

Felix

In this issue: the **FELIX 2020 SEX SURVEY**



Page 25 pull-out

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2 WEEKS TO LOCKDOWN?

Credits: Nicolas Geiseler, Toran



Eamon Farhat Comment Editor

London has had its first Covid outbreak at a hall housing students attending the Royal College of Music, right in the middle of Imperial. As freshers move into halls here and adjust to the unprecedented restrictions, many will be hoping that the extreme measures that they are putting up with will at least protect them from COVID.

However, by comparing the Imperial situation to that of universities around the country that began in person teaching earlier than us we can imagine what life might look like in a couple of weeks time.

The news is not encouraging. After a few weeks of students having moved into halls in Glasgow, where university starts much earlier, a real COVID storm has already hit. To understand what exactly has happened and to get the details, we spoke to a fresher who has moved into the Murano student hall, where the biggest outbreak anywhere in the country has happened.

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COVID-19 WARNING
IF YOU PICK UP THE PAPER PLEASE TAKE IT AWAY WITH YOU

No fee reductions says VP Education ‘No drop in teaching quality’

Calum Drysdale Editor in Chief

The interim Vice Provost (Education) has told Felix that students should not expect a reduction in fees in response to changes in education

delivery. VP Emma McCoy has said that the enforced change to teaching method has been a significant driver of innovation and she believed that teaching would be better now than it had been in previous years.

In an interview McCoy said that academics had been working to make sure that “the teaching [is] of the same

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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 involved in Felix in a regular capacity, email Felix@ic.ac.uk

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calibre that you would expect for any Imperial programme”.

Students complaining that their fees are being spent on a 'streaming subscription' will be disappointed to hear that the College has no plan to offer reductions in tuition fees.

The interim VP (Education), a statistics lecturer, explained that in the past the College had been 'outdated', by being overly focused on lecture-based teaching and that the COVID enforced change was merely “an acceleration” of a trend that was already occurring.

She pointed out that given much of the information conveyed to students over the course of a degree was available on the internet it was more important that academics worked with students to help them learn to apply their new knowledge.



IN THE PAST, THE COLLEGE HAD BEEN 'OUTDATED' BY BEING OVERLY FOCUSED ON LECTURE BASED TEACHING

When pressed on how distance, multi-mode, learning would teach students the same practical skills that in person teaching would, she gave the examples of the Lab in a Box parcels and having students wear cameras during practicals.

The Lab in a Box parcels have been mailed to students unable attend in-person practicals and contain equipment intended to allow students to simulate some parts of a practical experiment in order to gain vital skills.

McCoy insisted that all learning objectives would be met despite these changes as a result of the major investments that had been made over the summer.

While some departments have told students that they must return to campus in January, others intend to offer fully online courses beyond that.

Union council push through vote to change De la Beche Society name

Calum Drysdale Editor in Chief

The Union council voted to change the name of the former De la Beche Society to the Geology Society. Union trustee, Chris Carter brought a paper to the Union Council meeting on 22nd September which asked for the Council to change the name of the society.

The members of the society had already voted previously on a name change but there was no consensus reached on what the name would be with the most popular option (Geology society) only gaining 62% of the votes, several below the supermajority of 66% required by the constitution to change the name.

Carter brought the paper to Council

because he felt with the full support of his successor as RSMU President, the current and former Geology Society President's and committees, members of the Union Leadership team and members of staff in the Department of Earth Science and Engineering that it would be better to go to Council rather than rerunning the vote.

A sabbatical officer, when asked if they felt that this was an appropriate use of Council powers agreed that there was little precedent for the action but said “Who is going to defend a slaver?”

The name change was originally proposed in response to De la Beche's links to prospecting and slavery in Africa.

College charges postgrads to apply ‘Financial gatekeeping’ say academics

Nick Manrique News reporter

Hundreds of academics and researchers at Imperial College London have signed an open letter addressed to the College’s senior leadership team calling for the repealing of a new application fee for taught postgraduate courses. Signatories accuse the College of “financial gatekeeping” and claim that the introduction of the £80 fee will “act as a direct barrier for underprivileged students”. The move comes just weeks after the University of Oxford resolved to scrap their postgraduate application fees, which had been in place since 2007, with the congregation there specifically citing “the undermining of diversity efforts” and “discrimination”.

Many are surprised by the timing of the decision, especially given Imperial’s specific context. According to the most recent Times Good University Guide, Imperial ranks 5th lowest in the country for social inclusion, with a particularly low percentage of state-school-educated students. The introduction of the fee puts Imperial squarely in the minority of Russell Group institutions – although such fees are more common in London. The open letter also stresses that the decision is “important to consider in light of the recent work by the college to improve equality, specifically in response to the #BlackLivesMatter movement”, noting the “co-correlation of socioeconomic class and ethnicity, and associated disadvantage”.

In an interview with Felix earlier this week, Profs Ian Walmsley and Emma McCoy of the senior leadership team explained the reasoning behind the implementation of the fee, saying that “appropriate

management of postgraduate applications is a “considerable cost”. They maintain that the measure won’t discourage anyone from applying, with Prof Walmsley saying that “we have funds which we can use as waivers if people aren’t able to cover the fee.

We think

that that will mitigate the difficulty”. Prof McCoy added that funding availability should stretch to any applicant “who

meets our criteria for hardship. I don’t think this is about the College profiteering”.

Some members of academic staff disagree. Dr Dave Clements, deputy director of Physics MSc programs, shared his “distress” over the decision. “This will be a heavy burden for disadvantaged students. Even with waivers, these students will still be disadvantaged – they will have to go through the extra process of applying, which will further delay their application, and they could miss their place on high demand courses”. One of the authors of the open letter, Dr Ben Britton, expressed surprise over the timing of the move, particularly in light of the University of Oxford’s recent resolution to abolish their fee and the COVID-19 pandemic, saying “COVID restricts access to universities... When there is an imminent recession, education is turned

to, and immediately we’re putting up a financial barrier to people even applying”.



Both Dr Ben Britton (left) and Prof Chris Jackson (top) have expressed concern

to, and immediately we’re putting up a financial barrier to people even applying”.

Prof Chris Jackson, another of the authors, described what he thought the two-fold impact may be: “One part of it is inward-looking; I think a lot of staff and students will find it hard to trust Imperial when they make statements about BLM, or widening participation. And another part is to do with the external reputation, and impact on people applying”. He added that the College may miss out on “huge amounts of intellect and character” from dissuaded applicants.

It’s not just staff who oppose the measure: along with the academic signatories of the open letter are many students and alumni. Among them is Ben Fernando, who led the successful campaign at Oxford earlier this year and has organised a petition for Imperial alumni to voice opposition to the College’s move. He said “it’s incredibly sad that Imperial have taken this decision at a time when we should be reaffirming our commitment to equal-

ity and inclusion within the college. I hope fellow alumni will stand together on this issue and make clear that it’s not OK.”

The move has also called into question the transparency of the College’s decision-making processes. Dr Britton says that he first heard about the fee in a tweet of a colleague mere days before its introduction, and Prof Jackson recalls speaking to “passionate people at Imperial [involved in] widening participation” who were “completely blindsided” by the decision: “it clearly hadn’t been discussed as widely as it should have been”. The final decision was made at President’s Board, for which minutes are not made readily available and whose process is described as “opaque”.

The College hopes to prove these fears unfounded, with the official website promising that the waiver application process will be “swift and simple” and a pledging that it will “monitor the impact closely over the coming year”.



IMPERIAL RANKS 5TH LOWEST IN THE COUNTRY FOR SOCIAL INCLUSION

Major breakouts at Glasgow and RCM

Credits: Grace Kang

CONTINUED FROM PAGE 1

The situation is now very bad. Hundreds of students are locked down in their flats. The questions on everyone's mind is could the students or the university have put in place measures to avoid this or is the fate of Murano one that will be replicated in halls across the country including at Imperial.

With lectures, societies and sports all online, Dan explained that it was difficult to get a sense of community. "It's either you sit in your room, and waste the first week of fresher's when you're meant to try to meet people and get some form of a social group going so that you're not alone during the first part of uni or you just don't get sick. So it really is no competition in people's eyes." Coupling this with the fact that social distancing was just not possible in student halls, Dan told Felix that everyone accepted they would get the virus saying it was "mutually agreed upon" and "unavoidable". Social gatherings in halls which were definitely the big spreader had to happen as there was "no other way to meet people" as online events did not work in practice.

Some efforts were made by police to enforce social distancing, with about 30 officers patrolling the hall every night, according to Dan, breaking up social gatherings. The lack of consistency in the actions of these officers hinted that no official guidance had been given to them with how to deal with the unique



situation presented to them by the halls of residence.

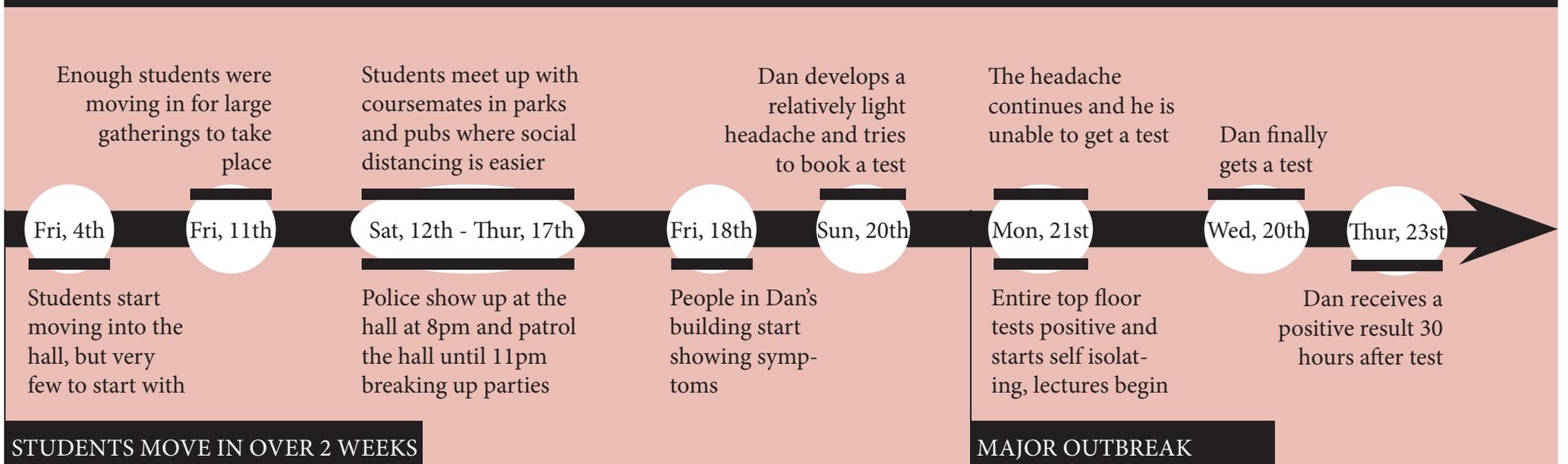
After about a week, students in the hall started developing symptoms, these would usually last just a few days and they would feel better. When some students did go and get tested and returned a positive test the whole flat would have to self isolate with the accommodation services plastering a "do not enter" sign on the flat door. In Dan's case, it took him 3 days to get a test after developing

symptoms and the walk in center was 40 mins across town (there has since been a mobile unit set up outside the hall). Once in self isolation, students could use their kitchens and bathrooms, and some neighbouring flats which were both in self-isolation would hang out together. In flats with high risk people, the other flatmates took extra precautions.

The mental toll of this was quite hard Dan explains, "It's it's very much sort of everyone in the same boat kind of men-

tality, but it's also quite dim because everyone's aware that this was not what the beginning of university is meant to be like and that we're sort of missing out on this really enjoyable, fun experience where kids are really meant to come out of their own shells and really explore new territory and meet new people." There is no longer the sense of FOMO which was around during the first week as everyone was self isolating and students were looking forward to putting this all

GLASGOW STUDENT EXPERIENCE



suggest we are weeks from lockdown

bring them and being able to have some freedom back. “Students kind of need a light at the end of the tunnel in order for them to sort of maintain their morale.”

New students have been moving into halls over the last two weeks, and although many of them and the College as well have taken extraordinary covid measures, Dan believes this is not enough.

Most of the measures employed by the two universities are very similar with Imperial seemingly going a step further by treating self isolating students with more precautions by moving them to en-suite rooms and not letting them out under any circumstances. However, there doesn't seem to be much in terms of provisions for food, laundry cleaning or access to wellness activities. Being cooped up in a room for 14 days can definitely take a toll on the freshers.

Without putting in proper measures, the risk of students not following the proper channels and taking the self isolation into their own hands is very possible.

A former Woodward resident who also went on to be a hall senior at Pembroke said the following “Whether it be the Woodward lifts shared by hundreds of students or the Wilson house narrow interminable hallway, or the kitchen shared by over 20 people in Pembroke, there is no way infections won't spread like wildfire if Imperial doesn't put further measures in place.”

After a lot of media coverage and controversy, Glasgow eventually agreed to refund 4 weeks rent to students self isolating and give them a bit of money to spend on food delivery, Imperial hasn't made the same commitment but a similar controversy could push the same thing to happen.

Two sides of the coin

Over the course of my investigation, I spoke to a fresher who is just about to move into Wilson hall at Imperial and a slight optimism with a heavy serving of glumness was clear:

“I'm trying to keep an optimistic mindset about socialising because there are online events and the possibility to still hang out in small groups, but the situation in Scotland makes it feel like the ability to socialise will probably disappear very quickly after move-in. I'm also worried about the mental health implications a potential lockdown in halls could have, how that could impact my studies, work ability, and overall university experience”

A student who was meant to come to campus has decided to attend the first term remotely

“I decided studying in Portugal until January would be the best option because this would allow me to be home if there was a second massive outbreak. Right now what I am most worried about is the fact that there will still be some practicals, and even though the university has assured online students that this will have no impact or affect us in any way I am slightly concerned that I will be disadvantaged. On a more social side I am also a bit worried that when I get there in January there are already some groups formed and everyone already knows each other quite well and that this will make my integration in the university harder, as in October I would be in the same uncomfortable situation as everyone else.”

Former Union President and anti-lockdown campaigner Piers Corbyn comes to Imperial

Calum Drysdale Editor in Chief

On Wednesday 7th October, former Union President Piers Corby, brother of former Leader of the Opposition, Jeremy Corbyn and anti-lockdown protestor attended Imperial on the invitation of a student to hold a rally accusing Imperial academics of being in the pay of Bill Gates and working to establish a ‘new normal’ and a ‘new world order’.

Invited by Marwan Riach, himself a staunch anti-second lockdown advocate he took the opportunity to look around the Union and reminisce over his experiences at the time. College, Union and students were, however, united in opposition to his visit. College security were in large attendance with security and police officers together outnumbering the small number of protestors.

Corbyn gave a speech on Queen's lawn in front of a banner calling on

the government to take down 5G masts, end mask wearing and social distancing and halt any work on vaccine development. Mr Corbyn studied physics when he attended Imperial College.

In an interview Corbyn explained that the dictatorial style of government that Britain was currently experiencing was intended to weaken our immune systems by limiting social contact to make us vulnerable to other attacks and population control measures. He quoted Orwell a number of times asking students sitting on Queen's lawn to consider whether they could ever have tolerated the restrictions put on them a year ago.

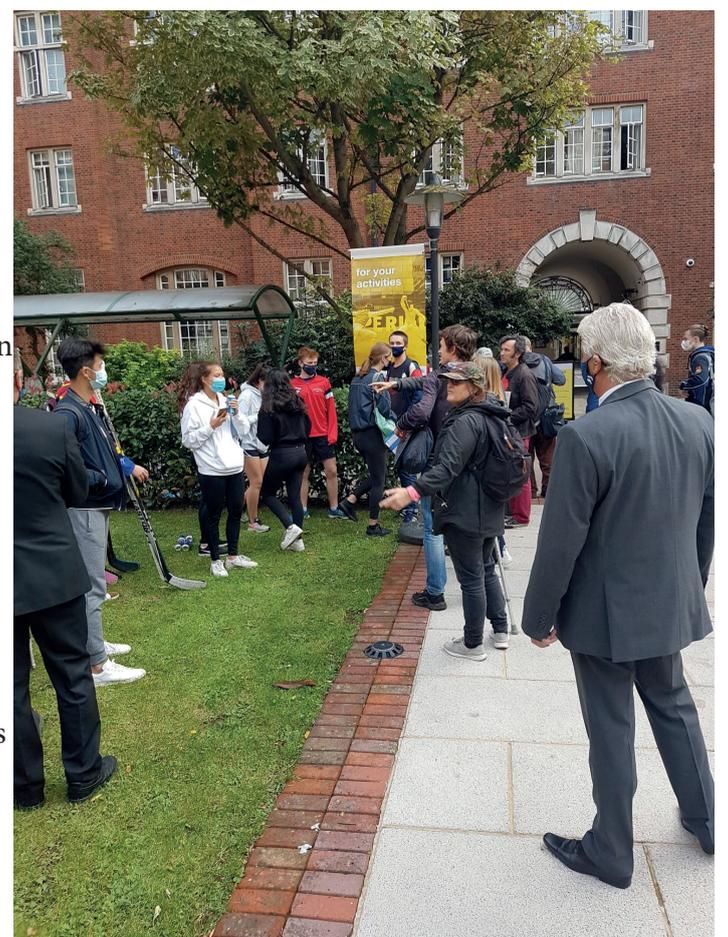
When Mr Corbyn went to the Union to try to get a drink he was blocked by members of Union security that shut all the doors and barred him entry.

There was also a confrontation be-

tween students in the quad and Corbyn and his fellow anti-lockdown protestors.

One student, Pierre Vivier, a 3rd year Maths student said that it was outrageous that College and Union security had allowed Corbyn onto College grounds. “What if there was someone with asthma?” he asked.

The group of protestors left Beit and dispersed after this. They handed out flyers as they left advertising a “Drink against the Lockdown” to be held at 10pm on Old Compton road.



Autumn Events Term Card

At Imperial Enterprise Lab we're passionate about inspiring the next generation of innovators and entrepreneurs. Whether you want to test an idea, develop new skills, start a business or just meet interesting people we're here to help. From skills seminars to competitions and co-working space to expert mentors, we offer all the support you need, free of charge!

October

- 14 / Idea Challenge
- 15 / How To...Do Customer Discovery on a Budget with Nana Parry
- 15 / Pitch 'n' Mix
- 20 / Innovation Pitch
- 21 / WE Inspire Conference
- 22 / How To...Visualise Data with David McCandless
- 28 / WE Innovate Final
- 29 / How To...Create an Inclusive Culture with Sonya Barlow

November

- 4 / WE Activity Series: Climate Change & Sustainability Talk
- 5 / How To...Understand Investment with Yvonne Bajela
- 11 / WE Activity Series: Health & Medtech Talk
- 12 / How To...Do Good and Make Money with Vicki Saunders
- 12 / Pitch 'n' Mix
- 16 / Discovery Fund applications close
- 18 / WE Activity Series: Ideation Workshop
- 19 / Innovating Smart Cities Hackathon
- 19 / How To...Be Resilient with Giles Duley
- 25 / WE Activity Series: Future Forecast

December

- 2 / WE Innovate application deadline
- 10 / Pitch 'n' Mix
- 15 / Innovation Pitch

How To Talks - Boost your entrepreneurial know-how with our 60-minute lunchtime expert talks.

Idea Challenge - Up for a challenge? Fancy meeting new people? Then join us for an afternoon of brainstorming, problem-solving fun. You might win a prize too!

Innovation Pitch - Pitching gets real! Come along to one of our Innovation Pitch evenings where our Imperial innovators showcase their latest projects. You'll also have the opportunity to ask questions and network with the teams.

Pitch 'n' Mix - Part networking evening, part pitching session, this is the place to meet future collaborators, get feedback on your pitch, and swap tips and tricks.

WE Activity Series - Panel discussions and workshops taking place every Wednesday throughout November for Imperial women.

WE Inspire Conference - Celebrating women entrepreneurs and leaders from Imperial and beyond.

WE Innovate Final - Watch the five finalists from our women's entrepreneurship programme pitch their idea to win part of the £30k prize fund.

Discovery Fund - Need a cash boost to see if your idea has potential? The Discovery Fund could provide just the support you're looking for.

Innovating Smart Cities Hackathon - Collaborate across borders to come up with innovative solutions to UN Sustainable Development Goal 11: Sustainable Cities and Communities. In partnership with Tsinghua University Beijing.

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How (not) to respond to a pandemic - Part One

Ansh Bhatnagar Science Editor

Over 500,000 cases. More than 40,000 dead. The largest recession on record. The UK's response to the coronavirus pandemic has left much to be desired, and with the start of a second wave already exceeding the recorded case numbers of the first peak, time is running out for the government to act decisively with evidence-based policies. How did the government get this so wrong, and what, if anything, did it get right?

A SWAN SONG

In 2016, a secret government drill called Exercise Cygnus was carried out to test the pandemic preparedness of the UK. Specifically, the virus it looked at was influenza, not a coronavirus, however there were many similarities between the simulated disease and COVID-19, namely that they were both fast-spreading acute respiratory diseases.

Cygnus told the Government something it did not want to hear: that the UK was woefully unequipped to deal with a pandemic. At a time of austerity, simulations predicted the overwhelming of an underfunded NHS that was lacking enough ICU beds and personal protective equipment (PPE). However, rather than act on the findings of this drill, the report was buried on the basis of national security.

TRIPPING AT THE STARTING LINE

Flash forward to 30th January 2020, when the World Health Organisation (WHO) announced to the world a Public Health Emergency of International Concern occurring in Wuhan, China. Despite the WHO warning governments about the severity of this issue, the current Prime Minister, Boris Johnson, missed five consecutive emer-

gency COBRA meetings at the start of the crisis; already putting the country's response on a weak footing.

On the 3rd March, more than a month after the initial WHO warning, the Government announced its plan to "Contain, Delay, Research, and Mitigate". By this time, the situation was developing quickly in Italy, which was deemed to be a 'few weeks ahead' in the pandemic, and thus was hit particularly severely. Italy entered a national lockdown a week later on the 10th March, with the crisis serving as a warning to other countries, including the UK. Yet the Government pursued a different strategy, known infamously as the 'herd immunity' strategy.

IS THIS A GAME OF PLAGUE INC.?

Revealed by the Government's Chief Scientific Adviser Sir Patrick Vallance at a press conference on 12th March, the public was told that the Government was not trying to stop them from catching the disease. "It's not desirable, because you want to get some immunity in the population", said Vallance. The aim of this strategy was to let the virus

spread, allowing the surviving population to build a degree of immunity post-recovery, and putting an end to any further COVID-19 transmission in the UK. This would rely on the phenomenon of herd immunity: when a critical proportion (thought in this case to be around 60%) of the population have immunity to an infectious disease, it can stop spreading. And yes – letting 60% of people get infected is as crazy as it sounds.

Why was the Government pursuing a strategy of letting a deadly virus tear the population, potentially causing the deaths of hundreds of thousands of elderly and vulnerable people? It claimed to be "following the science" – yet later developments of premature reopenings over the summer implied that their reasoning could be more ideological than scientific.

Meanwhile, experts such as Richard Horton, editor of prestigious medical journal *The Lancet*, and Anthony Costello, professor of global health at UCL, were urging the Government to act and bring about tougher measures to 'flatten the curve'. On

Photo credits: Andrew Parsons/No. 10 Downing Street/Reuters

March 15th, the discrepancies between the UK and European strategies were also highlighted by then Leader of the Opposition Jeremy Corbyn, to no avail.

On March 16th, Imperial College modelling that showed the UK was on track for 250,000 deaths was released by Professor Neil Ferguson, one of the epidemiologists sitting on the Scientific Advisory Group for Emergencies (SAGE). Modelling was also conducted with an alternative strategy of intermittent restrictions, showing a reduced death toll of 20,000 – on the same order of magnitude as our current death toll. It was this modelling that, when presented to the Government, caused an immediate change in strategy, with case isolation and social distancing measures introduced on the same day. Mass gatherings were also banned, but this was too little, too late, and Johnson would end up declaring a full-scale lockdown merely seven days later.

How did we go from a full-scale lockdown to a foreboding second wave? All shall be answered next week, in the second part.

Editor's Note

The public backlash to the herd immunity strategy was inevitable, however it was met with derision from the liberal commentariat. Bizarre tweets the day after the announcement, such as from former Ed Miliband adviser and commentator Ayesha Hazarika calling the backlash "hipster analysis", and from BBC comedy show *Have I got News For You*, mocking the opinion of a man-made pandemic expert 'Dave from Wigan', served to tell the public one thing: shut up and let the Government do what it wants. Why did the media discourage criticism of this Government at the height of a crisis?



The 2020 Nobel Prizes

► Over the course of three days this week, the 2020 Nobel Prizes for science were announced online. Felix reports on the researchers deemed worthy of the most prestigious prize in science, and why their work was so significant.

Nobel Prize in Physiology or Medicine: The trio who cracked the case of an insidious virus

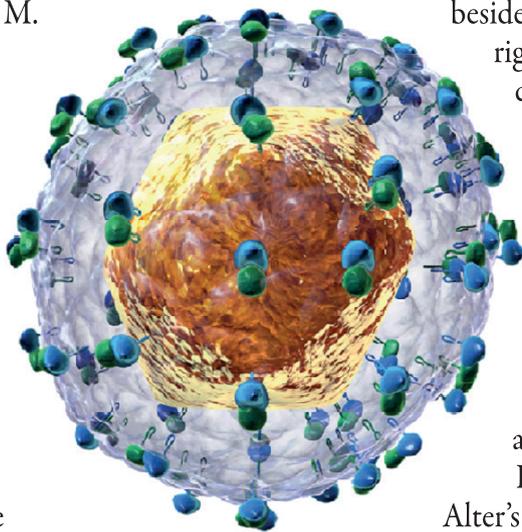
Photo credits: UK Government

William Carter Science Writer

While the fight against COVID-19 continues, this year's Nobel Prize in Physiology or Medicine recognises the decisive contributions of three scientists in identifying the hepatitis C virus.

Harvey J. Alter, Michael Houghton and Charles M. Rice have been jointly awarded for their seminal research that led to the discovery of the hepatitis C virus. The virus, as indicated in its name, causes chronic hepatitis, a scourge across the globe that precipitates cirrhosis and liver cancer, and is responsible for over one million deaths annually.

Hepatitis, or liver inflammation, is chiefly caused by viral infections, the two main types of which were previously known to be hepatitis A and B. Between them, the blood-borne hepatitis B is significantly more dangerous, remaining asymptomatic for many years until serious complications arise.



In the 1970s, blood tests for hepatitis B had reduced cases of transfusion-related chronic hepatitis. Despite this, the significant number of remaining cases caused concern for Harvey J. Alter and colleagues working at the US National Institute of Health, who suspected an unknown infectious agent. Using chimpanzees, the only viable host besides humans, and rigorous methodical investigation, Alter demonstrated the transmission of a characteristically viral agent, distinct from both hepatitis A and B.

In the wake of Alter's research, great efforts were made to identify this mysterious agent, yet the novel virus failed to be identified for over a decade. Researchers at pharmaceutical company Chiron predicted that a small fraction of the nucleic acids present in the blood of infected chimpanzees would be derived from the virus, and so set to work collecting DNA

fragments. Then, using sera taken from hepatitis patients containing the antibodies against the virus, Houghton and colleagues were able to identify cloned DNA fragments encoding viral proteins from the elusive infectious agent. Further research showed that this belonged to a novel RNA virus from the Flavivirus family and it was named hepatitis C. The last step was to determine whether the hepatitis C virus alone could cause hepatitis. Scientists set about investigating the virus's ability to replicate and cause disease. By observing genetic variants in hepatitis C samples, Rice and colleagues at Washington State University noted a region on the viral genome that they suspected was important in virus replication. Acting on this hypothesis, Rice engineered a special RNA variant of hepatitis C devoid of potentially deactivating genetic variations. When

the RNA was injected into chimpanzee livers, Rice observed pathological changes symptomatic of the chronic disease caused by hepatitis C. This acted as the proof that hepatitis C caused the unexplained cases of transfusion-transmitted hepatitis, finally concluding the decades-long journey of scientific endeavour.

The discoveries of this year's three Nobel Laureates have revolutionised the fight against hepatitis across the globe. Highly sensitive blood tests can now mitigate the risk of transfusion transmission and effective anti-viral drugs have been developed. While hepatitis C remains a global health concern, thanks to the work of these scientists, work towards eliminating the disease is now possible.

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USING
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Nobel Prize in Physics: Mystery and wonder in a time of crisis

Lily Shepherd Science Writer

The announcement of the 2020 Nobel Prize for Physics was quieter than most years, without the background noise of cameras clicking and

mumbles from a room packed with journalists. Professor Göran K. Hansson, Secretary General of the Royal Swedish Academy of Sciences, opened the announcement with an acknowledgement of the strange times we are living in and

an apology to those journalists who had not been able to attend in person.

But this did not take away from the astonishing achievements of this year's recipients. The Nobel Prize for Physics was awarded jointly this year, with one

half going to Sir Roger Penrose “for the discovery that black hole formation is a robust prediction of the general theory of relativity” and the other shared between Reinhard Genzel and Andrea Ghez “for the discovery of a supermas-

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sive compact object at the centre of our galaxy.”

Penrose’s work was theoretical, and it set a generation of experimental astrophysicists to work to find these mysterious black holes. Reinhard Genzel and Andrea Ghez were two of those astrophysicists, and they have been awarded the Prize for their discovery of a supermassive black hole at the centre of the Milky Way, known as Sagittarius A*.

Since the early 1990s, Genzel and Ghez have each led a group of astronomers who have spent years working with the world’s largest telescopes to map the orbits of stars closest to the middle of our galaxy. The orbits of these stars suggest that there is an invisible mass at the

centre of the galaxy, four million times heavier than our Sun. This provides convincing evidence that a supermassive black hole sits at the centre of the Milky Way.

Additionally, Ghez is only the fourth woman in history to be awarded the Nobel Prize for Physics.

4th woman in history to be awarded the Nobel Prize in Physics

All three scientists who were awarded the prize this year have helped to prove that there can be no doubt about

the existence of the black hole. Their case was further supported by the successes of the scientists who captured the first image of a black hole using the Event Horizon Telescope last year – perhaps a future Nobel contender?

In these uncertain times, when we

are overwhelmed every day with alarming new science, it is nice to be reminded that science can be filled with mystery, wonder and excitement. Today we have Roger Penrose, Reinhard Genzel and Andrea Ghez to thank.



UCLA astrophysicist and 2020 Nobel laureate Andrea Ghez

Nobel Prize in Chemistry: Genome editing, designer babies and patent wars

Lily Shepherd Science Writer

This Wednesday, the Nobel Committee announced that it had decided to award the 2020 Nobel Prize for Chemistry to Emmanuelle Charpentier and Jennifer A. Doudna “for the development of a method for genome editing”. This marks the first time in history that two women have shared the prize.

During her studies of a harmful bacteria known as *Streptococcus pyogenes*, which is responsible for infectious diseases such as tonsillitis and scarlet fever, Charpentier discovered that a previously unknown molecule called tracrRNA was used in the bacteria’s own immune system to disarm unknown viruses by “cutting out” sections of their DNA. Charpentier and Doudna then worked together to recreate and simplify these so-called “genetic scissors” in a test tube. Finally, they reprogrammed the genetic scissors so that they could be controlled and used to cut out any DNA molecule, not just those from viruses.

When these DNA molecules are cut out, cells will try to fix the damage caused, often disabling the gene in the

process. This allows harmful genes to be “switched off”. Mutated DNA could also be replaced with a healthy section of DNA to combat genetic diseases.

Genome editing has become something of a controversial topic over the past decade, with many fearing that it may lead to the creation of “designer babies”. Last year, scientist He Jiankui was sentenced

to three years in prison for creating genetically modified twin sisters using the CRISPR-Cas9 procedure, in an attempt to make them immune to HIV. Doudna has herself expressed feelings of concern about the use of the technology she has developed, and, in a 2015 interview with the *New Yorker*, even recounted a dream in which she had to present

her work on genome editing to Adolf Hitler.

This is not the only controversy that surrounds Wednesday’s announcement.



Biochemists Emmanuelle Charpentier and Jennifer A. Doudna

The invention of the CRISPR technology has been the centre of an ongoing five-year long patent battle between the groups led by Charpentier and Doudna, and a group led by Feng Zhang who published evidence that the CRISPR system could be used as a genome editor just 7 months after Charpentier and Doudna. A team led by biochemist

Photo credits: Niklas Elmehed/Royal Swedish Academy of Sciences

Virginijus Siksnys also independently developed CRISPR genome editing and published their results around the same time, and Siksnys was jointly awarded the 2018 Kavli Prize with Charpentier and Doudna.

Despite all this, the Nobel Committee for Chemistry clearly felt that there were just two scientists who were responsible for the discovery. Charpentier and Doudna have pioneered a new technology that has already transformed research in life sciences. The potential applications of the CRISPR-Cas9 “genetic scissors” seem limitless, from genetically engineered plants to the development

of new cancer treatments. And as Professor Göran K. Hansson, Secretary General of the Royal Swedish Academy of Sciences, noted at the start of the announcement, “it is important, and well worth the extra effort, to keep awarding the most important discoveries and celebrating scientific progress, even under these difficult times”.

