



This week an 'i' for an 'aye' makes the whole

world blayend



LIBRA

This week the Corbyn brothers 8 through 19 form a K-Pop super group.



SCORPIO

This week they come for the juice as the editors are too spineless to do the real joke.



SAGITTARIUS

This week you read that the fine print on your Haunted Aztec Gold promises immortality. At least you think it does, as you lost your left eye in a bar fight in Port Royal.



CAPRICORN

This week you will find balance as a second stroke evens out the damage done by the first.



AQUARIUS

This week you get your initiation rituals mixed up and sing Estelle's "American Boy" to the Saudi Soc Committee.



PISCES

This week you find out your Grandad pronounces it "Grin-dr". You still leave him on read.

Hangman spoke to an in- THE FILM [HAS

Exhibition Modern Love: Turner at Tate Britain

Turner's Modern World

Where? *Tate Britain* When? 28th Oct - 7th Mar 2021 Howmuch? £22 (Students £20)

Reviewed by Vaidhiswaran Ramesh Music Editor

Since its inception in 2000, Tate Britain has been in an uneasy marriage, struggling to accommodate its vast collection of classical art with its apparent ambition to be the next Tate Modern. In 2017, Art Critic, Jonathan Jones, urged for the museum to embrace its pre-20th century collection of art in a scathing opinion article appearing in The Guardian. He wrote, 'It seems to be a requirement that, to work at

the national museum of British art, you shouldn't like the nation's greatest art.' He further argued, 'It can show us everything from the industrial revolution and slavery to the history of horse racing. All it needs to do is put as much of that collection on view as possible, with an eye to history.' Somewhat prophetic, the museum seemed to have heard this call and put together the largest exhibition on Joseph Mallord William Turner's work in recent times, bringing together much of his bequest and shining a light on the artist and his lesser known works.

Tate Britain is, in so many ways, a museum for Turner. This is not to suggest that British art begins and ends with him, but it is an unassailable fact that his work was, and still is, a corner stone of post-Renaissance British Art. Until the 18th century, the industrial revolution aside, Albion was trailing behind mainland Europe, and the high arts since the renaissance flourished through Florentine, Venetian, Flemish, and French circles, and seldom reached English shores with the same intensity. The tide, however, changed with

the arrival of Turner and John Constable in the late 18th century. These two men, empowered by a bitter rivalry, ensured that English Art no longer found itself in the fringes of European high Arts.

Turner, upon his death in 1851, bequeathed his entire art collection to the nation, making one of the greatest donations ever made since Hans Sloane's bequest which set up the foundations of the British museum. His collection, after a circuitous journey tumbling about in The National Gallery and V&A Museum, found itself its current quarters at Tate Britain — home to British Art.

The current exhibition "Turner's Modern World" draws on this vast collection, seeking to expand our understanding of the evolution of the artist's work. Unashamedly embracing the collection's breadth, it presents a comprehensive and wonderfully curated exhibit of Turner's work with a penchant for deep reflection on the milieu. The late 18th and early 19th century were arguably the most turbulent and consequential period in European history, and, as with many artists, this volatility filtered into his work. The revolution across the channel, the Napoleonic 'world' wars, reformation of the parliament, emancipation of

primarily maritime and industrial paintings. The exhibition has not shied away from using his well-known, popular works to thread this narrative. Indeed, we see 'The Fighting Temeraire' and 'Rain, Steam and Speed – The Great Western Railway' loaned by The National Gallery, and 'Snow Storm: Hannibal and his Army Crossing the Alps' among numerous other highlights. In an exhibition telling a seldom told story such as this, it can often be distracting to have such popular paintings take the centre stage, but 'Turners' Modern World' treads this line quite carefully - not sacrificing the narrative for the grandeur and vice versa. An encouraging exposition of Turners attitude to slavery is presented with a reproduction of his painting 'The Slave Ship'. Even as a reproduction (the original, currently housed

Credits: Tate / Accepted by the nation as part of the Turner Bequest, 1856



War. The Exile and the Rock Limpet, exhibited 1842

Catholics at home, and the abolition of slavery; Turner lived through them all and as the exhibition puts it eloquently, 'Though not all works of personal conviction, Turner saw fit to capture them all'.

Through a series of eight thematic rooms, we explore the societal turbulence and its influence in and though Turner's work. Known extensively for his landscapes, the exhibition seeks to subvert this popular public opinion by underscoring his other works, in the Museum of Fine Arts, Boston, was deemed too fragile to transport), it takes centre stage in presenting the dichotomy of progressive attitudes in the early 19th century. A proponent of liberal trends in his later life, Turner had also infamously invested in a Jamaican slave plantation.

It is interesting to note how almost every painting from this exhibition is sourced from within the Turner Bequest, meaning, sourced largely from within Tate Britain. But then again it is what Turner would have wanted; In his will, he conditioned that his paintings be hung together. This was disregarded over the years and a few pieces now lie scattered between The National Gallery and Tate Britain. It is thus encouraging to see them find a common shelter as he wished, even if only temporarily during an exhibition such as this.

Often romanticised and pigeonholed, Joseph Mallord William Turner, with his modest upbringing in London, was the man who put British art on the world map. But there is much more to him as an artist that sets him apart from his contemporaries. This exhibition about him is striving for something much more as

well, and, apart from capturing the artist, it reflects on a museum seeking to re-invent itself by looking to the past. It is fitting in a sense that one of the final works we see in the exhibition is 'War. The Exile and the Rock Limpet' (inset) with Napoleon standing at St. Helena, brooding over his legacy. We all should do that from time to time, shouldn't we? I mean reflect! So why not begin at Tate Britain, where this exhibition runs from the 28th of October until the 7th of March 2021.

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Album Review SAWAYAMA - Album of the Year?



SAWAYAMA

Album by: *Rina Sawayama* Top tracks: *XS; Chosen Family; Snakeskin* For fans of: *FKA twigs, Alanis Morisette* Run time: 44 mins

Reviewed by Ozbil Dumenci Music Writer

People who are constantly around me know that I identify myself as a snob when it comes to music. I take pride in discovering artists (hello, Dua Lipa, *cough*) before they go big, and scold them when they dismiss music I share with them only to fangirl over them a few months down the line when they become hits. Yeah, I'm a little annoying.

Rina Sawayama, the up and coming Japanese-born British singer-songwriter, has built a rabid fanbase, in no small part thanks to her brilliant debut album, *SAWAYAMA*, which was released in April 2020, in the height of lockdown. Although consistently growing her fanbase, which includes the legendary Elton John who has gone on record to name *SAWAYAMA* as his favourite album of the year, she has not yet reached the popularity that a lot of her contemporaries have. However, I am a firm believer that for Rina, the only way is up.

SAWAYAMA doesn't quite have an overarching concept, however I think it would be a valid assess-

ment to say that there is running social commentary throughout the album. For instance, 'XS' (a pun for 'excess') is a faux-'flex song' which criticises commercialism. What a Marxist anthem. I believe it would also be fair to say that the most prominent themes throughout the album are heritage and identity. Not only do various songs heavily refer to Japan and her Japanese roots lyrically, they also gorgeously tie in to her British upbringing, resulting in deeply personal, honest songwriting.

