



# Felix

The Student Newspaper of Imperial College London



# EDITORIAL

## CONTENTS

EDITORIAL	2
NEWS	3-4
COMMENT	5-7
A CONVO WITH	8-9
POLITICS	10
BOOKS	11-13
ARTS	14-15
FASHION	16-19
CENTREFOLD	20-21
UNION	22-25
MUSIC	26-27
THROWBACK	28-29
FILM	30
SCIENCE	31
TECH	32
SUSTAINABILITY	33
INVESTMENT	34-35
FOOD	36
CONSTITUENT UNION	37
HANGMAN	38-39
PUZZLES	40

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

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

felixonline.co.uk  
@feliximperial

Printed by Mortons Media  
Group, Boston Road,  
Horncastle, Lincolnshire

Registered Newspaper  
ISSN 1040-0711

Copyright (c) Felix 2017

Front Cover // Taja Strle

## Felix and Criticism



Let me just make one thing clear: we're absolutely overjoyed to receive criticism. Genuinely. We're all in this because we love what we do - that's why I, and every student who works on this team, puts in 110% effort pretty much every week. For the students especially, who make up the entire team apart from myself, this is in spite of coursework, in spite of exams, in spite of everything else that comes with being an Imperial College student.

We love what we do. Even when we're tired and drained, we all come in to the office, and put together a paper every week with as much diverse and thoughtful content as we can muster. There are litany of obstacles we face, but we always just make it work.

Because we love what we do, we want to get better. I think everyone at Imperial can understand the drive for excellence. This year's Felix has produced more content - by far - than any other year in at least the last decade, and possibly ever. The 96-page anniversary issue published before the end of term is far-and-away the largest (and, I think, best) issue of Felix ever. We've all pushed ourselves to the limit.

So we want to hear feedback. We want to hear criticism. That's how we get better. We don't take it personally. We've openly published letters that are highly critical, even, and I do my utmost to respond to every comment or criticism directed our way whether publicly or

privately. Many changes have been implemented as a result of those, and we hope that those of you paying attention have noticed.

What I want to do in this editorial is outline something very important, however. There is a drastic difference between criticising Felix, and criticising the students who put in all that work. I didn't want to 'toot our own horn' with the previous paragraphs. I wanted to impress upon you, the reader, that every person on this team is a f\*cking legend. I consider it the highest achievement of my year, and of my professional life thus far, to have built that team, but it's only been possible because there are so many intelligent, passionate, and hard-working people at Imperial who also want to be involved with this paper. Every writer, every editor, every copyeditor.

That's why I feel incredibly defensive of those people.

Most times, when we make a mistake, people are understanding. They

know that we don't have the resources to output a completely polished paper every single time. We all thank you for that. We thank you for your patience with the website, as well. And typically, for those who are passionate about the paper and offer feedback, I want to encourage them to join our little cult - make the paper better, if a problem with it is bothering you. If you feel there's an agenda, write for the opposite perspective - we will accept your article and work with you. If you see copy mistakes and it bugs you, put the effort in and take the step to becoming a copyeditor.

Despite all this positivity, there are a small minority of people who have, sadly, become increasingly venomous with their criticism. They have stepped over the line from criticising the paper and our work, to criticising the people involved.

I could spend the rest of this editorial deconstructing why ad-hominem attacks are bad, but I think most people with a grasp

of critical thinking - as almost everyone here has - is well-aware of its flaws. So I won't do that. Instead, I speak directly to those of you who launch attacks against individuals, who say spiteful things, who expect something for nothing, and who are incapable of even framing constructive criticism: everybody on this team is doing significantly more for the Imperial community than you are. They are taking a *lot* of time to try to create something fantastic that everyone can enjoy. They put effort into their craft, above and beyond any call of duty or responsibility you could even try to lay at their (volunteering) feet. Have some respect for them and the effort they put in, even if the work they've output on a particular week isn't up to the high standards that we - and you - set for Felix.

And to be clear, I exempt myself from this. This is my job. This editorial isn't me defending myself - I've got a lot of areas to improve on, and as you are all indirectly paying my salary to do so, you have every right to be far more harshly critical of me than anyone else.

But don't be cruel to each other, and don't be cruel to the best of you - those who, as I said, go above and beyond to contribute back into the College community, whether that's via Felix or in any other way. Treat each other with respect, and remember that the Felix team are part of the student cohort as well - going through the exact same stresses that lead you to lash out at them.



### The Felix Team

**Editor-in-Chief**  
Henry Alman

**Deputy Editor**  
Charlie Titmuss

**News Editor**  
Henry Alman

**Politics Editor**  
Isabelle Zhang

**Comment Editors**  
Andrew Melville  
Calum Drysdale  
Charlie Titmuss  
Sung Soo Moon

**Tech Editor**  
Sudarshan Sreeram

**Fashion Editor**  
Syon Lee

**Arts Editors**  
Akil Eamon Farhat  
Claire Chan  
Ozbil Ege Dumenci  
Syon Lee

**Music Editors**  
Asad Raja  
Emily Freeman  
Martin Flerin  
Miles Gulliford  
Guthrie Ruby

**Investment Editor**  
Xerxes Chong Xian

**Sustainability Editor**  
Xiuchen Xu

**Puzzles Editors**  
Ameena Hassan  
Romain de Spoelberch

**Film Editor**  
Dominic Ede

**Science Editors**  
Christine Parry  
Julia Dabrowska

**Food Editor**  
Zahra Abiola

**Copy Editors**  
Anthony Onwuli  
Matthew Zhang  
Enny Tran  
Kavan Clark

# NEWS

news.felix@imperial.ac.uk

## Imperial Lecturer Apologises for Calling Students “Weak” and “Lazy” in Exam Report

*An Aeronautics lecturer has faced criticism for describing students as “weak” and “lazy” in their January exam report from 2019*

### NEWS

**Henry Alman**  
*Editor-in-Chief*

A lecturer in the Aeronautics department has apologised to students after an exam report from January 2019 was revealed, in which he described students as “particularly weak” and “particularly lazy”.

Professor Paul Robinson, the Aeronautics Head of Department, said: “The member of staff responsible for the report is an extremely passionate teacher with excellent student feedback. Regrettably, on this occasion they were particularly dismayed by the nature and extent of errors in the students’ answers and, in a momentary lapse of judgement, vented their frustration in the exam feedback. The staff member regrets their choice of language and apologises to students for the offence this caused.”

The controversial report was made available on the department’s sharepoint – a document management and storage system used across the College – and was visible to students. The document has since been removed.

The document sparked frustration and anger amongst students, particularly amongst the stress of the ongoing 2020 January exams, which several students had begun to vent about on social media.

Prior to being removed, clips of the report were shared on Facebook, reading in full: “these are trivial errors, which should normally lead to

students failing not only A-levels but even GCSE. How these students got into Imperial is hard to understand”, and “I am very disappointed. It looks like the number of particularly weak or particularly lazy students is unusually large this year.”

The reports are designed and intended to provide feedback to students post-exam.

A College spokesperson said: “We regret that a recent exam report available to Aeronautics students on the department’s sharepoint site contained inappropriate comments about the general results of an exam from last year. The intention of

**“How these students got into Imperial is hard to understand”**

these reports is to provide useful feedback to students taking exams. This particular report is not of the standard expected at Imperial and we sincerely apologise to our students. The Department has removed the document from sharepoint and is looking into this.”

The incident has also raised questions about the role the Facebook page ‘Imperial College Exposed’ plays in airing student grievances. While many support the space as a place for students to communicate with one another, several students and student

increases.” These are trivial errors, which should normally lead to the students failing not only A-levels but even GCSE. How these students got into Imperial is hard to understand.

I am very disappointed. It looks like the number of particularly weak or particularly lazy students is unusually large in this year.

Clips from the exam report, reposted to social media before the report was taken down from sharepoint //IC

representatives also criticised usage of the platform for launching anonymous personal attacks – rather than going through structures such as the reps and the Student Staff Committee – and

**“This particular report is not of the standard expected at Imperial and we sincerely apologise to our students”**

for not representing the views of every student accurately.

The Director of Undergraduate Studies for Engineering reportedly spoke to students in the common room and said he

believed the situation on social media was ‘getting out of hand’.

This follows on from controversy last year over an open letter submitted to the Aeronautics department by second-year students – the same cohort about which the exam report was written last year – complained about unfair courseloads and stress levels. The letter reportedly caused friction between academic reps and staff in Student Staff Committees, after several representatives expressed frustration that their concerns were shut down with comments such as “industry doesn’t push back deadlines.”

Several students, however, have anonymously expressed the sentiment that the department is making efforts to improve, and commented that the lecturer in question was “good in-class.”

Aeronautics is not the only Engineering department to have experienced

difficulties this January exam season. The Bioengineering department also received complaints after an exam was delayed by almost an hour and a half. The issue was reportedly caused by a conflict between the College’s anti-virus software and software needed for the exam.

A spokesperson for the Department of Bioengineering said: “We are sorry that an unforeseen technology issue involving the College’s anti-virus software caused a delay to the start time of a 3 hour live programming exam for 2nd year Bioengineering students.

“As soon as the Department became aware of the issue, which was outside of our responsibility and/or control, we alerted ICT to find a solution. In order to minimise disruption to students and prevent a knock-on effect on their revision for other exams, we opted not to reschedule the exam - instead ICT

sought a solution while students remained in the room. The exam began approximately 1h and 25 minutes after it was scheduled to, and students were given the full time to complete it.

“We understand the frustration this will have caused during an already stressful time and are very grateful to our students for their patience and help as we worked to find a solution.

“The Faculty of Engineering team are working with ICT to ensure similar issues do not arise in future. We will liaise with our 2nd year students regarding the issue via the Staff Student Liaison Committee, and the issue will also be reported to the Board of Examiners to consider and note its impact on the students.”

This did, however, prompt some students to question how the issue had not been caught before the exam took place.

# NEWS

news.felix@imperial.ac.uk

## The Return of 568 and Hbar Food: "Sooner Rather than Later"

*Food was due to begin in both venues next week, but delays have set delivery back further; can expect "sooner rather than later" says DPFS*

### NEWS

#### Henry Alman

*Editor-in-Chief*

Food service in the Union bars and hbar can be expected "sooner rather than later", the Deputy President (Finance and Services) has said.