A hint for extra-terrestrial life: Phosphine found on Venus

► *Phosphine (PH₃), a toxic gas produced by microbes, has been found in the atmosphere of Venus with no known non-biological explanation. Felix discussed this with the two Imperial astrophysicists who co-authored the paper on this fascinating discovery.*

Ansh Bhatnagar Science Editor

Typically produced by anaerobic bacteria in oxygen-starved environments such as

sewers and wet soils, phosphine is generated via the reduction of phosphates. It has been found on gas giants such as Jupiter and Saturn, however these planets host the somewhat extreme conditions required to produce it physically; these happen to be closer to the cores

where high temperatures and pressures exist, and it is brought to the outer layers of their atmospheres post-production by convection.

These conditions do not exist on rocky planets like Venus, leaving the scientists who first discovered the presence of Venusian phosphine perplexed. The James Clerk Maxwell Telescope (JCMT), situated in Hawaii, collected the initial data from observations of Venus in June 2017 where a blip in the spectrum at a wavelength of 1.23mm was first spotted. Light at this wavelength was notably lacking, creating what is called an 'absorption line' in the spectrum. This wavelength corresponds to a specific transition in phosphine - the fact that the absorption line was at this wavelength indicated that there could be phosphine in the atmosphere, absorbing those photons to gain energy, taking them away from the light spectrum that would eventually reach the JCMT. Further confirmation of this absorption line

was sought with data collected at the Atacama Large Millimetre/submillimetre Array (ALMA).

This data was astounding - any phosphine in the atmosphere of Venus is expected to react and oxidise to become phosphates, particularly due to the energy provided by the ultraviolet radiation from the Sun, leading to a decay rate in the amount of phosphine. The fact that a detectable amount of phosphine exists in the atmosphere

indicates that the decay rate is matched with a production rate, i.e. an equilibrium has been reached, in this case at an abundance of 20ppb (parts per billion). The mystery, therefore, lies in the mechanism behind the phosphine production.

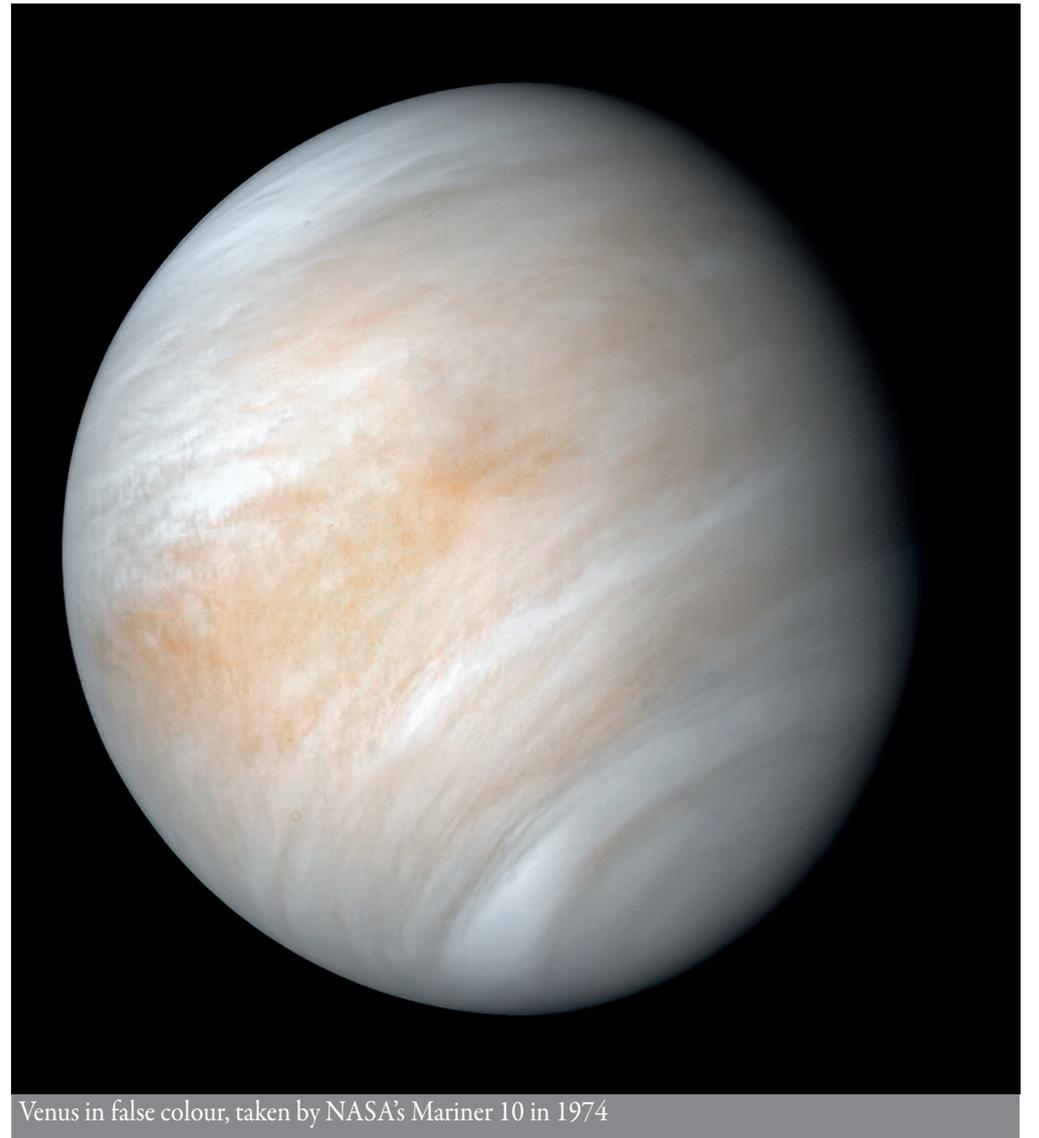
The authors of the landmark paper, published in *Nature* on September 14th, exhausted all known physical mechanisms for phosphine production. Around 75 relevant reactions under thousands of

varying conditions were looked at, including those involving volcanoes and lightning. None of those reactions could explain the abundance of phosphine detected in the atmosphere, leaving the researchers to conclude the phosphine "must be produced by a process not previously considered plausible for Venusian con-

“

NONE OF THE KNOWN PHYSICAL REACTIONS COULD EXPLAIN THE ABUNDANCE OF PHOSPHINE DETECTED

H-DRY-H



Venus in false colour, taken by NASA's Mariner 10 in 1974

ditions. This could be unknown photochemistry or geochemistry, or possibly life.”

Venus has not been a major candidate in the search for life, primarily due to the incredibly hostile surface conditions – hot enough to melt lead, and a pressure 90 times that on the surface of the Earth. “Carl Sagan called Venus hell” remarked Dr David Clements, one of the Imperial astrophysicists who co-authored the

paper. Despite these surface conditions, other regions of Venus could be more hospitable to life; mainly droplets in its

clouds. But ‘more hospitable’ is still a far cry from the relative luxuries we experience on Earth. “[The clouds] are made of wonderful substances – sulfuric acid!” joked Dr Ingo Mueller-Wodarg, another Imperial co-author.

“It’s way, way, way more acidic than any acidic environment where life has been found on

“

THE CLOUDS ARE 20 TIMES DRIER THAN THE ATACAMA DESERT, THE DRIEST PLACE ON EARTH.

CONTINUED

Earth.” stressed Dr Clements. “It’s also way drier – 20 times drier than the Atacama Desert, which is the driest place on Earth, and water is by and large thought to be an essential component for life to operate. So – how does [any possible life] cope with that? We don’t know.”

“There is no reason to assume that something that evolved separately on a different body is going to use the same biochemistry that we have – that it’s going to use DNA, RNA, the Krebs cycle for metabolism... So that’s why it’s surprising. We need to know whether that’s the case, because if it does turn out to have DNA then the chances are that life evolved once in the Solar System and

spread to other planets through asteroid impacts... But if it turns out to be a separate origin of life, then you’ve got two planets, bang next door to each other, and life has happened twice, entirely independently. What does that say about the distribution of life in the universe? It means it’s going to be really common.”

On the possibility of there being a biological origin for the phosphine, Dr Clements said that

his co-author Dr William Bains “still thinks there’s a 90% chance that this is just chemistry that we haven’t found – some strange photochemistry that the weird environment of Venus was able to do.”

“Obviously, we would all love for it to be biological, but if there’s a particular result that you would like to be the case, you have to be that result’s worst enemy.

That’s how responsible science is done. But I still really want it to be life.”

“
IF THERE’S A PARTICULAR RESULT YOU WANT, YOU HAVE TO BE THAT RESULT’S WORST ENEMY.”

Trump treated with experimental antibody cocktail

William Carter Science Writer

Donald Trump, adept science denier and alternative facts authority, has become an unwitting participant in the scientific method.

After testing positive for COVID-19 on early Friday morning, President Trump was flown to Walter Reed National Military Medical Centre as a “precautionary measure”. Disclosed in a public memo, the President’s treatment included the prescription of an 8g dose of experimental polyclonal antibody drug, REGN-COV2.

Developed by Regeneron Pharmaceuticals, REGN-COV2 is currently undergoing clinical trials after showing promising results in reducing levels of viral particles and improving symptoms in those infected. The drug combines two potent monoclonal antibodies: man-made proteins like those produced naturally by the immune system that bind to specific protein sites on viruses. As antibodies are so exactly specified, any change to the protein through a viral mutation will render the antibody ineffective. This is called ‘viral escape’ and it is this mechanism that REGN-COV2 acts against. The drug’s antibodies bind

to two distinct sites on the SARS-CoV2 spike protein – in turn meaning that two simultaneous viral mutations of the protein would be required for viral escape. In this way, when the drug is administered, the likelihood of ‘escape mutants’ and thus the infectivity of the virus is reduced.

While allergic reactions to foreign antibodies are typical of similar treatments, any potential side-effects of REGN-COV2 are yet to be

confirmed.

It’s early days for this new drug, but with \$450 million to support clinical development, signs of great promise in pre-clinical trials, and the chance of a ringing presidential endorsement, the future looks hopeful for REGN-COV2 and the patients it could treat.

Editor’s note: Since this article was written, the President was discharged from Walter Reed on Monday.

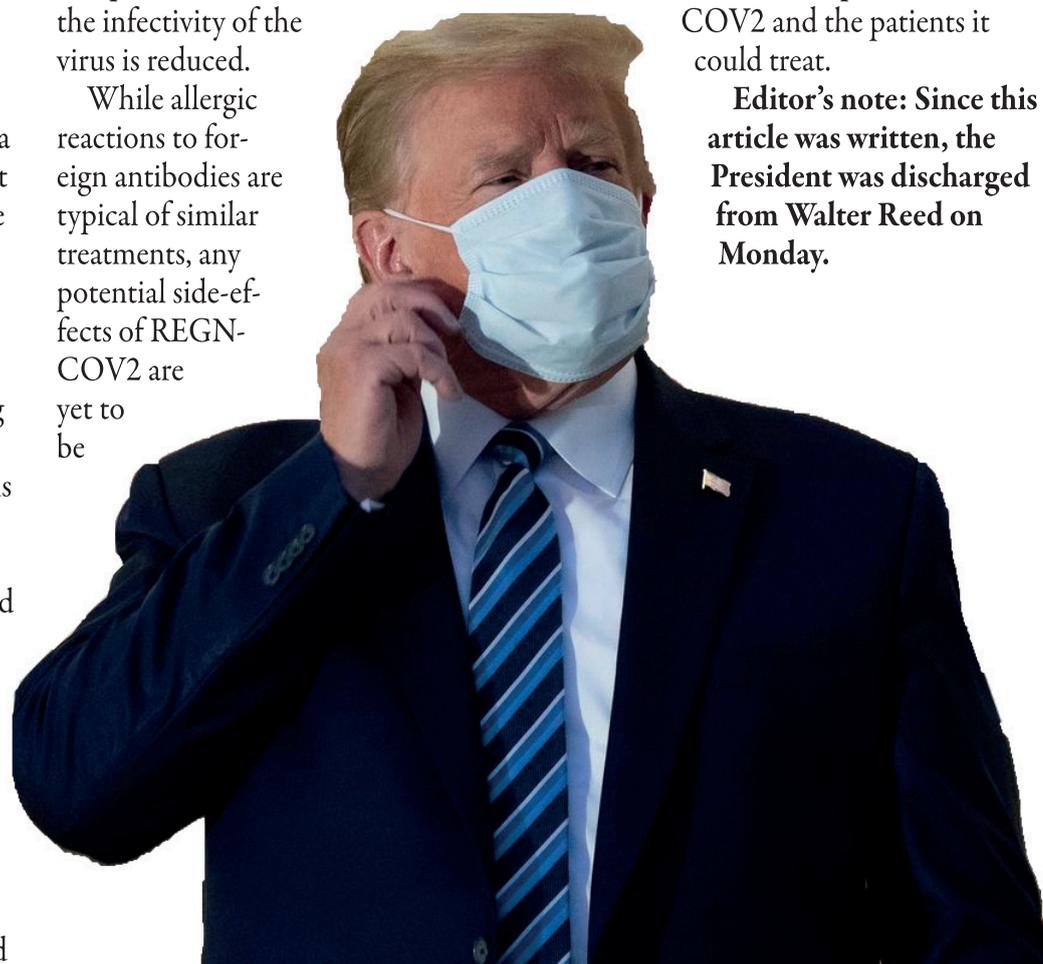


Photo credits: Alex Brandon/AP

Legacy system causes 16,000 unreported coronavirus cases

Sudarshan Sreeram Tech Editor

Over 16,000 coronavirus test cases between September 25th and October 2nd went unreported due to the Public Health England’s (PHE) use of a 13-year-old Microsoft Excel document format (.xls) to store data.

This format, which dates back to 1987, has a fixed capacity of 65,536 rows, whereas the new one (.xlsx) released in 2007 supports up to 1,480,576 rows. Test results were initially populated in a CSV file (which has no fixed size limit) and then automatically fed into an Excel template file. During this automated process, the number of rows reached the maximum limit, leaving the remaining data ignored. A temporary fix to this problem has been issued, which involves splitting up the data into smaller batches, and several people are calling for a replacement. However, it is a source of national embarrassment that such critical data, used by the NHS test and trace system and the PHE reporting dashboard, is managed through an Excel spreadsheet.

COVID-19 VACCINE TRACKER: Felix Edition

Julia Dabrowska Science Editor

In order to put an end to the global coronavirus pandemic, researchers around the world are working tirelessly to develop a vaccine to protect against COVID-19. While vaccine production usually takes multiple

years, a coronavirus vaccine is hoped to be developed within 12-18 months.

Vaccine testing can be split into 5 stages:

Pre-clinical – animal testing to see whether the vaccine elicits an immune

response.

Phase I – healthy human volunteers to determine safety and evaluate immune response.

Phase II – hundreds of volunteers to identify correct dosage.

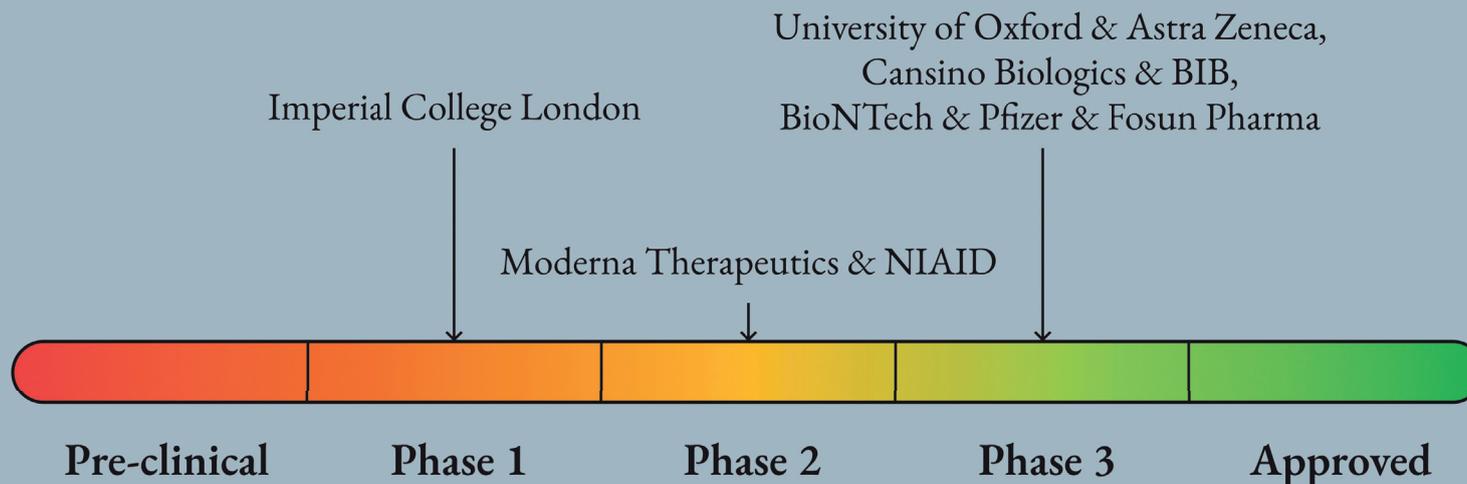
Phase III – thousands of volunteers

to confirm safety and efficacy vs. a placebo.

Phase IV – studies on adverse effects, long-term immunity and vaccine usage following the approval and licensing of the vaccine.

The WHO is currently tracking the progress of over 170 candidate vaccines; at Felix, we've chosen 5 of the most promising candidates to follow, so watch this space!

New Update: Last week, new results of the Pfizer/BioNTech vaccine clinical trial were published in *Nature*, showing that the vaccine can induce a robust immune response.



New NHS contact tracing app released - a hopeful second attempt

Photo credits: NHS/Sudarshan Sreeram

Sudarshan Sreeram Tech Editor

After a partially failed first attempt back in June, the second NHS COVID-19 contact tracing app, released on 24th September, has garnered over 10 million downloads.

An automated contact tracing app periodically monitors and registers a user's contact with another individual (either known or unknown) by broadcasting and receiving a key code composed of a random set of characters through Bluetooth Low Energy. This key code is changed regularly to maintain the anonymity of the user, and a list of past key codes is stored locally. Additionally, an encounter list tracks the codes of registered contacts. Users can log their COVID-19 test results in the app, and if the result indicates a positive, then an alert is generated for those on the encounter list, who are then instructed to self-isolate to limit transmission.

The new NHS app takes a decentralised approach and uses the Exposure Notification API, a toolkit collabora-

tively developed by Apple and Google. This approach aims to prioritise user privacy and anonymity by processing user information locally to generate exposure alerts.

In contrast, the first attempt took a centralised approach where user data is uploaded to and processed by a central NHS server. While this allows the NHS to accumulate a rich dataset that could be analysed by epidemiologists, privacy concerns and security vulnerabilities were felt to outweigh the benefits. Interestingly, the first app has been shown to work on a greater number of older devices and is more accurate in measuring the contact distance. However, the app was forced to circumvent Apple's

privacy measures to avoid background Bluetooth activity, but even this custom solution had a few bugs. Considering Apple's strict App Store policies, this app was at a high risk of being rejected for publication regardless, so the UK government set to work on the development of the second application in parallel that used the Apple-Google toolkit.

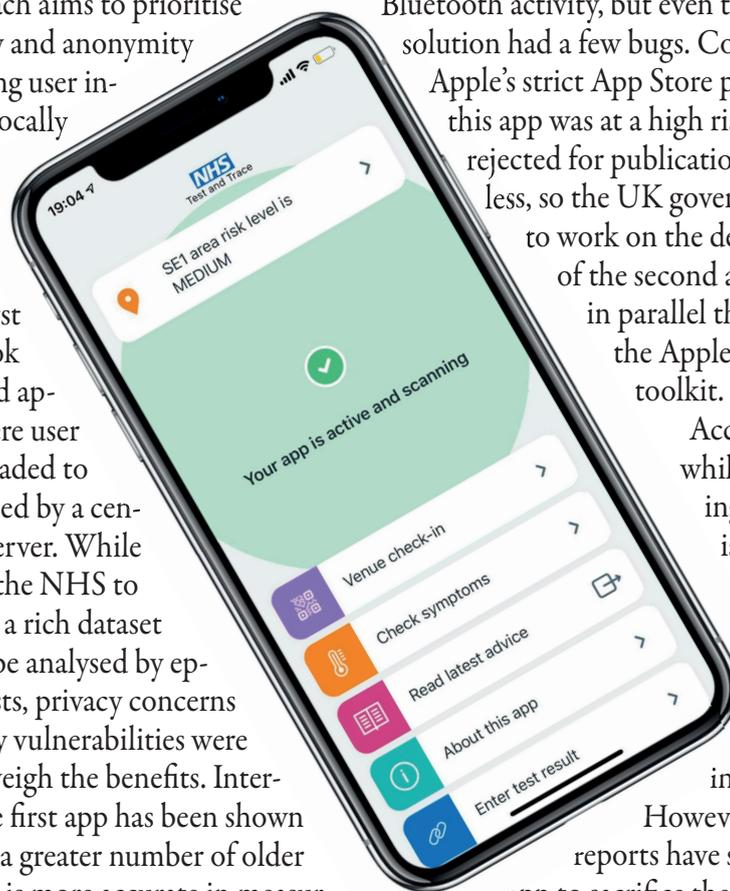
Accuracy while respecting privacy is the main aim of decentralised contact tracing apps.

However, recent reports have shown the app to sacrifice the accuracy aspect with false readings of close contact and disappearing exposure

notifications caused by bugs in the Apple-Google API.

The effectiveness of this second application in slowing the pace of the virus is yet to become clear. Experts have mixed opinions on how automated contact tracing can help reduce transmission. For example, a study from Oxford indicates that even low levels of app adoption would help save lives, whereas one from UCL found that large scale adoption of the app and integration with a public health response is crucial for any significant impact. However, both studies agree that automated contact tracing can indeed complement manual contact tracing.

Despite an unsuccessful first attempt, it is commendable that the NHS immediately began work on a second app in parallel with instead of in opposition to technology giants. If it were the latter, it could've potentially led to a much worse situation. With COVID-19 cases on the rise in the UK we can only hope that this new app will make a significant difference.



Black History Month is here!

► *Liberation Officer Deborah Adegoke highlights the importance of Black History Month*

Deborah Adegoke
BME Officer*



2020 has been *a lot*, but there are still things to look forward to in the remaining months.

A lot of us look forward to October, the *spooky* month; the ghouls and goblins. What's also scary is how institutions believe it's enough to acknowledge Black history for one month of the year, and ignore them for the rest (in the US, Black History Month is celebrated in February - the shortest month of the year).

It's not enough. But it's a start.

This month is a time for reflection. Not only is it an opportunity to celebrate Black contributions to society in history, film, art, sports and... politics, it's also an opportunity to develop our understanding of African & Caribbean culture. Black British history is important because it matters to everyone - it's a crucial part of this country's story. The Windrush generation - people arriving in the UK between 1948 and 1971 from

Caribbean countries - were transported on the ship *HMT Empire Windrush* as the British Empire were filling shortages in the labour market due to WWII. Black people fought for this nation, during and after the war. The mass migration and following events led to major cultural shifts, building the communities we have today (although there's always room for improvement).

We're all too aware of America's Black history regarding the slave trade, but Black history is much more than just that. Few have heard about how the Ethiopian Krar Harp is the earliest form of guitar, or how Liberia was founded as a settlement for free Black people, believing they would face better chances for freedom and prosperity there than in the United States.

There's Black history when it comes to STEM too: Otis Boykin, the Black man who improved pacemaker circuitry; how you're five times more likely to die during pregnancy if you're a Black woman, and Henrietta Lacks, whose 'immortal' cells have been used at the forefront of virus, cancer and radiation research (the



Credits: Oladimeji Odunsi

This month and every other month we must fight against racist injust

ethics of obtaining these cell samples are very questionable).

It's important - arguably now more than ever - to talk about these Black people and the system that was against them in the past and the system against us in the present.

October comes to you with an opportunity to both learn and remember. The reflections, research, support & conversations don't need to end on the 1st

November- this month just gives you a nudge to get started.

Please visit the Union website for upcoming Black History Month events: <https://www.imperialcollegeunion.org/campaigns/black-history-month-2020>

Photo credits: Unsplash - Clay Banks



People March at the Black Lives Matter Protest in Washington DC 6/6/2020

COMMENT

From A-Level results day to Imperial

► *1st year students share how a controversial grading system affected their journey to Imperial*

Khama Gunde
Comment Editor



For the past few months, thanks to Covid-19, students across the country have faced unprecedented changes to their educational

journeys. Here at Imperial, we saw the introduction of the safety net policy and remote exams. A-Level students, on the other hand, had summer exams cancelled. I remember hearing this news and feeling slightly envious of what I, wrongly, assumed would be a smooth ride to university for some. However, the challenge of fairly assigning grades to over 700,000 students for exams they didn't sit, meant a controversial grading system was introduced.

The difficulty of this challenge was made apparent when, on 13th August, 39% of students in England saw their A-Level results downgraded from their CAGs (Centre Assessment Grades), which were their teacher's predictions. At the time, students with downgraded results were given three main options; appeal their grades, re-sit in Autumn or accept their grades. However, the ensuing backlash was so intense that just 4 days after results day, the UK government took a U-turn and allowed CAGs to be used as final A-Level grades, if they were higher than those awarded by the grading system.

A guide published by Ofqual (The Office of Qualifications and Examinations Regulation) on results day, explained that the grading system was meant to moderate and standardise grades across England and maintain a grade distribution like that of previous years in order to avoid grade inflation. Ofqual stated: "We had 2 broad aims: to make sure as many students as possible could get grades so they could move on to the next stage of their lives and to do that in as fair a way as possible".

According to Ofqual, without intervention, there would have been a 12.5% increase in A*-A grades since 2019. Upon introducing the grading algorithm; 78% of students scored A*-C, up 2.6% since 2019, and 27.6% of students scored A*-A, up only 2.4% since 2019. A success in numbers it seemed but for 39% of students on results day, their plans beyond A-Levels suddenly became very unclear.

Below are testimonies shared by some 1st year students, exploring how A-Level results day went for them and how their admissions journey to Imperial was affected.

off than some other IB students because they were turned away from universities after the A-Levels all got in from CAGs"

'I can't describe to you the meltdown that I had the morning of results day'

"I was predicted A*AA and I needed AAA for Imperial and AAB for my insurance. But I got A*A*C. So, I didn't get into any university. I can't describe to you the meltdown that I had the morning of results day. The main issue was that I needed to wait for an appeal for my math C grade, but as I didn't know when or if my grade would be changed, I couldn't take any places through clearing. They just kept filling up which was horrible because you wake up and see half the places than there were originally only 24 hours prior.

In the end when there was the U-turn, I thought everything finally fixed itself and I'd be able to go to university because I got my grades. However, I got told after I celebrated that I wasn't guaranteed entry and had to wait another 2 weeks to finally find out if I'd go to university at all. I made plans for what to do if I don't go to university. My big fear was the Brexit situation and the massive fee hike from 9k to 25k which I couldn't afford. I can't tell you how horrible I felt for the whole of August"

'I feel like coming to Imperial, I need to prove to myself and the university, that I deserve to be there'

"I felt like I had no idea what to expect because I was being assigned a grade rather than sort of knowing how well I'd done in an exam. I needed AAA to get into my course at Imperial, but I was mainly worried that I wouldn't get my A in math. My results loaded first, and I was so happy that I'd got A*A*A (A in maths) so I knew I'd made my offer. Although I was happy, I did kind of feel a bit of imposter syndrome, like I hadn't really earned those grades. After the U-turn my results went up to 3A*s which anyone would be over the moon with, but I just don't really see them as my own grades.

I feel like coming to Imperial, I need to prove to myself and the university, that I deserve to be there, and I deserve my grades. I know that a lot of people didn't make their offers, so I almost feel like I need to work harder so that I know they didn't lose their places for someone who doesn't deserve it!"

'I didn't meet my firm (Imperial) or my insurance (Manchester)'

"The IB used a similar algorithm to determine their grades which downgraded me from a 766 (a level equivalent A*AA) to a 665 (AAB) which meant I didn't meet my firm (Imperial) or my insurance (Manchester). Both eventually took me, however, my grades were never altered. The IB introduced a series of appeal processes which were applicable to few people. Then they said schools could appeal on the behalf of a candidate (which mine did for me), however, I still haven't heard back.

There is another process to re-mark our coursework however you can only have one process at a time (either appeal or re-mark) which meant while waiting for an appeal to come back I missed my re-mark deadline. And I mean, yes, I'm grateful because I'm so much better

‘I got lower than I expected’

“At least for me I got lower than I expected, all 3 grades were downgraded from my UCAS predictions overall! Also, with everyone else getting moved up after the U-turn, my grades looked even lower as mine didn’t move. My teachers told me that they wanted to play it safe, but obviously overall it didn’t work. I went from 3A*s to 3As”

‘I got exactly what I needed’

“I was actually quite lucky in the sense that I got exactly what I needed and what I thought I deserved the first time. As I’d worked consistently hard since year 12, I feel my mocks (which were past papers) were a good representation (A*A*A in math, physics and chemistry respectively). When they were upgraded (from A to A* in chemistry) I felt kind of guilty since I knew I didn’t need it or would’ve achieved the higher grade, although I’m obviously happy that so many people finally got what they deserved. I don’t know if it’s a bit of imposter syndrome sneaking in. Although it helps knowing that of course I must have done well enough on the selection day and in my personal statement to still be selected.

Most of my friends also had the grades they needed. I assume it’s because our school has a history of doing well. A couple of my friends didn’t get what they should have so are re-sitting exams. However, since they are both taking gap years it hasn’t affected their university plans. It’d be much worse if they hadn’t planned to take gap years. It’s great that the government is letting people take actual exams but it’s just too late in the year for people who were planning to go to university since that’ll set them back a whole year”

‘I think my situation was quite rare’

“I had an offer from Imperial to study Medicine, and the grades I needed were A*AA with the A* in biology or chemistry specifically. I’d been predicted A*A*A in biology, math and chemistry respectively. I’d been told for the past two years, by my teachers, that my predicted grades were what I would get, and my school has a reputation for making accurate predictions, so I knew that I was somewhat deserving of those grades.

On results day, I opened my emails to see I was given 3A’s and I was so shocked. I wasn’t expecting it. Honestly, I cried my eyes out because Imperial is my dream university; I’d been aiming for it for two years. I knew it was where I wanted to go, I knew it was where I would fit in. But in that moment, I also knew I didn’t meet my offer. I thought Imperial would never be lenient and prepared myself for rejection.

UCAS Track had crashed for 40 minutes but when it finally worked and I opened the page, I saw that I was accepted by both my firm (Imperial) and my insurance (KCL). Both let me in despite the fact I hadn’t met my offers. My confirmation from Imperial meant the world to me so I was ecstatic. Unfortunately, I think my situation was quite rare since none of my friends who applied to Imperial and missed their

grades got in on results day.

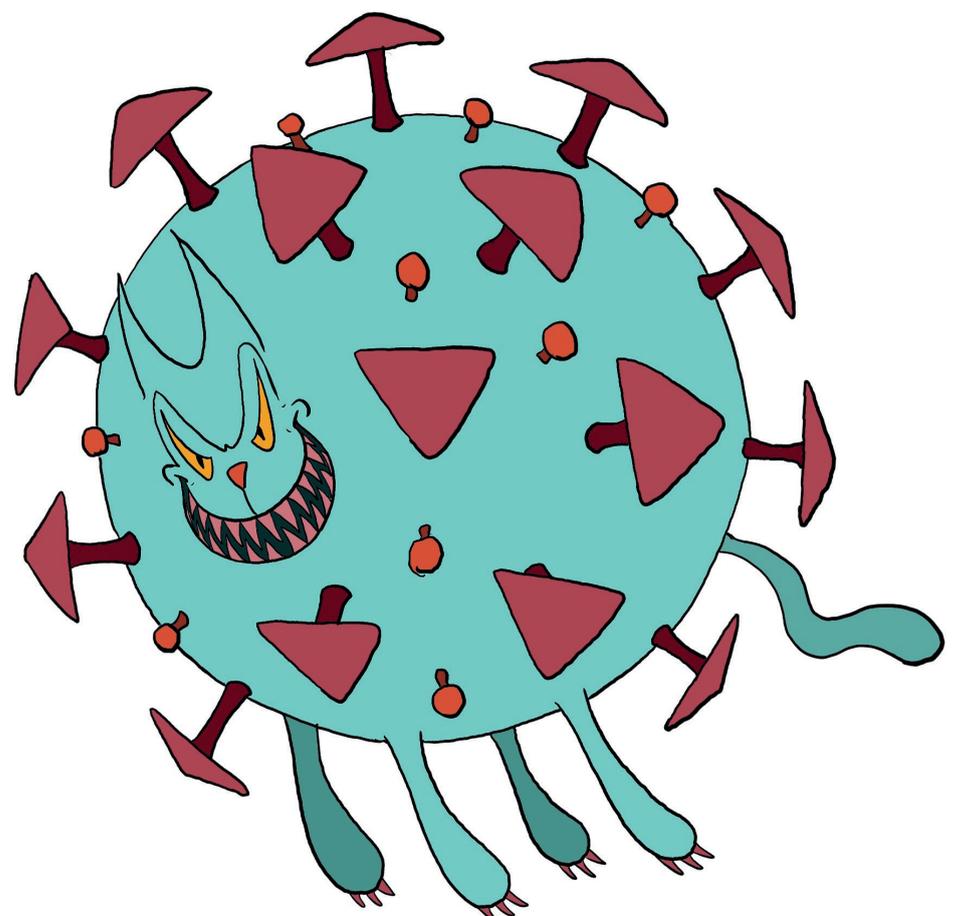
I think I was accepted because Imperial had said before results day that they would look at the grades and even if you had missed your offer, they would look at your application holistically e.g. looking at your interview score. Then they would make a judgement based on the rest of your application to see whether they would still let you come in. So, I think it was my interview score that got me in, I think I did might have done well on my interview.