One of the things that makes *SAWAYAMA* special is the seamless way different genres have been blended within each individual song. Banging rock guitars bleed into smooth R&B beats not only from track to track, but within individual songs. Amazingly, no song on the album ends up sounding out of place, and the overall project is incredibly cohesive. Although



Rina's songwriting and delivery play an important part in making this album the juggernaut it is, it is the production that truly elevates it through genre-bending, mind-melting choices that are in equal parts confusing and brilliant.

Although the album is outstanding throughout, 'XS', 'STFU!' and 'Chosen Family' are perhaps some of the more immediately attention-grabbing tracks

on the album. Further, the opening and closing tracks of the album, 'Dynasty' and 'Snakeskin', are also nothing short of brilliant. 'Dynasty' is the thesis statement of the album, both thematically and sonically. As it's guitar solo kicks in, you know you are in for something special. 'Snakeskin' ensures that the album closes on an energetic note following the relatively more traditional (albeit beautifully penned and extremely heartfelt), slower paced 'Chosen Family'. It leaves the listener fully satisfied yet wanting more.

All in all, *SAWAYAMA* is a brave, borderline genius effort from the Cambridge graduate songstress. The album has been critically hailed as 'compelling' and Rina has been labelled as 'one of the boldest voices in pop today'. If this record is any indication, I am firmly standing my ground in my belief that the only way for Rina is up, and she is already on her way.

Feature Passing the Aux to Gabriel Kassayie

Lenzman - African Dream

Interview by Guthrie Ruby Music Editor

When did you first hear this song? 23/09/2016 10:47am

How old were you when you first hear it? 19

How often do you listen to the song?

Frequency varies. I have a playlist of songs I listen to a lot that moves with time. Now, it's pretty rare that I listen to this song, but I still come back to it.

In a sentence, describe the song

Smooth, a little bit bubbly, comforting, subtle, airy.

What initially drew you to the song?

I was already a fan of the artist. I really got into DnB from about 2014, I was almost exclusively listening to DnB but was a bigger fan of the harder stuff. So, when I enjoyed the liquid tracks they stood out.

Is there a killer moment?

The very first part, with the one note repeating, the sheer clarity of the time that it brings me back to is _____ insane.

Does listening to this song put you in a certain headspace?

The headspace it reminds me of is from the start of second year. I had just come out of first year, one of the best years of my life, and

now I'm free to get back to excitement and wonder of seeing my friends. That feeling of being free.

Is there another sense you associate strongly with this song?

Overcast. A very, very cloudy sky (only because of the weather back then).

How did this song affect your musical habits?

This was a key liquid DnB track in my collection that helped me fully appreciate the sub-genre. Lead to a long time of listening to liquid.

Why do you love about this genre?

In the genre tracks usually lack vocals, allowing you to focus more on what's around you. It becomes part of the scene. If I listen to these songs, I can see points in my past so purely, without clouding.

Final comments?

Take some time to listen to music for the sake of listening to music.



Gabriel - Pure Maths PhD and powerlifting legend

Credits: Netflix

FILM

20

Reviews Borat Returns + Rebecca Remade

Oliver Weir Film Editor

Borat Subsequent MovieFilm

Directed by: Jason Woliner Starring: Sacha Baron Cohen; Maria Bakalova Studio: Amazon Studios; Four by Two Films; Oak Springs Productions

Tn this new American ad-Borat venture, returns to the States looking to make amends. After some years interned in a Kazakh labour camp—due to displeasure the the Kazakh authorities had for the first movie-he is sent to



 $\star\star$

America to deliver gifts to the elite. His only daughter, Tutar (played by Maria Bakalova), tags along for the journey, finding it hard to unite the ludicrous doctrines of her father with the liberal values of the USA.

Now, to be upfront, I've never been much of a fan of the original movie or of the character of Borat himself; however, I recognise that many people do love him. With that said, I think the two most important questions are: 1.) did I think it was funny? and 2.) was it as scathing a satire as was adver-

tised? Firstly, I didn't find it particularly funny, or make sufficiently at least not any funnier than the first movie. The joke writing in *Borat II* (as I'll call it) is mainly focussed on shocking you, interspersed with nostalgic catchphrases and familiar Borat beliefs. For me, the jokes seemed desiccated and thoroughly squeezed of their goodness; whatever humour was bound up in them originally has long-since fled. What I did like about *Borat I* was that Cohen made the objects of his satire stick out more than his own ridiculous character in many ways; Borat was merely the spark to ignite reactions that, while seemingly normal in a room next to Borat, had some sting when they were considered in isolation. For me, Borat II didn't have the bite or the wit I wanted (given its political targets), and I very much doubt that it will be the cultural nuke that Cohen anticipates it to be heading in to November 3rd.

Rebecca



**1

Starring: Lily James; Armie Hammer; Kristin Scott Thomas Studio: Working Title Films

To revisit something that has been done before is perhaps more difficult than producing something new. In such an endeavour, you begin in the shadow of previous work, rather than casting your own shadow over the genre. It is not all doom and gloom though, and there are two main ways in which directors can 'succeed' in remaking a movie: one can do what the original did but even better, or one can many alterations that it takes on a altogether different look. If a director pursues the second approach, then in the eventuality that the new version is not as good as the original, it will, at least, be notably distinct from it. So stands Ben



Wheatley's new adaptation of Daphne du Maurier's novel alongside Hitchcock's 1940 version. Firstly, Wheatley's version is predictably worse than Hitchcock's-to back this up I can only really advise you to watch both. What is of more interest is whether Wheatley makes his Rebecca distinct, whether he succeeds in creating something true to the book but unique from the Hitchcock. I'm not entirely convinced he does. The film is remarkably void of remarkable features. Almost every aspect is...fine. The cinematography *adequately* captures the grandeur and mystique of Manderley, the script adequately captures the early love in Monte Carlo and the consequent jealousy stirred up at the estate, and the performances by Lily James, Armie Hammer, and Kristin Scott Thomas are similarly adequate, doing little to get the heart racing. If you really want to watch Rebecca, I advise you to stick with the 'Master of Suspense'.

Halloween Pick: The Texas Chainsaw Massacre (1974)

The Texas Chainsaw Massacre

Directed by: *Tobe Hooper* Year of Release: 1974

Reviewed by Oliver Weir

he Texas Chainsaw *Massacre* blurs the lines between a cinematic experience and an assault. It's like watching a balloon that's on the verge of popping, being inflated more and more—and whenever they do release some air, a second later they're blowing it up again but at twice the



previous rate. This unrelenting tension makes for one of the most powerful cinematic experiences you're likely to have. It doesn't have a great plot; the visuals are adequate; the dialogue is average; and the performances are forgettable; but the film, for whatever reason, is not. There are very few movies that can be excused in this way, and I hold it in a class of its own in this regard.

"Do you enjoy The Texas Chainsaw Massacre?" is a bit like asking someone whether they enjoy getting punched in the face. The answer is no, but at the same time, the specific exhilaration you get is wholly confined to that experience, and, in that, there's a unique thrill. This is, of course, the essence of horror: volunteering to be terrified and tricked, all for the exhilaration of the experience. I see Texas Chainsaw on a par with The Shining in its ability to lull you into its world, and then gun for you relentlessly. Although the all-out brutality of Texas Chainsaw is in stark contrast to the symphonic composition of The Shining, it is no less terrifying. Within the savagery and the whistle-stop pace, director Tobe Hooper reaches the pinnacle of artistry in horror: capturing the essence of fear, then letting it loose on the audience.