The initial plan was to reopen the kitchens next week, most likely on Friday 24th. However, delays to progress in both venues means the date is currently uncertain, with the potential for further delays.

The issues – namely electrical faults and pest problems – that led to the initial closure have reportedly been resolved, with new equipment additionally being installed in 568. Additionally, two pizza ovens will be installed in hbar pending further discussions with the College regarding space usage.

The pizza ovens were originally bought for Reynolds, as an upgrade for the older equipment there. However, upon purchase it was discovered that the Reynolds kitchen could not support them due to insufficient power outage.

The reason for the

purchase of unusable equipment is currently unclear. The Union's Head of Commercial Services and Operations Manager did not respond to multiple requests for comment sent on 8th and 10th January.

The pizza ovens have, after having been placed into storage, found a use in hbar, where the Union will be facilitating the evening service cancelled by the College last year.

However, the service return will not see a reopening of the full menu in either venue. The fully new 568 menu, introduced only a few weeks before the closure

after a month-long delay at the start of the year and issues with food quality, is returning in a limited fashion, predominantly serving burgers and pizzas – and the ever-popular curly fries will also return. The hbar menu will be pizzas-only.

The Deputy President (Finance and Services) previously stated that the Union did not want to bring any "interim" food measures into hbar, responding to suggestions of providing hot dogs or paninis after initial negotiations broke down last summer. Of the new pizza menu, she said "the interim services that

could have been provided quickly would have been non-inclusive and poor quality, which is not a service that I felt the students would have wanted, or something the Union could have been proud of. Whilst I will strive for a fuller menu, a good quality pizza menu is a step in the right direction, and can be made accessible to all dietary requirements and preferences."

There are ongoing concerns about the financial impact the closure of the 568 kitchens will have on the Union. In a previous interview, Jill Finney, the Chair of the Union's Board of Trustees, expressed

that the closure would have "severe budgetary implications." Concerns are heightened after the discrepancy between the predictive budget and the bars' actual income last year forced the Union to re-evaluate its financial strategy.

A reforecasting of the budget takes place in the Union every January, and was due Wednesday January 15th, which should outline the financial implications of the closure. This report was not provided by the Union in time for publication. Felix will report further on this aspect next week.

## Imperial Professor made Dame in New Year Honours

### NEWS

#### Henry Alman

*Editor-in-Chief*

Dame Lesley Regan, Clinical Professor in the Department of Metabolism, Digestion, and Reproduction, was made a dame in the New Year honours list. She was awarded the prestigious recognition as a result of decades of work on women's health policy and, from the scientific direction, reproductive health.

She also holds several other positions – she is co-director of the UK's Baby-Bio Bank, a pregnancy tissue archive, and was an academic leader

on developing non-invasive treatments for uterine fibroids. Both are major contributors to helping women experiencing recurrent miscarriages.

She also sits as the Head of Obstetrics and Gynaecology at St. Mary's Hospital, was formerly President of the Royal College of Obstetrics and Gynaecology, and is chair of the International Federation of Gynaecology and Obstetrics' (FIGO) Sexual and Reproductive Rights Committee, as well as their General Secretary.

She has repeatedly advocated for improvements in science communication and policy regarding women's health. Speaking to Felix about receiving the Honour, Dame Lesley Regan said:



Dame Lesley Regan // IC Asset Library

"It is a great privilege to be recognised in the 2020 New Year Honours for services to women's health. We have made significant progress in recognising how important the health of women is to the health of our nation. But there is a long way to go before we can say that we

have maximised the potential benefits and impact that we can achieve.

"As President of the Royal College of Obstetricians and Gynaecologists (RCOG), I wanted to show politicians and policymakers that the near total focus on maternity care misunderstands the

role of women in society today. We should no longer think of women as characters in a Margaret Atwood novel whose sole purpose in life is to produce children. There is the whole of the female life course to consider and maternity is just one aspect.

"I want to help create a society where women and girls can discuss their health openly, where they receive the support they need to stay healthier for longer, and where our decisions and choices determine the care that we receive. This is not wishful thinking - it is within the grasp of the government and the NHS to deliver.

"In December the RCOG published Better

For Women, a clear strategy to improve the lives of girls and women across the UK. We have much to do to in order to achieve the recommendations we set out in this important report. I look forward to supporting the RCOG and its many key partners to continue to transform women's health-care so that everyone in our society benefits."

*Editor's note: A damehood is equivalent to a knighthood, and they are issued each New Year's and in the summer. It recognises significant societal contribution in various forms, and confers upon one the title "Dame".*

## COMMENT

comment.felix@imperial.ac.uk



# Meghan Markle: Britain's racism wouldn't let her sparkle!

*Eamon Farhat writes about the Duke and Duchess of Sussex's decision to withdraw from frontline Royal duties*

## COMMENT

Eamon Farhat

Arts Editor

A shock statement released by the Duke and Duchess of Sussex has outlined plans for them to step back as senior royals. No matter what side of this dire argument you are on, one thing is clear: this week has seen unprecedented events take place in the royal family. There has not been this much drama since Prince Paedophile insisted to Emily Matilis that he wanted to be known as Prince Pizza Express instead. I do not have a huge interest in the Royals but when Meghan Markle, a strong, independent, self-made, African American actress first entered the Royal family, an institution whose history is steeped in a less than favourable view of people of colour, I was slightly perplexed. I remember thinking that it was the most ambitious crossover since Harry's foray with the Nazi stripping brigade.

All jokes aside, Meghan Markle gave such hope to me and other people of colour in the UK and across the world. She had the power to give astronomical visibility to the problems faced and break people's pre-conceived ideas of what the western elites should look and act like. Unfortunately, Meghan Markle coming into one of Britain's oldest institutions exposed an even older institution still present in 21<sup>st</sup> century



Meghan Markle in happier times. Probably // Wikimedia

Britain: racism.

Her first appearance in British press - when the news of Harry and her relationship was broken - as being "(almost) straight outta Compton" started painting her as an exotic outsider. An immediate verdict was not made straight away by the press and the couple enjoyed a brief honeymoon period, until suddenly, the mood changed. Increasingly the press did not see her as being compatible with the British Monarchy.

It is sometimes hard for people to understand how the criticism of Meghan has been racist. Many see

her as a public figure who is being scrutinised like any other. When she took private jets while preaching about the climate crisis, she was bashed for being a hypocrite. This seems fair but when you read through other criticisms that the same people have of her, things do not seem as rational and a more racialised narrative emerges.

When she ate avocados for example, she was accused of causing mass murder. When she held a beautiful bouquet at her wedding, the press insisted she was causing grave danger to Princess

Charlotte. And of course, her charity work with a Muslim Heritage Centre was linked to terrorism. These sorts of criticisms are extremely unfair and are reported on with inflammatory comments. Unlike Kate Middleton, the perfect English rose, the British press believes that Meghan does not know her place and must conform. Even small attempts at deviating from the rule book have been met with a barrage of criticism steeped in racism.

With the recent decision from Harry and Meghan to step back from their roles as senior royals,

this whole debate about racism, which is usually swept under a massive Union jack carpet, has come out into the open. The hardest thing about explaining how all of this is steeped in racism is the white privilege it takes to even ask that question. When someone says "give me an example" it's insulting. As a person of colour, I know exactly what racism feels like, but it is not my duty to educate the very white people who perpetrate it. Racism is not just being called names and slurs or being checked at airport security. Racism for me

is the insidious feeling that others are holding you to a different standard because of what they see. Meghan's fall from grace in the eyes of the British media has shown that even if you have a successful career, marry a prince, and literally become a princess with the best intentions in the world, your race will always be what people see and judge you

**"Meghan gave hope to people of colour in the UK, and this recent decision might be very saddening for some"**

on first.

Meghan gave hope for people of colour in the UK, and this recent decision might be saddening for some, but I know that the lovely couple will go on to great things and fight for the very issues that pushed them away. I wish them luck and praise their brave decision and hope that we reflect on the societal changes needed for this type of thing to never have to happen again.

## COMMENT

comment.felix@imperial.ac.uk



# How Do We Stop People From Committing Crimes?

Comment editor, **Charles Titmuss**, looks at crime prevention, whether it is possible, and what the best way to do it is.

## COMMENT

Charles Titmuss

Comment Editor

At the moment, London is always in the news, mostly because of the sheer amount of knife crime on the streets of the capital. Hundreds of almost entirely young men have been stabbed or have engaged in the act of stabbing. This violent act has been linked to a whole variety of different causes: drug crime, a lower number of police officers, inequality, and a lack of opportunity. The finger of blame has been pointed in so many different directions that it is almost certainly dislocated by this point. It is of course a problem of many parts, and in this article, I shall examine some of the attempts made to dissuade crime and explain what I think are the best methods.

First off, I'm going to (probably incorrectly) split criminal acts into two different categories. Irrational crimes (crimes of passion), and rational crimes (premeditated crimes). Irrational crimes are crimes that people commit without putting too much thought into the immediate aftermath. Rational crimes are crimes that people tend to make podcasts about 20 years later and demand a certain amount of forethought prior to the commitment of the crime.

Preventing both types of these crimes using the same methodology is not possible. Irrational crimes are far more challenging



At least their soul was saved? // Wikimedia

to prevent, although it is possible. Rational crimes however, can be prevented through deterrence.

Deterrence is complicated. I would propose that, assuming every participant is rational, deterrence is 100% effective only when there is no win condition for the participant that wishes to perform an act. This occurs when the consequences of an action are terrible and also certain, or terribly certain. To abstract away from the individual, let us consider the main way that peace was and is maintained in the modern world. The

Mutually Assured Destruction (MAD) doctrine has been a centrepiece of international diplomacy since the advent of nuclear weapons. For two states considering attacking one another, there has to be a motivation, for example, some territory that they wish to acquire, and there has to be a win condition, where they acquire that territory at a reasonable cost. MAD ensures that there is no such thing as a reasonable cost for any goal that a nation wants to achieve through violence against a nuclear-armed nation. The cost is total and utter destruction.