In the end everyone got their CAGs, but when I received mine it turned out that my teachers had submitted A*AA for me. Even though they had consistently told me I could achieve A*A*A and I had felt really supported by them. As frustrating as that was, I got the A* in the end and it was nice to have some recognition for my hard work over the past 2 years, plus I’ve now officially met my offer conditions.

Some people had to wait ages after being downgraded to know if they got in, so they thought they were rejected, then got accepted through CAGs, then had accommodation issues. Compared to others, I feel lucky and grateful for how things worked out for me. But I think it was a difficult and unfair situation for most of us.

Also, some schools were very strict with predicted grades, like mine. I went to a grammar school which was very stingy with top grades and they didn’t give loads of pupils A*s even if they were deserving of it. A lot of my friends were high achievers but didn’t get A*s or A’s from the teachers, so it felt very unfair. Whereas I know for all my private school friends, they got upgraded. So, the whole system was unfair because some schools were upgrading, and others were downgrading.

I understand that it was a challenging task for the government to do, but the way they went about it didn’t make any sense to me.”



EDITORIAL

This edition was produced thanks to the work of

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And our numerous contributors

The Felix Editor on

The trials of long distance and the feeling of failure

Two weeks ago, after a summer of preparation I experienced the greatest failure of my life. Despite my preparations, I failed to get the Felix pages to the printers in time and we were unable to print that week. This did not in the long term mean a lot. We had left a buffer week between our first issue and the second for precisely this kind of eventuality but it was shocking none the less. I left the office that night lower than I believe I have ever felt. I tied my self worth to that paper and when it did not arrive I saw that as my own total failure. It is easy to give excuses for the lateness and if you find me in the bar I will go into detail as to why it was not at all my fault and that if anything I should be praised for what I had done.



But I did fail. And when the pages didn't arrive on Friday it hurt all over again.

This week I write to you, hopeful that what happened last week will never happen again. We all got up and got back to work.

I am incredibly proud of the team. I would like to mention the Science section in particular this week. They have really taken my request to put multiple articles on a page and if you have a look today I hope you will agree that the pages look better for it.

When the papers did arrive the following Wednesday, the rush that I got made the whole summer of toil and frustration worth it. We, the Felix team had made something, a huge, beautiful paper. We look forward to continuing to do so as the year goes on.

Union council oversteps itself

I condemn, most strongly, the actions by the Union Council in changing the name of the De la Beche society. I have no issue with the changing of the name itself, I believe a culture reckoning is upon us and Britain must reap what it has sown. When we as a nation failed to make members of the Windrush generation feel welcome and forbade them from integrating, how can anyone expect them to value and want to uphold the status quo when it so completely failed them. However, the actions of the Council are not appropriate by any measure. When a significant portion of the voters check the Re Open Nominations, there is clearly a need for fur-

ther dialogue within the department and the society.

Why have members not accepted the name change? Do they have valid concerns?

This did not occur, however. On the basis of 62% of the vote in an election that achieved a 22% turn out, it was felt that a 'majority of students' had shown their support from the name change.

I call on the members of the Union Council to take their positions more seriously or else they will become a rubber stamping body. Last year, the only bills brought to Council were by Officer trustees and the Council Chair. Let us hope that this sad state of affairs does not continue.

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**

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COVID-20 release date delayed to 2022 due to the pandemic

Tarlie Hitmuss NegaFelix Reporter

New world order scientists gave a press conference today in which they expressed their sadness and disappointment in announcing the postponing of COVID-20.

The highly anticipated sequel to the already iconic COVID-19 had been in the works for several years and had recently passed its final clinical vaccine trials. New world order lead scientist Feil Nerguson told NegaFelix that it was a huge disappointment to the team. "We had already made the vaccine, had a branding campaign and the early access microchip free vaccines were ready to ship to all the billionaires that had ordered them. But because of social distancing we can't get to them and are having to watch years of work go down the drain. It is heartrenching"

With the major New world order labs shut down due to the social distancing requirements there has been a rethink of the architecture.

An unnamed source told NegaFelix that the previous preference for narrow corridors, huge pits and limited ventilation had really hurt their profit margin.

"It is really frustrating to see the non evil labs getting on with work because they included ventilation and didn't use up floor space on piranna pits. Mr Gates is furious"

Other leaders of the Bilderberg group also agreed to speak to us.

George Soros told NegaFelix that the fall in commercial air travel was playing havoc with his chemtrail program to sterilise the population and turn everybody gay. "If there are no planes then there are no trails. I have had to get onto the Tube with a little aerosol hidden under my jumper and spray it when no one is looking. And everybody is wearing a mask so they aren't even breathing in the fumes! It is

“
**FEIL NERGUSON
 TOLD NEGAFELIX
 THAT IT
 WAS A HUGE
 DISAPPOINTMENT
 TO THE NEW
 WORLD ORDER
 LAB TEAM**

enough to make me cry!"

Mark Zuckerberg was similarly disappointed. He and Jeff Bezos had been planning on moving beyond stealing your data and over charging you to actually stealing your phones and your wallets.

Their new initiative promises "non consensual removal of wallets and phones, extortion, drug trafficking and lots of other really exciting business opportunities to investors.

They have already raised several billion in venture capital funding.

HANGMAN

LETTERS TO THE EDITOR

Dear sir,

I am writing to you to inform you that there was a mistake in your last issue. In the issue (1749) you published, on page 18, column 3 line words 6-7, the words Union Jack. As an educated man you must surely know that the words Union Jack can only ever apply to a flag flown from a ship. The word Jack refers to how the flag was flown from the front of a warship and should not be used to refer to the Union FLAG, in any other context. Please let me know when the retraction and apology have been published.

Christopher Porter
Physics PhD student

Dear sir,

I am writing to complain about a recent shipment of yours. I definitely did not intend to order 400 bags of your Felix Finest Delicate meats cat food, yet this was what appeared on my doorstep this morning. On top of that, from what I have seen, the first 200 appear to be mostly air with hardly any delicate meat inside! You should be ashamed.

Dorothy Liu
2nd year DesEng

Dear sir,

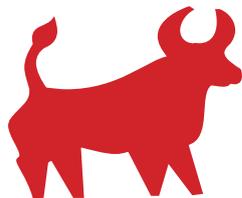
I would like to apply to become your webmaster (my CV is attached below). I believe that with some minor changes we can make Felix Git compatible allowing us to roll back any errors in the paper. This would also allow us to become more sustainable by rolling back Felix into its constituent ink and wood pulp components every week. Let me know what you think.

Michael Trew
1st year JMC



ARIES

This week Piers Corbyn attempts to assassinate Alice Gast in order to “keep the number of G’s in Britain below 5”



TAURUS

This week you put your foot in your mouth and end up ruining the yoga social



GEMINI

This week how about you try **not** finishing the bottle?



CANCER

This week a friend will introduce you to an exciting business opportunity that will only end up costing your dignity, lust for life and £16000



LEO

This week a thin slice of onion will come in handy when you lose your favourite bookmark



VIRGO

This week you misunderstand Sainsburys’ online pricing and end up ordering not only a single grain of rice but 6kg of apples



LIBRA

This week three small hoodlums break into your house and steal your favourite trenchcoat



SCORPIO

This week you keep getting adverts for Imperial Pro
It costs £9250 to unlock the full feature package



SAGITTARIUS

This week your flatmate takes a liberal interpretation of “Bay windows” by flooding your living room



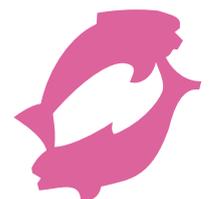
CAPRICORN

This week the Breakout spaces on campus have a new meaning



AQUARIUS

This week you offset your carbon footprint by walking on your hands

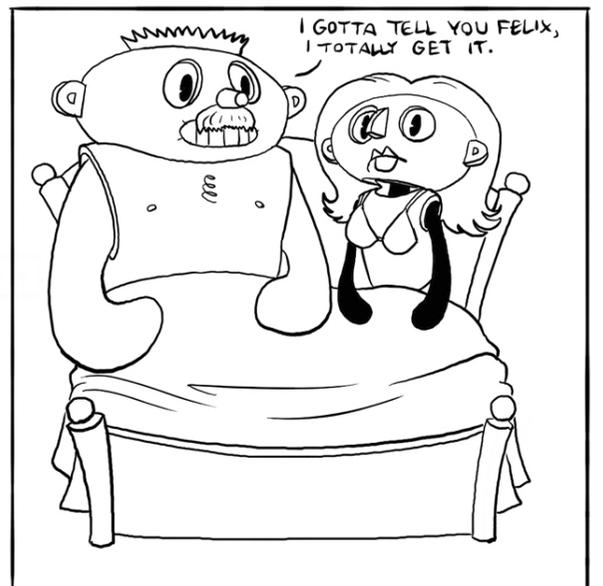
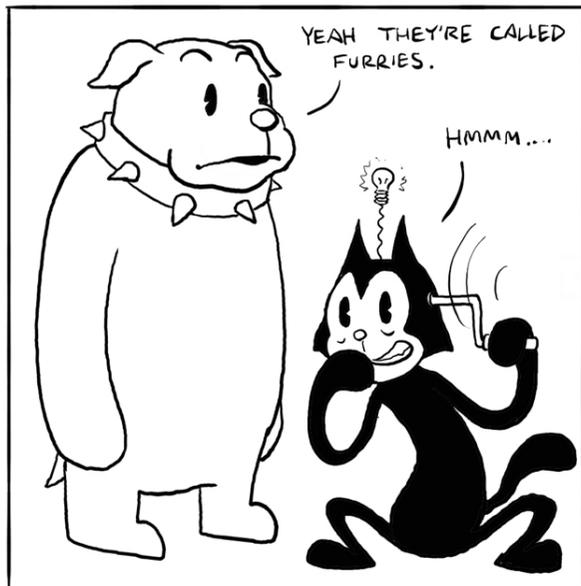


PISCES

This week you have to tell your car-loving family that you are bike-curious

HANGMAN

Credits: Sutirta Budiman



SKINNIES

-NICG-T

WHAT'S ON

October

Sports Arts and Entertainment Faith Academic
Charitable Other Cultural Department Social

Monday 12th

Fencing novice class

Fencing society

The first session of our one-term course for complete beginners, which covers the basics of fencing. Participants will learn and practice each of the three weapons: foil, épée and sabre. For more info, email us (fencing@imperial.ac.uk) or visit our facebook page (Imperial College Fencing Club).

4-4:50/5-5:50 pm

Ethos Court 5

Tuesday 13th

SynBIC Opening Seminar

Synthetic biology soc

Professor Tom Ellis will be delivering our opening seminar. His talk, titled 'Exploring the flexibility of a eukaryotic genome using synthetic yeast', will cover his research on synthetic yeast genomes and their potential applications to biotechnology.

6 pm

Sign up at Fresher's Fair
Numbers capped

Wind Band rehearsal

Wind band

Wind Band meets on a weekly basis, usually in the Great Hall, from 6pm-8pm every Tuesday. We play a variety of music and welcome players from all levels!

6-8 pm

The Great Hall in Sherfield Building. But check our facebook page <https://www.facebook.com/ICwindband> to see if we are going to meet in the Great Hall or on Microsoft Teams

Belly Dance - Beginners Free Taster

Belly Dancing society

Want to try something new this year? Have a taste of the traditional Egyptian style of Belly Dancing at our first beginners class of the year! No experience needed!

7 pm

Zoom

Sign-up on What's on,
Union Website

Wednesday 14th

Fusion Belly dance - Free taster

Belly Dancing society

Fusion Belly Dance is a modern form of belly dance, with elements of Hip-Hop, popping, 'Egyptian' belly dance and many other styles. No experience needed!

7 pm

Zoom

Sign-up on What's on, Union Website

Thursday 15th

CMS Discord Social/ Games Night

Chamber music society

The music-themed games night is a great chance for you music lovers to get to know each other! You can meet fellow musicians here and form your own chamber music group!

6 pm

CMS Discord server (join with link: <https://discord.gg/ytPcE8h>)

There is no limitation on number of participants

Meet the society and Fashion Pub Quiz

Fashion and design soc

Join us for a short introduction to our society and to meet us! We will have a little quiz to have fun and chat about fashion.

7 pm

Link will be posted on society social media prior to the event

Weekend 17-18th

History Society Online Pub Quiz!

History society

We'll be hosting an online quiz (feel free to have some casual drinks as we do it, we certainly will) full of history questions on multiple topics!

Fun, relaxed event and we welcome all abilities.

8 pm (17th)

Details on social media prior to the event

FACEBOOK:

<https://www.facebook.com/ichistorysoc>

INSTAGRAM:

<https://www.instagram.com/ic.historysociety/>

A Cappella Society Virtual Auditions Deadline!

A Cappella society

The first round of auditions will be entirely by video this year. If you're interested in auditioning for one of our 5 groups, please do sign up! Your video audition must include:

- A short introduction of yourself
- A range check
- Singing two songs of your choice
- Beatboxing (optional)

Once you've recorded your video, you can upload your audition via the submission form. The deadline for your videos will be 18th October 2020.

All day (18th)

All information can be found on our website:

<https://www.union.ic.ac.uk/arts/acappella/get-involved/auditions2020/>

Coming up

Thursday 29th

Lessons Learned from COVID-19

Infectious diseases soc

We'll be hearing from a range of experts, including researchers and frontline workers, about what we can learn from the COVID-19 pandemic so far. You'll even have opportunities to submit your own questions to the panel, so don't miss out!

6 pm

Microsoft Teams, just click 'going' on our Facebook event to stay updated.

Museum Murder Mystery: Sexpression Investigates

Sexpression Imperial

Sexpression is a society which aims to empower young people to make their own choices regarding sex and relationships. This event is a spooky murder mystery set in the National History Museum with a spicy Sexpression twist ;). You will work in teams of ~4 on zoom in breakout rooms to discover who killed Ben Dover... You can work in preformed teams or use the opportunity to make new friends! Either way sign up using the google form!

7 pm

*Online on zoom!
Sign up here: <https://forms.gle/JmK-pooEcwk3RVrfy8>*

Thursday 12th

Masters 2020 Sweepstake

Golf club

Be in for a chance to win big as the infamous Masters tournament returns to Augusta National this November. Follow your randomly chosen player to glory and take away some awesome Imperial golf stash! All you have to do is sign up using the link, + bonus free entry for new & existing followers of @icgolf on instagram!

Thursday-Sunday

Sign up to our new mailing list. Link found in our insta bio @icgolf.

Saturday 28th

Young Researchers Conference

ICSM Society of Research and Academia

Interested in getting involved in a summer research project? Need help preparing a scientific poster? Want to know how to publish your first paper? SORA Young Researchers' Conference (YRC) is here to answer all of your questions.

9:00 am - 4:30 pm

Hop In

Follow our facebook page (ICSM SORA) for more info on how to join later!

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Union Page



Autumn
Elections 20

#icuElections

STAND

Take charge of your Imperial experience - become a Rep



Become a Representative

Nominations are now open for course representatives and other student positions at Imperial. Take charge of your Imperial experience and stand for any of these positions:

- Academic Representatives
- Wellbeing Representatives
- Council Representatives
- Liberation & Community Network Committees
- Constituent Union Leaders
- Clubs, Societies & Projects Leaders

Nominations are open until **noon, Tuesday 13 October**. For more information and to stand for a role: imperialcollegeunion.org/elections

Celebrate Black History Month

It's October, so we're celebrating Black History Month! This is a time to look back at our shared black history that shaped the society, heritage and culture we enjoy today. It's also a time to celebrate the here and now, bringing communities together and glancing into future possibilities.

In partnership with our African Caribbean Society and our BME Officer, we have a range of events planned this month that you can join in. From a BAME Poetry Corner, to a Colonial Discourse Talk by Dr Terri Ochiaga or a Games Night with the African Caribbean Society - we've got you covered. Visit imperialcollegeunion.org/bhm for a full list of events.

Whoever you are, we recommend diving into our resource page (imperialcollegeunion.org/campaigns/black-lives-matter) to learn more about the #blacklivesmatter movement, how you can help, and how to be an ally.



Watch TGBBO and join our competition

Do you enjoy The Great British Bake Off a bit too much, like we do? **Join us** in FiveSixEight every Tuesday, and let's watch it together! FiveSixEight is **bake** (see what we did there?) and it's open every day of the week from 16:00 to 22:00 and we're still serving our amazing (fully loaded!) curly fries.

Want to show off your baking skills? We might be three weeks in, but it's not too late to take part in our very own **Union Bake Off**! Simply send us a photo of your bake via direct message to our Instagram ([@icunion](https://www.instagram.com/icunion)) for a chance to win a voucher worth £10, to redeem at FiveSixEight. Every week we choose our favourite and in the end you get to vote for the winner! Exciting, isn't it?

#icuBakeOff



Catch up on the Union Brunch

Missed our Union Brunch this week? Don't worry, you can still watch them on our Facebook and YouTube. Inspired by Channel 4's Sunday Brunch show, we came together every morning this week for our **daily Union Brunch**. Head over to Facebook ([@imperialcollegeunion](https://www.facebook.com/imperialcollegeunion)) or YouTube to catch up.

If our services are a mystery to you, this is a great place to hear about them directly from our Officer Trustees. Every day we introduced you to a selection of our over 380 Clubs, Societies & Projects, our services, Constituent Unions, Liberation & Community Networks and answered student questions live.

If you haven't already, have a look at our **Virtual Welcome Fair** as well - it's on until Sunday, 11 October! (digitalwelcome.imperialcollegeunion.org/register)

Your Union Events

FiveSixEight.

The Great British Bake Off & The Union Bake Off

#icubakeoff

Join the competition: Send us photos of your bakes on Instagram!

 @icunion

FiveSixEight.

 [beitbars](#)

 16:00 – 22:00  16:00 – 20:30

Saturdays

Live Music at FiveSixEight

Sundays

Beer & Burger Deal

Tuesdays

The Great British Bake Off

Thursdays

Super Quiz

More details at: imperialcollegeunion.org/whatson



AUDITION TECHT



/TECHTONICS



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#ACAPPELLA #QUAR

FOR THE TONICS



WWW.THETECHTONICS.CO.UK



@TECHTONICSIC

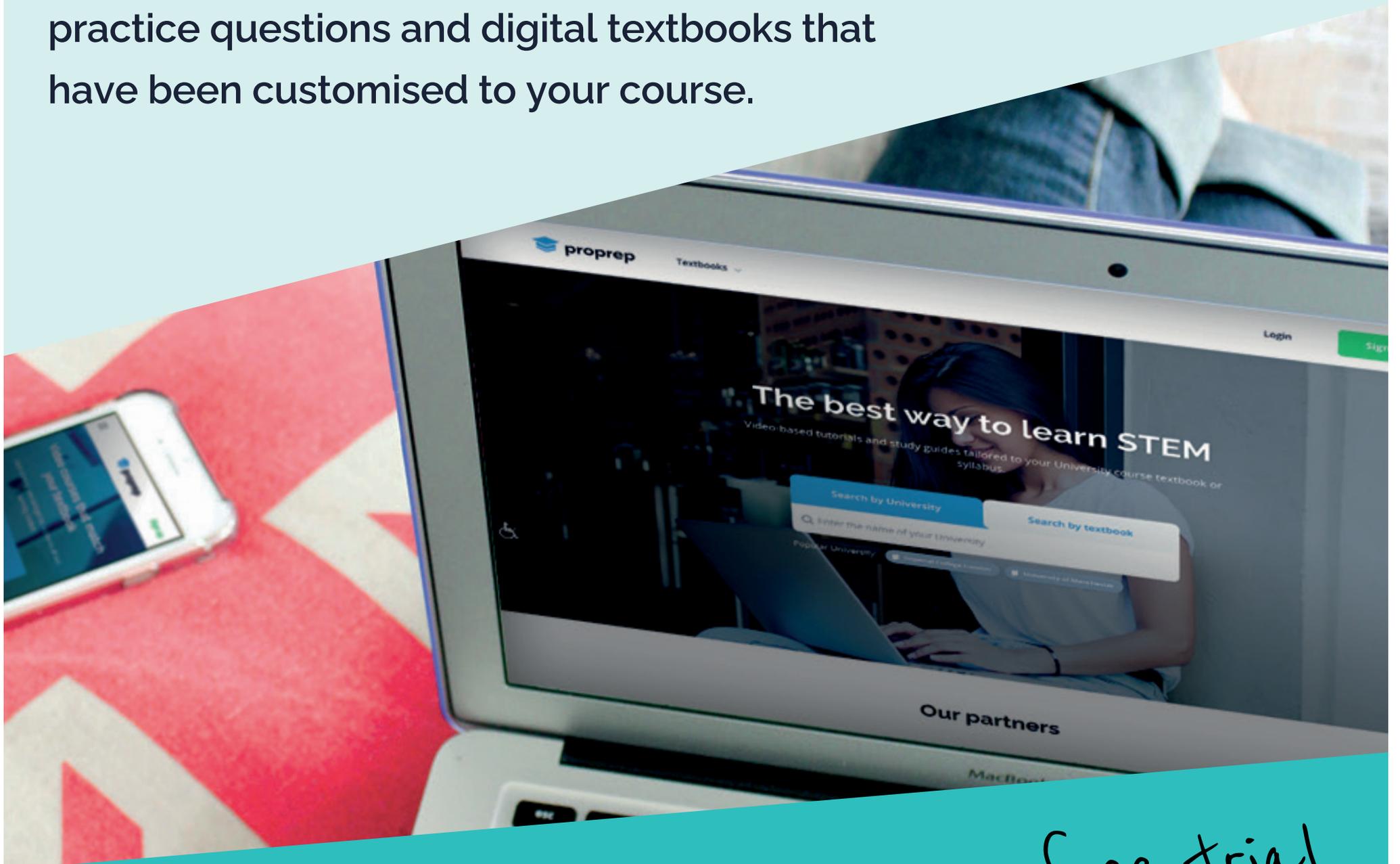


ANTONICS_EDITION

DEADLINE: 18TH OCT

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Gain access to 50,000+ video tutorials,
practice questions and digital textbooks that
have been customised to your course.



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For your free trial
use code - **ICU2021**

Autumn Events Term Card

At Imperial Enterprise Lab we're passionate about inspiring the next generation of innovators and entrepreneurs. Whether you want to test an idea, develop new skills, start a business or just meet interesting people we're here to help. From skills seminars to competitions and co-working space to expert mentors, we offer all the support you need, free of charge!

October

- 14 / Idea Challenge
- 15 / How To...Do Customer Discovery on a Budget with Nana Parry
- 15 / Pitch 'n' Mix
- 20 / Innovation Pitch
- 21 / WE Inspire Conference
- 22 / How To...Visualise Data with David McCandless
- 28 / WE Innovate Final
- 29 / How To...Create an Inclusive Culture with Sonya Barlow

November

- 4 / WE Activity Series: Climate Change & Sustainability Talk
- 5 / How To...Understand Investment with Yvonne Bajela
- 11 / WE Activity Series: Health & Medtech Talk
- 12 / How To...Do Good and Make Money with Vicki Saunders
- 12 / Pitch 'n' Mix
- 16 / Discovery Fund applications close
- 18 / WE Activity Series: Ideation Workshop
- 19 / Innovating Smart Cities Hackathon
- 19 / How To...Be Resilient with Giles Duley
- 25 / WE Activity Series: Future Forecast

December

- 2 / WE Innovate application deadline
- 10 / Pitch 'n' Mix
- 15 / Innovation Pitch

How To Talks - Boost your entrepreneurial know-how with our 60-minute lunchtime expert talks.

Idea Challenge - Up for a challenge? Fancy meeting new people? Then join us for an afternoon of brainstorming, problem-solving fun. You might win a prize too!

Innovation Pitch - Pitching gets real! Come along to one of our Innovation Pitch evenings where our Imperial innovators showcase their latest projects. You'll also have the opportunity to ask questions and network with the teams.

Pitch 'n' Mix - Part networking evening, part pitching session, this is the place to meet future collaborators, get feedback on your pitch, and swap tips and tricks.

WE Activity Series - Panel discussions and workshops taking place every Wednesday throughout November for Imperial women.

WE Inspire Conference - Celebrating women entrepreneurs and leaders from Imperial and beyond.

WE Innovate Final - Watch the five finalists from our women's entrepreneurship programme pitch their idea to win part of the £30k prize fund.

Discovery Fund - Need a cash boost to see if your idea has potential? The Discovery Fund could provide just the support you're looking for.

Innovating Smart Cities Hackathon - Collaborate across borders to come up with innovative solutions to UN Sustainable Development Goal 11: Sustainable Cities and Communities. In partnership with Tsinghua University Beijing.

Be part of something awesome. Register now:

www.imperialenterpriselab.com

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imperial.ac.uk/evening-classes

Arabic - British Sign Language - Chinese - English Conversation - French - French
Conversation - German - German Conversation - Italian - Italian Conversation - Japanese -
Korean - Portuguese/Brazilian - Spanish - Art Class: Drawing and Painting from
Nature - Art Class: Creative Writing: Short Story Writing
- Cultural Studies - Introduction to Film Production to Film - Greek and
Roman - The Birth of the Modern World
- History - Nighttime Philosophy - Music:
Disability - Music Practice and Performance - Opera in Focus: Verdi and
Wagner - The History of Art, Literature and Film -
Spelling - The History of Magic - The Great Artists - African Art,
Modernism - The History of European Art - British Art in the
20th Century - The History of Art from Impressionism to the Present
Science: An Introduction to Science - The Body: Illness and in Health - The Brain:
Neuroscience, Psychiatry and Psychology - Understanding Psychotherapy: A Social History
of the Mind - Arabic - British Sign Language - Chinese - English Conversation - French -

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Exhibition

Eastern Esotericism Done Right

Tantra: Enlightenment to Revolution

Until 24th Jan 2021



£15 (£13 Students)

britishmuseum.org.uk

Reviewed by **Vaidhiswaran Ramesh** Arts Editor

Violence, sex and gore — seems like the ingredients for the making of a poor Game of Thrones episode. But these elements in 6th century medieval India, manifested through Tantra, played a huge role in shaking up orthodoxy and redefining not just Hinduism or Buddhism, but the cultural and traditional practices of the subcontinent and South-East Asia for centuries to come.

Tantra, meaning ‘to weave’, is probably the most misunderstood aspect of Eastern religiosity in the West. Spanning a history of over 15 centuries, and still quite active as a distinct practice among various sects in India, Tantra is a cross-cultural and multi-religious spiritual philosophy, espousing spirituality through the material world. A philosophy stripped of the rampant patriarchy and hierarchies of power prevalent in the erstwhile traditions of the Subcontinent.

The exhibition traces the history of Tantra through the ages, beginning with its origins in challenging Hindu orthodoxy, its adoption by Buddhism and later by the Mughal rulers (giving the philosophy an Islamic touch), and finally viewed from the perspective of the British Empire, at which point — around the wake of the independence movement in the subcontinent, Tantra as a practice became politically charged.

At the turn of the 6th century, Hinduism offered a codified religious landscape. It was around this time that by subverting this strict orthodoxy, Tantra offered/promised power through ritualistic practices, and in doing so found sanctuary and widespread acceptance in the political turbulence of the era. Sex and death, often seen with disgust and considered impure, were adopted and embraced deeply within the practice.

The exhibition traces the origins of this tradition with sculptures of Tantric deities and yoginis (shape shifting goddesses), ritualistic Sanskrit verses on palm leaves and audio enchantments giving the exhibition an eerie feeling. A key tenet of Tantra was to free oneself of limiting attachments such as fear and disgust, and this principle can be clearly seen and appreciated in the exhibits. There is an impos-

ing 10th century granite relief of Bhairava, a deity in Hinduism, with his guard dog who scours the graveyards and feasts on the flesh of the corpses. This violence or gore is present throughout — skull caps used to feast on blood, statues of yoginis devouring tantric practitioners who showed fear, and of course sculptures depicting ritualistic sexual intercourse. The exhibition boasts a well-crafted audio-visual recreation of a ritualistic practice in a 10th century temple from Eastern India dedicated to Yoginis.

Tantric rituals viewed the body as a tool, and just as with ritualistic sex, yoga was seen a conduit to attaining power. Although Tantra was born out a will to subvert the orthodoxy of medieval Hinduism, it was shaped as much by Buddhism. Strikingly, a majority of the shock and awe exhibits in the exhibition belong to this period of its history. Buddhists monks donning aprons made of human bones and skull caps is indeed a sight too difficult to visualize and reconcile with, given modern mainstream perceptions on the religion. The exhibit also touches on the Islamic interpretations of the subject, predominantly through paintings from the Mughal court.

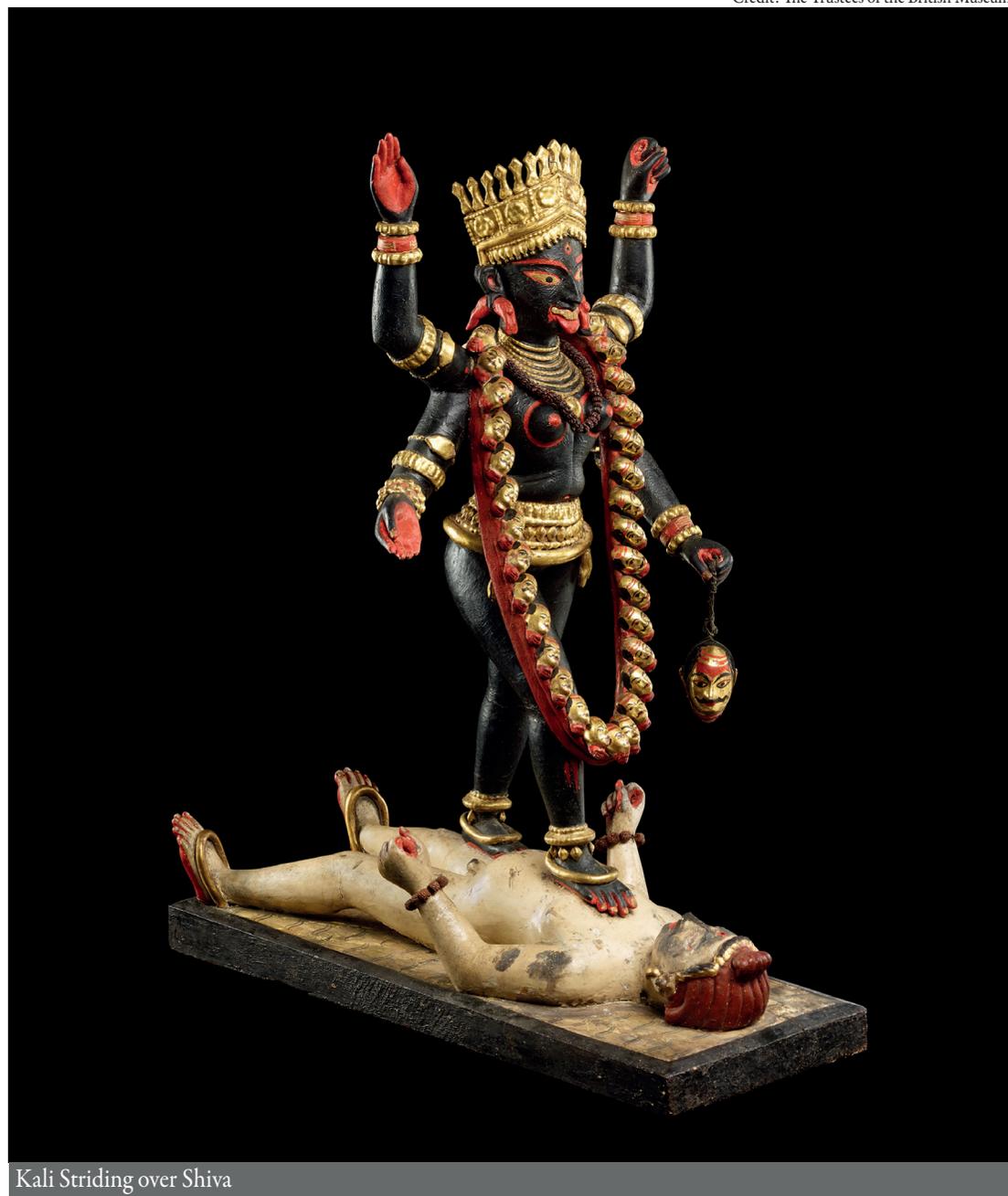
Arguably the latter parts of the exhibition, tracing Tantra around the independence movement in the subcontinent in late 19th and early 20th century are much easier to follow. Posters from this era presenting goddess Kali (pic inset) as a rallying cry to the movement are juxtaposed

quite beautifully with the British counter narrative from the time — branding the movement and the practice as arcane, demonic and uncivilized.

The modern take on the subject, and the shifting tides in favoring western attitudes for the tradition with the 60s is documented well with posters and exhibition pamphlets from the era.

As with many practices and traditions of the East, the lack of proper documentation and cultural translation lends itself to misrepresentation in the West. Tantra is a prime example of this, being often misinterpreted, and associated solely with exoticism and sexuality. But it’s much more than that, and British museum in its latest exhibition, it’s first one after the pandemic shuttered the 281-year-old institution, casts a wide net trying to answer it all. It may not have all the answers, but it will give you an overall perspective on its evolution and might even quell some misconceptions about this ‘arcane’ practice along the way.