What I love most about this movie is its unapologetic tone: it is unashamedly simple and absolutely fearless, not once does it try to please the audience or attempt to get them on their side. As it becomes more twisted and more horrifying, it shrugs off any obligations it has to the audience and says bluntly: 'Deal with it...it's about to get a whole lot worse in 5 minutes'. Nothing is ever explained, but once the ride begins, you very quickly lose the urge to ask questions.

Editor Recommends Classic of the Week: Being There

Being There

Oliver Weir Film Editor Directed by: *Hal Ashby* Year of R elease: 1979 Starring: Peter Sellers; Shirley MacLaine; Melvyn Douglas

"Do you realize that more people will be watching you tonight, than all those who have seen theater plays in the last forty years?"

"Oh yes?" "Yes." "Why?

settle that distinction—it

is sufficient that we are

BEING THE t doesn't sound like you've understood a film very well if you can't decide whether the main character is an idiot or the messiah. Reassuringly, Hal Ashby does not seem to demand that we

left conjecturing: 'Who is Chance the Gardiner?'. A man who has resided in the same house, tending the same garden, year upon year, never leaving; a man whose understanding of the world has come from the TV and the radio; a man whose idle speech is twisted into profundity, allowing him rise up the ranks of society and into the world of talk show hosts and socialites, ambassadors and presidents; a man who's able to walk on water, not because he knows he can, but rather because he never learned that he couldn't.

Perhaps Chance is merely a satire, and his success a jab at the willingness of the political elites to hear

what they want, to look, not for change or substance, but for charisma and empty optimism. I think that is partly true, but that is not all he is. Sure, we, the audience, see where Chance has come from, and are privy to more information than the characters on screen. We know that they're being duped, and that they mistake his naivety and uncorrupted spirit as wisdom and



And yet, in DO WE ALL SEE IN the final scene where Chance CHANCE WHAT walks on wa- WE WISH TO SEE ter-something only the audi- IN THE WORLD? ence is privy to,

we are forced to see him on the

same terms as the other characters, and we are helpless to deny it-the satire is turned on us. Why is this? Do we all see in Chance what we wish to see in the world? Does Ashby decide to show him walking on water because, deep down, we know that such a miracle is needed to save our washed-out politics? Or is Chance a warning that all of us can be lulled into irrational beliefs, even if it is just for a second?

Of course, before his benefactor passes away, Chance really is a gardener; however, once he steps into the world, he becomes a mirror for all acquaintances, a tablet on which they chip their sorrows, a clay man that they can mould into a solution. For those infatuated by power or money, Chance is their



ter Sellers, as Chance, in *Being There*'s iconic final shot

mouthpiece, and likewise, for those intent on friendship and love, Chance is the warmth and good-spirit they so badly crave. Ultimately, he is more a reflection of your own character than any outstanding feature of his; he is the ideal man to meet the needs of those that meet him.

In my opinion, Chance is an echo, the inevitable effect of all causes finding form in the world. As such, he is the totality of characters: he is a companion to those who yearn for affection; a business partner and financial advisor; a suit mistaken for sense; he is a backroom scandal at a bourgeois party; he is a friend for those resigned to death; a little boy who never grew old; a white man gaming a broken system; 15 minutes of fame; the saviour of the world; he is the impotence of men in power; a mistaken member of a rival gang; the zeitgeist of a broken age; an awkward handshake with a slimy lawyer; an eccentric man in a stately dining hall; the next President of the United States; a tabula rasa; a state of mind; a Christly figure saving the damned; the will of men within this world; Gautama under the bodhi tree; a blissful season of deliverance.

Free Film of the Week: Suspiria (1977)

Suspiria

Reviewed by Oliver Weir

Directed by: Dario Argento Year of R elease: 1977 Starring: Jessica Harper

f you have staunchly ruled Lout watching *The Texas* Chainsaw Massacre this Halloween, then perhaps Suspiria (1977 version) will be a more palatable substitute; it is far less abrasive

than Texas Chainsaw (hell, what isn't?), and keeps itself at a distance, establishing a tempo that is far more refined and much less frenetic. Suspiria follows Suzy Bannion (played by Jessica Harper): an American ballet-dancer who has recently joined



a prestigious Tanz Academy in Germany. As her studies get under way, the mysteries of the institution unravel themselves—students disappear, matrons shuffle around at night, and the school's suspicious directress is much discussed, though rarely seen.

Without hesitation or hyperbole, I can say that the soundtrack and cinematography of Suspiria will blow you away. The music is electric, and the repetition of the central theme is hypnotic. In the few scenes where the tempo is about to let up, the theme tune sounds and a new, ethereal energy is breathed into the picture. The final element to this near-perfect horror film is the cinematography by Luciano Tovoli. The colour palette—consisting of corporeal reds and fleshly crimsons—washes over you as it does Suzy, giving you no sense of direc-



tion, no chance of escape. The persistent glares of carnal reds and cobalt blues come to embody both light and dark, the natural and the supernatural, the real and the imagined. [Suspiria (1977), as well as Suspiria (2018), is included with Amazon Prime—of which students can get 6 months for free.]

BOOKS

22

Book Review If Cats Disappeared From the World

If Cats Disappeared from the World

By Genki Kawamura

Reviewed by Jia Qi Tan Books Editor

You have been diagnosed with a terminal illness, left with days to live. The devil comes along and makes a deal, in exchange for another day to live, he makes one thing disappear from the world. This is the premise that sets the scene for If Cats Disappeared from the World by Genki Kawamura (translated by Eric Salland). The narrator, faced with the peculiar and difficult decisions of life and death, embarks on a journey of reflection and reconciliation.

The premise is nothing special; it takes the what ifs that everyone has wondered about at least for once in their lives and builds a story out of it. The choice of presenting the "decision-maker" as character of a devil betting with God is surely interesting. Kawamura even goes so far of structuring the books in "days of disappearances," echoing the classic Christian reference of seven days of creation. Each day reveals more about the protagonist and weaves into the next day smoothly; although the plot moves rather slowly at first, the complete picture comes together eventually, and it ends at the perfect place.

The book touches on many themes in its short span, each of which is profound on its own but to-

gether creating somewhat of a messy read just when I was hooked and wanted to read more about something, the author swiftly moves on to the next. Nevertheless, the book's depiction of family relationships and the narrator's contemplation of life and death

If Cats Disappeared From The World

Genki Kawamura



stood out to me. The narrator's will to live, juxtaposed with his inevitable death prompts one to reflect on the century-old questions of why we live and what are the most important things in life. You see the ending coming, but you get to experience the narrator's emotions firsthand as he walks down memory lane. It is an emotional roller coaster, but it leaves me feeling satisfied when he attempts to reconcile with his past leaving no regrets.

MORE JAPANESE BOOKS

What I Talk About When I Talk About Running



By Haruki Murakami

One of my all time favourite memoirs,

this book details Murakami's (Japanese author known for Norwegian Wood and Kafka on the Shore) journey of writing, running, and growing old. It's a meditative piece that truly speaks to me and inspires me to write. It's not just a recommendation for fellow runners out there although it seems like the perfect read for a long distance runner (it is). The way he writes ahout determination and consistency makes it universally relatable, and it also provides insights as to why he is such a great writer.