Some people would consider deterrence simply to be assured simply from these consequences alone. However, this is not the case at all. Not only is it necessary to consider the consequences, but it is also necessary to consider the likelihood of these consequences. In the MAD doctrine, the only way to prevent a nuclear retaliation is through a first strike, where a nation destroys the opposition's warheads prior to them being launched. However, nation states prevent this by concealing the location of their warheads. China hides its nuclear weapons

in forests, the UK hides them in submarines, and Pakistan hides them in very dodgy and constantly moving vans. Therefore, a devastating retaliation is impossible to prevent, hence the lack of a win condition. This works well with states since the actors, governments, are generally rational. No state has consciously used nuclear weapons against another similarly armed.

From the above, the lack of a win condition is a combination of two factors: an appropriate consequence that deters action and the certainty that this consequence is

guaranteed. These two factors create deterrence, preventing rational actors taking actions that would be guaranteed to hurt them at an unacceptable cost. If we apply this back to the idea of the individual committing a crime, it is clear that this type of deterrence only works when the actor considers the consequences of their actions and the impact that it will have on them. Hence, criminal acts of passion are impossible to prevent via deterrence.

**“Criminal acts of passion are impossible to prevent via deterrence”**

When considering the deterrence of rational crimes two factors must be considered: how terrifying the punishment is, or the consequence, and the likelihood of being caught, or the probability that this consequence occurs. The terrifying punishment may be terrifying, but as long as there is a chance that the individual is successful i.e. is not caught, they may be willing to take the risk, particularly if the incentive is large enough. Therefore, the potential criminal has a win condition and therefore they may take the chance and commit the crime. Deterrence has not been effective. In order to make the deterrent more effective, it is necessary to do one of two things: make

# COMMENT

comment.felix@imperial.ac.uk

the likelihood of getting caught higher, or adjust the consequence to make getting caught worse. Unfortunately, despite the number of people that read the Daily Mail and love the idea of flaying people alive for shoplifting chewing gum, there are issues with raising the level of consequence.

Strong consequences, at a level that would completely discourage crime suffer from societal perception. Returning to MAD, nuclear disarmament campaigners take action against nuclear weapons because they feel they are an immoral solution to the problem of inter-state violence. Governments are more able to ignore this issue because whether a nation has nuclear weapons does not undermine its overall legitimacy in the eyes of the people. At least, not at the moment.

However, it is a different matter entirely when it comes to justice. A government's legitimacy in the eyes of the people it governs is hugely impacted by its ability to deliver justice to the population that it is gov-

erning. If a government is able to deliver fair and appropriate justice as judged by its people, it is a legitimate government. If not, then it becomes less of a legitimate government and rules by repression. In democracies where the people are somewhat important in determining who is to govern, acceptable punishments are a necessity. At present these acceptable punishments in

## “Acceptable punishments in the UK are prison sentences and fines”

the UK are prison sentences of a given length, fines, or community service. In the past, punishments that would have been acceptable include something called “breaking on the wheel”. To be broken on the wheel was to have all your limbs broken and then braided through the spokes of a wheel before

being left to suffocate to death. If you were particularly fortunate you would be mercifully garrotted or have your throat slashed.

This form of punishment is high risk for the government executing an individual.. Firstly, there is the chance that the person that is being executed in this manner is innocent. To execute a guilty man this way could be acceptable, but to execute an innocent man this way would be a horrific and irrevocable injustice. This would impact the legitimacy of the regime dispensing this justice. Additionally, there is the possibility that the punishment does not match the crime. Breaking on the wheel was a punishment for highwaymen and robbers. This may have seemed appropriate at the time. However, applying this punishment to a starving thief aiming to support a large starving family may have been viewed differently by the mobs watching. It may have led to deterrence, but the fact that justice was seen to be misapplied by the mob would undermine the government's legiti-

macy. These two issues, the potential for innocent victims and ensuring that the punishment fits the crime, make extreme punishment a less attractive option for governments aiming to deter crime, despite the possibility that it may be effective.

There is also the risk-underestimation factor of the potential criminal that plagues the world due to the prevalence of people failing to consider negative options. In this case the prospect of a terrifying punishment has not been effective as a result of the small likelihood that they would not get away with it. As a current gambling ad says, “when there's a chance, there's always a chance.” The number of people that play the lottery further confirms this situation. There is a large possibility that the government will have to punish a large number of people extremely, simply because each thought they would never be caught. This problem of over-punishment can be seen particularly in the US, where fixed term sentences have been applied to people

committing minor crimes such as the possession of weed. Whether this was actually a disadvantage for the government that brought it in (Republican) is another matter, but clearly deterrence through harsh punishment failed in this situation. It has also undermined the legitimacy of the US regime in the eyes of a significant portion of the US popula-

## “Levels of government surveillance are increasing worldwide”

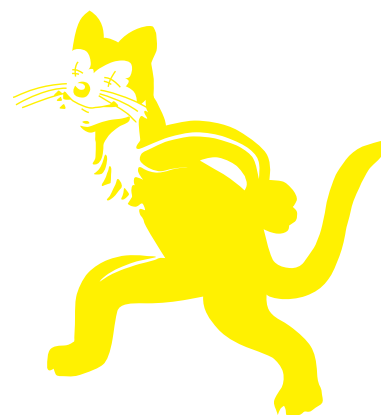
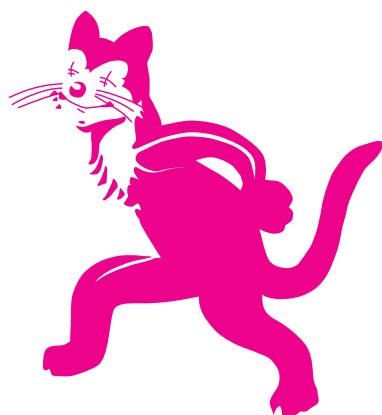
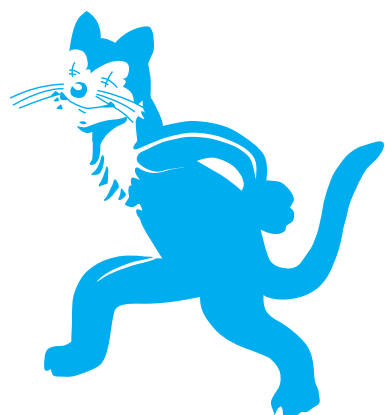
tion.

In the late 1700s, the utilitarian philosopher Jeremy Bentham came up with a novel concept for a new modern prison to force the good behaviour of its inmates: the panopticon. The panopticon consisted of a system of cells where each of the inmates could be observed at any time by the prison warden and crucially would not know

when they were being observed. Therefore, the only way for the prisoners to rationally avoid punishment was to behave well all the time. I believe that the same logic has been applied by many modern-day governments that use far-reaching and intrusive mass surveillance techniques in order to maintain an increased grip on society without having to resort to more extreme or inhumane forms of punishment. The Edward Snowden leaks provide conclusive evidence of this in the Western world. Other governments, such as Russia and China, are also relying increasingly on surveillance to more effectively control their populations.

Surveillance has further advantages. When coupled with a large number of police and other state actors, it can be used to prevent and predict crimes of passion. This raises the further question: is the cost to our individual privacy worth the safety we think that it provides?

## Felix is recruiting!



**We want you – yes, you! We're looking for writers, photographers, editors, illustrators, reporters, computer experts, and grammar nerds to join our team. No experience needed – we'll teach you everything you need to know.**

**If you're interested, send us an email on [felix@ic.ac.uk](mailto:felix@ic.ac.uk)**

# A CONVERSATION WITH...

felix@imperial.ac.uk

*This week Felix spoke to the Deputy President (Finance and Services), Fifi Henry, about the Summer Ball, The Sustainability and Services Board, and food in 568 and hbar.*

**Felix: Lots of big projects you've been working on over the past couple of months and the Christmas break – probably the largest and most pressing is Summer Ball, which you are leading on and organizing this year. How is that going?**

FH: The background story to this is that previously, the Summer Ball has sat with the Events and Conference Manager in the Commercial Services directorate. They left at the start of October, and so there was nobody to pick it up as it's a massive project. The head of the directorate proposed to cancel the Ball, which was presented to the Board of Trustees – who provide oversight of the Union from internal and external sources.

I made the argument that it was a fundamental part of the student experience – that it not only celebrates the end of the year and their exams, and for many the end of their degrees as it's the biggest event right before their graduations. We as a Union don't do as many big-scale events as maybe we should, and don't do as many big recognition pieces to celebrate all that our students do. I felt it was really important that it still had to happen, and the only way to make that work was to take on the responsibility myself – but I knew I could do it, as I'd already reached out to several key student stakeholders, such as the Arts and Entertainment Board, DramSoc, and members of the student bar team, who each are involved either in organizing or running the ball.

There are about 10 students on the new Summer Ball Committee as a result – previously the Ball was fully organised by staff members at the Union – and we meet two hours every week to discuss and organise, sign off things like risk assessments, and so on. Our main project for first term was to create a budget and break down the costings of everything, and broadly defining our financial approach. The Board agrees that the Ball is not meant to be a Commercial Services project, rather a Student Experience project, and is not meant to be run in order to make a profit. So the plan is for it to break even – and if a loss is made, then as long as it's an experience students enjoy and are happy with then we can absorb it into the Union's financial reserves. If overspending slightly means students have a good time, we'll overspend slightly.

We've sorted out our headliner – though we aren't announcing it quite yet, we can confirm it's a live act and not a DJ! – and the theme this year is 'Enchanted Forest'. In the past we've suggested options and had students vote – this year we put it out there for anything and everything to be submitted as ideas. We had some really strange things come up in there, for sure, but one of the most prominent thoughts that came up, and which the Summer Ball Committee really felt we could strongly deliver in terms of dressing the environment to fit the theme, was enchanted forest. The posters should be going up soon, as the flash sale begins on Monday at 12 – so everyone keep your eyes out for that! From there

we'll be slowly releasing more information, setting up some fun initiatives which will allow people to get free tickets, and so on.