Credit: The Trustees of the British Museum



Kali Striding over Shiva

ARTS

Feature

Highbrow vs Lowbrow: An Arbitrary Divide

Written by **Syon Lee Alumni**

There's a hierarchy in the world of art. Opera sits on a lofty perch, high above its modern counterpart, musical theatre, fanning itself with its 17th century orient-inspired decorative hand fan. And if opera is at the peak of the pyramid and musical theatre its body, the underbelly is a writhing mass of Disney movie musicals like *High School Musical* and *Frozen*, feeding on the rotting carcass of public appeal. A similar hierarchy exists for books: books about straight, white American men trumping graphic novels and comic books. Mention manga and the art world collectively shrugs as if to say "Manga? I don't know her."

Put simply, Art is divided into "highbrow" and "lowbrow" forms, the former a byword for art that is intellectually stimulating and boundary-pushing and the latter a condemnation of art that appeals to the masses.

The separation of art into "good" and "bad" has occurred throughout history with works judged on mastery of the craft, divine talent, and, as is always the case, social currency.

The ability to arouse feeling through a sensual medium was seen as a gift, whether it be divine or otherwise but sometime in the 18th and 19th century, with the post-Enlightenment fixation on the measurable and the rational, the way the arts were judged began to change. The Age of Enlightenment ushered in an era of hypothesis, reason, and experimentation – what would grow into what we call the scientific method - and its effects trickled through all layers of society and culture. Royals and the clergy, their status given by God and

conferred by blood, had their power and position questioned and sometimes stripped away. Under this new system, one would expect art to be released from the shackles of class and pretension, and for all artistic forms to thrive in a field levelled of its snobbery. After all, how could you apply objective judgement to a subjective medium like the arts? However, society abhors a vacuum, and while paradigm shifts may change the way the world is viewed, it rarely makes an impact on the world itself. Those with the money and influence simply changed their vocabulary and were able to re-establish their station – the poor were deemed biologically degenerate and other races inferior with prejudices now 'scientifically' supported by pseudoscience such as the study of skull shapes or phrenology.

According to this particular branch of pseudoscience, a high brow or forehead signified intelligence and an aptitude for the sciences and art.

Unfortunately, anyone who wasn't basically a Caucasian male, was seen as having a significantly lower forehead and therefore lacked the necessary development to succeed in these fields. It really goes to show the lengths to which white men would go to justify their receding hairlines.

What's remarkable is that the distinction between high and low culture became

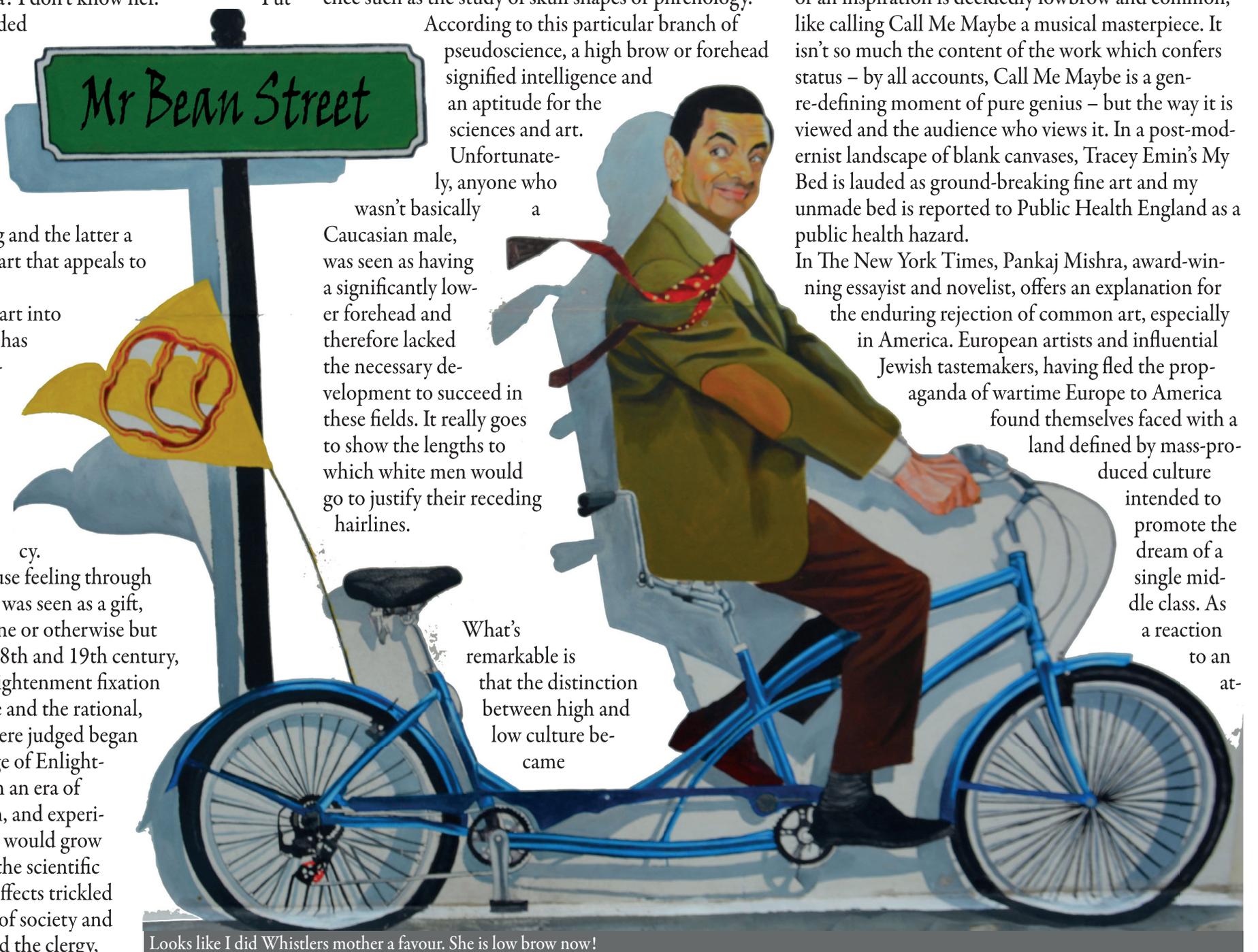
ever more pronounced in the early twentieth century. As industrialisation and the invention of new technologies like photography and phonographs gave the masses an increased access to artistic media, it got a lot harder to gatekeep the institutions of Art. Decrying certain artistic principles as "lowbrow" or, god-forbid, "popular" became a powerful tool in preserving the status quo and controlling discourse around the arts. What is particularly baffling is how transparent this technique is, yet the concept endures. One only has to look at the terms highbrow and lowbrow themselves to notice the connection to questionable skull-based studies and the way the labels are applied further makes a mockery of the distinction. Shakespeare, with its bawdy genital-based humour and cloying melodrama was the Elizabethan equivalent of today's Hollywood blockbusters and yet is quoted and performed today as the height of sophistication. The *Mona Lisa*, with her hairline plucked back and eyebrows suspiciously absent was the epitome of highbrow art, and yet its popularity would prove to be its downfall. It is decidedly highbrow to study Da Vinci and his contemporaries but to name the *Mona Lisa* as a favourite or an inspiration is decidedly lowbrow and common, like calling *Call Me Maybe* a musical masterpiece. It isn't so much the content of the work which confers status – by all accounts, *Call Me Maybe* is a genre-defining moment of pure genius – but the way it is viewed and the audience who views it. In a post-modernist landscape of blank canvases, Tracey Emin's *My Bed* is lauded as ground-breaking fine art and my unmade bed is reported to Public Health England as a public health hazard.

In *The New York Times*, Pankaj Mishra, award-winning essayist and novelist, offers an explanation for the enduring rejection of common art, especially in America. European artists and influential Jewish tastemakers, having fled the propaganda of wartime Europe to America

found themselves faced with a land defined by mass-produced culture

intended to promote the dream of a single middle class. As a reaction

to an at-



Looks like I did Whistlers mother a favour. She is low brow now!

tack on individuality and without the necessary structures to allow discordant ideologies to be showcased, the landscape of art became increasingly polarised.

“Hatred of popular culture was also to define a generation of American intellectuals, and their claim to a superior sensibility,” Mishra writes, “Political defeat, isolation and irrelevance had devastated their old presuppositions about art and its relation to human beings”. And perhaps they had a reason to be fearful. If the focus of Art shifted from the aesthetic to the mimetic in the past, our new direction seems to be towards the “relatable”. Relatable content, such as the widespread popularity of memes, self-insert fanfics, and viral TikTok videos only serve to impersonate a form of contrived togetherness like the Barnum-effect of horoscopes. It is reflexive rather than reflective, reactionary rather than revelatory. But while mainstream media with its inseparable ties to capitalism and a senseless drive to sell may have stifled creativity and expression, to reject all mass media as a class distinct and beneath is to conflate an entire genre with specific examples of bad art, and only introduces an unnecessary barrier to the audience that art seeks to serve. There are cases of outstanding art in common media just as there are examples of appalling works in the most esteemed galleries.

To many, what really sets the two worlds apart isn't so much the product of the artist's imagination but rather the seed from which the idea itself grows.

“

TRACEY EMIN'S 'MY BED' IS LAUDED AS GROUND-BREAKING FINE ART AND MY UNMADE BED IS REPORTED TO PUBLIC HEALTH ENGLAND AS A PUBLIC HEALTH HAZARD

Highbrow artists, they maintain, will often reach downwards towards the bawdy and the commonplace for inspiration while your typical graphic designer lacks the necessary understanding and intellect to pluck fruit from the higher branches of artistry. They believe their true talent lies in the ability to elevate the normal and transfigure the mundane into the extraordinary. But if a highbrow artist thinks that they are special for turning whores into Madonnas, then you only have to watch an episode of Rupaul's Drag Race to see the effect in reverse. In fact, the layers of subversion only increase the more you look at the premise and the execution of the programme. In theory, a heavily-edited reality competition show where drag queens compete to out-dress, out-sing, and out-innuendo each other should be the antithesis of good art and yet it is acclaimed by even the harshest of critics for subverting a wild array of television tropes and challenging the worldview of millions. And it does that while being

irreverent, fun and absurdly camp. Graphic novels have also started to see its own blossoming as a medium to be taken seriously. Gone are the days when comics were either aimed just at children or relegated to the back of a newspaper. Persepolis, Marjane Satrapi's graphic novel memoir detailing her childhood in Tehran, lived through the Islamic revolution, exemplifies how cross-cultural representation can be both challenging and digestible, important and accessible. Even stand-up comedy, often thought of as a glorified Christmas cracker

joke-telling, bears examples of masterful work such as Hannah Gadsby's Nanette (viewable on Netflix, a platform some see as the enemy of good taste). For anime, you have the Madoka franchise which pairs powerful and reference-rich narrative with disturbingly alluring artwork by Gekidan Inu Curry. Good art is everywhere if you're looking for it, and to be pigeon-holed by labels is to blind yourself to the very experiences that inform great art. And here lies the true problem at the heart of artistic evaluation. To question how art should or could be judged is to question the very definition of art. Loathe to say it but Art is a social construct - with no inherent value, art is intrinsically tied to institutions and power structures of the time and a slave to the dominating worldview. Art divorced from institutions risks not being seen and art that is unseen is by virtue not art at all. In a time when judgement and criticism comes swiftly and without pause, maybe it's time we all just sit back, relax, and enjoy art for ourselves, without deferring to notions of sacred or mundane, highbrow or lowbrow, and woke or broke.

Credits: Mr Bean The Movie



Okay! It's time to show off on Tik Tok now. I wonder how Mono Lisa is doing.

Currently On

Tantra: enlightenment to revolution @

British Museum

“Explore the radical force that transformed the religious, cultural and political landscape of India and beyond in this landmark exhibition.”

Check our review of the exhibition in this issue.
3rd Oct 2020 – 24th Jan 2021

Kimono: Kyoto to Catwalk @
Victoria & Albert Museum

“This exhibition presents the kimono as a dynamic and constantly evolving icon of fashion, revealing the sartorial, aesthetic and social significance of the garment from the 1660s to the present day, both in Japan and the rest of the world.”

You can find our review in Felix Issue 1672.
Until 25th Oct 2020

Andy Warhol @
Tate Modern

“A new look at the extraordinary life and work of the pop art superstar”

You can find our review in Felix Issue 1749.
Until 15th Nov 2020

MUSIC

Feature

Passing the Aux to Jakub Hanczak



Each week an Imperial student will be interviewed about a song they love and want to share with Felix readers. If you have a song you wish to share, follow the QR code and complete the form!

David Bowie - Five Years

Interview by **Guthrie Ruby** Music Editor

When did you first hear this song?

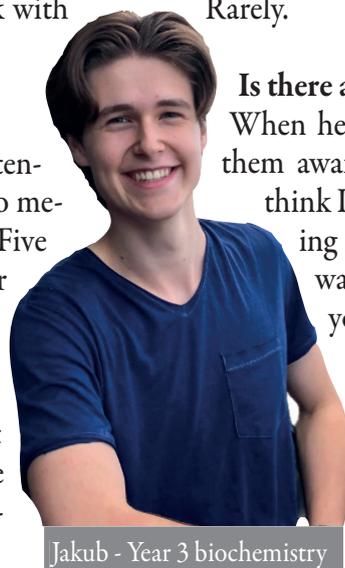
During my first year of uni, would've been Jan 2019. I was introducing myself to the David Bowie discography and fell in love with this track straight away. The dramatic and cinematic storytelling, I fuck with it heavily.

What initially drew you to the song?

I was in the kitchen, not really paying attention. The singing progresses from spoken to melodic to emotional, it really drew me in. Five minutes later I was already going back for seconds.

In a sentence or two, describe the song.

It introduces the concept of the album, that the earth will cease to exist in five years due to lack of resources. At the time of its release the Cold War was in full swing.



Jakub - Year 3 biochemistry

What about the performance do you love?

Bowie starts half singing half talking, kind of like Lou Reed and the Velvet Underground. As it goes on, it becomes more emotional, he becomes more involved, climaxing when he screams and cries. Bowie actually cries at the end and it was all one take.

How often do you listen to the song?

Rarely.

Is there a great lyric?

When he speaks directly to the listener, making them aware that the song is about them too. "I think I saw you in an ice-cream parlour/ Drinking milkshakes cold and long/ Smiling and waving and looking so fine/ Don't think you knew you were in this song".

When do you listen to this song?

After listening to a lot of popular music and I'm tired of that bullshit, then I go back to the classics.

Where do you listen to this song?

Basically, anywhere where I know I won't be bothered for about fifteen minutes, mostly just my room lying in bed.

Is there another sense you associate strongly with this song?

Because of the descriptive imagery I can taste ice cream or milkshakes on a nice sunny day.

How did this song affect your musical habits?

It did validate my reasoning for wanting to venture into new genres of music.

Final Comments?

You should check out the conspiracy around this song (see below).

Feature

The Bowie-West Conspiracy

While interviewing the lovely Imperialite Jakub Hanczak about the song "Five Years" by David Bowie I was introduced to a conspiracy theory. The theory has existed since 2007 and ties the legendary artists David Bowie and Kanye West together, claiming that Bowie predicted the coming of Kanye West.

It starts with Bowie's album *The Rise and Fall of Ziggy Stardust and the Spiders from Mars*. On the album cover we see David Bowie posing under a sign that reads "K.WEST". Apparently, this was simply the sign of a fur store in London, though I think we all know it really means "Kanye West". Opening the album is the track "Five Years", which tells that the world will

run out of resources and come to an end in just five years. Later in the album, David Bowie tells of a "Star-

man" who comes to earth to save humanity. How long after the release of the album was Kanye West born?

Five years (and two days)!

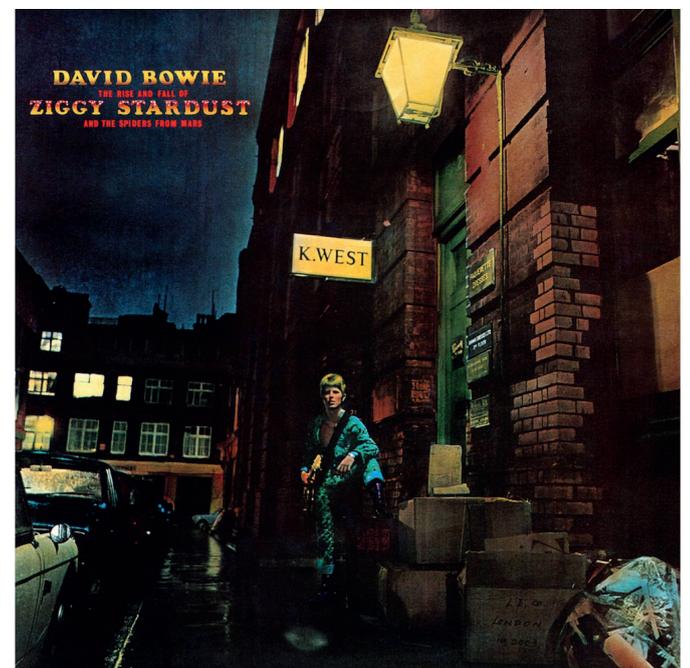
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THE ONLY REMAINING QUESTION: IF KANYE WEST WAS DAVID BOWIE'S SUCCESSOR, WHO WILL BE KANYE WEST'S?

clues from Kanye West's albums too. The third track of West's *Yezus* is "I AM A GOD" and respectively

Clearly a link has been established here. Though, it's not until around the time of David Bowie's unfortunate passing that more conspiracy grows. David Bowie's final album *Blackstar* contains the lyrics "I'm a Blackstar, I'm a Blackstar, I'm not a gangstar". People have tied this in as obviously Kanye West is a "black star". Some may even consider Kanye West as the biggest "star". Additionally, when he emerged onto the scene in 2003, Kanye West positioned his music as an alternative to the popular sub-genre gangster rap.

People started drawing in



The Bowie album cover that started it all

in David Bowie's *Blackstar* it's "Lazarus". The biblical figure Lazarus was resurrected by Christ three days after his entombment. Some have tied these "clues" together as a metaphor for Kanye West being David Bowie's successor, being sure to resurrect/continue their collective musical genius.

The remaining parts of this conspiracy are even more far fetched than the points presented already and most of this can be dismissed with one simple word – coincidence. Both artists have denied that any of this was intentional. Though, if you were some sort of ethereal musical being would you disclose it to the general population?

The only question I have remaining is that if Kanye West was David Bowie's successor, who will be Kanye West's?

Sex survey

Music for Two Part 2

Miles Gulliford Music Editor

Last issue, inspired by the variety of songs and genres respondents to the Imperial sex survey listed as their ‘sex jams’ I endeavoured to offer a few recommendations in a variety of genres that readers might find well suited to the bedroom. This week, in conjunction with the publication of the sex survey results (see page 25 for these in full) I am continuing to recommend music from across the spectrum that might help you set the mood.

New Jazz: Christian Scott aTunde Adjuah - The Emancipation Procrastination

Christian Scott’s self-anointed ‘stretch music’ is one of the most laid-back modern takes on jazz. On the third record of the New Orleanian’s centennial trilogy (celebrating the centenary of the first recorded jazz song), Scott’s languid, breathy and often multi-tracked trumpet lines are a delight upon the ear. The Emancipation Procrastination’s dark, spacious electronic and hip-hop tinged instrumentals built upon skittering drums and warped guitar create a sublime darkness, which intertwine perfectly with Scott’s innocent melodies. Personal favourites include ‘AvengHer’ and ‘Ashes of Our Forever’.

R&B: D’Angelo – Voodoo

Considered by many to be the ‘greatest neo-soul record of all time’, and from sex symbol D’Angelo himself, there should be little doubt in reader’s minds that this record is dangerously sexy. Here I would be praising the singer-songwriter’s breathy and often multi-tracked vocal lines if I had not already used that exact phrasing earlier this article, suffice to say D’An-

“

THIS RECORD IS DANGEROUSLY SEXY.

gelo’s voice is sweet and sticky in equal measure.

D’Angelo’s song writing here makes a conscious effort to homage classic soul with the addition of a more hip-hop focused approach to groove (thanks in no small part to Questlove’s innovative drum work). The result is an intricate set of tracks distilling the essence of ballads from soul icons like Marvin Gaye with more rhythmic intrigue, moulding a perfectly sensual atmosphere. I find myself enthralled by almost every track but would suggest avoiding ‘Left and Right’ due

to its aggressive features courtesy of the Wu-Tang clan.

Rap: 108 – Mission Infinite

This obscure gem has seen a recent resurgence in popularity thanks to a repressing from NBN Archives. Mission Infinite’s distinctly lo-fi, woozy beats and enjoyable but never show stealing or overwhelming flows make it about as good a rap album for the bedroom as one could imagine. I was personally a little surprised by the number of people that listed hip-hop tracks as their go to in the sack, but to each their own – give this one a spin too.

Rock: T-Rex – Electric Warrior

Having heard T-Rex frontman Marc Bolan’s name in the same sentence as Bowie’s more times than I would care to mention, I was quite surprised at the low-key nature sound of Electric Warrior. While lyrical themes of sexuality and a blurred gender are here in spades, the instrumentals are decidedly low-key. Prominent bass and drums imbue each tune here with smooth grooves; however, Bolan’s vocals and lead guitar are low enough in the mix to add flavour without overwhelming the listener. This makes this LP the perfect rock choice for an intimate evening.

Felix Recommends

Ho, why is you here?

Artist: Flo Milli

For fans of: Megan Thee Stallion, Rico Nasty

Top Tracks: Like That Bitch, In The Party, 19, May I

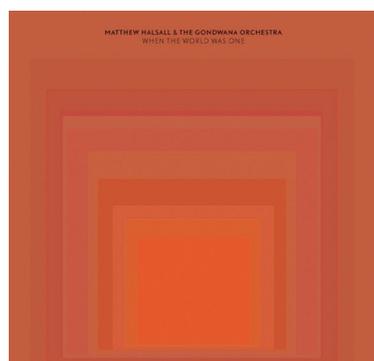
Run time: 30 mins

Miles Gulliford Music Editor

“I do what I please and you do what I ask/He love my confidence and that’s what you lack” draws Flo Milli on Beef Flomix, the 20 year old’s breakthrough (thanks tik tok) single. The track has been sitting at the top of my workout playlist for the last year, so I was happy to find that the rest of the Alabama native’s debut could join it. Built on simple, catchy beats, surprisingly technical flows and a lethal dose of attitude Ho, why is you here? puts Flo on par – or in my opinion perhaps a little better than the tidal wave of female talent flooding the rap scene.

From buoyant instrumentals like

‘19’ to ‘May I’ ’s driving groove - it has been one-liners like “Put a hoe in her place like she movin’ in” which keep me coming back.



When the World was One

Artist: Mathew Halsall and the Gondwana Orchestra

For fans of: Miles Davis, Dorothy Ashby

Top Tracks: Tribute to Alice Coltrane

Run time: 63 mins

Having earned the “what’s this?” accolade from friends and family, this treacle smooth venture into the more traditional (read modal/spiritual) side of jazz is one I can confidently recommend to novices and aficionados to the genre alike.

The classic rhythm section (drums, double bass, piano) and Halsall’s trumpet are augmented and enhanced by tasteful flute and harp contributions, blending deliciously into the record’s subtle composition and spacious production. The result is a rather timeless listen that will leave you floating above your desk/bed/sofa in a cocoon of musical rapture.

When the World was One’s listenability is in a large part thanks to it’s production. Cut in one room in whole takes, as jazz tunes were in the genre’s golden age, a single listen should leave listeners with a subtle sense of the technical progress audio recording has made in the intervening fiftysomething years.

Delicate mixing and deep reverb allow the harmonically harsh geometries of each instrument to blur together in a manner evocative of the album’s mystical cover.

The album peaks with it’s concluding track ‘Tribute to Alice Coltrane’, where Rachel Gladwin’s harp work weaves an enchanting backdrop for Halsall and the rest of the Gondwana orchestra to improvise over. The track’s simple, lilt-ing chord progression ebbs and flows to match the intensity of each soloist in a manner only seasoned musicians in the same room at the same time can truly achieve. Here and throughout Halsall’s septet harness their well honed musicality, creating an hour of velvet serenity.

FILM

Reviews

Now on Netflix

Oliver Weir Film Editor

I'm Thinking of Ending ThingsDirected by: *Charlie Kaufman*Starring: *Jessie Buckley; Jesse Plemons; Toni Collette; David Thewlis*

To create the capital-A Art that Kaufman so obviously relishes, his writing needs to be harassed, not left in peace. His finest work, as writer or director, has always been subject to some sort of intellectual audit—for example Spike Jonze as the ‘auditor’ of his writing in *Being John Malkovich*, *Adaptation*, and *Synecdoche, New York*. With *I'm Thinking of Ending Things*, Netflix have given him free rein, with very polarising consequences. On one hand, the first and final acts are brilliantly creative—looking down the barrel of the capital-A Art that Kaufman wants. The house sequence with Jessie Buckley and Jesse Plemons as the new couple, and Toni Collette and David Thewlis as the bizarre but lovable parents, is both delicate and terrifying. On the other hand, there are aspects of this movie, such as the second long car scene, that are a shade more self-indulgent than is bearable, despite the great cinematography. Kaufman die-hards will explain that it's ‘cerebral’ (as they like to say), but I think that's a sly pretext—Kaufman can do better.

The Devil All The TimeDirected by: *Antonio Campos*Starring: *Tom Holland; Bill Skarsgård; Riley Keough; Jason Clarke; Robert Pattinson*

Not being too familiar with Antonio Campos' catalogue—except for his uninspiring 2016 movie *Christine*—and seeing the star-studded cast, I wasn't quite sure what to expect from *The Devil All the Time*. It follows a handful of initially disparate residents of the small and deeply religious village of Knockemstiff, Ohio. Then, using a sort of ‘Tarantino grease’, it attempts to slot everything together as tensions flare, and lusts for reprisal come face-to-face with religious propriety. Bill Skarsgård knocks it out of the park as the caring father to protagonist Arvin Russell (played by Tom Holland, whose performance is serviceable, though not remarkable). As Arvin discovers the abuse of his sister at the hands of the school bullies and the new priest (Robert Pattinson), we feel the weight of his decision to either descend into violence and go to jail, or be rational and hold together a family already under the cosh of life's misfortunes. It perhaps overstays its welcome at 138 minutes, but *The Devil All the Time* is an altogether fairly entertaining thriller.

The Social DilemmaDirected by: *Jeff Orlowski*Starring: *Tristan Harris; Aza Raskin; Justin Rosenstein*

“If you're not paying for the product, you are the product”. This documentary-drama features interviews with former engineers and managers from the world's biggest tech companies, warning of the dangers of social media, often condemning the systems they helped to create. In tandem with these interviews, the film weaves in a drama about how social media can inveigle and entrap vulnerable young adults. Tristan Harris—the film's central expert—

lays out the problems and their consequences very eloquently, showing a strong desire to steer us into calmer seas. The dramatic interludes could be entirely dispensed with, but the film succeeds in raising awareness of the predatorial designs of even the most seemingly banal inventions. As the credits roll, the movie does not end—the message endures in the form of a healthy guilt, for all the times we've acted unknowingly as pawns.

Enola HolmesDirected by: *Harry Bradbeer*Starring: *Millie Bobby Brown; Henry Cavill; Sam Claflin; Helena Bonham Carter*

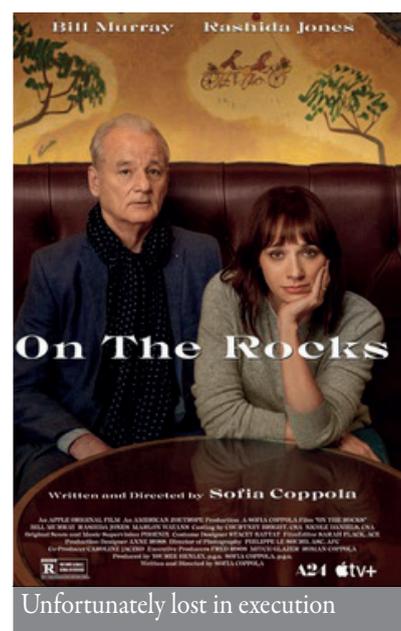
Enola Holmes is yet another movie so concentrated on its end that it neglects its means. It is ‘message first, movie second’. By fixating on telling the tale of a young woman rising above her societal constrictions, the movie hurts both its plot and its message. Movies made to ‘make a point’ are most successful when they find an object to act as a formula for the emotion. The final message is made powerful by it being earned—as opposed to just being thrown out there lazily. Through a combination of Helena Bonham Carter's poorly integrated character, Sam Claflin's poorly written character, annoying 4th wall breaks, and Henry Cavill's clear mis-casting as Sherlock Holmes, the film trips up—drawing too much attention to its aim. Millie Bobby Brown's performance as the titular Enola Holmes is energetic, and her rapport with Louis Partridge's Lord Tewkesbury is, at times, entertaining; however, taken in its entirety, the film comes off as fairly middling and slightly strained.

Latest movie from Sofia Coppola

On the RocksDirected by: *Sofia Coppola*Starring: *Rashida Jones; Bill Murray; Marlon Wayans*Reviewed by **Oliver Weir** Film Editor

In a recent interview Sofia Coppola said she wanted to “capture what she loves about New York” and pair that with a father daughter story. She cites conversations she used to have with her own father—the great Francis Ford—about relationships and male psychology. *On the Rocks* does a stellar job at showing the funny side of these conversations, but also in showing the subtle adaptations fathers have to make, in order to stay a part of their daughter's life as they grow up. The plot is simple and singular, though it tries to

work on two emotional fronts: the relationship between Laura (Rashida Jones) and her father Felix (Bill Murray), and Laura and her husband Dean (Marlon Wayans). Laura, a novelist suffering from writer's block, notices that her marriage has lost the spark it had long ago, and that her husband appears to take more and more business trips with a female colleague. She attempts to find in her father an ear to listen, but instead she gets an ambitious detective who, feeling starved of her attention, is determined to protect her. Where Laura considers ‘maybe just asking Dean’, Felix calls



for ‘following Dean’ and ‘tracking his credit card transactions’. Coppola's great sense for conversational dialogue lends even more warmth to already great performances by Jones and Murray. Like in *Lost in Translation*, Murray strikes the right balance between assured exterior and yearning interior. The issue with the movie arises in the second relationship, between Laura and Dean. They feel unintentionally artificial, and a little wooden at times. Despite the sumptuous cinematography, and deadpan brilliance of Bill Murray, the movie's final act is disappointingly bland.

Editor Recommends

Classic of the Week: The Shining

The Shining

Oliver Weir Film Editor

Directed by: Stanley Kubrick

Year of Release: 1980

Starring: Jack Nicholson; Shelley Duvall; Danny Lloyd; Scatman Crothers

While the idea of conscious deliberation in Art is popular, it is not supreme. The editorial mechanism feels predominant because it's explainable, but edits and rewrites are driven by impulses that are never understood. That an artist sees one phrase as more fitting than another, or one fabric a more suitable shade of violet, is impossible to satisfactorily explain. The artist relies on the unconscious miasma of nurture and nature to spit out artistic truth. Even the most refined editorial know-how is incapable of entertaining an idea that never springs to mind. Great directors need no more than these mechanisms. Their artistic intuition so closely coincides with 'artistic fact' (i.e. those things that make us think and make us feel), that few external tools are necessary.

In the case of Stanley Kubrick, the divine intuition is for 'orchestrated terror'. Being an instinct, this sensibility is naturally genreless, and as such we find a calculated, rhythmic fear coursing through the veins of his entire filmography. We can feel it in *2001: A Space Odyssey*, *Full Metal Jacket*, *A Clockwork Orange*, and *Eyes Wide Shut*, but it finds its most evocative shape in *The Shining*. Amid an almost faultless canon, *The Shining* stands out for its algorithmic potency. Its cogs are positioned and oiled in such a way as to exact precise responses from the audience. What emotions we attribute to circumstance, are in fact as predestined as the characters we're watching. We may not notice

the knives looming over Danny's head in every kitchen scene, nor do we notice the changing layout of the Overlook Hotel, but these details are not wasted on our unconscious minds—they fester and build a cloud of portent and deception. In *The Shining*, the stately poise of *Barry Lyndon* harmonises with the frightening ceremony of *A Clockwork Orange*, amounting to what I think is Kubrick's finest film, the greatest example of his craftsmanship. (Incidentally, it is of no surprise that HAL 9000's callous duplicity, or feigned contrition, is directed so naturally in *2001*—HAL is the incarnation of Kubrick's practice.) All too often, the horror genre is dumbed down in, look to the dumb gore of the *Saw* franchise, or token jump-scares. *The Shining* separates itself from dull conventions—every speck of blood is deliberate, necessary, and considered.

Yet *The Shining's* true history can easily become distorted. It was in fact the only one of Kubrick's last nine films not to receive a nomination for an Oscar or a Golden Globe. Rather embarrassingly, it did inspire Kubrick's only Razzie nomination. However, its negative reception was nowhere more apparent than in the words of Stephen King, who reportedly said that the film was the only adaptation of his work that he could "remember hating". At first it seems that King thought of Kubrick's film less as an adaptation and more of a ransacking. Ultimately, the idea of a faithful adaptation necessarily translating into quality on the screen is a mirage. Indeed, King's own forays into TV/Film prove this. The 1997 miniseries *The Shining* (written by King, and starring Rebecca De Mornay) is a more faithful take on the novel, but it's universally seen to have fallen short of Kubrick's 1980 standard.