Before the Coffee Gets Cold

By Toshikazu Kawaguchi

Yet another exploration of magical realism, this book offers its protagonists a time travelling offer, that is, you must

stay at given seat in the cafe, you cannot leave, and everything will return to the present when the coffee gets cold. It's unique, beautiful, and heartwarming.

Book Review The Miracles of Namiya General Store

The Miracles of Namiya General Store

By Keigo Higashino

Reviewed by Jia Qi Tan Books Editor

Three thieves accidentally come across an abandoned general store with a mailbox which contained simple letters from the past, dropping in asking for advice, and there began the story of this magical store. The Miracles of the Namiya General Store by Keigo Higashino (translated by Sam Bett) covers a lot more than what can be written here. Such a story is not what I would ever expect from Higashino, a powerhouse of thrillers and crime fictions, including some of my personal favorites The Devotion of Suspect X and Malice. It reminds me of how Stephen King could write a story as hopeful as "Rita Hayworth and the Shawshank Redemption" but also a tale as dark as "Apt Pupil" within the same collection of short stories.

The storytelling is both unique and brilliant. Higashino's background proves to be very useful in crafting the suspense portion of the book. His whimsical writing style fits the magical realism genre and makes for a very pleasant reading experience, which is especially needed since we jump between different timelines. The plot is almost as good as its storytelling. All the characters are beautifully fleshed out and every detail comes together to weave an unexpected, heartwarming story. The book ultimately is about redemption, kindness, empathy, and how our words and actions can in-



the story so touching. To end it with one of my favorite passages from the book, "Your map is still blank. Even if you try to set a destination, you do not even know where the path is. But because it's blank, you can draw any map. Everything is free and the possibilities are endless. I sincerely hope you believe in yourself and live your life to the fullest."

fluence others; it is a worthy message and what makes

Program Review Emily in Paris Riddled with clichés and stereotypes

Emily in Paris

Starring: Lily Collins, Ashley Park, Lucas Bravo

Episodes: 10 (30 minutes)

Reviewed by Jia Qi Tan Television Editor

E mily in Paris is a Netflix show starring Lily Collins as the titular character and written by Darren Star who was known for his work on Melrose Place and Sex and the City. It follows Emily, a girl in her mid-twenties working as a marketing strategist from Chicago, who accepts a job in Paris despite her not knowing a word of French. This premise already makes for an unfortunate start for both Emily and the show. The show's plot can be best summarized as Emily trying juggle her new job, friendship, and romantic relationships as she struggles to adjust to the new culture.

I did not have high hopes to begin with—all I wanted was a simple, undemanding show—an eye candy, per se. A show with a young protagonist starting a new chapter of life in a new city seems like the perfect story—fun and motivational, the exact kind of show to keep me in the mood to start another semester of university. Besides, Lily Collins is a lovely actress, with a likeable personality that fits the aura of a character like Emily. Not to mention how Paris's beauty and charm makes the perfect backdrop for a

plot like this.

But that about sums up all the ups of Emily in Paris—Lily Collins and Paris itself.

The major flaw of the show is the weak plot. There is little to no character development; the Emily from the first episode is identical to Emily in the last episode. Any conflict that arises always magically solves itself. Emily doesn't speak French? Everyone she meets speaks perfect English then. Emily doesn't have friends in Paris? She just randomly meets the friendliest people on the streets and instantly becomes best friends with them. Emily gets fired? There is no such thing as firing people in Paris. Emily breaks up with her boyfriend in Chicago? She has one encounter with a hot guy after another in Paris, oh, and they all speak perfect English as well.

I get that TV shows are bound to have coincidenc-

es and conveniences here and there, but this is way beyond what should be acceptable. I love rom-coms and fairytales and perfect endings too, but the plot is outright superficial and frivolous. At the very least, Emily could have had a Dev-CRINGE-BINGE

il Wears Prada moment like when Andy reflects on herself, buckles up, and impresses Miranda. But

the lazy writing of the show rushes the plot, skips any build-up, and oversimplifies everything. It makes the show frustrating to watch and does not do justice to



the character of Emily either.

Even an actress as charming as Lily Collins cannot make the character of Emily works because this character is written so poorly. Emily is a character with a

> lot of potential, but we do not really get to see Emily go beyond the image of a basic white American girl. What Emily's boss Sylvie (played by Philippine Leroy-Beaulieu) sums up the problem pretty well, "You come to Paris. You walk into my office. You don't even bother to learn the language. You treat the city like it's your amusement park. And after a

year of food, sex, wine and maybe some culture, you'll go back to where you came from."

Emily in Paris is riddled with countless extreme French clichés. It is almost as if the writers refuse to take Paris as a true city and instead grab all the stereotypes they can think of and dump them all into the script, from workplace extramarital affairs to chain smoking to mean Parisians, a lot of which are untrue. The writers do not stop at France when it comes to stereotypes; Emily holds a lot of American stereotypes as well (although I am not sure if it is just poor character writing or piling up stereotypes or both). Emily's newfound best friend in Paris, Mindy Chen (played by Ashley Park), a rich Chinese girl who runs away from her rich family, is yet another inaccurately written character written from typical Asian impressions.

All in all, I would say that this is a hate-watch, cringe-binge type of show that prompts an inexplicable urge to keep watching despite much to dislike.



Credits courtesy of Netflix

Lily Collins as Emily

15 Minute Healthier Pizza from Scratch (Vegan)

Noor Akhtar Food Writer

Set a 15 minute timer on your phone. When the alarm goes off, you'll have made a deliciously fluffy (Vegan!) pizza from scratch. Your pizza will be jam packed with nutrient-rich ingredients without compromising flavour. The best part of this recipe is that everything is customisable. So mix it up, add whatever your heart desires (apart from pineapple of course) and enjoy! If you do make this recipe, please make sure you tag me on Instagram @nooreatsalot so I can share it!

I hope you guys have fun following this recipe and savoure every last bite of your delicious pizza. As always, if you have any recipe suggestions, please email me at noor.akhtar19@imperial.ac.uk or message me on my food Instagram account

Ingredients

Pizza Base

113g self raising flour

1/4 tsp of baking powder

1/2 tsp of mixed herbs

1 tsp instant yeast + 1 tsp of honey 1 tbsp of hemp hearts (any seeds will work but preferably de-shelled seeds, they create a really soft dough!)

1 tbsp of olive oil

Toppings

Sauce (e.g. tomato sauce - pasta sauce works well, BBQ, white sauce, pesto etc)

Low moisture cheese (e.g. Cheddar, Vegan Violife is amazing!)

Veggies (Sliced mushrooms, peppers, onions, sweetcorn, tomatoes etc. roast the peppers and onions before hand!)

Protein (optional): sausage chunks, chicken, beef, tofu, nutritional yeast sprinkled later

Recipe

Step 1

In a small bowl, add the yeast and honey alongside 3 tbsp of water. Cover with several towels and leave in a warm cool place.

Step 2

Preheat the oven to 180°C fan (200°C standard)

Step 3

In a medium sized bowl: stir in the flour, baking powder, mixed herbs, hemp seeds and salt and pepper to taste.