I think a big difference this year is that this year it is being organised by students, so it's a lot more relevant to what students want. Previously there was little student input – there were some consultations done, but they weren't really pushed. We've also taken on feedback

that people in the past have spent £50 on a ticket and felt they didn't get as much out of it as they'd want – so this year, we're raising the maximum ticket value (by around £15, but that's not fully certain yet), but it will additionally include a main and dessert and a prosecco reception, as well as the fact that the headliner will be a live act. It's small but significant experiential improvements that don't too drastically affect ticket prices.

We're also looking into sponsorship opportunities, trying to get other organisations engaged and more money coming in we can make something better for students. So there's a lot going on there, it's quite overwhelming, but very exciting. I'm hoping we can change people's opinions about the Ball – people previously often felt it wasn't worth the money, but came anyway. We're hoping this year they'll come anyway, and find that it was worth it – and feel that this was what they wanted to do to celebrate the end of their year!

**Felix: This is a colossal amount of work – and that's just been tacked on to your role this year because**

**otherwise it would have been cancelled. You're still doing everything else the DPFS has always done, with this on top. Are you receiving support from other staff members in the Union?**

FH: There is support. Marketing have been great – we had a meeting to discuss what we wanted to do when we knew what the theme was. They quickly drafted up some beautiful posters; I really think they are stunning, so I can't wait for everyone to see it on Monday. There are people within the Commercial Services remit who have definitely offered support, and there are people in Beit bars who have worked Balls before and have a lot of experience and knowledge, and have been able to provide insight. I've not run an event on this scale before, so there are some concerns there, but there's a good support network – and everyone on the Summer Ball Committee all have relevant experience and know what they're doing. Without them it wouldn't work, so really credit to that team to be honest.

**Felix: As big a project as this is, it's only a part of your role. I know you've also been doing a lot of work with the Services and Sustainability Board (SSB) recently, planning several campaigns. Can you tell us about those plans?**

FH: The SSB is a new board approved by Union Council this year – more work to do! – which means I could shape it however I wanted, which is really exciting. I could define its terms of reference. I

decided that the really important thing moving forward was for all of our services to be sustainable – economically viable and environmentally friendly – but the core of it is ensuring the students' needs are met, and that all of our services are doing everything for them. Again, the SSB has a great set of dedicated students, and we decided there are two big things we wanted to do. One is to have a big sustainability project, and the other is to look into the staff welfare side of things – the different policies that affect our student staff.

The overarching sustainability project is coming into fruition this term, with several campaigns beneath it. The first is the 'Planetary Health Diet' campaign launching next month; it piggybacks off of 'Meat-Free Mondays' from last year, but doesn't promote a vegetarian or vegan perspective as much. It doesn't tell you to remove meat from your diet. It looks instead at what foods are best for you in terms of health, as well as those foods'

environmental impact. So, for example, it promotes eating things like chicken over consuming more red meats, compares different types of nuts in terms of water consumption, and so on. The idea is to get students to consider what they are purchasing – it's a knowledge piece, which is great. Last year, Meat-Free Mondays helped a lot of students realise that things like beef and lamb have a much bigger environmental impact than some might realise. It pushes that positive effect further, highlighting foods that are great for you as well as the environment. There'll be different activ-



Fifi Henry, the DPFS //ICU



# A CONVERSATION WITH...

felix@imperial.ac.uk

ities running in February around this, and all the information will be up on a new SSB website in the next week or so – and we also want to work with Felix’s Sustainability section!

Later in the term or early next term, we’ll also be looking into the use of palm oil in our products. A lot of them contain palm oil, and we need to ensure that the oil is being sourced sustainably or that we find an alternate product that does not contain palm oil. Again, it’s an awareness and knowledge piece about the issues and impact of palm oil on our planet.

The third is looking into packaging waste, and trying to reduce it. Then there’s also Greening Imperial week, which is February 10th-14th. Greening Imperial and Francesca, the Ethics and Environment Officer, have organised different themes and activities for each day. The first day is themed around food, and we’ll be tying the Planetary Health Diet into that – more info will be available soon via the Union Facebook page.

**Felix: Attached to the SSB is the Services Working Group (SWG) – which I believe looks at the other half of the SSB’s remit, to do with staff policy. What’s happening there?**

FH: The SWG is a very temporary group – it probably won’t exist beyond this year. The members are student representatives from 568, hbar, and the Union Shop, and the goal is to review some of the policies affecting student staff – such as the Food and Drink policy put into place last year. There’s also currently no official policy of ours for relationships between student staff

members, so we default to the College’s one, which is not necessarily quite right for the environment our students work in.

**Felix: What is that “effective” policy borrowed from College?**

FH: You have to declare your relationship, and then it is up to your line manager in what capacity you can work together – so it’s a very case-by-case basis depending on the line manager. That’s very difficult to manage in a student bar, and it’s also a space where you do see relationships blossom because the bar staff are very close and social. You shouldn’t be penalised for that, stopped from working shifts together or in the same bar together. It also doesn’t make sense when these are students who might need to work for financial reasons. I don’t fully know how much the policy has actually been implemented, but it clearly needs to be reviewed.

London Living Wage (LLW) has also come up in that conversation, as well as how various benefits from working in either the shop or the bars work, and what initiatives should be in place to make sure it’s an enjoyable place to work.

**Felix: How will those discussions be applied or implemented?**

The SWG is a subgroup of SSB, which is then a committee of the Union Council – the highest democratic body the Union has, constructed of students – and was separated out because we didn’t want the issues with bars and shops to dominate the SSB meetings. Anything we come up with will feed back through to Council for voting and potentially passing into policy.

The LLW is a much bigger-picture discussion, because it has a bigger potential ramification for other areas of the Union – but we can start a discussion here.

**Felix: With annual budgeting due soon for clubs and societies, it seems a good time to revisit a topic we covered in our previous interviews – your plans to develop additional financial training materials for treasurers and chairs, using your extensive experience as DPFS. How’s that going?**

FH: I spent Christmas – including Christmas Day – laying out the fundamental framework for how I want it to look. I also sent out a survey to all club officers around finance training, asking for feedback on our current training – what we do well, need to improve on, and what we don’t do at all. That feedback is a really useful exercise for myself, the DPCS, the Student Development Manager, and head of Student Experience to effectively review training.

What we need is a system such that if someone did not get a good handover from their predecessor, they would have access to materials immediately – and we need to go above and beyond current systems like Officer Academy, which is great but is also capacity-limited and is only on one day. If someone can’t make that, and their query isn’t covered in the general material we have, where do they go?

It’s been interesting to see people have questions you would assume they’d know from the start – but they don’t, because it’s something that fell through the cracks. Then the question becomes: “this student now knows,

but does everyone else know or is everyone lost?” So it’s going to be a really useful tool for future clubs and societies and will support their growth.

**Felix: Atop the training review, I believe there is going to be a review of how contracts are dealt with – at the moment, any contract from any of the 350ish clubs and societies goes directly to you to sign, correct?**

FH: There is difficulty with contracts being sent via email. I do my emails from oldest to newest – so if you send me something that is urgent, and I have any kind of backlog of contracts to go through, I might not be able to get to yours in time. Contracts require careful reading – I am personally, individually responsible for the financial decisions made for seven years afterwards. I can’t just sign them off; so they take at least a certain minimum time to review properly.

A new system on eActivities has been started, but we need to assess how realistically that will speed up the process. It shifts the contracts from the DPFS’ emails to eActivities, and

makes improvements that might for example highlight parts of a contract that have changed but not others, but how much will that make an impact on speed?

There are a lot of major projects going on, so this will take place over the longer period – but it’s definitely on my radar and me and the Systems Team will be looking at it most likely in third term.

**Felix: Talking about finances – there’s been a lot of chatter about the Union and College’s negotiations. A lot of**

**students have heard about the rent renegotiation, but just as essential is the block grant renegotiation. How is that developing?**

FH: For clarity, the block grant is the chunk of funds the College gives to the Union for various costs such as staffing. Either yearly or every three years, the Union and College will renegotiate that amount, and this is one of those years; we’re currently looking to set up a one-year grant this time, as with the departure of the Managing Director we’re looking to create a shorter one-year 2020-21 Strategy – rather than the more usual three-year Strategy.

As an example, if we wanted to ensure the LLW as a minimum pay rate for staff (student or otherwise), we would need to assess the impact on our staffing costs and that would play into the block grant negotiation with the College.

The actual negotiation has been pushed back to Easter, as not having a Managing Director has thrown up disruptions within the Union and our priorities have had to change in terms of what projects we are working on. To give us time to re-evaluate, we didn’t have that discussion in first term.

The Officer Trustees and Senior Management Group – the senior-most positions in the Union that form the Leadership Team – are meeting frequently to start looking at what we want moving forward, what we can ask for, and what we think the College should support for us as an organisation and for the students.

**Felix: Finally, there’s a conversation to be had about the**

**food situation – in 568, but also in hbar. What timeline can we expect for food to return?**

FH: With 568, we’re working with the College Estates team to ensure the kitchen – which has been refitted and whose issues have been resolved – is fully up to standard before we put food service out. The plan was to have it begin in the coming week; however, right now we don’t have a confirmed date. We’re hoping it will be sooner rather than later.

In terms of hbar, we’re working with College’s Campus Services to sort out the space in the hbar kitchen in order to install two new pizza ovens, which we already own. We’ll need some new equipment and to ensure the space for that, too. But as soon as that’s sorted, we can train student staff on how to use the ovens and then roll it out. We were hoping for it to be next week as well, but there has been a delay. It’s unfortunate, but the good thing is that we are very much in progress and it should be arriving sooner rather than later. We’re working well with College to ensure food service can get back out to students.

*For more information on the food situation, see the News section.*

# POLITICS

fpolitic@imperial.ac.uk

## Keir Starmer is Labour's best hope

Politics writer, **Andy Wang**, thinks that Labour's future after the election defeat needs to be decidedly more centrist

### POLITICS

**Andy Wang**  
Politics Writer

The race is on for Labour to select its leader to shadow the Conservatives' overwhelming majority over the next five years, and (if nothing goes wrong) to lead the party into the next General Election. Following the most humiliating electoral defeat since 1935, it's time for Labour to reflect on itself, a process that both frontbenchers and ordinary supporters must go through.