King evidently respected Kubrick's instinct and the need for artistic liberties to be taken, since he wrote in his 1981 book *Danse Macabre* that *The Shining* had "contributed something of value to the [horror] genre", and stated that it was one of his "personal favourites". It must be noted that, with regard to seeing *The Shining* as praiseworthy, King was ahead of the game. The cultural re-evaluation of *The Shining* took much longer than a year. Perhaps the movie needed its own space—after all, it did open on the same weekend as *The Empire Strikes Back*. While this may account for its slightly low box office takings, it does not account for the notably negative critiques of its quality. Perhaps Kubrick simply pushed the envelope so boldly (as in *2001*) that contemporary tastes were unable to keep up. In any case, when we compare it to other movies that have received similar re-evaluations, and also shared opening weekends with *Star Wars* movies—I'm thinking of Friedkin's *Sorcerer* in 1977—*The Shining* has fared extremely well. It now stands as a cinematic monument to what is possible in the hands of genius directors, in whom works the most divinely unexplainable intuition. As we mark *The Shining's* 40th anniversary, we should look at it not as something merely to be remembered, but rather as a monolith on some distant hill, the path to which modern horror should strive to retrace.



Free Film of the Week: The General (1926)

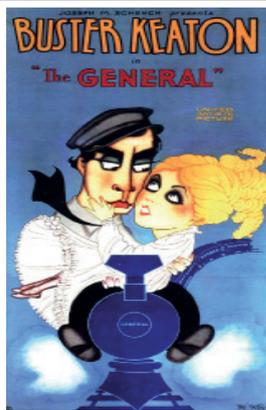
The General

Reviewed by Oliver Weir

Directed by: Clyde Bruckman; Buster Keaton

Year of Release: 1926

Starring: Buster Keaton; Marion Mack



The General is 7100 feet of Buster's finest film. Entering the public domain in 1954, it represents what is best about the silent era: testing the limits of a new art-form, with a healthy disregard for health and safety. The film follows Johnnie Gray (played by Keaton), a train engineer who, being ineligible for the Confederate army, decides to take matters into his own hands in a

bid to rescue his fiancée Annabelle Lee (Marion Mack) from a Union faction, and simultaneously thwart the advances of the Northern army. The film is all about the chase: Keaton on one train (the Texas), chasing the Union army on another (The General) (and later Keaton on The General, being chased by the Union army on the Texas!). If you think you've seen stunts before, think again. During filming: Buster was knocked out; a director was shot in the head with a blank; the wood-burning engines caused numerous fires; dams were erected; railroads were built; some poor sod had his foot run over and began legal action. For sheer spectacle, the train wreck scene is the most expensive single shot of the entire silent era at \$42,000 (the surrounding town declared a local holiday just to witness it). From the comfortable



"I was more proud of that picture than any I ever made" — Keaton

confines of the 21st century, I'd say the mayhem was all worth it: *The General* is a landmark in film history. It's been almost 100 years since it came out, and I do not doubt that its delights will persist for 100 more.



Scan to watch!

FOOD

How the UK let the Restaurant Industry Down

Zahra Abiola

Food Editor



Lockdown has become an incredibly controversial step which was taken in hopes of flattening the curve and saving lives. The high cost of this strategy was seen in the steep GDP fall in the second quarter of 2020 – worse than any other G7 country. Yet, this nosedive doesn't show the full picture. Not all industries were hit the same. It's obvious how the hospitality industry was going to be dealt a more damaging hand by the restriction due to the very nature of their work but the government's poor oversight was the nail to the coffin for many food businesses, forcing them to close up shop or stop serving in the UK.

In late March, Boris Johnson addressed the nation and embedded into our collective consciousness the costume changing slogan while mandating the closure of all non-essential shops – the beginning of lockdown. Yet, before this speech, he had already been addressing the nation, attempting to soothe the people of their fears and give the direction the so dearly sought. In these addresses, he struck the first blow. He ever so politely encouraged that people stay away from pubs and restaurants yet not instructing the businesses to close. Restaurants were put in their first uncomfortable situation. Overnight their clientele plummeted. Keeping their door open put them at a stark loss. Yet, because they would be closing their door of their own volition, they wouldn't be able to collect any insurance money to allow them to pay the fixed costs that would be piling on no matter their serving status.

Restaurants did what they could to mitigate for this before the lockdown started and some inventive projects and new normals were born that are showing staying power even as restrictions ease. They assured their customers that they would be taking all the precautions they could while handling

food. It's common to put one's life in their hands in mitigating for allergies after all. Quickly, you saw servers wearing mask and forcing people to use hand sanitiser before it became cool. Still the numbers were dwindling.

Once lockdown hit, they also found some inventive ways to build community, sharing recipes on Instagram and Facebook live. Restaurants and food stalls even found a way to bring your favourite dishes home with you outside of delivery. Meal kits became the food fad of lockdown. At a click of a button, you could have the restaurant quality ingredients from the places you were craving delivered to your door to make with your family once you became tired of banana bread. You quickly become a star chef (with the help of some very thorough instructions) to wow your family or entertain the household after the third New Girl binge by trying to make sense of the instruction together and all become line cooks trying to meet the demands of the dinner time rush.

At this point, things weren't ideal, but they were getting there.

Those that made it out of the other side of this trial by fire were coming back stronger than ever. Places were opening for delivery and were able to diversify their audience while spreading their reach. And it looked like things were really changing for the better once the Eat Out To Help Out Scheme was introduced. It sounded too good to be true. Half off all eat in meals up to a

£10 off per person. No voucher needed. As many times as you wanted from Monday to Wednesday all through August. All the restaurant had to do was sign up for the scheme and they could claim back the discount from the government so it could be used on conjunction with any deals they would be running themselves on those

day. Suddenly they could entice people to restaurants by offering them whole restaurant meals for little over the price of a Tesco meal deal. Everybody hopped on this wave. Even the bougiest restaurants in town like Novikov were getting involved because they had nothing to lose.

Or so they thought. In reality, the time frame of Monday to Wednesday of the deal meant that everyone would pack themselves like socially distanced sardines to any restaurant that would take them. After so long of people being out of work this was a logistical nightmare for owners. Restaurants aren't just about the food but also the service and if that faltered, their reputations would take a hit. They knew so many were using the scheme as a way to try out new restaurants. They need they had to ensure retention. In order to maintain quality, restaurants had to put more people on their payroll and work them to the bone to come out the other side of those three days a week. Yet they also had the problem of ghost towns for the rest of the week, now with too much staff and nothing to do with

Photo credits: Thought catalogue them. Outside of the scheme days, restaurant floors were so barren, you could see a tumbleweed rolling by if you squinted. This was not sustainable business.

A deal like EOTHO also meant that the perceived value of restaurant food fell in the public view. Let's be real, lockdown has taught us that are cooking skills aren't what we

may hype them up to be when left with no other options. At a restaurant, you pay for the experience, ease and quality. But with EOTHO, the line of thought quickly became why would someone pay full price for a meal at a restaurant when you know it can be gotten for £10 less. Many restaurants caved to this pressure. Fearing that their sales would plummet due to people not wanting to fork up the extra cash for something they were getting half off just a day ago, they extended eat out to help out into September. Some again in October. And this was all without Rishi's big pot of unlimited money but rather this already struggling businesses taking it on the chin themselves and paying the £10 out of pocket for each diner. Some just couldn't handle the heat. Even some world famous restaurants like Dominique Ansel Bakery had to close up shop after August because they knew that they couldn't keep doing business without the help of the scheme. No one was safe.

Yes, this scheme helped restaurants, but it wasn't just for their benefit or else the deal wouldn't have only applied to eating in. If take away was included, restaurants would not have to put their staff at risk to ensure they made a profit. The deal could have had more days. They could have even This was about getting people outside of their house where they would be using public transport, shopping and stimulating other sectors of the economy that were affected by everyone being shut in. So all the problems for the restaurants were acceptable if it meant that everyone else was getting this boost, leaving restaurants to pick up the pieces themselves once again.

“

EAT OUT TO HELP OUT WASN'T THE GOLDEN GOOSE MANY EXPECTED



“

THIS WAS A LOGISTICAL NIGHTMARE FOR OWNERS

Program review

The Battle of Sitcoms

Credits: Imgur/ Fox

Maegan Spiteri Television Writer

The genre of situational comedy, or sitcom, has been a well-loved one. And in light of recent events, we are in need of some laughter more so than ever. Whether you need something to remind you of what life used to be when you could visit your friend(s), a reason to procrastinate revision, or simply some background noise to keep the loneliness at bay while scrolling the internet, I present the battle of the sit-coms!

As a home student, I have a huge amount of pride for the great British telly, and while we have our own great sitcoms (read: *Outnumbered*, *The Office UK*, *The Inbetweeners* and *Plebs*), our expertise seems to lie more in the realms of drama. Don't get me wrong, drama series are great, but while the world is a dystopian horror reality, light and cheerful sitcoms are the way to go. More specifically, American sitcoms. Their endless seasons with more than 8 episodes, each make these shows perfect for a long-term binging commitment. But which one should you devote so, so many hours of your life to? Fear not, for I have the answer.

Between Netflix, Amazon Prime and Disney+, there are countless series to binge, but for the sake of crowning the best sitcom, let's consider the most popular four: *Brooklyn Nine Nine*, *Friends*, *How I Met Your Mother* and *The Office US*. Disclaimer: I have watched all these shows at least twice through each, so I feel pretty well informed, but these are just my opinions trying to help you pick your next binging obsession, so don't at me.

Firstly, let's talk about *Friends*. This is probably one of the most infamous American sitcoms ever. With 10 seasons and a total of 236 episodes, this will take over 3 ¼ days to binge. Set predominately in 90s, this show is great for reminiscing a simpler time of landlines and mom jeans, and for those in the earth science, Ross' palaeontology lectures count as revision, right? *Friends* is one of the best American sitcoms, however, taking it out of its contemporary context, some characters views be quite problematic. Despite the occasional fat-shaming and homophobia, the show is light-hearted and not too rough on your brain. Each episode is standalone and requires next to no concentration to enjoy. The characters are relatable which can be a downside if you get emotionally invested so take this as a warning: while stuck at home in lockdown, you will find yourself living vicariously because though your actual friends may not be able to, *Friends* will be there for you.

Next there's *How I Met Your Mother*. This is another hefty series with 9 seasons and 206 episodes to get stuck into, which will take you just short of 3 days to



complete. The show follows Ted Mosby telling his children the story of how he met their mother (obviously), and his life with his friends Robin, Marshall, Lily and Barney. These characters, though great, are less relatable and a bit more annoying. The episodes follow the general chronology of how Ted met Mrs Mosby, but again, each episode is quite standalone, perfect for when you've fallen asleep in front of the telly. *HIMYM* is a lot more about the journey than the destination. Without giving anything away, when you FINALLY get to the end, it's somewhat of a cop out. You've been on this whole roundabout for hours and hours, following all the characters' lives, for not much of a payoff. That's not to say each episode individually isn't enjoyable, but if you're watching it to find out who the mother is - don't, just google it instead.

Then there's *The Office US*. Based on the Ricky Gervais show in the UK of the same name (but better), the mockumentary follows the workers at Dunder Mifflin Paper Company. Another series with 9 seasons and 201 episodes means it will keep you busy for a while or a hardcore 67 hours. The characters are a lovable band of misfits, often winding each other up in the office, though due to the paper company setting, the episodes can have a bit of monotony which can make it difficult to consume in large quantities. Having said that, it is great way to turn your brain off and relax after a hard days work... or not.

Finally, there's *Brooklyn Nine Nine*, the youngest of the series and the only one still making new episodes. There are currently 7 seasons and a total of 143 episodes which gives it a reasonable viewing time of just under 2 days. From the writers that gave you *Parks and Recreation*, *Brooklyn Nine Nine* follows the detectives in

the 99th Precinct of the NYPD. The characters are the most diverse group of protagonists out of any sitcom, allowing the show to delicately address serious issues such as homophobia, sexual assault and racism, in such a way it doesn't compromise the comedy of the show or become 'preachy'. Despite being yet another workplace sitcom, each episode follows a different case as well as the long running relationships between the characters, giving it a more substantial plot and making it great to binge or to watch casually during a break. This is another show of relatable characters, who are genuinely funny so there needs to be another warning here about getting too emotionally invested, but at least they're still making more episodes so you don't have to feel that empty void for too long after watching it.

All of these shows are fab, and everyone has their own favourite, but if I had to crown a winner (I don't have to but I'm going to anyway), it would have to be *Brooklyn Nine Nine*. The police setting allows for loads of wild stories, the characters feel real and have their own strengths and flaws, making it more enjoyable all round to watch. The 99 work as a team and have a great sense of community which we may be missing in our own lives at the moment. If you're in need of a pick me up, this is the show for you.

Friends vs US Office vs Brooklyn 99 vs How I Met Your Mother

Trends we're falling for:

Autumn 2020

Marianne Gazet Fashion Writer

As we're all heading back to uni and the weather turns colder, we're back in fashion's best season for layering! Read below for a little overview of what pieces and styles will shine this season!

The Blazer is *still* there

This iconic piece has been around for several seasons, but it is still there and evolving with interesting additions and a twist! This season, they are seen oversized (of course) and belted, but also – and this is fresh and striking: cropped! Yes still oversized fit on the shoulders but cropped slightly above or at the waist! This cool twist, gives such an edgy and distinctive shape! Like the original blazer, it works well as a matching 2-piece suit, however you can also style it with high waisted jeans. This will emphasise nice pants and highlight your waist or even show a bit of tummy on warmer days!

Another hot trend incorporating the blazer is the 2-piece suit with a skirt. It has been seen a lot recently! Careful it is not a workwear pencil skirt, but a shorter and straight skirt, that can look like the extension of the blazer for a perfect preppy and stylish look.

Leather/faux leather in all shades

A lot of amazing leather pieces were seen on the runways, and many were not in the classic black! The brown palette tones like beige, caramel, maroon, rust are perfect for autumn! Trousers are an easy piece to

use for this trend, in a loose and straight cut, and work well with all other materials like knitwear and coats. Also, shirts made of lovely leather have been seen quite a lot, worn open as a second layer or closed as a top. PS: a shirt/ jacket is called a shacket (yes it is a thing apparently!). Long leather boots were seen in all shades, boldly overtaking the basic black. To conclude, the full leather look is welcomed and even encouraged. For the most daring of you, try in a sleeve-less jacket and bermuda or a full-length dress with boots.

(Make a) Statement collars

After the focus on sleeves in previous seasons, it is collar time. This season they are large, embroidered, asymmetric... This is seen in an array of materials (crisp white poplin, knit, leather, hint hint...) and the collar becomes the centre of attention of the look. It is a very work appropriate trend, on the more chic side, especially on a white shirt. If you're more of a casual style you can try the knitwear version, which is also much warmer for those chilly autumn days! The cardigan worn as a top was already a big trend last season, and it's still here this autumn, incorporating the collar addition or some frill detail!

Knitted vests

Seen everywhere since the autumn collections have been released from catwalks to high street brands, something I had seen creep-

ing last season is now fully entering the fashion scene: vests aka sleeve-less, but on jumpers. It gives a totally different look from the full sleeve ones, and it's perfect for layering! With a nice plain shirt for a monochrome combination (looking so chic and effortless in whites and creams) or with a trendy pattern to elevate that look with pieces that grab attention.

They can give you the full preppy look that we love! They are seen paired with wide legged trousers or cigarette pants. The only issue in this trend for me in our not so warm climate... is potentially getting cold arms? Oh well it's all for fashion, right?

Shoes: chunky boots!

Shoes wise, boots are always the star of the show in autumn/ winter. This year, they are flat, mid-rise, rounded boots with a thick sole! I think they look like a mix between combat boots and Chelsea boots. The original is by Bottega Veneta, but now many other brands have taken up the style and they will be everywhere this autumn. They are more versatile than combat boots as you can still use them in a chic look. You can style them beautifully with a girly baby doll dress to break the look or with a blazer dress and a mini bag (yes, as with the few previous seasons the tinier the better with bags!). Another way to style the boots, in a more rock or street style, is paired with boyish pants or jeans tucked into the boots, yes, we want to be bold and really elevate the looks this season.

Accessories:

Chain(ed to the trends)

Been loving this trend on runways since it arrived! The chains are big and gold and adorn everything from handbags to jackets to jumper collars and not forgetting jewellery. For a more chic and minimalist style, dainty little chains work and for a more daring and bolder look, a chunky chain will be the star of the outfit. My favourites were the Stella McCartney chain on handbag look and the Balmain oversized chain single earring.

Photo credits: Wikimedia and Creative Commons



OH WELL IT'S ALL FOR FASHION, RIGHT?



Why not go one step further? Pair leather and a blazer for a look that cries out sophistication and (not) subtly not giving a fuck

SOCKS

'Out of sight, out of mind'

Alex Taylor Fashion Writer

Socks, the most unobtrusive and most disregarded item of clothing. This simple piece of attire is oft hidden behind dastardly shoes and sly trousers. Kept out of sight and out of mind. Yet, these nylons play a most pivotal role in our everyday lives. Without socks how could we brave the world? How could we escape the chilly floors underfoot or the rough innards of our shoes?

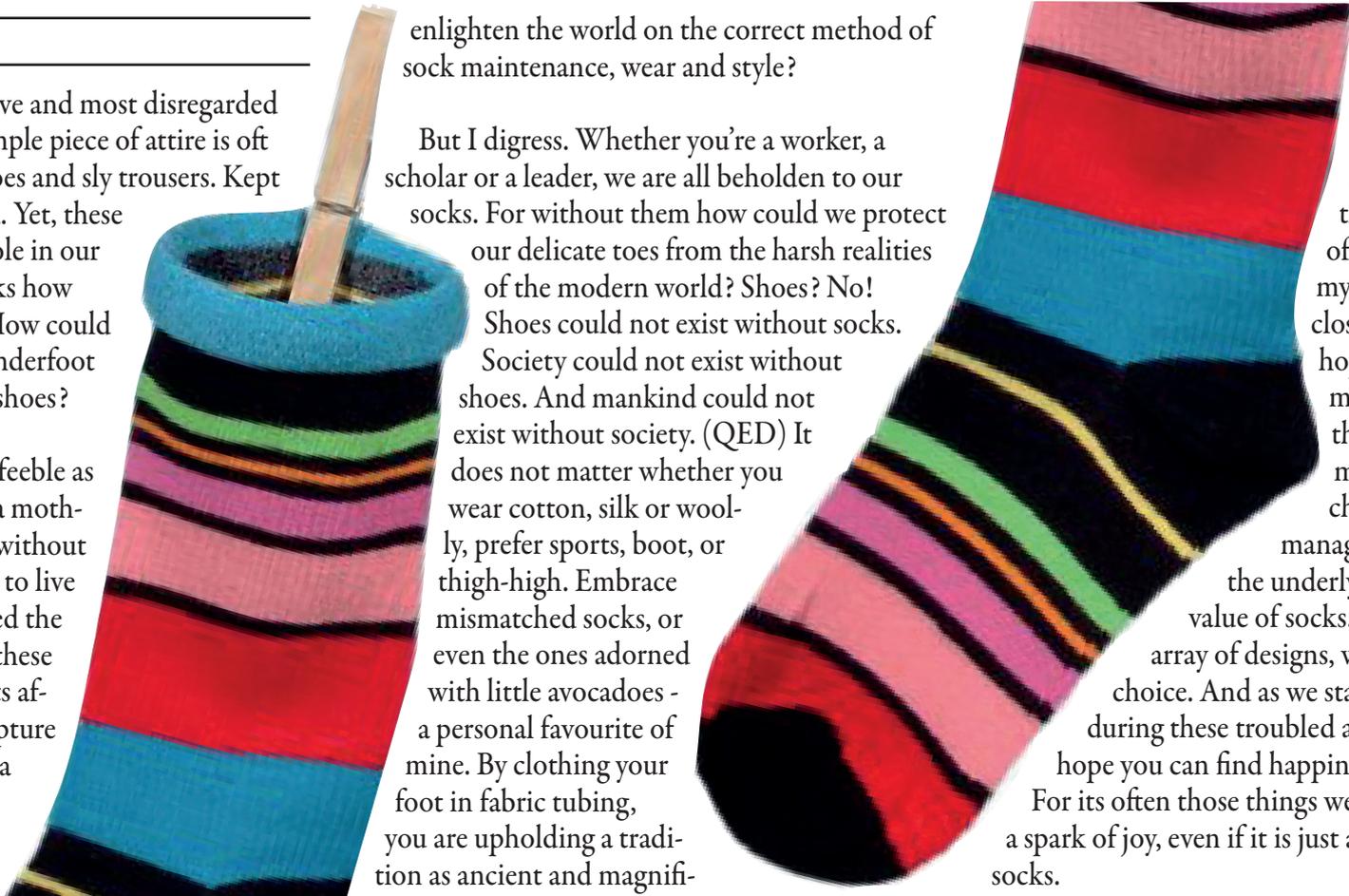
Bereft of socks we'd be as feeble as a wee babe, still coddled by a mother's embrace. We were born without them, but we shouldn't have to live like that! I myself was granted the gift of covering myself with these feet coverings mere moments after my birth. They say my rapture for socks at a young age was a clear sign that I was of a boy destined for greatness. Or perhaps, a boy destined to

enlighten the world on the correct method of sock maintenance, wear and style?

But I digress. Whether you're a worker, a scholar or a leader, we are all beholden to our socks. For without them how could we protect our delicate toes from the harsh realities of the modern world? Shoes? No! Shoes could not exist without socks. Society could not exist without shoes. And mankind could not exist without society. (QED) It does not matter whether you wear cotton, silk or woolly, prefer sports, boot, or thigh-high. Embrace mismatched socks, or even the ones adorned with little avocados - a personal favourite of mine. By clothing your foot in fabric tubing, you are upholding a tradition as ancient and magnifi-

Photo credits: Needpix cent as mankind.

And for this, I salute you, my Good Sirs, Madams and those that are neither of the two. But alas, my time here comes to a close. While I must go I hope that you remember me in each foot and in the warmth offered by my undergarment of choice. I pray you've managed to understand the underlying importance and value of socks. Not to mention the array of designs, we really are spoilt for choice. And as we stand strong together during these troubled and uncertain times, I hope you can find happiness in the small things. For its often those things we miss that can provide a spark of joy, even if it is just a simple pair of odd socks.



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Concise Crossword

| | | | | | | | | | | | | |
|----|--|----|--|----|----|---|--|----|----|----|--|----|
| 1 | | 2 | | | | 3 | | | | 4 | | 5 |
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| 6 | | | | | 7 | | | 8 | | | | |
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| 10 | | | | 11 | | | | | | | | |
| | | | | | | | | | | | | |
| 12 | | 13 | | | | | | 14 | | | | 15 |
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| 17 | | | | | | | | | | 18 | | |
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| 19 | | | | | | | | | 20 | | | |
| | | | | | | | | | | | | |
| 21 | | | | 22 | | | | | | | | |

ACROSS

- 1 The journey of a hero (9)
- 4 Church bench (3)
- 6 Payment for temporary ownership (4)
- 7 Not quite a break (8)
- 10 Opposite of trans (3)
- 11 Based on observation and experience (9)
- 12 Gets longer in the winter (5)
- 14 Extremely peaceful situation (often rural) (5)
- 17 The personified form of Britain (9)
- 18 Decay (3)
- 19 Unploughed land (8)
- 20 Fruit often used to flavour gin (4)
- 21 What you hit a golf ball off (3)
- 22 Having an appearance that is both male and female in appearance (9)

DOWN

- 1 All humans are originally _____ (7)
- 2 Second planet in the solar system (5)
- 3 Sour and hard fruit (6)
- 4 When a man has a fat stomach he is _____ (7)
- 5 Most important invention in history (5)
- 8 Big new Taylor Swift song (8)
- 9 Best thing at IKEA (8)
- 13 The part of meat you don't eat (7)
- 15 Picking names out of a hat is a _____ (7)
- 16 To straighten (6)
- 17 Opposite of sharp (5)
- 18 To bring people together for a cause (5)

Points Available

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

Your leaderboard will be here from next week!

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

Clue Writing Competition

Your word is OCTOBER!

Well done to Ed Rattner for his clue for SALAMANDER:
Little salt with morning article on red-backed animal (10)

Mild Sudoku

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 5 | | 4 | | 2 | | 6 |
| | | | 8 | 3 | | | | |
| 2 | | | | | 5 | 8 | 4 | 7 |
| | | 2 | | | 9 | | 5 | |
| 9 | 8 | | 1 | | 3 | | 2 | 4 |
| | 5 | | 2 | | | 7 | | |
| 6 | 4 | 8 | 5 | | | | | 9 |
| | | | | 8 | 4 | | | |
| 5 | | 1 | | 9 | | 4 | | |

Medium Sudoku

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | | | | | 5 | 8 | 2 | |
| | | | | 7 | | | 9 | |
| | | 1 | 8 | 4 | 6 | | | |
| 7 | | | | | | 6 | | 8 |
| 4 | 5 | | | 8 | | | 7 | 2 |
| 8 | | 2 | | | | | | 5 |
| | | | 1 | 2 | 9 | 4 | | |
| | 2 | | | 3 | | | | |
| 4 | 7 | 5 | | | | | | 1 |

Hot Sudoku

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|---|---|---|---|--|---|---|---|---|
| | 5 | | 6 | | 4 | 3 | | |
| | | 8 | 9 | | 1 | 4 | | |
| | | 6 | | | | | | |
| | 1 | | 3 | | | 2 | | |
| 3 | 5 | | | | | 7 | | 8 |
| | | 2 | | | 7 | | 3 | |
| | | | | | | 1 | | |
| | | 4 | 8 | | 9 | 6 | | |
| | | 7 | 1 | | 5 | | 4 | |

COVID-19's drastic impact on airlines

Riccardo Pierre Investment contributor

Airlines have felt the pain of the coronavirus more than other companies. Almost overnight, the bulk of their business ceased. But in mid-2020 there was at least hope that Covid might not be as virulent as first thought; that warmer months would bring some respite; that travel corridor agreements allowing passengers to fly between two countries without quarantine might not get people back in the air.

Now, almost eight months into the pandemic, with cities re-entering lockdown and likely vaccine months away, it's apparent there will be no quick comeback. International air traffic in July was 92% below 2019 levels, International Air Transport Association figures show. More than 400,000 airline jobs have been cut since February, according to data compiled by Bloomberg. People are not going to get back and travel as they did before until there's a vaccine that's been widely distributed.

British Airways CEO says the airline is "fighting for survival" and said it's restructuring or die. Airlines in the U.S. are expected to layoff thousands of additional workers when the coronavirus aid expired at the beginning of this month- with over 29,000 already laid off by United Air.

In Europe, a pickup in air traffic in July and August, as vacationers sought to escape monthlong lockdowns, has abruptly gone into reverse. Lufthansa is preparing for more in-depth job and

fleet cuts. According to IATA, 25 million jobs are at risk. More staff reductions are coming.

Losses in Asia-Pacific meanwhile seem small. That would indicate Asia may be on the cusp of a torrent of cuts. Government aid has helped, but there may not be more they can do.

Carriers in Europe alone received \$29 billion in aid, state-backed-loans, and other forms of support through Aug 27.

With airline stock prices plunging, attracting new investment is getting harder. Warren Buffet has completely exited his stakes. Richard Branson's Virgin Atlantic is undergoing a £1.2 billion rescue built around a loan from a hedge fund.

The pandemic is pushing airline Virgin Australia into the hands of private equity. In the U.S., Delta was able to raise 49 billion in the

industry's largest-ever debt sale. American airlines sold \$6.8 billion of debt in June. Aircraft is in a crisis of their own. A third of the world's 26,000 passenger jets remain grounded, packed in deserts or lined up in rows along the tarmac, aviation data provider Cirium says.

Fleet reductions are squeezing plane makers. Airbus re-

ceived only one order in August, and Boeing is fighting to stop cancellations of its 737 Max, which was grounded after two fatal crashes. Airlines are also seeking to defer previously ordered planes. Corporate travel may never recover as businesspeople everywhere realize they can close deals and get the job done over Zoom and from home even. Leisure travel is expected to spring back once there's an effective vaccine, but tourists will probably be more cautious. Jaunts to far-flung places where medical help is remote may hold less appeal.

Wizz Air Holdings relaunched services more aggressively than any other European carrier but has since hit the brakes, freezing capacity plans for the fourth quarter at current levels. Norwegian Air Shuttle ASA has dumped its signature model of low-cost transatlantic flights until at least next year.

After cutting planes, pilots, and crew, airlines are tearing into ground services such as baggage handling as well as fixed costs such as property. Qantas has said it might require shiftiest Australia-wide property review.

If you'd like to learn more about the financial markets or investing, join the Investment Society- it's free! You also check out www.stockclub.net

Market summary

1. The global coronavirus infections topped 32 million
2. Whitbread cut over 6,000 jobs
3. President Trump tested positive for coronavirus
4. Harvard suffered a 20% drop in undergraduate enrolment
5. HSBC's share prices dropped to the lowest levels in 25 years
6. Despite the majority of its parks reopening, Disney looks set to reduce its staff significantly.
7. JPMorgan Chase, agreed Tuesday to pay a record \$920 million to settle charges related to 'spoofing.'
8. The U.K.'s Covid-19 outbreak is not under control with hospitalizations and death rates rising
9. Joe Biden's chance of getting to the White House increased after the first debate, according to professional forecasters, who now see a 78% chance of victory for the Democratic presidential candidate

I am too embarrassed to ask... What is an investment bank?

An investment bank is a financial services company that acts as an intermediary in large and complex financial transactions. An investment bank is usually involved when a start-up company prepares for its launch of an initial public offering (IPO) and when a corporation merges with a competitor. It also has a role as a broker or financial adviser for large institutional clients such as pension funds.

Sachs, Morgan Stanley, Citigroup, Bank of America, Credit Suisse, and Deutsche Bank.

An investment bank can act as a financial advisor to large institutional investors; an investment bank may provide strategic advice

on a variety of financial matters, work in mergers and acquisitions by providing estimates of the value of a potential acquisition and negotiate a fair price for it, and provide research services on companies that institutional investors can use.

A guide to breaking into finance

Credits:Markus Spiske

Geoff Sang Investment editor

When it comes to finance, relevant university courses tend to be more quantitative than qualitative. Students hoping to work in financial services are required to develop some professional experience through exposure to the workplace, most importantly internships to build interpersonal skills as necessary. A job in financial services cannot be dissected to a set of specifics – and yet however, there are a few popular careers at an entry-level in the industry. These could be suggested to be accounting & advisory, investment banking, operations, compliance and the booming FinTech for which London is widely considered a quintessential hub. The careers are made available at firms split up into two sides of finance – buy-side and sell-side.

Within the financial market, buy-side refers to the side that buys and invests significant portions of securities in order to carry out portfolio management. Given that buy-side is revolved around purchasing huge chunks of securities at a time, the top tier managers tend to own hold an extensive deal of market power in the industry at hand.

The sell-side, in fact, has far more opportunities for aspiring young people entering the workforce armed with a degree in finance, or even STEM and liberal arts which have also well prepared students to break into finance, as we have witnessed in the past decade. This side is opposite of the buy-side given that it deals with the issuing, selling and trading of securities to the capital markets. Popular sell-side firms include Citibank and Goldman Sachs, the latter of which has led the ‘sell-side empowers the buy-side’ movement in recent years. However, what truly matters is the institutions allowing for integration of all trade cycle parts, so these terms are expected to dwindle in significance over time. How about the buy-side competitors?

Still, there are a number of firms which dominate buy-side activities in the financial services industry and these tend to be leading exchange-traded fund and mutual fund managers, including Vanguard, Fidelity and BlackRock, all of which have unsurprisingly bright



Welcome to financial services. This is your life

outlooks even through this challenging period, backed by unwavering optimism revolving around asset management.

Many of such investment management firms heavily depend risk management teams that lead protective efforts via both bottom-up and top-down strategies which allow for the identification of the 2 main categories of risk which are enterprise and fiduciary. From these, many entry level careers including financial modelling and quantitative analytics are available for graduates.

In addition to carrying out quantitative analysis to support a firm in managing its fiduciary and enterprise risks, risk management teams ensure that portfolio risks are consistent across mandates, reflect current investment themes within its strategies, and comply with client-specific risk guidelines. Developing analytics and standards for risk and performance measurement has become especially paramount in recent years so there has been a surge in demand jobs related to this.

During your time at university, an internship opportunity would certainly broaden your horizons and potentially propel you into your dream job in financial services. An insightful experience when handled correctly could set you up for success after graduation.

Some expectations to have going into a finance internship are things that students would be better off brainstorming when making applications. This way, interviewers will have an improved chance of seeing sincerity and passion during conversations.

When you spend a summer at some firm in the relevant industry, you would be applying the more technical skills learnt and developed at university, all whilst honing those essential soft skills to professionalism. Naturally, the internship will be centred around you bettering the way to handle professional duties such as analysis and team discussions. You will, however, also be spending lots of time trying to pick things up as there will be a very steep learning curve going in so making sure to consistently demonstrate eagerness to learn new concepts and ask relevant questions are imperative to apply and further increase knowledge.

Longer period internships are typically called industry placements which students sometimes do if their university course permits it, thereby allowing for these to be treated as credit for completion of the degree. These placements are an optimal way to develop skills in the professional environment, having that extended characteristic. In particular,

your employability will shoot up and you will obtain an international perspective. However, internships tend to be exclusive to those in their penultimate year of study. What if you still want to get ahead early in a cut-throat industry?