Step 4

Once a few bubbles start to form in the yeast-honey mixture, incorporate into the flour mixture and stir with a fork until it forms a soft ball.

Step 5

Incorporate all the flour from the bowl into the dough with your hands and flatten into a 1cm thick base. If the dough is too sticky add some more flour (vice-versa)

Step 6

Cover the bottom of a non-stick baking tray with some olive oil (alternatively a sheet of aluminium foil) and transfer the base.

Step 7

Add the sauce, toppings and cheese and spray with some more olive oil for a crispier crust.

Step 8

Bake for 8-10 minutes until all the cheese has melted and the base is golden brown. Enjoy!

How restaurants are working around Tier 2

Zahra Abiola Food Editor

Tier 2, London's current situation, means that mixed household groups can no longer meet indoor. Again the rules have made the lives of restaurants even harder.

As the temperatures drop and the sun scurries under the horizon before you can finish your horizons, it is a hard sell to get a group of your friends to dine al fresco anymore. Restaurants have had to be the bad guys and do the government's dirty work, forcing groups to prove they are in the same bubble. Now they have found a solution to this pesky number that is threatening their business model once again.

If the rules weren't confusing enough, there are a few exceptions to this indoor meet-up ban. Mixed meetings at restaurants can continue if it's a business meeting. Restaurants have jumped on this technical-

ity and used tongue in cheek language to reassure that their customers that it's still business as normal for all their "business talk". Now I don't know how you can talk tax with bottomless mimosas but after restaurants stepped up following the decision of the parliament to not provide free meals for struggling children during this half term, I'm not going to snitch. So, go forth and talk "business" at all your favourite spots. Remember, it's not "wasting money" and being "too lazy to cook" anymore, it's "doing your part for the country" and "stimulating the economy".

Your Union Events

FiveSixEight.

Live Music at FiveSixEight

FiveSixEight.

ⓒ 16:00 – 22:00 ⊗ 16:00 – 20:30

Saturdays

Live Music at FiveSixEight

Tuesdays
The Great British Bake Off

Sundays Beer & Burger Deal

every

Saturday

Thursdays Super Quiz

More details at: imperialcollegeunion.org/whatson

• imperial • college union

f beitbars

imperialcollegeunion.org

Union Page





Your Clubs, Societies and Projects events

We might not be able to do things the way we used to, but that never stopped us, did it? We adapt and we go on. Our CSPs are doing an amazing job themselves, adapting to what is happening in the world right now and are still working to put on great events for you. Introductory sessions, quizzes, training they've got it all!

If you haven't signed up for a CSP in Welcome Week and you're really passionate about something or simply want a new hobby - don't wait - have a look through the list on our website at **imperial**college**union**.org/**a-to-z**, and pick something you like. You'll automatically be signed up for that CSP's newsletter and you'll be able to find out more info about their events directly from them. More than that, you should keep an eye on our What's On page **imperial**college**union**.org/ **whatson**, where CSPs update the calendar with events. Go, go, go!



Who's up for cocktails?

A jug of Cheeky Vimto for only £12.50? Yes, please! We're definitely ready to try all the new drinks on the FiveSixEight menu. New beers in the bottles section, more cocktails on jug, and something new coming on draught soon (get excited, it's really good!).

Don't forget about the Beer and Burger deal on Sundays - for £7 you can grab your favourite beer or cider and any burger you like (yes, even the vegan one!).

We've made sure that FiveSixEight is compliant with any rules from the government and that it's safe for you to come and socialise. Even if you're only in to watch Bake Off with us on Tuesdays or to listen to live music on Saturdays - we want you to feel safe and welcomed. Stay tuned to our Instagram to watch FiveSixEight taking over our Stories some Wednesdays, Fridays and Saturdays!



National Student Mental Health Survey

We would like to invite you to take part in one of the largest studies on student mental health. College has partnered with Trendence to navigate the conversation surrounding student mental health and address how we, both College and the Union, can best support you as you study. Take part in the 10-minute survey, and you're automatically entered into a prize draw. You can win:

- · a £50 Netflix voucher (given away every week 4 to give away!)
- a £50 Deliveroo voucher (given away every week 4 to give away!)
 a Fitbit (4 given away at the close of the survey)

Mental health can be a sensitive topic for many, but please remember your answers will always be treated confidentially, anonymously and will never be analysed individually. You can stop at any time during the survey. Complete the survey here: **imperial**college**union**.org/**nsmhs20**

<image>



imperialcollegeunion.org

27

Concis	se Cro)SSW(ord																
1		2		3	4		5		6	7	Acro	DSS I	Dow	/N					
8					9						8	Material spread over the surface of soil (5)	1	To send out, often light or sound (4)					
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											25	A type of beer (5)	23	Method of memorisation (4)					

Points Available

Cryptic Crossword: 10 Concise Crossword: 5 Hot: 3 Medium: 2 Mild: 1 Gogen: 3

Points are available for partially solved cryptics!

Leaderboard

The Flots (58 Points)
 Mr Puzzles (40 Points)
 Cryptic Ed (10 points)

Send in a picture of your solutions and your entry to the cryptic clue writing competition by Tuesday 12pm to puzzles.felix@imperial.ac.uk to take part.

Clue Writing Competition

Your word is GREENHOUSE!

Send in an original cryptic clue to puzzles.felix@imperial.ac.uk for a chance for it to be published in next week's issue.

Mild Sudoku

		9		8		2	7	
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9			3					8
	8						1	
6					9			2
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	2	7		4		9		

Medium Sudoku

5		9						
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8	6		9	5			2	3
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Hot Sudoku

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PUZZLES







RULES

Felix is proud to announce a new type of puzzle. Never before seen in a newspaper in the world, cZeus was developed by the Mathematical Games company and provided to Felix.

Last Week's Answers

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4 1 2 8 9 3 6

6 4

6 8

3 8

cZeus is a mathematical puzzle formed of four simple rules - follow this QR code for an explanation of how it works.

Gogen

RULES

Write letters into each circle to form the listed words. Letters can be linked by moving between adjacent cells horizontally, vertically or diagonally in any direction. You may use each letter in the alphabet only once.



BEAUTY-FOXY-GLARE-JADE-PICTURE-QUICK-RAVEN-SHARK-SLAVE-SMOKY-WHOM



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hy is waste norma

Flora Dickie Sustainability Editor

When I worked in a not-to-benamed supermarket a few years ago, I was exposed to the role of institutions in the production of waste. At the end of the day when the doors closed to customers, we moved in for the night shift to stock shelves and unsold fresh bakery goods were all thrown away every single night. The normalisation of this act was startling. Even more shocking to me was the fact that we meant to report any sightings of people trying to 'steal' the thrown-away goods from the rubbish bins overnight. It is scary to think that we live in a world in which using 'unsellable' food (potentially unsafe), is stealing. Furthermore, not only do we produce a lot of waste, but so often this waste cannot be used. In the UK this doesn't just happen with food, but every single good, from dishwashers to cufflinks to potatoes.