Many have attributed the failure solely to Brexit, with the narrative going like "Labour lost the election because of its weak Brexit stance despite the good economic policies". The fallacy is failing to recognise that both Labour's Brexit and economic policies were unconvincing, and these two factors were resonating together to curate the failure. Many Remain voters are not fond of radical plans such as mass nationalisation, and despite the media urges on tactical voting, these voters simply cannot tolerate Corbyn's Labour and turned to the Liberal Democrats instead.

**"That's why Labour needs to elect a leader who can uphold their fundamental principles"**



Geology students are as satisfied as Sade // Wikimedia

That's why Labour needs to elect a leader who can uphold the fundamental principles Labour stands for; to protect the rights and services for everyone in the country and Britons abroad – from fundamental human rights to the NHS; to address and end the climate crisis; to promote equality and widen the path to social upheaval for the working class. At the same time Labour needs to reconsider its economic stance, which was, frankly, self-marginalising and dissuading. By moving back to the centre ground, Labour will stop its descent into a party for

only Londoners, activists and uni students, but remain as a broad church with a moderate and realistic set of economic policies for a dynamic economy with – as the constitution itself puts it – a thriving private sector and high-quality public services.

And Starmer is the right person for the job.

Despite being a member of the shadow cabinet, Starmer kept a distance between himself and Corbynism. Most notably he abstained, instead of opposed, the Welfare Reform Bill introduced by the Conservative government in 2016. In the

leadership election that same year, he pitched his support to Corbyn's rival Owen Smith, a centrist candidate. But at the same time he isn't a vocal critic of Corbyn and the "old Labour" trade unionism, for he has been voluntarily providing free legal advice and representations to trade unionists since the Thatcher era.

Keir Starmer started off his career as a human rights barrister. He worked extensively on a pro bono basis, representing many who couldn't afford legal representation in human rights cases. This has continued after he obtained the honour of appoint-

ment as Queen's Counsel. He then worked as legal and policy adviser to the Northern Ireland police and the government. From 2008 to 2013 he served as the head of the Crown Prosecution Service. He is also a barrister for Human Dignity Trust, a charity aiming to defend LGBT rights throughout the Commonwealth through legal means.

He stood opposed to many policies of the Blair government, believing it has strayed too far from Labour values. In 2003 he voiced that he believes the legal advice Blair relied on for the invasion of Iraq was flawed – a stance later confirmed in the Iraq Inquiry in 2016.

**"Among the contenders, Starmer stands out the most with his strong, continuous history of sticking to Labour's principles"**

In 1995, when Shell attempted to dispose an offshore oil storage platform into the ocean, Starmer joined Greenpeace to stop an ecological disaster. He fought for 10 years in the McLibel case, when McDonald sued two environmental activists for libel for sending out leaflets on the street. Recently he has expressed support towards Extinction Rebellion

protesters. He is also on board with the Green New Deal, pledging for a green industrial revolution to decarbonise the economy.

Starmer devoted his maiden speech in the House of Commons to defending the Human Rights Act 1998, an Act the Conservative Party has long been pledging to repeal. It is the only comprehensive human rights legislation in our statute and the only domestic legal protection British residents have against violations of human rights.

With the Tories holding a majority of 80, the government could blaze any bill through the Parliament with ease. The country needs a strong and effective opposition to hold the government to account, especially on matters of human right and the climate crisis. Among the contenders, Starmer stands out the most with his strong, continuous history of sticking to Labour's principles; fighting for the many and the ordinary against the few and the powerful, and sometimes the state. At the same time – perhaps a trait more appealing to the middle-class voters in contrast to Corbyn, he is not a revolutionist to upset the system – for he was the Director of Public Prosecutions and has worked for several police forces – a very "prime ministerial" appearance. It's not hard to explain why he is the frontrunner in the leadership race, and rightfully so. He is the natural choice for a modern and electorally capable Labour party.

# BOOKS

books.felix@imperial.ac.uk

## *The Crimson Petal and the White: A Vivid Picture of Victorian London*

*Michael Faber's behemoth 895-page book may seem daunting, but within its pages lies a fearless and intelligent exploration of theme and setting that any fan of literary fiction should enjoy*

### BOOKS

**Taja Strle**

*Books Writer*

I am not going to lie; this book initially scared me. With its 895 pages of historical literary fiction, it presented a challenge and its mere appearance on my shelf demanded respect.

Don't get me wrong. It was not the page count alone that was terrifying - I frequently devour colossal fantasy tomes without trepidation. However, my reading pace significantly slows down when it comes to works that err towards a literary fiction style. There is something about the genre that commands your constant attention - and that can be exhausting.

In spite of my reservations, *The Crimson Petal and the White* pleasantly surprised me with its readability and robust writing style. Its enthralling storytelling pulled me in right from the first sentence, which goes like this:

*"Watch your step. Keep your wits about you; you will need them. This city I am bringing you to is vast and intricate, and you have not been here before. You may imagine, from other stories you've read, that you know it well, but those stories flattered you, welcoming you as a friend, treating you as if you belonged. The truth is that you are an alien from another time and place altogether..."*

Employing an omniscient narrator is a tactic that does not always pay off - but the world this

book was inviting me into from my comfortable and well-lit bedroom was so richly gruesome, with just the right amount of light to balance out the darkness. A description of the dim, cobbled street full of beggars and horse shit, pouring rain and the smell of urine is almost enough to turn you away. But at the end of that street is a pub, light and warm, full of hazy patrons - and there is a story unfolding within it.

Almost voyeuristically, you want to step closer and take a look; there is a temptation to explore and experience as you invisibly follow first one character then the next, in a manner that is not dissimilar to Harry Potter's visits into the Pensieve. This

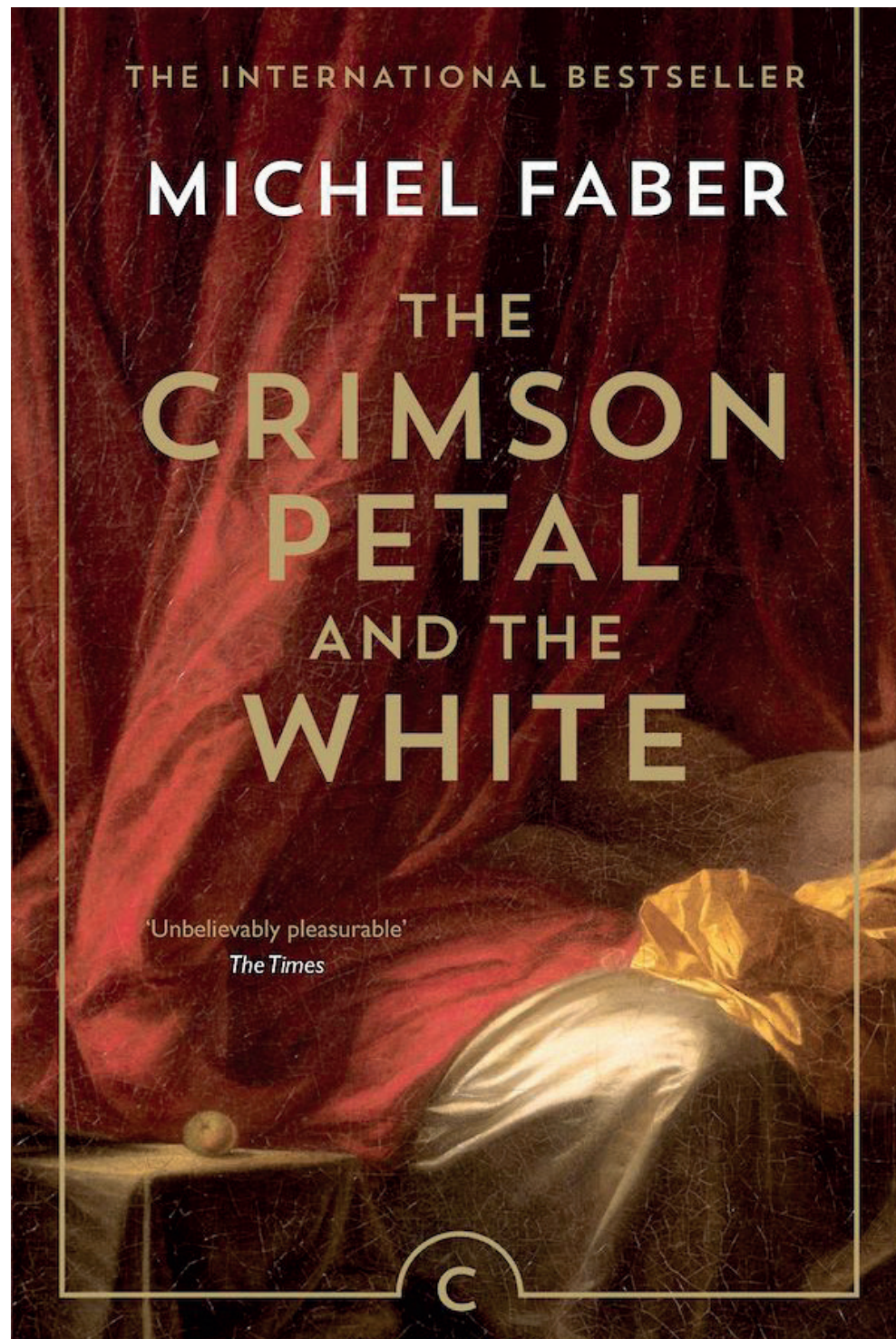
**"This enables the author to explore characters in-depth, and lay them against the rich backdrop of Victorian London"**

way of gently inviting you in and guiding you along makes for a smooth flow that enables the author to explore a number of characters in great depth, and lay them against the rich backdrop of a veiled and nearly-tangible Victorian London.

Faber gives the book an almost Dickensian atmosphere but with prose that is distinctly modern and unabashedly uncensored - something that would probably evoke more than a few gasps were it to be published in Mr. Dickens' times. He achieves tangibility by not shying away from fearlessly describing even the most taboo of details - the protagonist's red and flaky skin that is likely psoriasis, the various liquids and vaginal douches prostitutes used to prevent getting pregnant, the sounds and smells of the sewage-clogged streets. He weaves them in expertly, again and again - and the result is as vivid as a photograph.