Spring Weeks are available for students going into their penultimate year, and are usually taken placement before Summer Term at university. The availability of such placements has permeated throughout the industry in the past couple of years, allowing for firms to identify an early batch of students. Thus, the program is treated as a pipeline for summer internship programs and in turn, for full-time roles. Even without intern to full-time conversion, you would have still enhanced networking skills and connected with people on LinkedIn so that it is possible to stay in touch with those who have similar career interests.

Fierce competitiveness in financial services at an entry-level is without doubt the norm in 2020 and with virus concerns and an expected economic bubble burst, this does not seem to be stagnating as we move further into the decade. With the right amount of ambition and resilience, incoming university graduates can face adversity and optimistically strive for an acceptable career.

Oat drinkers boycott Oatly

Natalia Glazman Sustainability writer

Back in July, Oatly, the oat milk company that's been popping up in every supermarket and coffee shop accepted a \$200 million investment from Blackstone, one of the biggest private equity firms in the world. Soon after, the climate activist @LessWasteLaura urged her twitter followers to boycott Oatly. She discovered that Blackstone funded a Brazilian infrastructure project which involved deforesting the Amazon rainforest. Frustrated, Laura claimed that she doesn't "want my money going to the destruction of the planet and putting people's lives and land at risk just so that I can have a creamy coffee in the morning!". The twitter thread went viral, and suddenly, Oatly was 'cancelled'.

It's true that Oatly's goal is to 'deliver products that have maximum nutritional value and minimal environmental impact'. Accepting this investment seems like the last thing a plant-based, sustainable company should be doing.

After all, aren't they putting money in the pockets of the evil Blackstone that's destroying our planet, one tree at a time?

What we must understand when we read stories like this, is that there's always a bigger picture when it comes to sustainability - it requires compromises.

By boycotting companies like Oatly, the only thing we're doing is holding back the progress of sustainable businesses.

Oatly could have found a different investor with a clean track record. But unfortunately, most prominent investors are linked in some way to projects that contribute to the destruction of our planet. It would've been an enormous challenge for Oatly to find an investment size sufficient to reach their large-scale goals, without an initial trade-off.

According to Oatly, the company

needed funding to meet its growing global demands. Using the money from Blackstone, as well as a \$200 million green deal bank loan, they're planning to build more factories in Asia, Europe and the US. The result of this will be that Oatly, a producer of the most environmentally friendly milk alter-

native, will be on more supermarket shelves than ever. Oat milk will be accessible to a broader audience, and every pint of dairy milk that is

replaced with oat milk is a step towards a smaller impact on our climate. Isn't this what we want?

Blackstone's decision to invest in Oatly also encourages and pressures both big and small investors to put their money into 'greener' projects (which is how Oatly justifies this decision in a statement on their website). This approach diverts these huge investments away from companies that don't view sustainability as a priority and sets a precedent for said companies to change this. Oatly's explanation sends exactly this message: "With global private equity working toward a green future, we actually have a chance of saving the planet for future generations". If financial institutions are to consider companies' environmental footprint in their investment decisions, we must start speaking their language: profit.

Of course, companies that claim to be sustainable should be held accountable for the decisions they make. I think if society accepted all the decisions that sustainable businesses made without question, we would be setting ourselves back in the fight against climate change. But to create real, long-term change, instead of immediately 'cancelling' businesses like Oatly, we must allow them to learn while growing- only this can show investors and corporations that sustainability is the future.

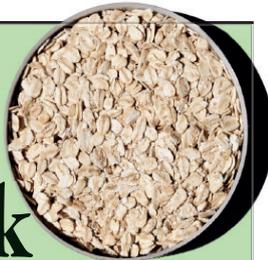
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THERE IS ALWAYS A BIGGER PICTURE WHEN IT COMES TO SUSTAINABILITY

LIVING SUSTAINABLY in the kitchen

How to make oat milk

Flora Dickie Sustainability Editor



In light of recent events many oat fanatics have lost hope in there being a truly sustainable oat milk option in the supermarket. Yes, that's right, in a capitalist world there is no such thing as ethical consumption. *Who would've thought?*

However, a way of reducing emissions related to the transport and production of putting oat milk in a carton is to make your own at home. The post-milk generation have decided to drop the drama and make their own

oat beverage seeing as the process is relatively simple and cheap. Here is our recipe that hopefully won't come out too slimy for you:

1. Blend together 3 cups of water and a pitted medjool date.

2. Add ½ cup of rolled oats to the mix and blend all together with a pinch of salt for 30 seconds (for a powerful blender). To make oat milk for a foamy latte add in a teaspoon of coconut oil to the mix.

3. Strain the mix through a fine sieve tapping the sides to let liquid through and careful not to push through with a spoon.

4. Use milk straight away or store in fridge for up to 4 days.

5. Don't over blend as this will cause it to go slimy. Don't heat up as it will thicken, less if you add in the coconut oil to make it suitable for coffee. Don't pre-soak oats because this will also make the milk drink a slimy texture.

Oatly should be held accountable

Alternative perspective

Flora Dickie Sustainability Editor

On the surface, the Oatly boycott appears as though the action is simply to 'cancel' the company. However, delving deeper into the conversations held between those in sustainability communities online we see how people feel like **this boycott is to keep the company to account to their commitment for climate and social justice and promise 'to be a good company'**. Oatly claims that they are the most ethical and environmentally friendly option of milk-type beverage. Therefore, these customers expected more from the company, but they would be willing to support Oatly again if they were to do a U-turn.

Oatly recently published their acceptance of investment from the private equity firm Blackstone, the part-owner of 2 Brazilian firms contributing to the destruction of the Amazon rainforest, responsible for the forced evictions of families after the 2008 economic crisis and with a CEO donating to the Trump administration. The boycotters are not just against the acceptance of money from such a firm which profits off exploitation and injustice, but also the fact that Oatly's customers will be creating profit for Blackstone through green business. **Plus, Blackstone is using this investment as an opportunity to greenwash their company.** Oatly could have chosen a better investor considering their efforts on sustainability reporting and marketing, but they have been forthcoming on the possibilities this investment gives them to grow and globalise the business. So, should we oat-drinkers boycott Oatly if we care so much for the future of the planet? We here at Felix sustainability are not going to tell you what to do. This is something you must figure out. Does Oatly align with your values? Maybe you would like to learn more about green capitalism and sustainability before you make that decision. Read our second page to learn.

SUSTAINABILITY

The worryingly warrow wustainability concept of many 'Green' Companies

Photo credits: Wikipedia/Oatly

Flora Dickie Sustainability Editor

The main reason for green companies accepting large investments is to scale-up and sell in more markets across the world. Yet, there is a strong consensus for the incompatibility of capitalist growth and sustainability. You could say the same for globalisation and sustainability. According to the scholar, Vandana Shiva, the development of the market can't solve the crisis as it creates it. Therefore, having goals such as dominating the global market show a lack of true care for the crises, we have put ourselves in. Instead of trying to dominate the world market, a more sustainable option would be to help support local collectives across the world and starting these where there is already demand.

Many green companies focus on environmental impact of production but evade the importance of social impact for sustainability. For example, Oatly's sustainability re-

on the local authorities having proper facilities and practices.

There is a lack of advanced recycling services across the globe and so a lot of packaging is not recycled and goes into landfill; in 2018, 16% of Oatly's cartons were recycled in the USA and 35% in the UK. The dependence on recycling in this way is not a circular business model, and the reliance on customers to recycle is not forward-thinking. Focusing on recycling sustains and bolsters the disposable culture driving ecological collapse. Plus, many authorities send their landfill abroad to MAPA (Most Affected People and Areas), places that were colonised and historically marginalised in the globe. Due to a variety of factors, one being structural adjustment policies, often these countries do not have the same capacity to recycle or process the enormous amount of waste shipped to them creating hazardous health risks for communities and environmental injustice.

Taking the word 'sustainability' to solely mean environmental footprint is a common but dangerous mistake to make. If production is not fully circular, it cannot be considered sustainable since waste is a modern human creation. Celine Semaan, the founder of the Slow Factory, says that sustainability shouldn't just be about making cleaner production, it must be about reducing consumption.

A hotly debated topic within sustainability communities online is the symbiosis of capitalism and sustainability. Marx's metabolic rift theory explains that capitalism disturbs the metabolic interaction between human beings and the planet on which they live, for example, large-scale industry impoverishes workers and large-scale agriculture

deteriorates the soil. For this reason, his writings describe the only lasting path to sustainability being the consideration of land as communal property. For-profit companies are required to act selfishly in the capitalist context so they cannot be depended upon to 'save the world', even if they are 'green'. Greening also only focuses on one

aspect of sustainability, leaving out ethics, social justice and circularity.

Since capitalism is inherently designed to destroy and extract from nature, there is no ethical consumption under capitalism,

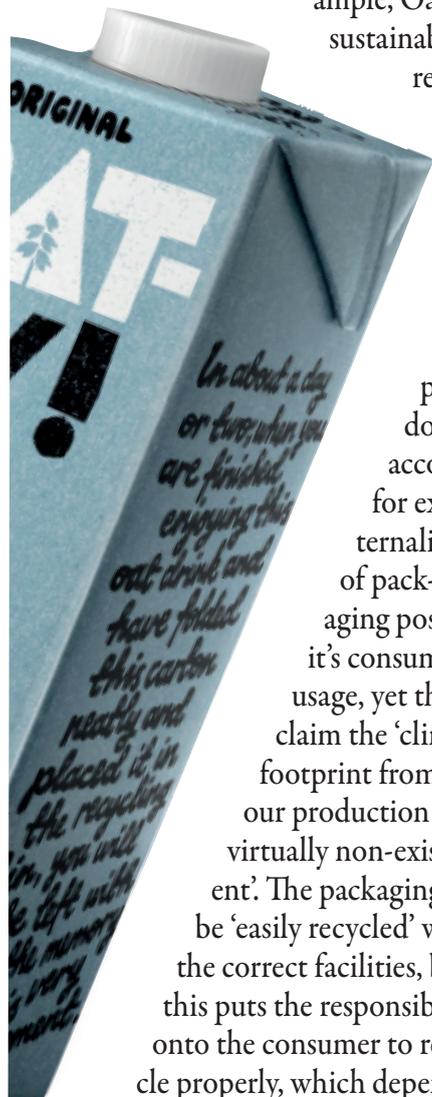
and some argue that reforming the system is not enough; instead we need re-design and re-construction. Therefore, green capitalism doesn't solve our current situation of ecological and climate breakdown. Power and greed characterise our system, so even in a greener context, there is still profit being made through exploitation and injustices.

It is worrying to see companies like

Oatly claim that our future can be saved by sustainable business and that we can trust green capitalist companies to be enough. The climate crisis is happening now; people are being affected right now, and these new flavours of capitalism, be it green or vegan will stop it. Green business models are often less harmful to the environment than traditional models, yet they are still rarely actually beneficial to the earth.

The ongoing dominance of individualism manifests itself in a focus upon green business and green growth. More radical changes and models should be adapted to reverse climate and stop ecological breakdown, such as shifting to a post-growth economic world with a major scaling down of resource and energy use in the Global North. Socio-economic relations will need to be radically transformed to heal the fissure between humans and nature. To release the exploitative burden off MAPA, we need collective shifting towards local food sourcing, regenerative systems and land reparations to allow for recovery of pillaged communities. In this way, the Global North may be able to re-learn the finite extent of resources and reconnect with local methods of production depending on the environmental conditions. Focusing on ecological growth instead of economic growth is needed for more equitable well-being and health of all organisms.

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GREENING ALSO ONLY FOCUSES ON ONE ASPECT OF SUSTAINABILITY, LEAVING OUT ETHICS, SOCIAL JUSTICE AND CIRCULARITY.



ports do not account for externalities of packaging post its consumer usage, yet they claim the 'climate footprint from our production is virtually non-existent'. The packaging can be 'easily recycled' with the correct facilities, but this puts the responsibility onto the consumer to recycle properly, which depends

This Week's Sustainability Inspiration

Monami Miyamoto Sustainability Editor

Podcast: The Sustainababble

Sustainababble is a fun, approachable and casual podcast run by Ol and Dave who babble on about topical sustainability issues. If you want to learn more about sustainability, but aren't so keen on brain-heavy, information loaded, serious talking, this podcast is perfect for you.



Amongst the banter, jokes and hilarious comments in between, this podcast not only makes you feel less alienated from becoming sustainable, but also inspires and uplifts you when it comes to making positive changes. Recently, they've been inviting many guests who are experts in the field and talk about all sorts of topics from eco-anxiety, electric vehicles, and even philosophical approaches to climate change. Give this podcast a try, I'm sure you'll find yourself grinning to yourself as you listen.



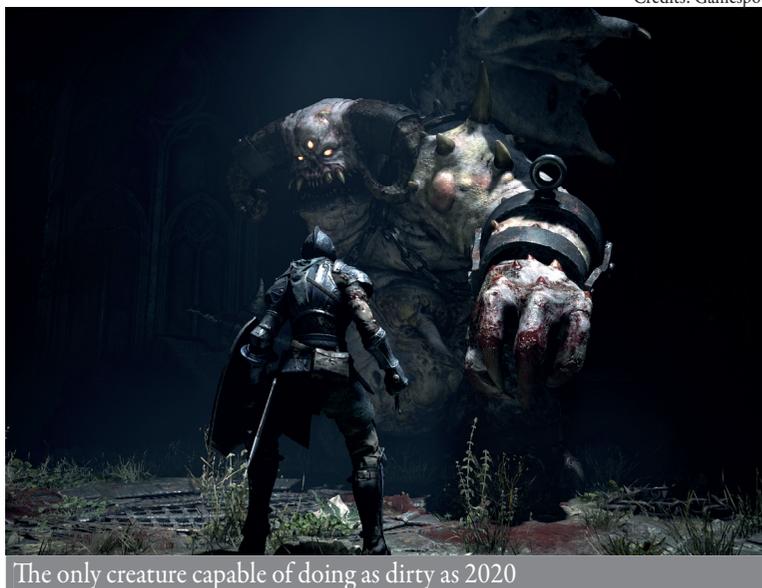
What Demon Souls Remake means for Souls Fans

Sam McKay Games Writer

Back in 2010 my brother introduced me to my first souls-like which just happened to be the first ever souls-like, Demon's Souls. It was punishing, especially for my juvenile mind. What sort of a psychopath makes a game which gets harder the more you fail? However, the first time I felt the warm squelch of the phalanx under the boots of my fluted armour, I knew why they'd done it and it was a masterpiece.

Ever since then, like a junky with a limitless overdraft, I've sought greater challenges to recapture the high that only Demon's Souls could give me. New game +7 on Dark Souls – the sun praises me. The Last of Us on grounded – baby food picked out of my teeth with a flick knife. Metro 2033 on Ranger Hardcore – you don't need ball bearings when you've got balls of steel.

Nothing has come close to recapturing the sense of achievement my 13-year-old self felt when I lulled the old one back to sleep. So you can imagine my excitement when Sony announced a Demon's Souls remaster at their PS5 reveal event. A wise Ubisoft script writer once said "Did I ever tell you what the definition of insanity is? Insanity is doing the exact... same fucking thing... over and over again expecting... shit to change..." what they didn't realise though is that I'm



The only creature capable of doing as dirty as 2020

not expecting shit to change – I'm an addict and that feeling I got from Demon's Souls is my drug.

But what does it mean for folk who never got the chance to play Demon's Souls the first time around? Well, for starters you'll get to see where one of the most popular and punishing franchises (and genres) started. Demon's Souls blend of show don't tell storytelling, challenging combat and sprinkling of Lovecraftian horror made it a joy to play and guarantees that if you can "git gud" (admittedly, not a trivial proposition) you'll have a great time. On top of that, you'll get to experience true hardship. Souls games are the only experience worse than living through an economic collapse, global pandemic and a race war simultaneously – once you've encountered your first archdemon you'll wonder why you

Credits: Gamespot

ever worried about the impacts of 2020 on

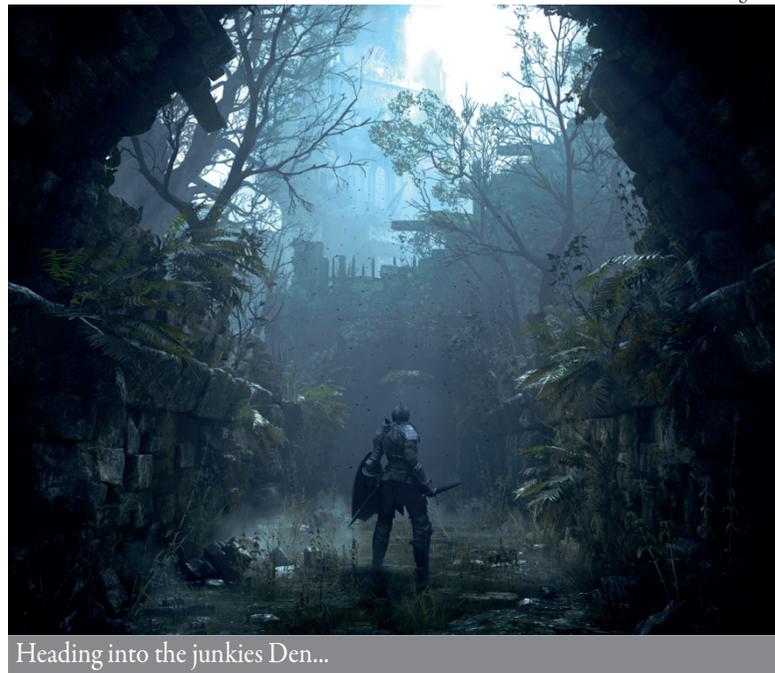
your career plans and future life prospects.

The most exciting element of the remake though is the potential for expansion on the original project. The PS3 release featured five distinctly themed levels accessed through five "Arch-stones" found

in the game's hub-world. There was however, a sixth. This stone has been desecrated in game – a memori-

al to the cut sixth world which still exists within the game's code. The stone would have provided access to the land of giants in the cold north. It is likely that

Credits: usgamer



Heading into the junkies Den...

this realm, its demons and their archdemon, may just make it into the remake of the game. Us veterans of the Soul's series are sustained by hope alone and the sixth Arch-stone has long been a source of sustenance.

Most importantly this remake gives the next generation of gamers the chance to play a diamond in the rough, polished to perfection, and to experience one of the greatest feelings in gaming. Approaching a challenge and getting kicked into the dirt over and over again until eventually, through sheer force of will and a bit of luck, you scrape past that challenge in the nick of time only to have to do it another 20 times. It's a bit like doing a degree at Imperial.

GAMING NEWS RELEASES

● Sega Game Gear Micro Releases.

The game gear has been shrunk even smaller than the gameboy micro from back in the day!

● **Xbox Series X Overheating.** While not making any noise, the console releases heat like crazy... leading to some testers burning themselves.

● Cyberpunk 2077 Goes gold

Pleasing fans of CD Projekt Red. After the announcement of them going into crunch, this is a welcome news drop

● **Minecraft Steve** is the newest addition to the Smash Bros. roster. Can it get any weirder than this?

NEW RELEASES

Remothered: Broken Porcelain
Stormind Games

Sequel to the Original Remothered game, this survival horror, adventure treat should be a great addition to the games to play this Spooktober.

Fifa 21

EA
Everyone and their mum knows Fifa. If you like football, check it out!

G.I. Joe: Operation Blackout

Game Mill Entertainment
Third person shooter based on the famous comic book/tv series.

Golf and socialising in the time of Covid

Jordan Fuller Contributor

Since Covid first made its appearance earlier in 2020, most of us have seen far fewer people than we're used to. Families have been at home for months. If you're a student, you may have been in your dorm room with your mates.

But as humans, we're sociable creatures. Even introverts need some socialisation, and many of us are desperate to get out of the house and do something (anything) with friends. If you're wondering what activity would be fun, challenging, and socially distanced enough to be safe, why not try golf? Here's why it would be a great way for students to socialise in the time of Covid.

If you're an avid golfer, you may have been playing at home or in your dorm room throughout lockdown. But if you think about it, golf is the perfect social distancing sport. There's no high-fiving and bum-slapping like there is in other sports. It's known as the gentlemen's

game (or gentlewomen's) and it's much more chilled with the physical contact. That's not to say there are no happy congratulations when one of you sinks a tough putt or gets an elusive hole-in-one. They're just more like an appreciative nod than a raucous team hug.

Golf is a leisurely sport that promotes health and fitness, gets you out in the fresh air, and allows you to do something enjoyable with a group of people whose company you like. To add to that, the relaxed nature of golf makes it one of the best sports to do with a mask on, if you feel the need for an extra layer of protection.

Despite the fact that golf is a one-man game, it's still a team sport in other ways. If you have a caddy, there's already a loyal partner in your game. If not,

you'll still be walking the course with some good friends. Some competition is part of the experience, but if you're playing a friendly game, you'll most likely be cheering each other on rather

than plotting to throw your bestie's game off. Then there's the 19th hole - the chance to catch up afterwards and chat about the game, the day, and whatever else you didn't get round to talking about

on the course. The 19th hole doesn't have to be in a bar or restaurant, either. If you can't have a pint in the clubhouse after a game due to Covid restrictions, you can have a Coke and a sandwich on a picnic blanket or someone's tailgate before heading home.

Are you a beginner who still needs to learn the difference between a driver

and a putter? Don't let that put you off getting out on the golf course. Here's another perfect opportunity to socialise - learn from someone whose skill level is greater than yours. If you're an advanced player, why not teach one of your friends the ins and outs of the game? Golf doesn't only have to be a socialising opportunity for those who've played before or have similar abilities. Why not get a bunch of friends together and learn or teach your way through a game? It's still getting out in the fresh air, doing some exercise, and getting some valuable social time together.

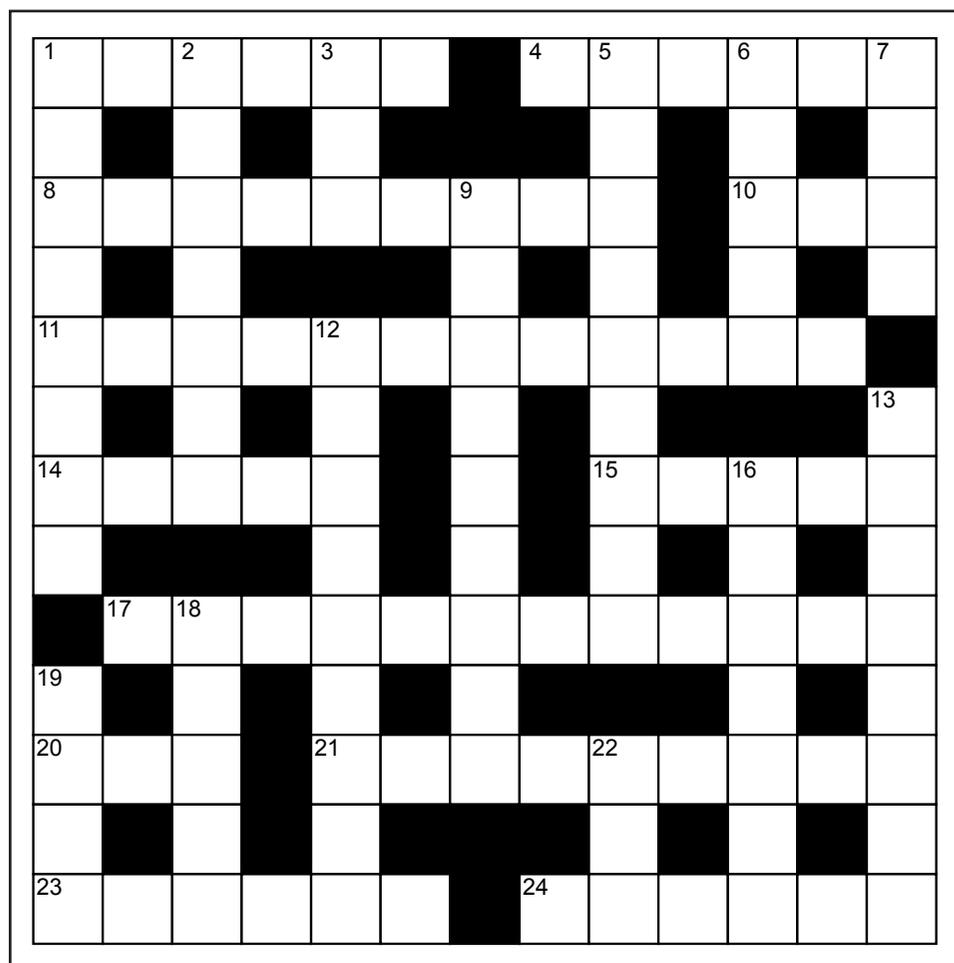
Golf is a super way for students to get out of their dorm room and socialise with some friends they haven't seen in a while. It's the perfect social distancing sport, while improving health, keeping the brain sharp, and being just good fun all at the same time.

If you want to get involved with the club, you can reach them at golf.club@imperial.ac.uk

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MANY OF US ARE DESPERATE TO GET OUT OF THE HOUSE AND DO SOMETHING

Felix Cryptic Crossword No. 2

Serendip



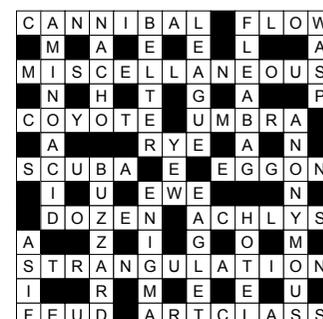
Across

- 1 Brit's fanny pack second-rate by graduate angle uncovered (6)
- 3 Retreat dropping butt of cigar product (3)
- 4 Commercial break without anchor (6)
- 5 By implication, a place of support and recreation (3,6)
- 8 Crash plough into heath by mistake at end of day (3,3,3)
- 6 I rank 50% above man with tattoos (5)
- 10 Weep over European losing consciousness (3)
- 7 Prickly pear but you can poke it? (4)
- 11 When in Rome, how to get on with crazy dudes full of vim and vino? (5,7)
- 9 The public 'ooh' about Greek character head over heels with two students on Love Island (3,6)
- 14 Trees trimmed short (5)
- 12 Sort of a sport, etc? (9)
- 15 Fish batter whisked up without drop of beer (5)
- 13 What Jaguars use to see small bumps in the road? (4,4)
- 17 He escapes Tiree hillsides before winding up at one of these? (12)
- 16 To get stiff, a great many substitute love with brief lovebite (7)
- 20 Get treatment here for schizophrenia? - At beginning, middle and end (3)
- 18 Unfitting way in which Ptolemy kicks off? (5)
- 21 Attempt feebly in audition every Monday, Wednesday and Friday, maybe? (9)
- 19 Some about in Helsinki? (4)
- 23 Coerce wrongdoing by old flame (6)
- 22 Head from decapitated King (3)
- 24 Planet - Saturn - first in universe for time travelling (6)

Down

- 1 Is that man Atlas, perhaps? No, another Titan! (8)
- 2 He charges cattle prod at Amish shelters in revolution (7)

Last week's solution



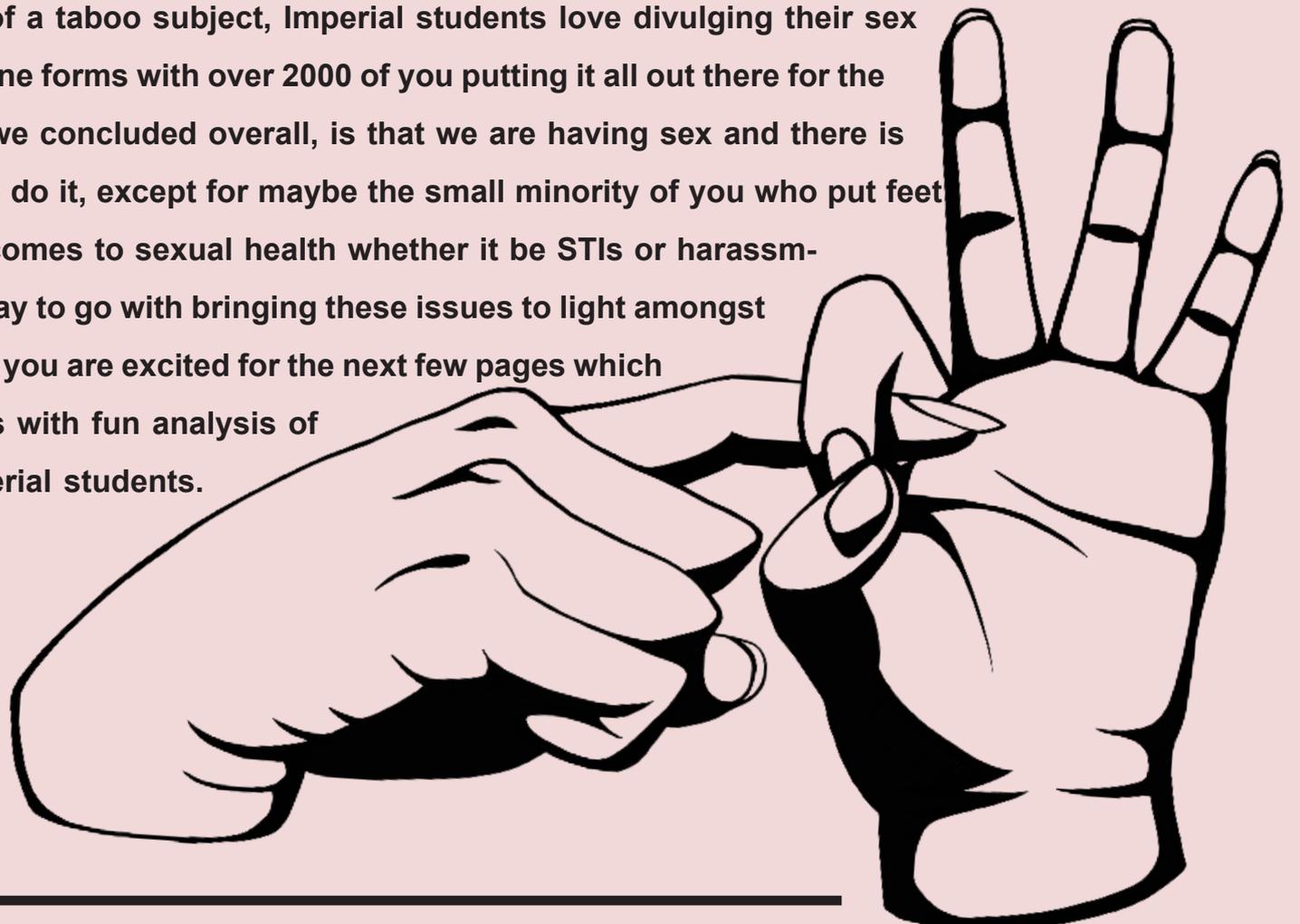
Enjoy solving cryptics? Head over to Page 43 for more puzzles and the chance to enter our clue writing competition and be featured in next week's issue.

the FELIX 2020 SEX SURVEY



What is this thing?

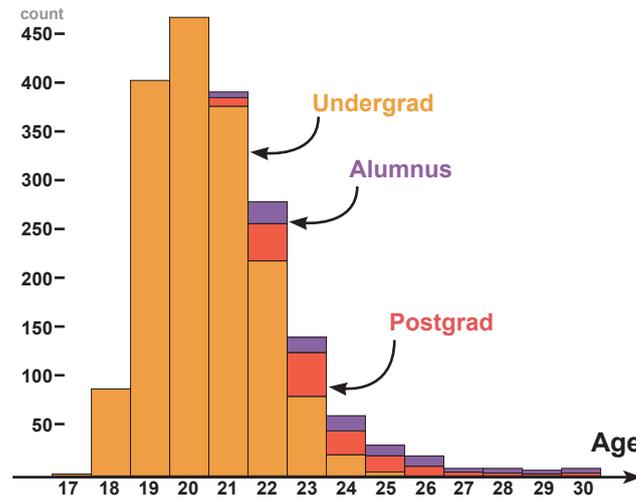
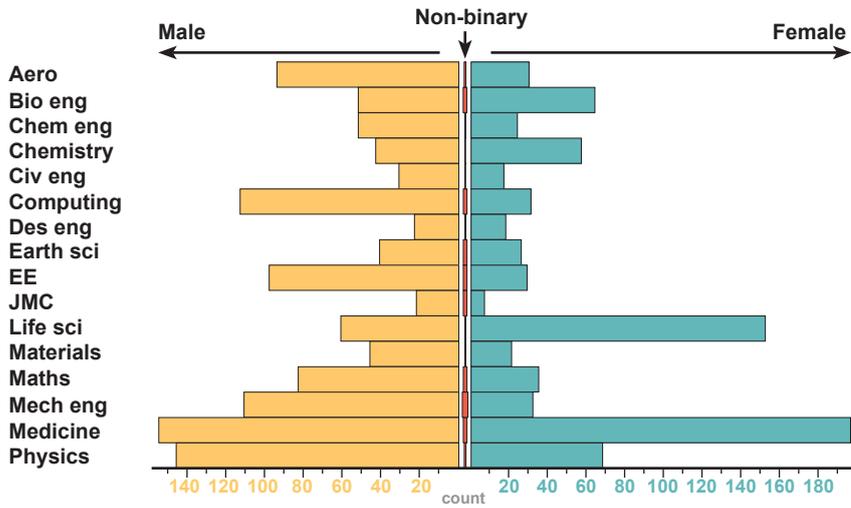
Our intention this year was to do more graphs and properly visualize the data while cross comparing different categories. We did not want you to have to read much as we know you are all too busy hanging out with your 6 closest friends in the pub until 10 pm. Despite sex being a bit of a taboo subject, Imperial students love divulging their sex lives on anonymous online forms with over 2000 of you putting it all out there for the Felix team to see. What we concluded overall, is that we are having sex and there is no right or wrong way to do it, except for maybe the small minority of you who put feet stuff as a kink. When it comes to sexual health whether it be STIs or harassment, there is still some way to go with bringing these issues to light amongst our community. We hope you are excited for the next few pages which are busting at the seams with fun analysis of the sex lives of the Imperial students.