Waste, as we know it, is a human con-

THE LEGACY OF

COLONIALISM HAS

OF ITS AFTER LIFE

Humans cept. are not inherently wasteful beings, yet our behaviour shift started to happen after World War 2, as the industry saw an oppor- LED TO THOSE tunity to make WHO CONTRIBUTE profit gains quickly. How LEAST TO PLASTIC we saw our day **POLLUTION TO** to day items transformed by **BEAR THE BRUNT** strong marketing initiatives of plastic and

packaging industry. With the design of disposable plastics, the potential of high economic gain was too good for the production companies to resist, and so they began the trend that still permeates today. These companies contributed to designing the world today and the multitude of environmental and social problems within it. Supposed disposable plastic and other disposable objects, such as clothing, people began to buy more than they needed in what we now call overconsumption. The design of disposability for profit has shaped how we



live and contributes to the crises we find ourselves in today.

We don't think twice about buying a plastic bag. We use it for as long as it takes to get home, and then we throw it away, so often that this act is engrained in our muscle memory. We don't consider how long it took to produce the bag, who made it or what pollution it may have caused in the process. Neither do we think about what happens to the bag once it is collected by our local council, for landfill or recycling.

How long will the bag be around? Does it decompose, and what contamination might it cause in the process? As recycling is such institutionalised an process, it takes the responsibility away from the producer. The normalcy of the act of recycling, as a natural occurrence to our modern existence, makes it seem simply part of our routine to buy disposable plastic because we can recy-

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lege.

cle it. Recycling also takes the guilt away from the supposed eco-conscious consumer.

However, putting the focus on the consumer and municipal recycling infrastructures is precisely what the plastic-producing industry want us to do. The mega-producers of disposables design for mass-over-consumption, and we are now wired to buy into this, or we often have no other choice of product. Companies can make a higher profit if they offload their waste externalities onto the recycling system, which is an

energy-using and propollution

ducing process and often leads to down-cycling, materials where transformed are a product into of lesser value than before. Furthermore, not everything that we put into recy-

cling bins is recycled. A lot of what we separate into different bins at home and work, ends up in the landfill, often due to the complexity of the plastic product or the lack of infrastructure. Even more concerning is that many countries in the Global North, i.e. the USA and the UK, have been known to send their waste abroad to South East Asia, and to be building waste incinerators in the Global South too. The legacy of colonialism and imperialism has led to those who produce and profit from plastic pollution, not to bear the brunt of its after-life.

It is useful to frame the process of recycling as another way of disposal, which Dr Max Liboiron discusses at depth in her work on Discard Studies. A complete re-thinking of the way we design products and packaging is needed, highlighted by the work of The Slow Factory on 'Waste Led Design Systems' in which the end life of a product is considered from the beginning of the design process. I believe that there must be a shift in how we value objects, materials and labour, to reduce the production and consumption of disposable goods and to re-cultivate a re-use culture. Yet in the Global North,



SUSTAINABILIT The 2020 Plastic Straw Ban Save the sea turtles

Flora Dickie Sustainability Editor

f you didn't know already, on the 1st October 2020, a ban on throwaway plastics came into place in England, including plastic straws, plastic cotton buds and plastic stirrers. However, establishments can still provide straws to people with specific medical needs or a disability (for whom straws were created for in the first place).

This ban will remove billions of disposable plastic items from circulation every year and reduce the amount the UK contributes to the 150 million tonnes of plastic waste in the ocean. I feel like the general public will see this as an environmental 'win', considering the rise in popularity of sea turtles in recent years. However, I do beg to question whether this is showing commitment to the protection of the environment for the planet and people, or is this just another greenwashing ploy? It is positive to see that the government have not brought in a blanket ban and have considered the importance of straws in the daily lives of people with disabilities or for their use in hospitals and clinics.

Nevertheless, this ban does seem like the picking of low-hanging fruit. What I mean is that this is just one small element of the significant plastic pollution problem and disposability culture we currently live in. If the government truly cared about the plastic pollution problem, they would have already banned all single-use plastics and invested in reducing plastic packaging production. A spokesperson for DEFRA (Department

for Food, Environment and Rural Affairs) said the government are 'absolutely committed to turning the tide on the widespread use of single-use plastics', but we are yet to see this a reality. Furthermore, the UK's 25 Year Environment Plan is not ambitious enough as the target to eliminate avoidable plastic waste is 2042! This current lack-lustre approach is worrying for future generations and shows how little the government care for climate and environmental justice.

SUSTAINABILITY

Reducing Plastic as a Student in London

Monami Miyamoto Sustainability Editor

Everyone has the best intentions gle-use plastic waste. But sometimes the best intentions just aren't enough. That's why this article has compiled some of the best shops and online delivery services that'll make sustainable choices easy for you. From weekly groceries to personal care products, these companies have got you covered.

BULK MARKET (in-store & online)

Bulk market is a plastic-free shop in

Hackney, selling everything: organic fruit and veg, staple foods, personal hygiene products, DIY cosmetics, snacks, zero-waste kits, and most importantly, freshly ground peanut butter! (who wouldn't want that?). Sold at affordable prices, the Bulk Market is your onestop-shop for zero-waste products.

MARKET -

The best part is, they also offer online delivery. You can simply go to the shop's website, select what you want, and they'll deliver to most areas in central London. Grocery shopping plastic-free has never been easier. **THE SOURCE BULK FOODS** (in-store and online)

The the source Source **BULK FOODS** has its roots in Australia when it was opened in 2012 with the aim of reducing packaging and carbon footprint of grocery shopping. The concept arrived in the UK in 2018 and is now one of the leaders in London Zero-waste shopping; they have stores in Chiswick and Battersea, but like the Bulk Market, also have online delivery systems. Their product range is similar to that of The Bulk Market but tends to be slightly cheaper.

The zero-waste blog on their website is also a great place to get tips and tricks on how you can live a more environmentally friendly lifestyle!

WEARTH LONDON (online)



ing-free, we've decided to include them in this list because their focus is still on ethical, environmentally friendly products, and they've also got a dedicated 'zero waste' section on their website. Slightly different to other bulk stores, WEARTH doesn't sell food products, but offers pretty much everything else you might need: they have an extensive range of ethically produced products from furniture, jewellery, zero-waste starter kits and more.

If you're interested in making purchases that are not just good for you but for the environment and our society, be sure to check out WEARTH.

ABEL & COLE (online)



Buzzing about organic for 30 years

Abel & Cole offers one of the most wholesome online shopping experiences you could have. They provide delicious, ethical sustainably sourced fresh produce, as well as pantry staples, weekly essentials, fresh bakery and household products all in sustainable returnable, reusable, recyclable packaging.

FARM DROP (online)

Farm drop is an online market for purchasing fresh produce as well as other foodstuffs, all of which you can filter using the 'plastic-free' option on their website.



They also wrap whatever produce requires bagging with compostable bags, making it a much better alternative than going to supermarkets. You won't be missing out on convenience either, because their fast delivery allows you to order by midday for a next day delivery!

Oh, and they also have a recipe section on their website with ideas on how you can produce seasonal recipes using their high-quality ingredients.

Making sustainable choices doesn't have to be difficult. It's all about knowing where to source your products and produce. Hopefully this guide offers you a glimpse into all the creative ways you can make a positive impact. Finally, it's also important to remember that when it comes to sustainability, the best thing to do is to reduce consumption in general - purchasing sustainably is the next best option.