Indelicate and brutally honest in its portrayal, this wonderfully irreverent novel follows Sugar - a prostitute, yes, but perhaps more importantly an exceptionally intelligent young woman. She performs her job well; so well, in fact, that she is known far and wide for it. But what makes her unique is her shrewd ability to hold conversation with the men that seek her out for a quick shag, but then stay - and inevitably keep coming back. As her life slowly and inexplicably intertwines first with high-society gentleman Mr. William Rackham and then with a cast of highbrow and lowbrow characters from all walks of life, she ends up changing the course of all their lives forever. And the journey is riveting.

Revealing the plot any further would, in my opinion, take from the



book, even though the story itself is not complex. Instead, its beauty lies in its unique, colourful, and detailed characters that mesmerisingly come to life on the canvas of 1870s London, that is complete with realistic political machinations of its society.

As a result, this behemoth of a book (and, with its 895 pages, it can't be called anything else) very masterfully explores themes of class differences and exploitation of the poor - which in my opinion is the cherry on top that makes it not just an entertaining read but an

insightful one as well.

So I would implore you: if you've ever wondered what it would be like to take a walk along the streets of old Victorian London, follow along - embark on the journey of Sugar in Michael Fabre's *The Crimson Petal and the White*.

# BOOKS

books.felix@imperial.ac.uk

## The Power: A Novel with Powerful Ideas that Fails to Execute Them

*The Power is a book with enormous potential, but it fails to effectively capitalise on them with any nuance - and instead hammers home a staler, less original IDEA*

### BOOKS

**Henry Alman**  
Editor-in-Chief

I feel quite torn about *The Power*.

On the one hand, I think the frank - even brutal - portrayal of the consequences of physical power is to be admired. There's something to be said for the fearless bleakness required to write those scenes; scenes of rape, abuse, torture, on the individual and systemic level. The book doesn't shy away from the horror of the situations it is presenting. It also provides a somewhat refreshing view of power dynamics, moving away from certain modern popular views that tend to boil down to "men bad, women good".

On the other, that refreshing viewpoint is also the source of the novel's weaknesses. Simply put, the concept was not as fully explored as I would have liked.

Yes, some of the insights into the way that physical power propagates into social power and the oppression of the powerless were quite insightful. The acknowledgement that being powerless can, in controlled situations, be an attractive or enticing thing (especially for those previously used to power) was one I didn't expect to find. How many authors dare to write about men enjoying being submissive in bed, for fear of drawing ire from the depressingly fragile egos of the Chads of the world? And yes, it successfully communicates the old

adage "power corrupts, and absolute power corrupts absolutely." But I also feel that it fails to go any further, which is what I was expecting given the high praise friends and family have heaped upon this book.

The essential idea of the novel is that our world's historical abuse of women is a product of the physical power men tend to have, which results in social power, and not a product of something like biological differences in the brain, such as levels of testosterone. In other words, it does not matter which gender is the more 'powerful', in the sense that it wouldn't stop abuses of power. When women suddenly develop 'skeins' which allow them

**"It could have been explored deftly, focussing on differences rather than similarities to our world"**

to discharge electricity severe enough to main or kill, world history and the patriarchy is upended.

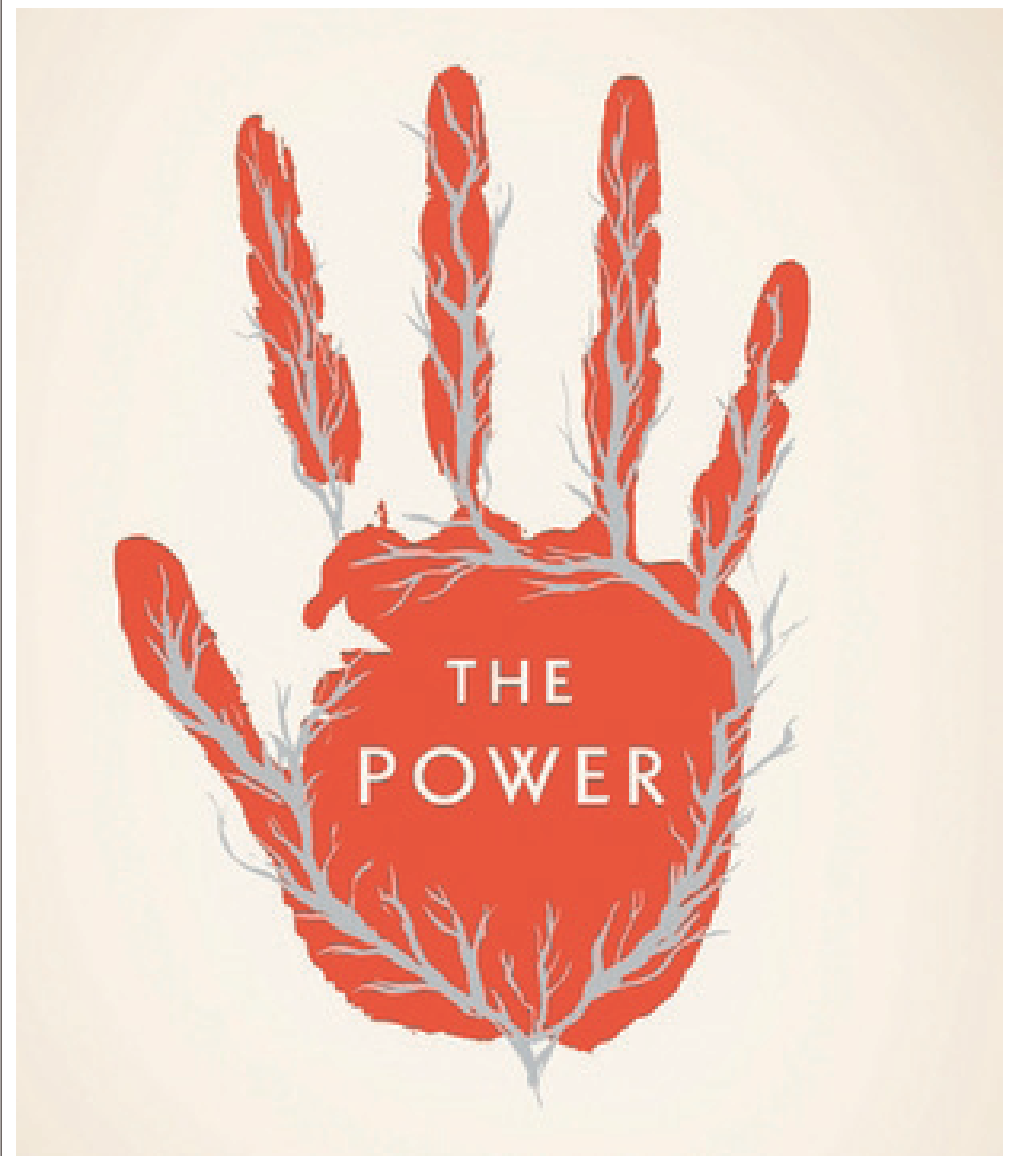
The consequences of this shift are speculated upon, and conclude that women having the power to rape and pillage, or to launch nukes in signs of aggression, or whatever else would result in just as horrific a world as our real one - one in which

men tend to have that power. The idea, then, is that gender is essentially purely a construct of power dynamics; the stereotypes that are associated with genders are originated from the difference in physical power between genders; and removing power differences results in no need for the gender construct.

Great. I can get behind all that.

However, I feel like all of this could have been explored more deftly, with more thought dedicated to the differences that might exist in this new hypothetical world - one in which women only gained physical power after having been oppressed for millennia - rather than the similarities. Because I do genuinely believe there would be differences - not because women are better than men, but because anybody who has been subjugated would be fully aware of what they were doing by abusing their power. That situation is blatantly not the same as the world we live in, where the privilege of men is there because they have always had the advantage of that physical power.

There are multiple ways this could play out. The urge for revenge could drive greater atrocities. The oppressed could empathise and rise above those desires. Any number of other interesting possibilities present themselves. However, *The Power*, in seeking to make its point about genders as a social construct, wastes this chance. It deliberately portrays a world virtually identical to our own, just



with the genders reversed; the end of the novel features an 'epilogue' of sorts, thousands of years later, where a male writer is advised to use a female pen-name instead.

As a result, the novel very much starts to read as "hey you know how men do this to women in our world? well women would also do that to men in this world! Power corrupts, guys!" I understand that, to an extent, that is the point being made by the novel - but I think, then, that the point should have been changed, or rather

developed further. Indeed, it starts to feel a little 'Animal Farm' in how 'on the nose' it is. *Animal Farm* is great, don't get me wrong, but there's a reason it's not considered a masterpiece quite on the level of 1984. *The Power* ends up being just interesting, at many points brutal and raw in a way that deserves commendation and respect, and with the potential to be a powerful novel for disabusing the un- or mis-informed about the nature of power as it relates to gender. I've found myself using it as an

example in conversation, in an attempt to illustrate certain points, and that speaks for itself.

However, it sacrifices subtlety and nuance in order to ring those particular notes as strongly as it does, pounding the message in with a mallet, and in doing so can come across - despite the darkness of some of its contents - almost naive in its interpretation. It will not change the landscape of political or social commentary for any informed reader, as I feel it had the potential to do.

# BOOKS

books.felix@imperial.ac.uk

## How to Bake Pi: A Heady Mix of Mathematics, Logic, and Baking

### BOOKS

**Ameena Hassan**  
Puzzles Editor

Eugenia Cheng's book *How to Bake with Pi* was a can-opener in a way that most books have never been. Without the aim of educating the reader, it gives simple recipes for 'fancy' meals, with a mathematical context attached. Working off the best (or worst!) pun in mathematics - the ratio of a circle's circumference to its diameter being delicious - this book is one for all the puns.

Likewise, this book goes on - each chapter is a recipe and a short passage on a mathematical concept. This slim edition was a gift (both figuratively and literally); while I tend to view mathematics as an ad-

venture, Cheng seems to revel in the mathematics of food. Or the food of mathematics - you really can't tell. After having read it over the break, I still can't say if it's a book on mathematics, logic, or baking. Maybe it's one on all three.