Created by:
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Eamon Akil Farhat
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Miles Gulliford

Illustrated by:
Lisha Zhong
Theo Lupu

WHO TOOK THE SURVEY



Over 2000 people took the survey this year! We broke down the basic demography of our survey respondents by looking at department, gender, age, and status.

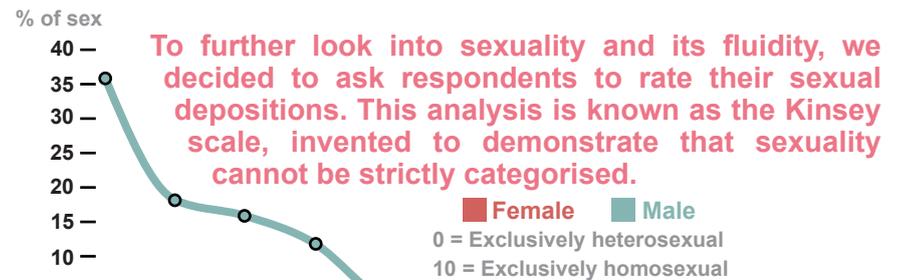
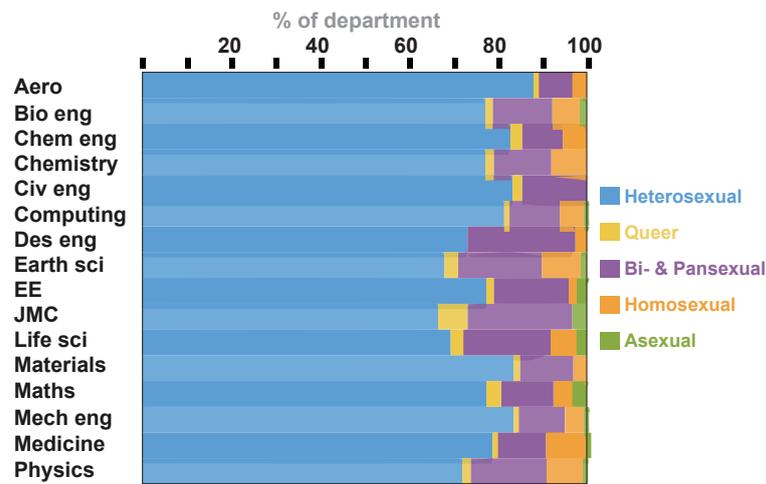
Females make up 40% of respondents, which is a slightly optimistic representation of the actual Imperial gender ratio.

Our data is most representative of Undergrad life - possibly because our advertising didn't reach as many Postgrads/Alumni, but probably because they also have better things to do than fill out a sex survey.

WHO LOVES WHO

21% of respondents overall identify as non-heterosexual. This is much higher than the rate reported by the National Office of Statistics, who found in 2017 that 2.0% of the UK population identify as lesbian/gay/bisexual, and 4.2% of those aged 16-24.

Interestingly, Felix Sex Surveys over the past 5 years have all reported that around 20% of respondents are not straight.



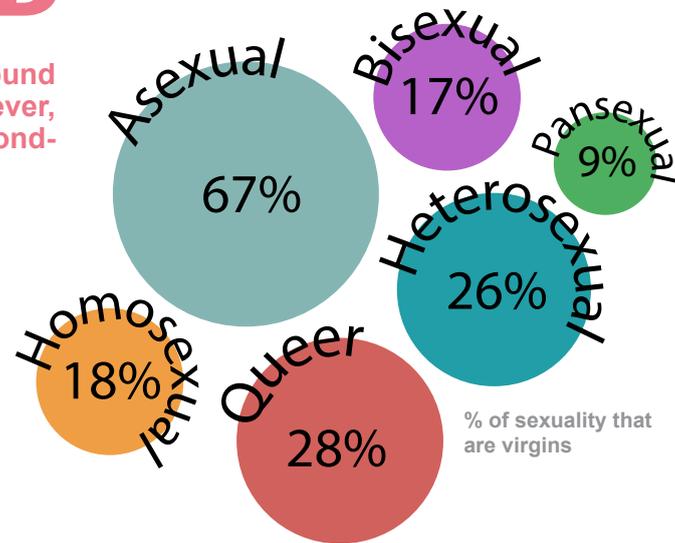
To further look into sexuality and its fluidity, we decided to ask respondents to rate their sexual dispositions. This analysis is known as the Kinsey scale, invented to demonstrate that sexuality cannot be strictly categorised.

We now see a higher proportion of respondents who aren't 100% heterosexual. A 2015 YouGov analysis found 56% of those aged 18-24 in the UK were not 100% heterosexual.

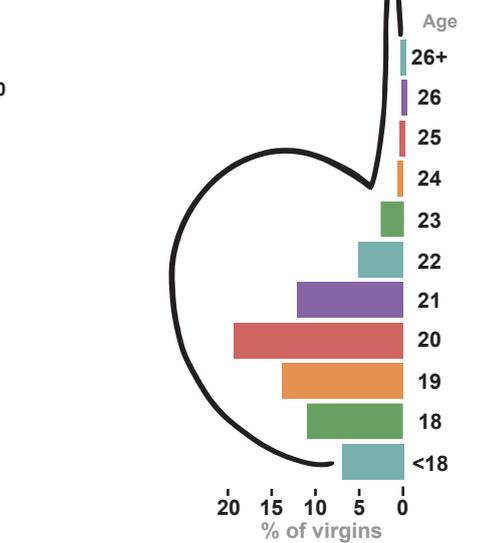
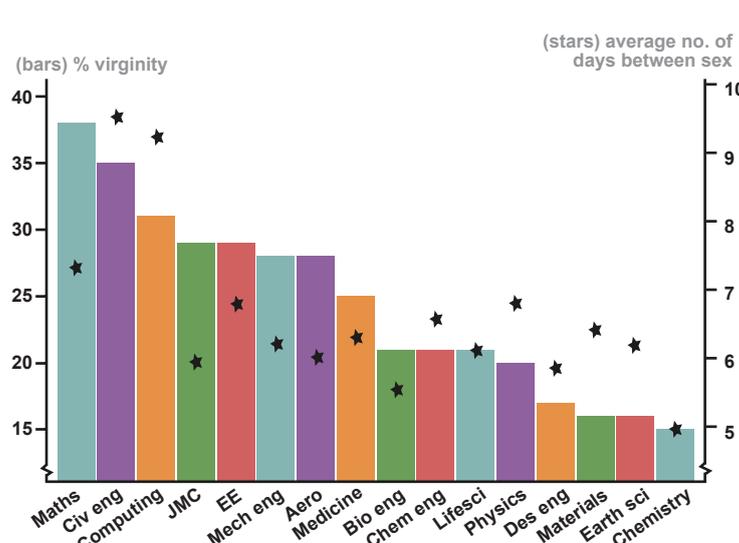
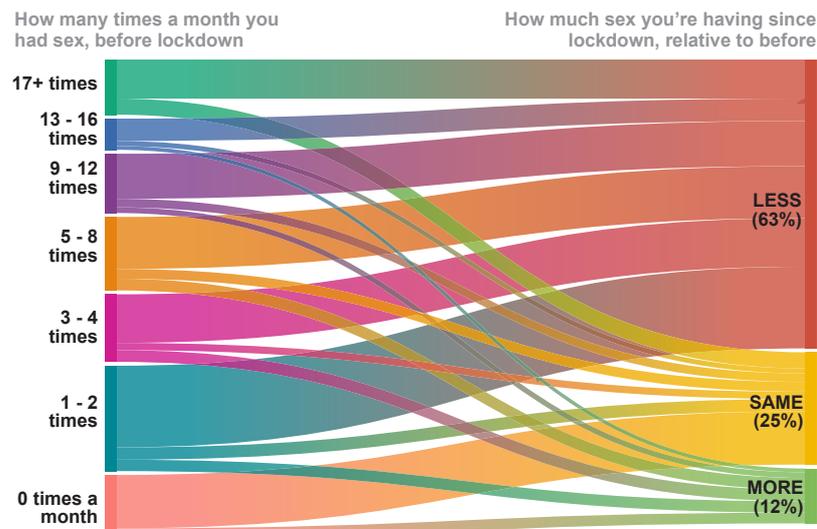
WHO'S GETTING LAID

Compared to Felix Sex Survey data from previous years, we found that relatively high percentage of respondents are virgins. However, the dataset we gathered this year had the largest number of respondents by far (up to 150% larger than some years!).

24.67% of respondents are virgins
 21.67% of women are virgins
 26.44% of men are virgins

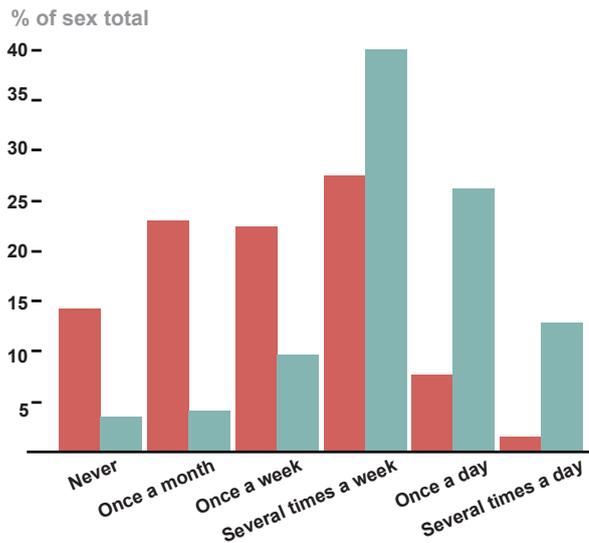


How much sex is everyone having?



How often do people...

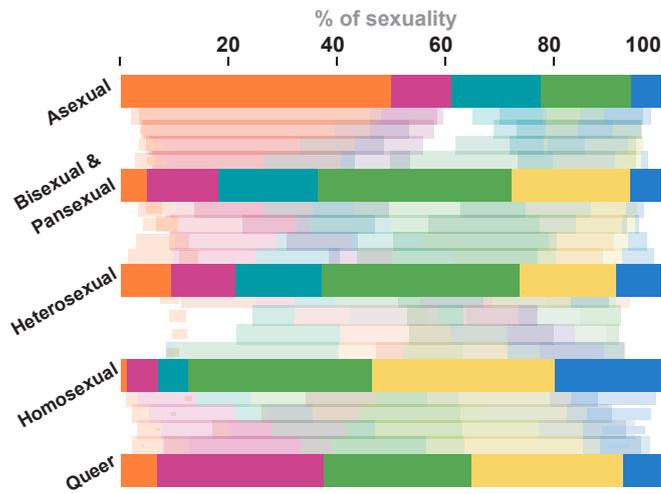
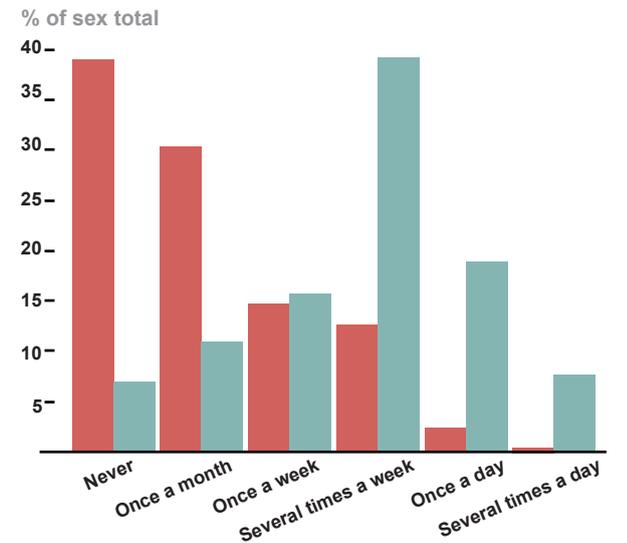
MASTURBATE?



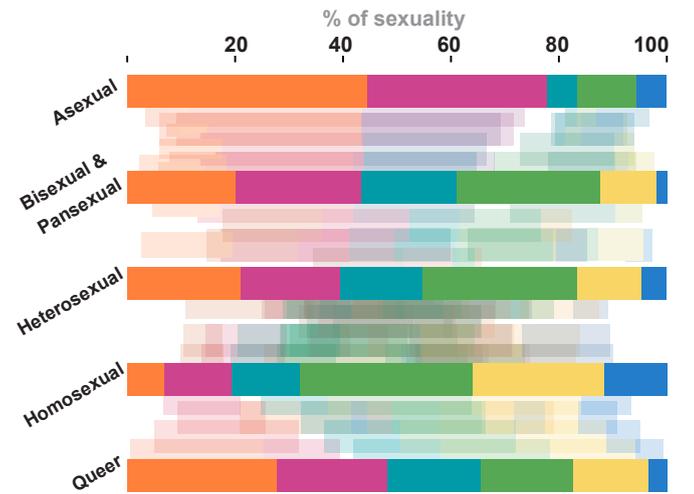
Interestingly, there are significant differences in masturbation and porn frequencies when broken down by sex.

Females tend to masturbate and watch porn significantly less than males. This is in line with many scientific studies which observed that females have lower sex drives or experience sexual desire less frequently than males. However, many of these studies do not consider the various psychological and contextual factors that may influence sex drive, and neither have we.

WATCH PORN?

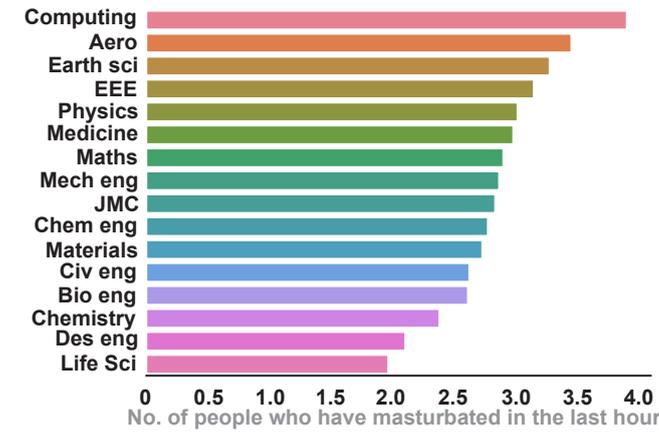


When it comes to watching porn and masturbating in the LGBTQ+ community, there are some clear trends. First of all, asexuals by far are the least likely to do any of this which makes sense as asexuality is defined as the experiencing little to no sexual attraction. Amongst the rest, of the community, the habits are quite similar to straight people with the slight exception of homosexuals who watch more porn and masturbate more.

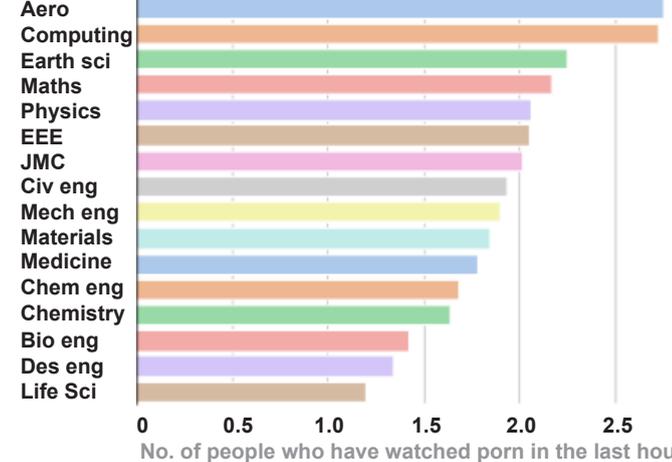


Virgins are 2.48 times more likely to never masturbate
6.08% of non-virgins never masturbate
15.05% of virgins never masturbate

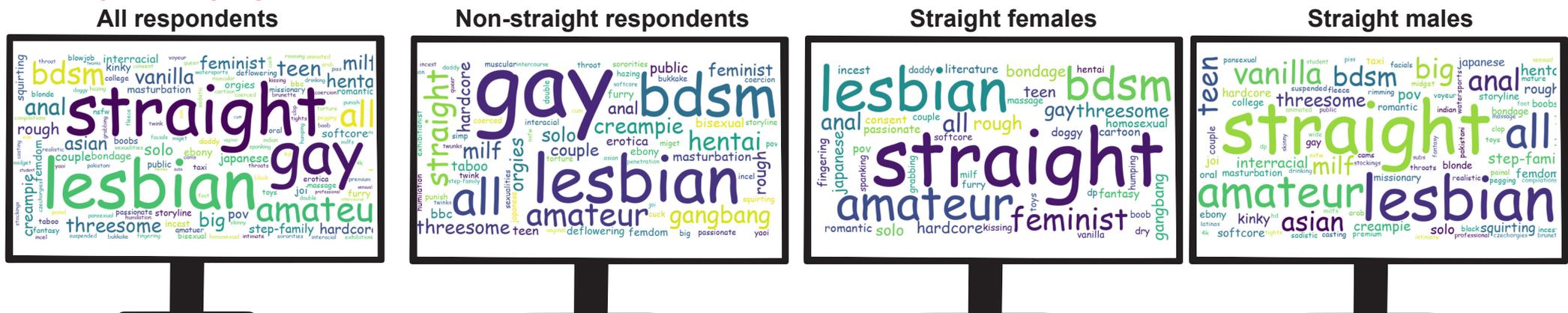
Virgins are 37% more likely to never watch porn
18.52% of non-virgins never watch porn
25.46% of virgins never watch porn



When it comes to watching porn and masturbation, aero and computing are the champions! These champions often had masturbated within the last hour, and while Felix does not know when each respondent answered this survey and thus cannot know if the deed was done between lectures or whether reading Felix is their masturbation routine at home, it does recommend a heavy dose of hand sanitizer after shaking hands with them. On the other extreme are the life sciences students, watching almost half the porn and masturbated almost half as much as aero and computing. Results were normalised for department size (of course) so this could be down to the gender differences across these courses.

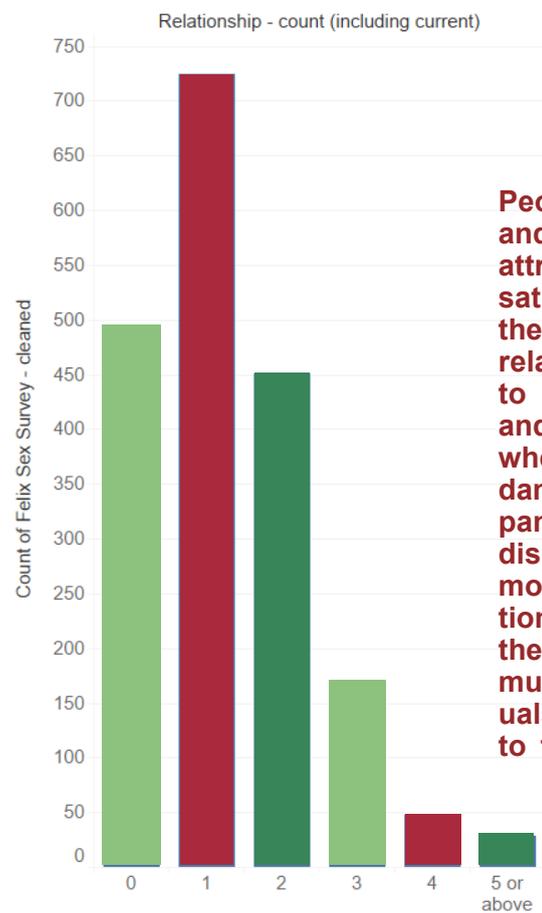


What porn do people watch?



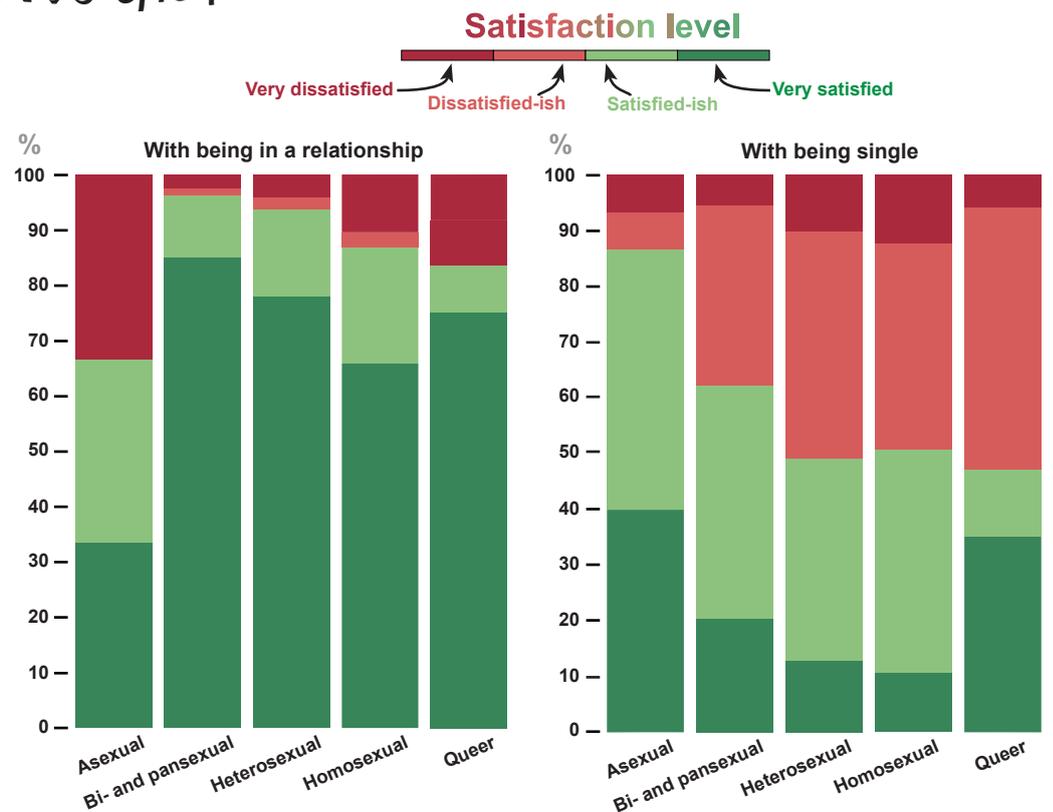
RELATIONSHIPS

Count of past relationships



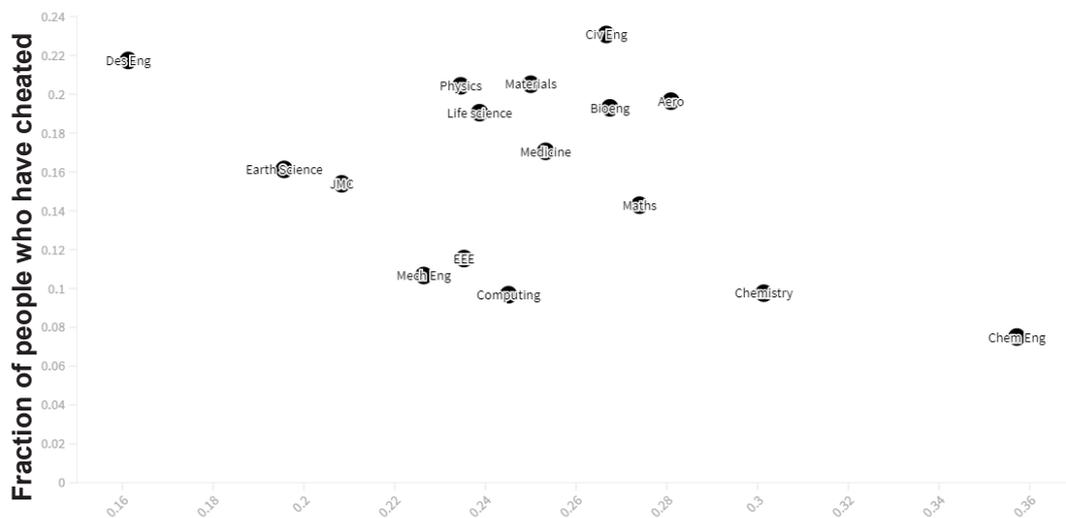
People who identify as asexual and experiences little to no sexual attraction are the most likely to be satisfied with being single and yet the least satisfied with being in a relationship. This is probably down to their partner not being asexual and thus a huge dilemma occurring when it comes to having sex. Despite damaging stereotypes about bi and pan people being dissatisfied and disloyal, they were in fact by far the most satisfied with being in a relationship, around twice as much as the breeders. Overall, there was not much difference between heterosexuals and homosexuals when it came to these categories of satisfaction.

49.95% of respondents are not in a serious relationship
 42.91% of respondents are in a serious relationship
 7.14% of respondents are in something inbetween

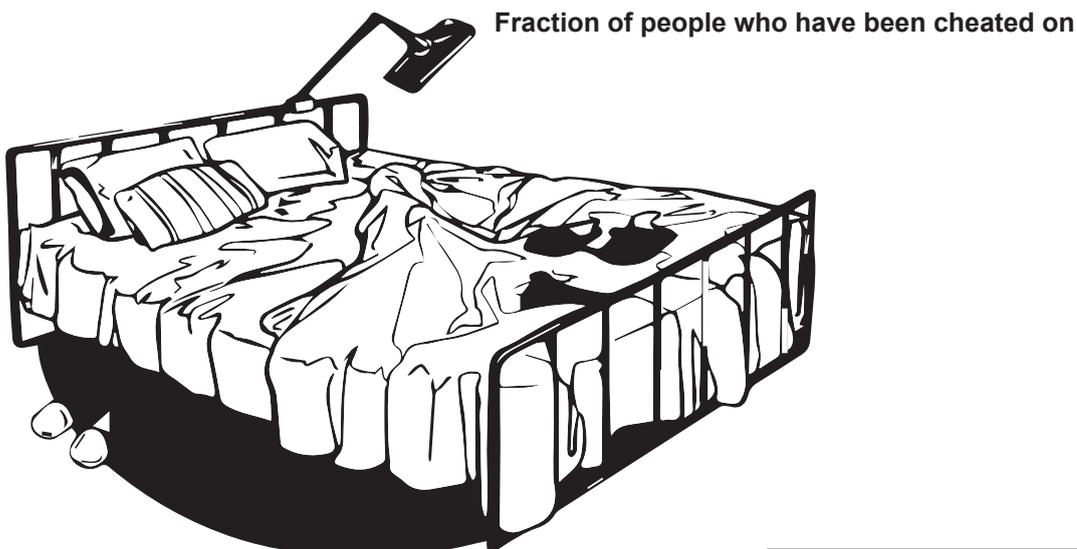
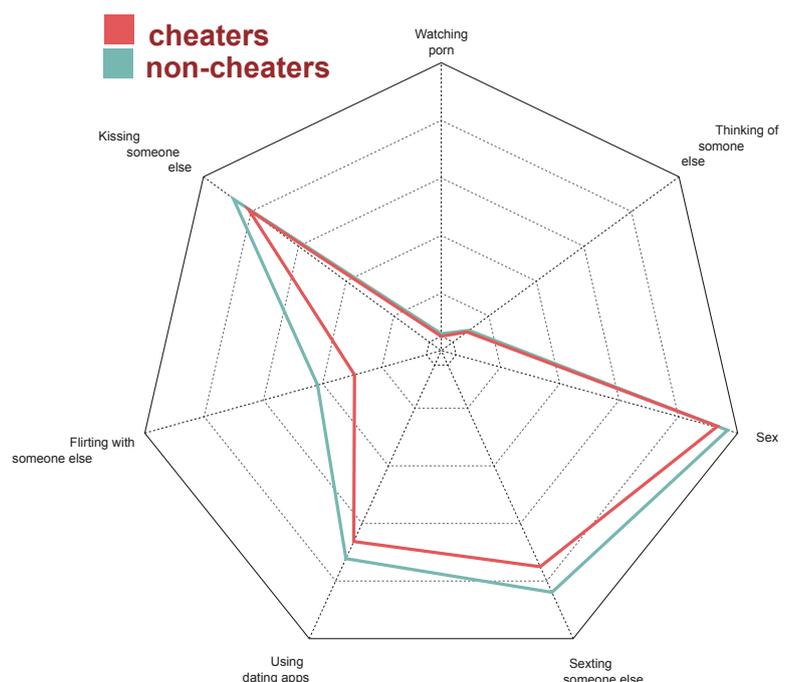


CHEATING

DesEng and ChemEng are the two extremes when it comes to infidelity in relationships. ChemEng are the most likely to be cheated on while they themselves are also the least likely to cheat! DesEng on the other hand are the least likely to have been cheated on and second only to CivEng when it comes to being loyal to a partner.



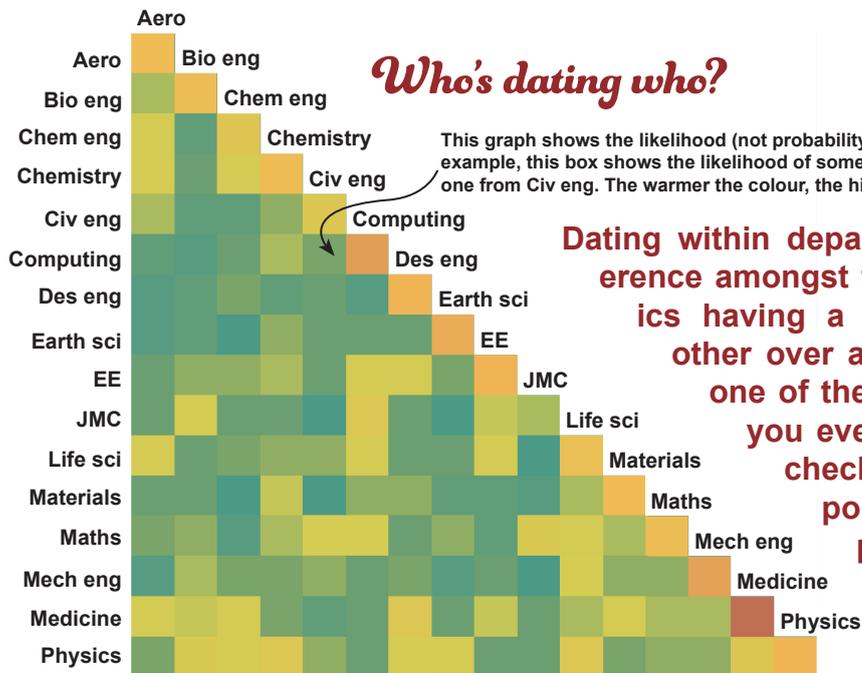
The age old question of what counts as cheating was posed to the student body. Unsurprisingly, people who had cheated before were a little more relaxed with the rules. The biggest disagreement between the cheaters and the non-cheaters is when it comes to flirting with someone with cheaters less likely to say this is cheating. Similar disagreements were found for using data apps, sexting someone else and even sex which amazingly is seen as some as not being a form of cheating. Despite open relationships being more and more common, there is still a small contingency of people in monogamous relationships who believed having sex was not cheating, mind boggling.



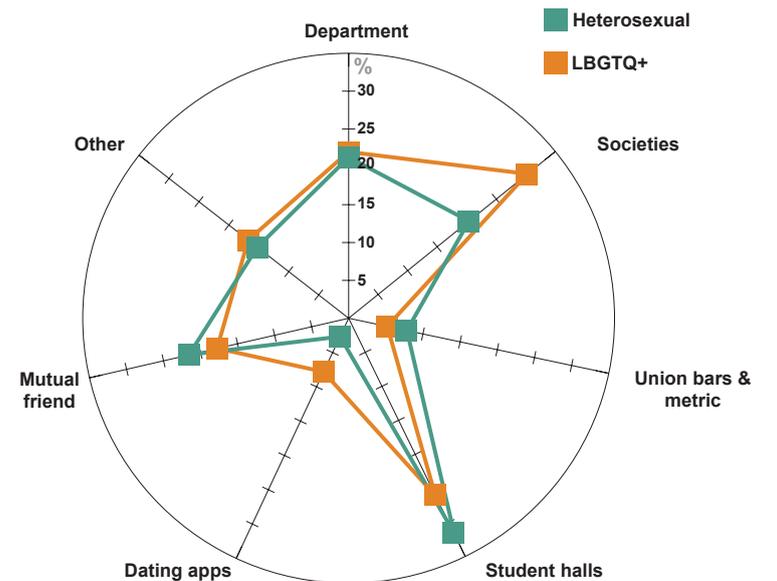
RELATIONSHIPS @ IMPERIAL

66.30% of those currently in a relationship have one with someone who is/was at Imperial

Students in relationships at Imperial meet in various ways but student halls really seems the place to find that special someone. Dating apps are by far the least likely way of finding a bae with slightly more luck being afforded to LGBTQ+ respondents. These same LGBTQ+ respondents were also much more likely to meet at society events, maybe due to the success of IQ, the Imperial Queer society, at fostering a sense of community.



Dating within departments is clearly the preference amongst the student body with medics having a particular interest in each other over any other course. If you are one of the 66.3% of people who have you ever dated anyone at Imperial, check to see if your pairing is a popular one or you and your partner explored new territory together.