All images in this article are from the respective company's websites

This week's inspiration: A Plastic Ocean

Monami Miyamoto Sustainability Editor

A Plastic Ocean is a documentary that captures the tragic realities of our love-hate relationship with plastic. I still vividly remember watching this two summers ago during a family holiday in Japan. Coincidentally, Japan ranks number 2 in global per-capita plastic usage. I wasn't surprised to see why, given that every single cookie is individually wrapped in plastic inside a larger plastic package.

A Plastic Ocean opened my eyes to the reality of our love-hate relationship with plastic. Lightweight, cheap and sturdy, the very reasons we began using plastic for, has now become the reasons why they're so destructive for our planet. The producer, Producer Jo Ruxton felt a deep sense of urgency to alert societies about this issue, upon witnessing the Great Pacific Garbage Patch. The Great Pacific Garbage patch is a region of ocean between Hawaii and



California and happens to be one of the largest offshore marine debris and plastic accumulation hotspots in the world spanning across 1.6 million square kilometres. To put it into perspective, that's two times the size of Texas or three times the size of France.

What's worse is that once plastic waste accumulates in these regions, they don't go away – they break down mechanically or by solar energy, into microplastics. Microplastics are so small we can hardly see them, but that's what makes them lethal. They not only harm marine wildlife but accumulate in food chains and eventually end up in our bodies every time we eat seafood.

Although plastic production began in the 1950s, nearly half of the current plastic waste that exists come from just the last 14 years. Much of it boils down

to the fact that we're oblivious to just how much single-use plastic waste we produce and how damaging it is. *A Plastic Ocean* offers a detailed understanding of both topics, including cutting-edge research and scientists who attests to the dangers that await our future if we don't act.

It's a 1.5-hour watch and is bound to change the way you think about plastic waste. Alternatively, if you're keen on learning more about it, some other great resources are: *Turning the Tide on Plastic* by Lucy Siegle and the 3-part BBC Radio series, *Fantastic Plastic* by Mark Miodownik.



The Great Pacific Garbage Patch - Image from Forbes

US election and the bond market

Riccardo Pierre Investment writer

With the U.S. presidential elec-tion just weeks away, the focus is broadening from the singular emphasis on the politics of the election to the potential policy implications.

We here in the Felix investment section think the the most likely election scenario is worth exploring

A Democratic sweep, with former Vice President Joseph R. Biden, Jr. winning the White House, and Democrats keeping their majority in the House of Representatives and taking back the Senate (albeit by a very narrow margin). We address this scenario in detail below, since it would likely lead to substantial policy shifts.

I am too embarassed to ask... What is a bond?

A bond is a fixed income instrument that represents a loan made by an investor to a borrower.

A type of fixed-income security, a bond is an investment that provides a return in the form of fixed periodic interest payments and the eventual return of all money that was originally lent at the expirey of the loan.

Bonds are used by companies, municipalities, states, and sovereign governments to raise money from the lenders and investor around the world (the market) to finance projects and operations. A company might decide that, rather than selling shares (equity) which respresent part owenership of the company they would prefer to borrow money by issuing bonds.

Owners of bonds are debtholders, or creditors, of the issuer.

Bonds can be bought and sold and their price depends on the level of interest paid on them and the amount of time left until the bond must be paid back or 'matures'. This is because when the price of a bond falls by 50% the 1% annual return has in effect been doubled to 2%. Bonds can be both long and short term loans.

How would risk markets respond under each scenario?

It is hard to definitively predict what the market response would be. The conventional wisdom in 2016 predicted a Trump victory would trigger a market sell-off, yet it outperformed for years. Indeed, if history is any guide, risk markets are somewhat impervious to the outcome of the election, having done well under both Democratic- and Republican-led White Houses since 1932. As measured by the S&P 500 Index, the market has historically performed marginally better under Democratic than under Republican administrations, but best under divided government.

While the direction of the overall stock market may be hard to predict, it is easier to forecast which sectors are likely to be winners and losers under the two election scenarios.

What policy changes should we expect from a Democratic sweep?

Felix investment expects a Biden White House and a Democrat-controlled Congress to prioritize legislation that would:

1. Modernise infrastructure, going beyond bridges and roads to a national broadband build-out THE MARKET HAS climate-friend- HISTORICALLY and ly buildings and schools.

2. Strengthen the Affordable Care Act (ACA) by **BETTER UNDER** putting it on firmer DEMOCRATIC legal standing and ensuring it is actually THAN UNDER more affordable for REPUBLICAN middle-income earners. We could also see **ADMINISTRATIONS** Democrats pass pre-

scription drug pricing reform that would to negotiate prices, similar to current ed programs in other government agencies, including the Veterans Administration.

Raise taxes modestly to pay for 3.



some of these changes. We believe only drilling on U.S. federal lands, both onmore evolutionary, rather than revolutionary, tax changes could pass a narrowly Democratic Senate (such as a 25% corporate tax rate versus the 28% rate proposed).

4. Focus on climate-friendly regulatory changes, such as curbing emissions from fossil fuels and limiting fracking on public lands.

Provide significant 5. COV-ID-19-related funding for states and cit-

ies, in addition to businesses, if Congress still has not passed any additional stimulus by January 2021.

Outlook for credit sectors under a Democratic sweep

The winners Renewable energy Hospi-• tals

Construction, particularly lower drug costs by allowing Medicare homebuilding and infrastructure-relat-

The losers

Oil and gas exploration and pro-• duction, particularly firms exposed to shore and offshore

- Chemicals •
- Healthcare, pharmaceuticals
- Mixed
- Financials •
- Technology

A few more takeaways:

Financial sector faces challenges: Despite what we think would be a broader economic recovery and a reprieve from large-scale financial regulation under a Trump win, the persistently low interest rates that banks have faced over the past four years will likely remain a negative overhang to underlying equity performance. Select credits will likely fare much better.

Energy suffers from secular changes: President Trump's energy-friendly policies have done little to aid oil and gas companies, which have been hampered by heightened environmental, social, and governance (ESG) concerns, limited availability of incremental investor capital given poor returns, and secular headwinds, (i.e., electric vehicles and renewable energy).

Technology is caught in political fallout: Finally, we would expect U.S-China trade tensions to continue simmering with spillover effects primarily hitting the technology sector equities and high-yield credits, as witnessed with the ongoing Huawei and TikTok issues.



PERFORMED

MARGINALLY

SPORT

Best Moments at Imperial Basketball from the President

up. The buzzer sounds just

as I make [the basket]". This

ties the game and puts it

into overtime, which sadly

Imperial lost. Even though

Imperial lost in overtime,

that steal and buzzer beat-

er made the game. Kenny's

first game at Imperial ranks

second in his favourite mo-

ments. "In my first game, I

remember I was really nerv-

ous because I hadn't played

in 6 months, and I had made it into the Men's Sec-

ond Team. I was also told

I would be in the starting

5. I was really excited and

I wanted to prove myself."