This book is perfect for the layperson with a free afternoon, perfect like a cinnamon roll on a rainy day in a way most books on math aren't. It's as

**"Every chapter is another leaf out of a cookbook, another dish not in your family's lexicon of foods"**

much fun to have a read-through as it is to make the recipes described. Recipes are simple and easy to follow, fitting with the general ages of its audience - young people learning about mathematics outside the class, and who are still not very sure about how to make lasagne.

A recipe for porridge popped up in the middle - this book will surprise you in its variety and may remind you of an encyclopedia you might have once owned. Every chapter is another leaf out of a cookbook, another dish not always in your family's lexicon of foods. Coming to university and having to feed yourself is extremely daunting amongst all the other first experiences it brings; this book lets you take a step back, delve into something as complex as category theory, and

**"Even if I still burn rice, it's nice to know what a bechamel is"**

come back to take a bite of vegan brownies.

Maybe the adventure isn't how you get there in the end, but the food you ate along the way. Anyway, it was refreshing to read what Eugenia thought about the number five - even if I still burn rice, it's nice to know what a bechamel sauce is. (Something I thought was too fancy-sounding for me to make, but gosh is it great with pasta.)

If you don't like savoury, you might like sweet. Don't worry, there's a recipe for pi too, although I have yet to try it!

"Whimsical...rigorous and insightful."—New York Times Book Review

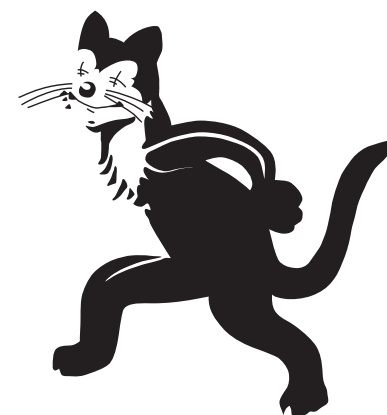
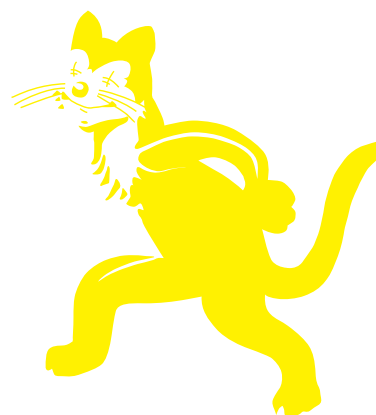
## HOW TO BAKE $\pi$



An Edible Exploration  
of the Mathematics  
of Mathematics



## *Felix is recruiting!*



**We want you – yes, you! We're looking for writers, photographers, editors, illustrators, reporters, computer experts and grammar nerds to join our team. No experience needed – we'll teach you everything you need to know. If you're interested, send us an email on [felix@ic.ac.uk](mailto:felix@ic.ac.uk)**

## ARTS

arts.felix@imperial.ac.uk

## Antigone: 2020 Edition

## ARTS



**Where?** New Diorama Theatre

**When?** 7th June – 1st Feb

**How Much?** From £16

**Eamon Akil Farhat**

*Arts Editor*

For those not familiar with Sophocles' Theban tragedy, you may still have heard of the tale of Oedipus - the man fated to fall in love with his mother. Well, Antigone is the story of the four children born out of his incestuous relationship. The two brothers Polynices and Eteocles are off at war with each other. After returning, one is a hero and one is a

traitor, but both are dead. Antigone and Ismene, their two sisters, are left to deal with the grief and when Antigone insists on honouring the "bad" brother with a proper funeral things escalate very quickly.

In this version of Antigone, written by Lulu Raczka, much of this plot is not explored in much depth in this production, with a magnifying glass being held up to the relationship between Antigone and Esmene. Themes of adolescence, independence and sexuality are explored as well as the classic theme of morality.

The opening, with the two teenage actors rising from the literal pit of dirt and getting ready to go out with a little Destiny's Child interlude is conducted with no dialogue

and yet still manages to introduce the strong bond between the sisters. The performance begins with a long opening babble about the girl's big night on the town. For those not familiar with the storyline, the plot itself was not made clear until about 20 minutes in. While this long opening babble explores ideas of sexuality, there was a lack of direction leaving the audience grasping for more substance.

Throughout the production, the colloquialism injected into the tense dialogue sometimes waters down the gravity of the themes being discussed. Yes, this adaptation is meant to bring the story closer to home for young people, but using "like" every other word isn't always the way to do it.



The staging emphasizes the bond between the two sisters. // Dee McCourt

Overall, the performance does hit home and make the audience think about themes that were not present in the original story. Antigone (played by Annabel Baldwin) and her younger sister Ismene (played by Rachel Hosker) capture every last drop of the audience's attention

from start to finish with their urgent and powerful performances. At one of the tensest moments in the play, Baldwin's monologue, where she exposes her internal struggles with what is right or wrong cuts through directly to the audience. Hosker's final monologue dealing

with grief elevated the entire performance and cemented her in my mind as the real talent to watch from this production. If you are looking for a truly mesmerising performance put together by lots of new talent, this production is perfect for you, no prior knowledge needed!

## Cirque du Soleil: Luzia

## ARTS



**Where?** Royal Albert Hall

**When?** Until 1st March

**How Much?** From £45

**Ozbil Ege Dumenci**

*Arts Editor*

**Amanda Hertzberg**

*Arts Writer*

Cirque du Soleil's most recent show to grace the Royal Albert Hall stage is Luzia, a colourful creation said to be inspired by Mexican culture and sponsored by the country of Mexico itself.

Luzia is, at times, a display of the cast's immense talent, however,

the overall show was plagued by a sense of monotony. The acrobatic acts felt outdated, and these were few and far in between random comedic acts that were frankly quite unfunny. This included an extended whistling sequence, that might have been funny for the first 3 minutes, but quickly lost its charm. There was no sense of urgency or

**"A confusing importance was placed on an act which simply involved some football tricks"**

enthrallment, bar a swing set sequence near the end of the second act. Additionally, a confusing importance was placed on an act which simply involved some football tricks. Are we all left to presume that Mexicans like football?

Some of the show's main redeeming qualities were its impeccable costumes, sound and lighting design, and a novel and creative display of waterworks. The music, although having an authentic feel to it, was mainly forgettable. The use of puppetry was also mainly successful: lifesize beetles, armadillos and ants were, to my surprise, cuter than they were creepy. A horse puppet operated by three men came across as clumsy in the first act, but served a better purpose later in the

**"A recurring philosophy during the making of this show seems to be 'when it doubt, soak everything with a giant waterfall'"**

show. Still, War Horse did a better job with horse puppetry.

As aforementioned, an important role was bestowed upon a tall waterfall which randomly appeared in the middle of almost each individual act,

albeit in different ways every time. A particularly impressive use of this displayed the water falling in unique formations. A recurring philosophy during the making of this show seems to be 'when int doubt, soak everything with a giant waterfall'.

Just when you thought the water thing had been overused, the stage turned into a giant pool, from which a cast member ascends via a network of vines to swing around countless times (just like P!nk has been doing for well over a decade) alongside a giant puppet of a cheetah.

Unfortunately, Luzia does not indulge in Mexican culture nearly as much as it could have. However, it does have its visual moments of near-brilliance. An

honourable mention goes to the curtain which descends at the end of the first act. This curtain is intricately designed with Mexican motives and gives a minimal amount of authenticity to the show.

Overall, Luzia is visually striking but lacking in substance. It's hard to avoid making comparisons to Coco, a recent Pixar movie, which is a true celebration of the Mexican culture. It does say a lot that about 80% of all the applause during Luzia was directly requested, nay, demanded from the audience. One can't help but wonder if this signifies the end of the circus.

# ARTS

arts.felix@imperial.ac.uk

## Once: The Musical

*The tale of two strangers connected through music*

### ARTS



**Where?** Touring  
**When?** Until 25th July  
**How Much?** From £13

**Ozibil Ege Dumenci**  
*Arts Editor*

**A**dapted from the 2007 indie movie of the same name, *Once* first made its stage debut on Broadway in 2011. For a long time, the movie has been one of my all-time favourites - desperately romantic and gut-wrenchingly realistic, all topped up with the wonderful music written by Glen Hansard and Markéta Irglová, who originally played the lead roles in the movie.

One of the biggest debates surrounding *Once*, both the movie and the stage show, has been whether it is a musical, or simply a movie (or play in this case) that happens to have music in it. Well, it's slightly complicated.

*Once* focuses on two musicians, simply called 'Guy' and 'Girl', who meet at possibly what is both exactly the right time,

and the worst possible time for them to meet, and form a formidable bond through sharing their music with one another. Simply put, the songs are 'written and performed' by the character, be it in pubs, in recording studios, or just to each other, and unlike the traditional musical, are not simply plot advancement devices. However, as the songs also represent the thoughts and feelings of the characters, either when they are being written, or as they are being performed, they do a more than adequate job as a so-called plot device.

And, boy, are the songs exceptional.

**"The real beauty of the staging is the starry sky overlooking Dublin"**

As I've already mentioned, I've been obsessed with *Once* for almost a decade now, having listened to both the movie soundtrack and the Original Broadway



Under the moonlit sky, overlooking Dublin// Mark Senior

Cast Recording countless times. 'Falling Slowly', one of the first songs in both the play and the movie, won an Oscar and was nominated for a Grammy, which is quite a feat for an indie movie. Powerful gems such as 'Leave' and 'When Your Mind's Made Up', originally performed by Glen Hansard, do lose some of their grit through some much-expected theatricalisation. However, the new arrangements, complete with breathtaking build-ups and airtight harmonies, absolutely make up for this change in

tone, giving it a new sense of power. Additionally, the effective use of the 'Falling Slowly' motif throughout the play is, although nothing new in musical theatre history, executed marvellously, evoking a sense of love so hopeless that it hurts.

Carrying the beautiful tunes written by Hansard and Irglová are a magnificent group of musician-actors who play instruments on stage, adding to the cosy, intimate atmosphere of the set design. The cast is led by Daniel Healy and Emma Lucia, who not only hold their own,

but excel in filling the large shoes left behind by Hansard and Irglová, as well as Steve Kazee (Tony winner for the role) and Cristin Milioti (later rose to prominence as 'The Mother' in *How I Met Your Mother*), who originated the roles on Broadway in 2011.