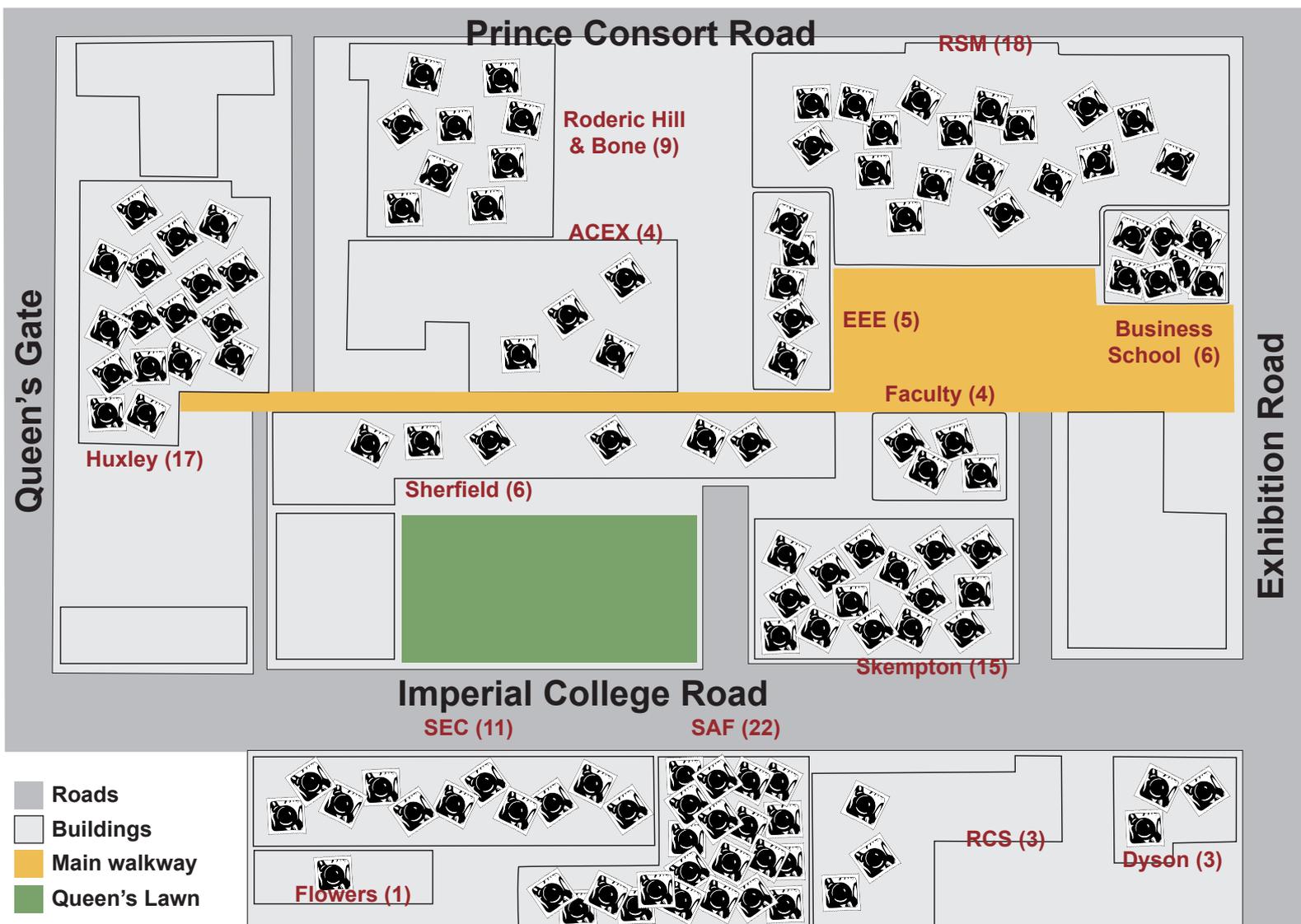
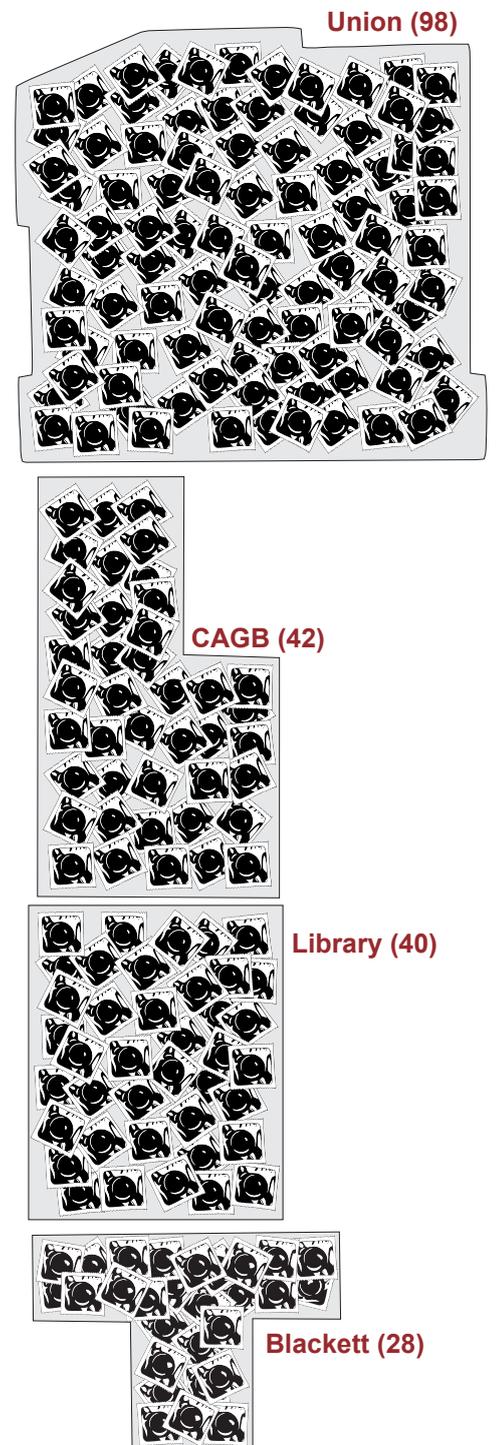


SEX ON CAMPUS

Almost a quarter of Aero respondents claim to have had sex on campus, the most out of all departments. This is nearly triple the percentage of Materials respondents who have had campus sex, which is the least out of all departments. There is no indication of how likely a department is to have had sex on campus.

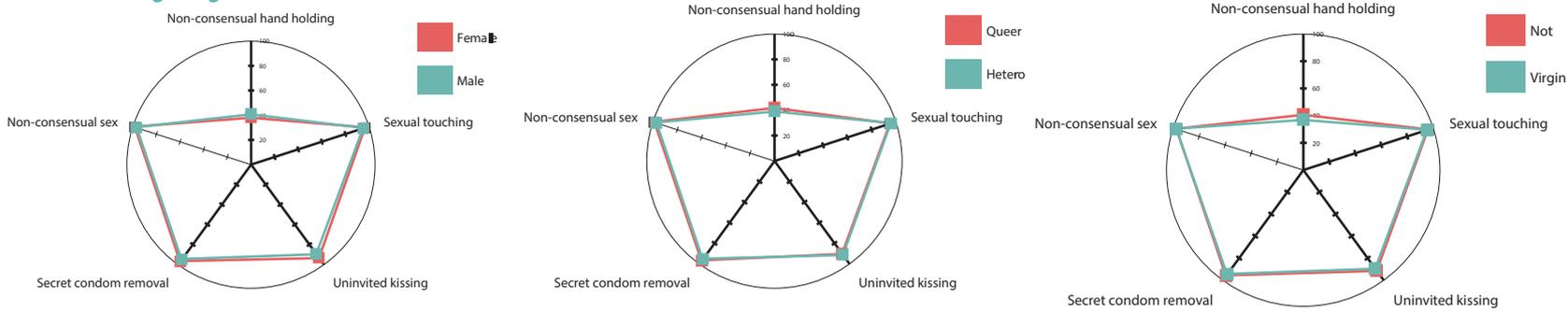


No. of condoms in a building = No. of people who have had sex there



SEXUAL HARASSMENT

How do people define it?



There was general agreement across different demographics about the types of actions which qualify as sexual harassment. It is possible that more discrepancies could be found, for example between male and female respondents, had more subtle forms of sexual harassment, such as catcalling and unwelcome compliments from colleagues, been included

Only 8.88% of sexual harassment cases on campus are reported

Have you been sexually harassed on campus?

| | Male | Female | Non-binary |
|----------------|-------|--------|------------|
| Once | 2.42% | 11.08% | 6.67% |
| Multiple times | 1.07% | 6.84% | 6.67% |

Reading about sexual harassment in the news over the last few years has been shocking for many but even more shocking is that this isn't just happening to people in the entertainment industry but also to students attending Imperial. Two out of every 15 females has been sexually harassed once, with one of those saying it has happened multiple times. Males are much less likely to be sexually harassed, around 5 times less. Despite a low number of non-binary respondents, one shocking result was that all the non-binary people who had been sexually harassed reported it happening multiple times.

SAFE SEX

By a slim majority, the preference of Imperial students is to never get an STI test. Despite the stereotype, this is not because the majority are not having sex which means a large percentage of people are having frequent sex without getting a test. There is still a lot of shame surrounding STIs which may explain this figure but as most of these infections are easily curable and not serious unless left undetected, it makes sense for everyone to get tested.

51.45% of respondents have never been tested for STIs

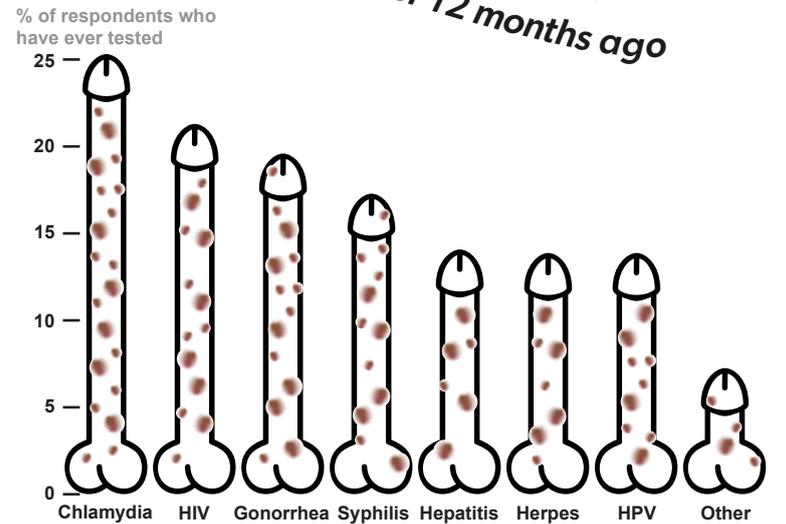
19.88% of respondents have been tested in the last 6 months

14.82% of respondents have been tested in the last 12 months

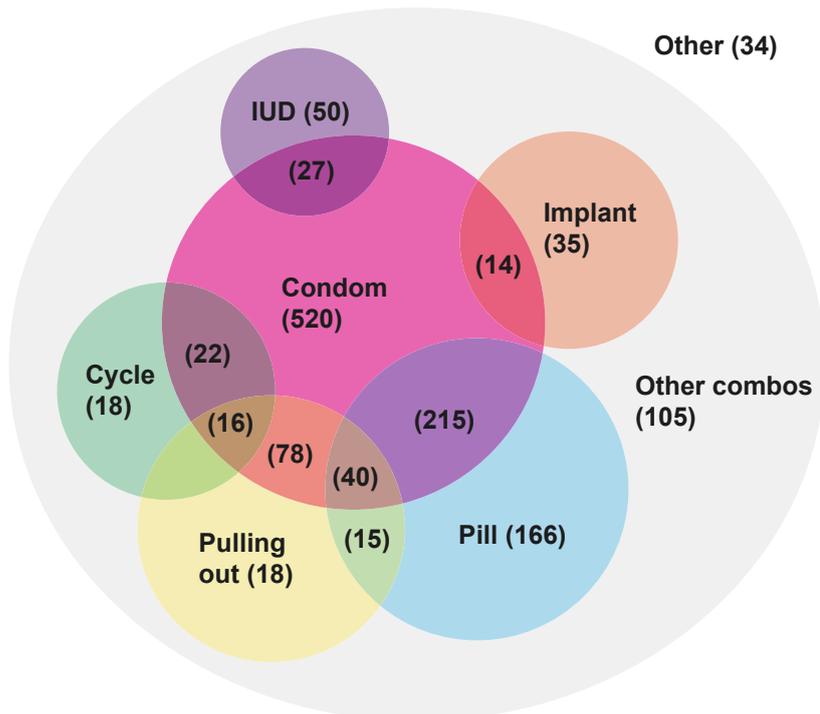
13.85% of respondents mostly recently tested over 12 months ago

Chlamydia seems to be the most common STI to be tested for, almost double than for other diseases like HPV, Hepatitis and Herpes.

Getting tested has never been easier with Sexual Health London offering free, discreet and convenient home testing kits (before Covid made it cool) for a wide range of STIs. Check out www.shl.uk for more.



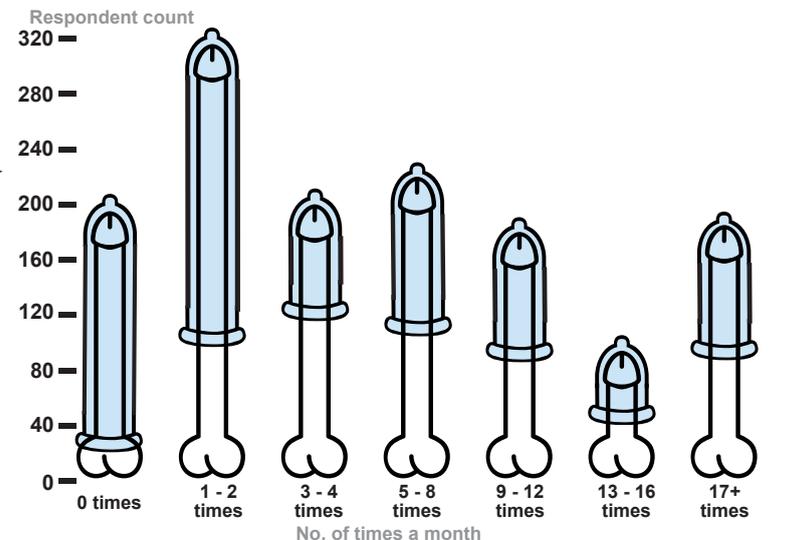
What contraception do people use?



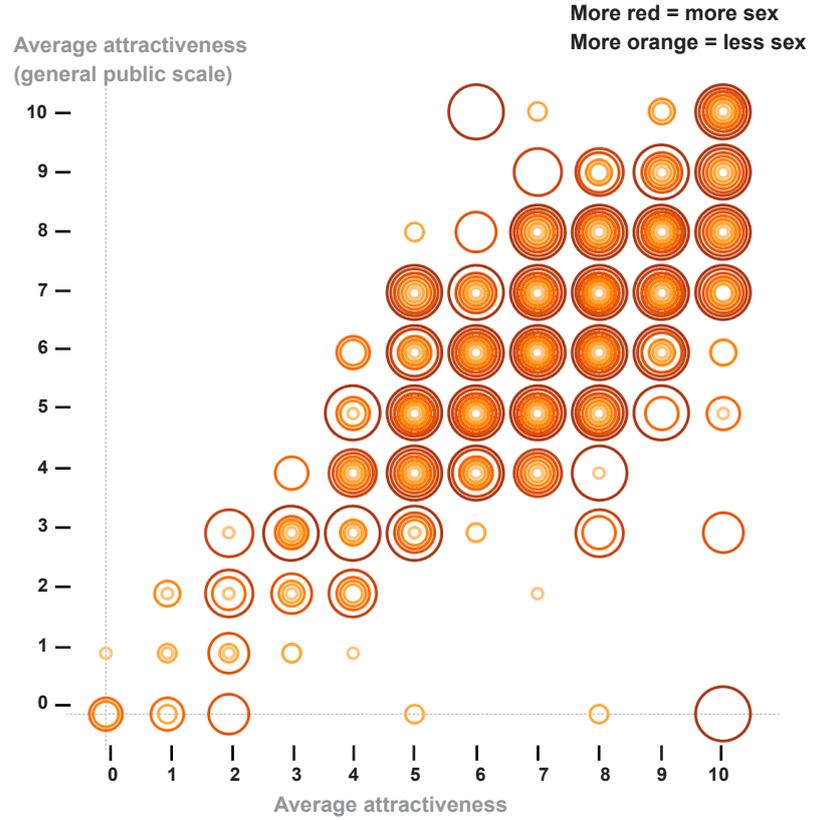
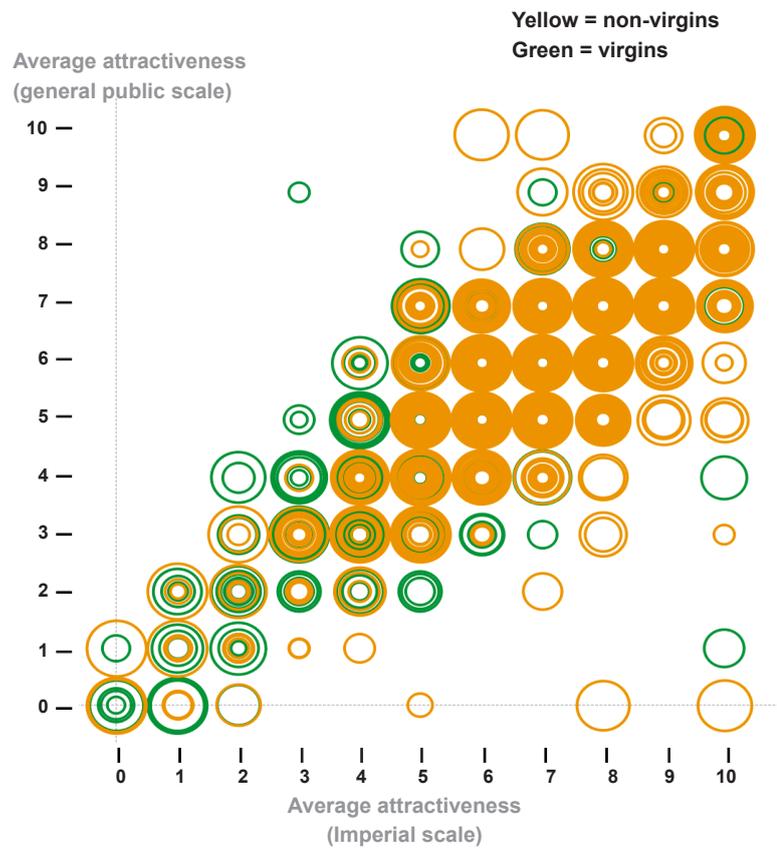
How to read this graph

Uncovered by condom = amount of total sex per month
Covered by condom = amount of safe sex per month

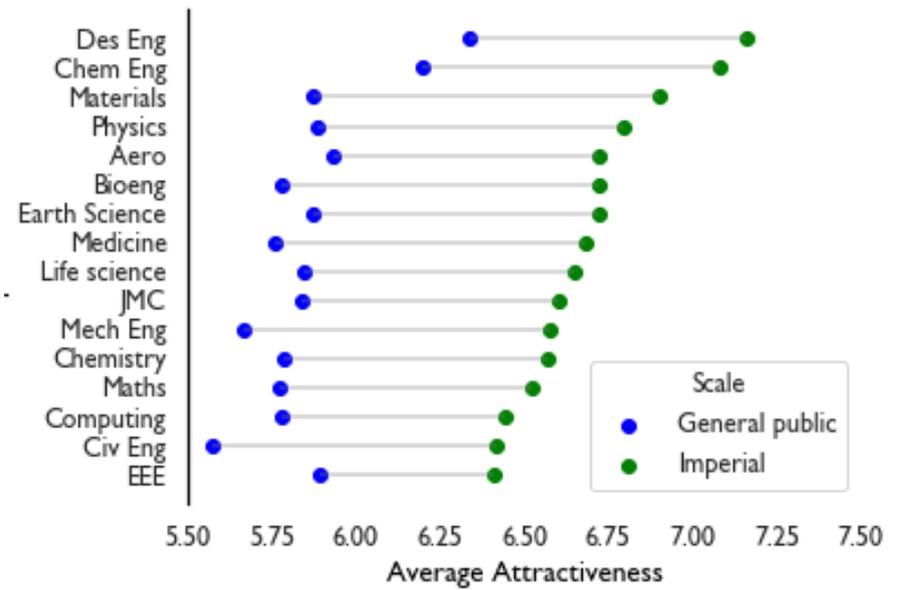
e.g. 320 people have sex 1-2 times a month, and around 100 people have unprotected sex 1-2 times a month



SELF ESTEEM



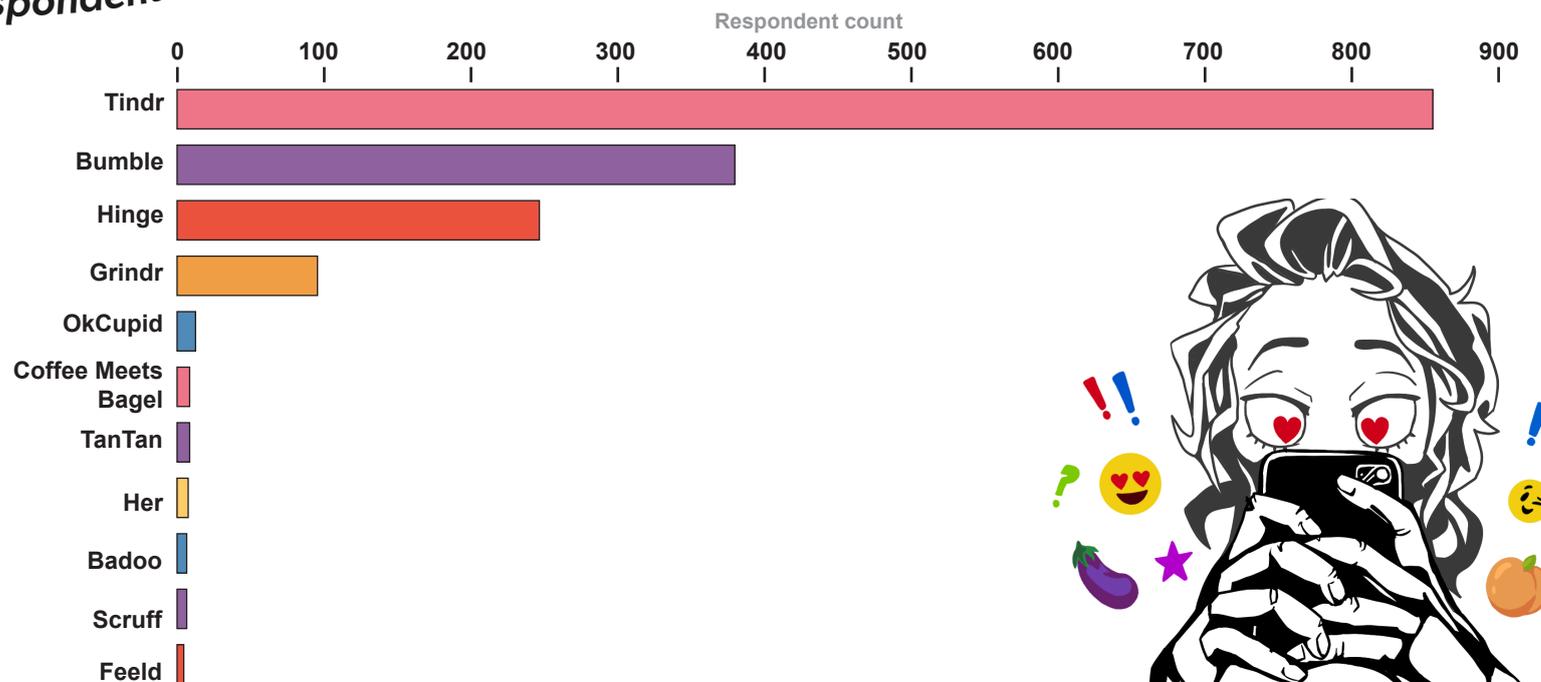
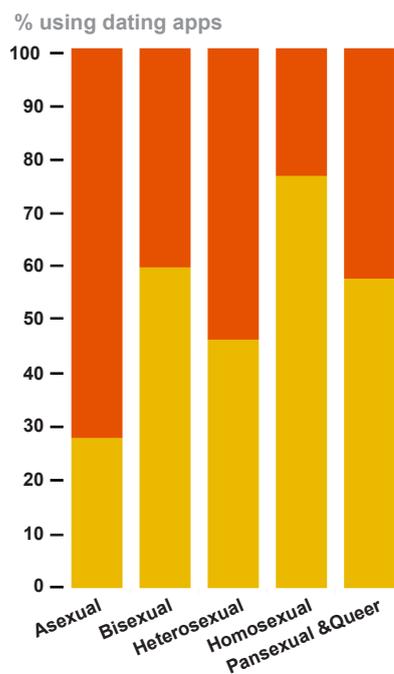
When asked to rate their own attractiveness compared to the general public and the rest of Imperial, people were more likely to think they were pretty hot compared to their fellow sweaty students in Metric on a Wednesday night, but not as much when rubbing shoulders with the wider London population at Ministry on a Tuesday. Non virgins, differed a bit from this and thought the competition at Imperial of who's hot or not was actually higher than in the greater population. The people having the most sex out there also thought of themselves as being the most attractive, a clear link between sexual confidence and self-esteem can be seen.



MEETING NEW PEOPLE

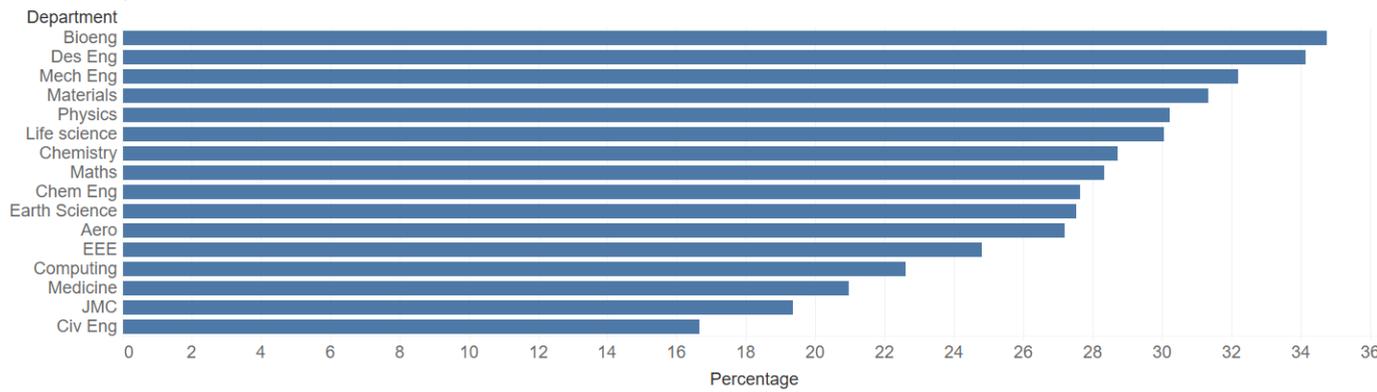
52.60% of male respondents use dating apps
 45.75% of female respondents use dating apps

21.74% of male respondents have asked someone out on campus
 7.32% of female respondents have asked someone out on campus



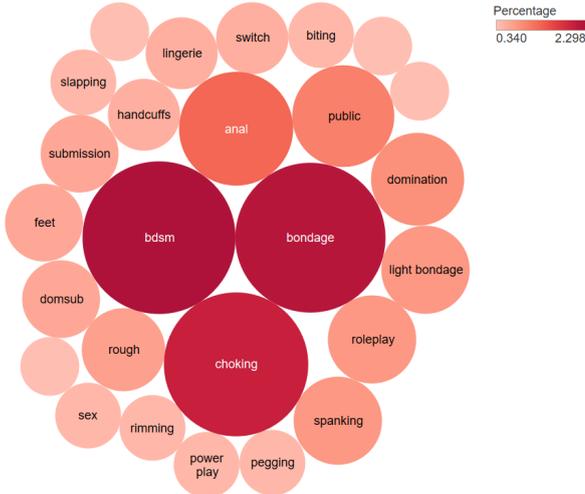
KINKS

Kinkest department

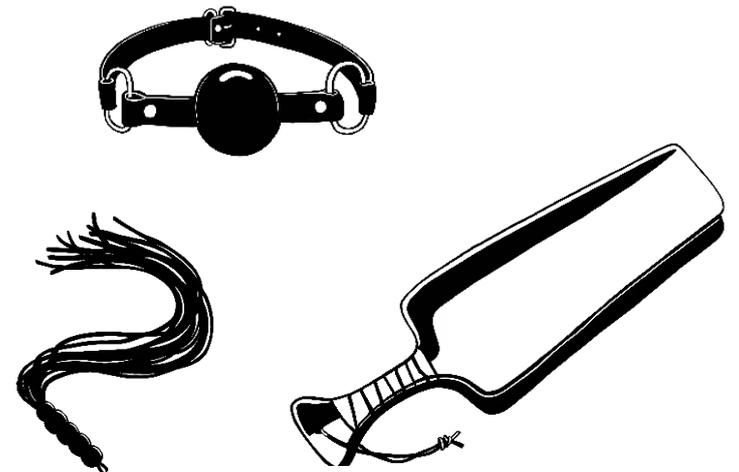
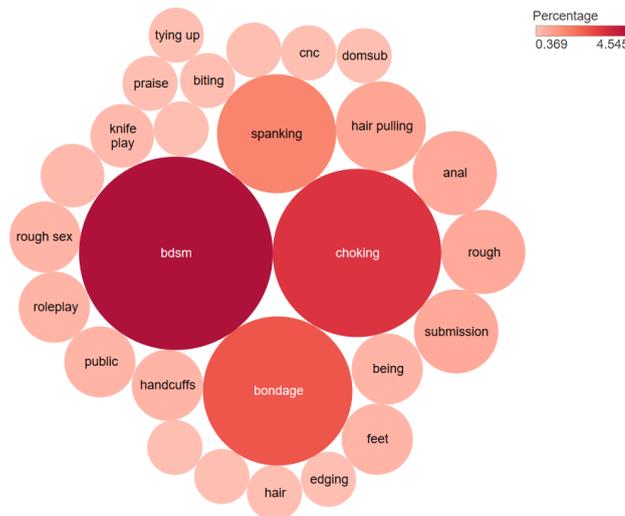


Whether it be the founding of Kink Klub or the noises coming from your flat mates room at 2 am, Imperial students are definitely kinky! Over 2% of male respondents included BDSM type kinks in their bedroom routines. Females however seem even more interested in BDSM, being about twice as likely to be excited by the chains and whips than the males. A surprisingly small minority of females included praise as one of their kinks, which is unusual as most Imperial students are still yearning for praise from their parents.

Most common male kinks



Most common female kinks



SEX SONGS

The Imperial student body listens to a remarkable range of music in bed, from BTS to Big Sean and Funkadelic to FKA twigs, you covered almost every nook and cranny of the musical spectrum. Miles offers a few suggestions from a range of genres in the second instalment of Music for Two on p41. Open Spotify search bar, press the camera and scan the image to listen.



13% of people listed The Weeknd as their go to sex jam

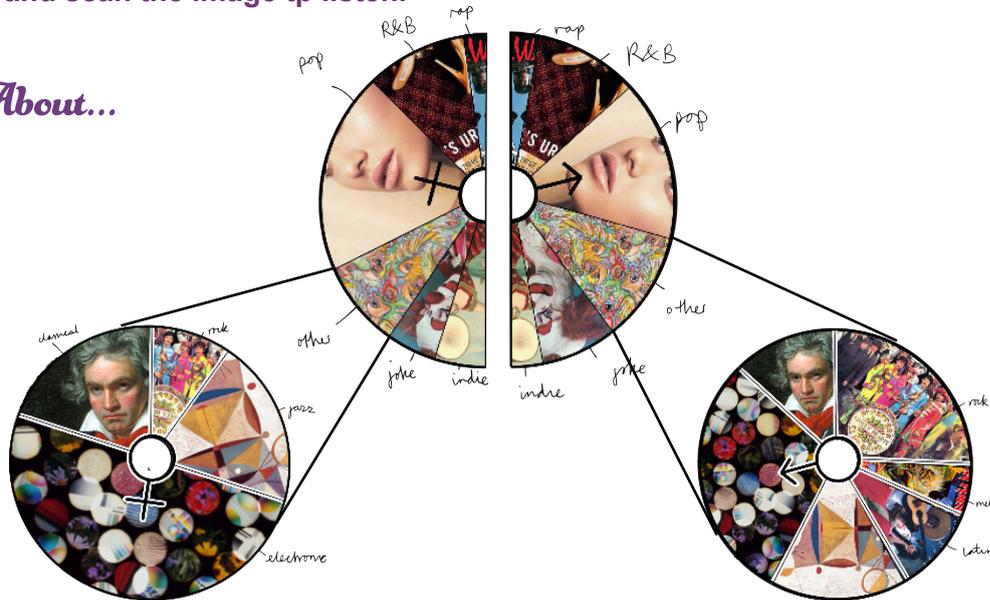


If you listen to latin in bed, you are 2x as likely to have had sex on campus



Sex Songs We're a Little Worried About...

- gecgecgecgec - 100 geecs
- This is Marilyn Manson Playlist
- Metropolis Pt. 2: Scenes from a Memory - Dream Theater
- Astor Piazzola
- Luciano Berio - Sequenza III
- Closer - Nine Inch Nails



Sex Song Choices That Made Us Chuckle:

- Pokemon Theme Song (listed by 2 people)
- You've Got a Friend in Me
- State Anthem of the Soviet Union
- Baby Shark
- Jurassic Park - Main Theme