The team had travelled to

Portsmouth for this game,

which was a 2.5 hour jour-

ney to play Portsmouth's

first team. As the game

started, "I quickly realized

Amanda Barden Sport Editor

Kenny is the president of the Basketball club this year alongside being in his second year at university studying Bio-Engineering. He's done a lot of work this year to try and make basketball run as smoothly as possible with the current pandemic. He agreed to be interviewed about his favourite basketball moments in the basketball club. However, it is very difficult to find just one favourite moment, so instead, we've asked him to talk about the three best moments he's

had with the club. In most sports, your first and last game can be the most memorable, such as watching Kobe Bryant in his I WAS REALLY last game score 60 points (which also happens to be Kenny's IWANTED TO favourite moment in sports history). It is the one that can bring

a lot of emotion: anxiety, excitement, happiness, pride, and acceptance. There's also the big games: finals in a championship, promotion games, or games where your family or friends come and watch. But sometimes, the most memorable moments you have can come from random games that you expected to maybe blend into memory after a few years. At the end of the day, sometimes you don't even remember how the game ended;

the important part of the game was how you felt in a specific moment. Kenny's moments encompass all these. His best memory was against Bucks university, in High Wycombe. Bucks university may have a small reputation of having referees that think there is no way Bucks has done anything wrong and should never get called on, and that the other team is absolutely atrocious and is out to get them. During the game, a lot of Imperial's players had a few fouls, including Kenny, who had four (in basketball, if you have five fouls, you get kicked out

> of the game, similar to a red card). After a long game, the last minute comes along and somehow Imperial are only 4 points down ("somehow" being that the other team was given enough free shots for it to be embar-

rassing if they didn't win). Imperial had possession and was able to score, so we were being down only 2 points. As the ball is inbounded, Imperial foul so that Bucks have to start from the half court and the timer stops. BUCKS inbounds the ball again from the half court to their main player, "who I was in charge of defending". As their main player starts to move, "I manage to steal the ball, run down to the basket, and go up for a lay-Credits: Zhuoqi Li



EXCITED AND

PROVE MYSELF!

Men's 2 Team picture in Portsmouth

that this team was absolutely incredible" and they had home court advantage and had a lot of supporters on their side. Imperial at this time had only managed to have trials and one training session together due to the late start of the season, so they lacked team chemistry and hadn't played together before. Therefore "we got demolished! We lost overall by 40 points... It was embarrassing, they were insane!" Even with that defeat, there can still be moments that redeem you (in parts). "In the dire moments of the game, they had a fast break. They had this guy that kind of looked like Ben Simmons, quite tall, and muscular... They passed it out to him and he was by himself running down the court, and I come running down behind him. He goes up for a dunk and I block him! Everyone on our team got so gassed!" The player tries to have the referee call a foul (which is what a lot of players do when they get blocked and are a little embarrassed, even though they know it was fair play), but the referee said that block was all ball so he didn't get the foul either! At the end, when we were talking about the game, our captain said "guys we may have lost by 40, but we are gonna remember that block!"And Kenny's third ranked greatest memory comes from his last game in his first

year. His team had won the previous game, "so we all started the game pretty confident, the team had played together more and we had team chemistry, and I felt more comfortable". As the game goes on, Imperial realizes they are doing great! Since we were doing well, "I pop up for a three and it goes in. So I'm like, okay, feeling good, I'm comfortable. So I decide to go for a second three, which was a bit further out, and it goes in. I'm getting even more confident". So then the game goes into second half, where the teams switch sides of the court. Kenny is coming down the side of the court with the ball where the Surrey bench is and their players are saying "leave him, he can't shoot". To this, Kenny "wanted to show them up, so I pull up for a three and it goes in. I turn around, look at them, put my finger over my mouth, and shush them as a joke. I was smiling and laughing and they were laughing as well". Imperial won that game, but "that was a good moment!"

If you or anyone you know wants to talk about their favourite moments in their sports club, please do get in touch at Sports.felix@ imperial.ac.uk

Credits: Zhuoqi Li

ICBC win first ever Embankment Challenge

Jack Powell Captain of ICBC

The Imperial College Boat Club 1st VIII won the first installment of the brand new "Embankment Challenge", an invitational time trial set up by Thames Rowing Club. The new race was set up because certain London Tideway rowing clubs missing out on racing due to the prohibition of river traffic under Hammersmith Bridge. This, combined with fears of overcrowding at hosts clubs upstream and thus not being COV-ID friendly, have caused rowing clubs downstream of Hammersmith bridge (most of which are based at Putney Embankment, hence the name) locked out of the recent Pairs Head, which they would have normally taken part in and competed for the top spots. The time trial, starting just below Hammersmith bridge and finishing near Wandsworth Bridge, was approximately 4km long and took eleven to twelve painful minutes to complete. The weather was not ideal with strong winds making conditions on the stretch from Harrod's to Craven Cottage difficult, however there was no heavy rain to dampen the mood. Due to COVID, spectators were told to stay at

home, wrap up, and watch the progress online as times were live-streamed for the race. The Men's 1st VIII, coxed by Annelise Perkins and stroked by Max Ridgwell, set the fastest time to the first checkpoint and to the finish line with a final time of eleven minutes and seven seconds, beating a very fast Thames 1st and 2nd VIII by seven seconds and nine seconds respectively. The Men's 2nd VIII came in 7th place in a very tight field, beating both of their compatriot 2nd VIIIs at London Rowing Club and Vesta Rowing Club. In total, Imperial fielded four VIIIs that took part in what

was a thrilling restart to racing; the first in over half a year, as all major competitions were cancelled last summer. This was a promising first performance for all crews, especially the 1st VIII, hungry for redemption after missing out on what was shaping up to be a highly successful end to the 2019/20 season. All crews are moving into a tough four weeks of hard full-time preparation for the upcoming Fours Head on the 22nd of November.

Photo credits: Joanne Harris, insta: @joannerharris



Felix cryptic Crossword No. 5



Think our clues are too easy? Too hard? Write crosswords for Felix puzzles! See the main puzzles section for more information²³ on our clue writing competition.

Across

1

21

22

- Lodge place to sleep after long dash (5)
- 4 Stop filming girl in slasher (7)
- 8 Arse around during oddly heavy tea (7)
- **9** Cryptic clue close to utter evil (5)
- 10 Edge along wall as coiling krait engages poor songbird (8,5)
- 12 Force that's Machiavellian to some extent (3)
- **13** Advance to Fleet Street? (5)
- **15** End every second of racism (3)
- 16 Work of Marxist leader to stop after Keynes finally enters home of Reds (9,4)
- 19 Mast and anchor not even by Royal Navy (5)
 - Location of penalty spot stipulates some characters be recalled (3,4)
 - More tasty oranges to be found here? (7)
 - Bar season where stags fight after early signs of stupidity (5)

Down

1

2

3

4

5

6

11

14

20

- Where Imperial student might go to lift spirit? (5)
- Nail bar surprisingly jams latest in jazz a style for those down under perhaps? (9)
 - Nice of Sikh to regularly work on computer (7)
- Spice up pie crust with finely chopped Pyrenean cep (7,6)
- Little Tom to knock papa out with barrel (5)
- Element of polar coordinates? (3)
- 7 Change of direction in freedom could produce something very different? (7)
 - In the style of Baroque era, bust university removed is a key matter for many statues (9)
- 12 In court, top doctor served up settlement (7)
 - Drugs used to avoid extremes on romantic rendezvous (7)
- 17 Lawyer's wigs are source of amusement with US soldier (5)
- 18 Toast uptake pointless before revision (5)
 - Boast firsts in Nordic walking and Olympic climbing (3)



Serendip

SPORT