The set, designed to resemble a pub somewhere in Dublin, is impeccable too. The show spans many locations, which are brought to life by the excellent and varied use of props. However, the real beauty of the staging is the starry sky overlooking Dublin, revealed to the audience as the ceiling of the pub is lifted and the floor of the stage lit up to resemble a nighttime skyline. Czech surtitles are used to represent that the characters are supposed to be speaking in Czech. At one point in the play, the surtitles switch from translating English to Czech to the other way around, creating a subtle yet wildly romantic moment.

To answer the original question, *Once* is neither and both. Compared to the movie, which simply

follows the two main characters' journeys through their music, the stage production definitely has an increased sense of audience engagement. This is largely due to the impeccable musical arrangements, which hand over some of the pivotal songs (such as 'Gold') to the excellent ensemble.

Whether a musical or a play with music, *Once* is a complete marvel, striking the perfect balance between fairytale and real life. Not simply a love story, it is a story about life, the power people have to change it for the better, and the importance of right timing for some things to fall into place, and others to fall apart. It is as much a breath of fresh air now as it was when the movie first came out more than a decade ago. If you somehow end up wherever *Once* is touring for the rest of the year (and they will be touring all over the country), I urge you to rush to the theatre and witness it in person, and support the pure artistry that has swept me off my feet time after time, both on screen and on stage.



The sheer intimacy of the show is paradoxically amplified by the presence of the ensemble cast// Mark Senior

# FASHION

felix@imperial.ac.uk

## Welcome to Fashion

### FASHION

**Syon Lee**  
Fashion Editor

**F**ashion – love it or hate it, everyone’s talking about it. And it turns out we at Felix have plenty to say on the matter, whether it be tracking the latest trends amongst Imperial’s students, brutally taking apart the latest met gala looks, or arguing about whether culottes have a place in modern-day society. In fact, Imperial College has a wealth of fashion-centric activities and talents, from our very own Fashion and Design Society to students within the university who own their own fashion labels (yes they exist, what have you been doing with your life?). Look no further than the end of Exhibition

Road and you’ll come across incredible exhibitions and curated collections of legendary designers at the Victoria and Albert Museum (currently showcasing Mary Quant’s work, the revolutionary who blessed the Swinging Sixties’ girls with their uniform: mini-skirts and hot pants). Given our location in one of the world’s fashion capitals, it seemed a real shame that Felix had abandoned its fashion section for so long. Flicking through the leather-bound volumes of all our previously published issues, it’s clearer than ever that what really marked the progress of time and acted as a social barometer was not political leadership or foreign and domestic conflicts, but the clothes we wear and how we wear them. Empires rise and fall but from the moment

FRIDAY 16 MARCH 2012 | FELIX  
Fashion Editors: **Saskia Verhagen**  
**Alice Yang**  
fashion.felix@imperial.ac.uk

### FASHION

## Fashion week highlights for autumn/winter 2012

From New York to London, Milan to Paris; **Saskia Verhagen** and **Alice Yang**

**Alexander McQueen**

Once again, the original reference to McQueen’s work is his 1996 collection of black, red, and white. The shoes, neckties, and the model were, in fact, a nod to the 1950s. The collection was a tribute to the 1950s, a time when fashion was a mix of the old and the new. The collection was a tribute to the 1950s, a time when fashion was a mix of the old and the new. The collection was a tribute to the 1950s, a time when fashion was a mix of the old and the new.

**Jil Sander**

Raf Simons’ swan song at Jil Sander could have seemed planned to be just that: a collection to close the door on the brand. However, the departure from the house was a surprise. The collection was a mix of the old and the new. The collection was a mix of the old and the new. The collection was a mix of the old and the new.

**Louis Vuitton**

All change on the Louis Vuitton runway. The collection was a mix of the old and the new. The collection was a mix of the old and the new. The collection was a mix of the old and the new.

FELIX | FRIDAY 16 MARCH 2012 | 39

### FASHION

## Fashion week highlights for autumn/winter 2012

bring you the best bits from last month’s catwalks

**Gucci**

A romantic decadence underpinned Guccio’s show. The collection was a mix of the old and the new. The collection was a mix of the old and the new. The collection was a mix of the old and the new.

**Lanvin**

This season at Lanvin continues. The collection was a mix of the old and the new. The collection was a mix of the old and the new. The collection was a mix of the old and the new.

**Haider Ackermann**

Inspired by the autumn leaves, Haider Ackermann’s show was a mix of the old and the new. The collection was a mix of the old and the new. The collection was a mix of the old and the new.

### The last time Fashion graced the pages of Felix // Felix

Eve bit the apple and had her eyes opened to the allure of foliage-based lingerie, clothing has been humanity’s one true constant. Therefore, this year, at the turn of a new decade, I’m very excited to announce the triumphant return of Felix’s Fashion. Yes, we understand that the first issue of the year has been and gone but seriously, were you expecting us to launch on schedule and not... fashionably late? We’ve got interviews with our Fashion Show

designers, reviews of campus clothing offerings, and insights into the fashion industry already lined up and ready to go. However, like all revivals (such as poet sleeves and, bizarrely, codpieces) our continued survival depends on social partic-

## Art Adorned: A review

### FASHION

**Simran Gill**  
Fashion Writer

**L**ast November, the auction house, Christie’s London, became home to ‘Art Adorned’ – a private selling exhibition with an assemblage of Old Master Paintings and renowned luxury fashion brand Dolce & Gabbana haute couture creations. The fusion of these two arts depicted princesses, empresses and noblewomen as a tribute to feminine beauty. The designers also showcased the lasting influence of art-historical movements, such as Renaissance, Baroque and Rococo, and their timeless impact on fashion. These

styles flourished in Europe from the 14th to the 17th Century and radiate extravagance befitting Dolce & Gabbana’s celebrated luxury Italian heritage. To highlight this, pieces of Italian furniture were also integrated into the exhibition. The 2019 Autumn/Winter collections from Dolce & Gabbana: Atla Moda, Alta Sartoria and Alta Gioielleria, were displayed alongside devotional paintings with some pieces of artwork incorporated into the fashion pieces itself. For example, *Madonna and Child* by Domenico Ghirlandaio was cross-stitched into the corset bodice of an Alta Moda organza dress, the garment was then completed with ostrich feathers and velvet piping.

The original painting can be found in The National Gallery, Trafalgar Square. Following this theme, the exhibition also held a completely cross-stitched dress displaying a floral ensemble and *Madonna del Belvedere* by Raphael. The focal points were two show-stopping, hand-painted gowns, one of which presented a yellow and pink floral pattern on waterfall illusion tulle, whilst the other with gold Baroque style motifs extended onto an elongated train. However, the most extravagant item may have been the Alta Sartoria green velvet embroidered single-breasted jacket. This featured peaked lapels, collar and pockets embellished with a golden guilloche and a blood jas-

per button. Gold thread, sequins, pearls and crystals taking inspiration from the renaissance era were enlaced in the green damask item. Overall, it was a comprehensive assortment construing the embodiment of archetypal feminism in the 14th to 17th century in Italy. The auction collection itself is suitable for high fashion enthusiasts and the exhibition enabled access for new and younger audiences to appreciate the works of art. Although the exhibition is over, the pieces can still be viewed online as a virtual tour on Christie’s website.



Where fashion and art meet // Christie’s Images Ltd. 2019



# FASHION

felix@imperial.ac.uk



Mary Quant and Vidal Sassoon, icons in their fields // Ronald Dumont, Getty Images

## Mary Quant - An Introduction

*A quick look at one of British fashion's most recognisable names and how she shaped what we wear today*

### FASHION

**Pauline Ronnet**  
Fashion Editor

**M**ary Quant was born in 1934, the daughter of Welsh school-teachers from mining families that aspired for her to follow their path and become a grammar-school teacher. Instead she opened her own clothes shop in King's Road with the help of her husband and business partner, Alexander Plunket Greene, whom she met at Goldsmiths College, and photographer Archie McNair. Her radical designs provided a personal means for other girls to break away from their parents and to stop dressing like their mothers. In 1966 she received the Order of the British Empire 'for jolting England out of

its conventional attitude towards clothes'.

The 1960s in Britain was a decade of massive societal change. Women campaigned for equal pay and it became illegal for employers to discriminate against women. The greater availability of jobs allowed them to become more independent at a

**"[Quant] emphasised the realness of women's bodies and redefined what sexy meant."**

time when most women couldn't open a bank account without a male relative's permission, enabling them to imagine a life that went beyond

marriage and motherhood. Fifty-three years ago from 2020, the invention of the contraceptive pill had a transformative effect on gender relations, creating a stark contrast between the teenagers of the 60s and their parents' generation.

This shift was mirrored in fashion. The loosening of sexual mores cast out the torture instruments that moulded women's bodies into artificial, idealised shapes designed for male excitement - the waspie corsets that cut women's figures in two and the wired, conical bras - and brought in miniskirts and straight-line dresses that emphasised the realness of women's bodies and redefined what sexy meant. This change echoed the freedoms afforded by the short, fringed dresses and harem pants of the 1920s, a short-lived period of female emancipation that followed the deprivations of the war and made Paris

the centre of fashion during les années folles. However, clothes by designers like Paul Poiret and Coco Chanel were only accessible to a small elitist clientele who could afford couture.

Mary Quant embodied a similar shift towards a new era of femininity in post-war 1960s Britain but she democratised fashion by making clothes more financially accessible to working girls. She was radical because instead of slavishly copying the designs of Parisian fashion houses to be sold to British retailers, she decided that street clothes deserved to have their own designs. It worked to her advantage that she studied Art at Goldsmiths and not Fashion, her lack of formal training allowing her to rethink design from scratch and implement her own creative vision of what women's clothing should be like ("optimistic, exuberant,

young, flirty"), capturing the mood of the time and giving an outward expression to women's greater freedoms by creating clothes that were comfortable and enabled ease of

**"...the miniskirt - a garment that is to this day controversial... and remains a symbol of defiance and sexual empowerment in the Me Too era."**

movement. Her designs were unprecedentedly

imaginative and original, borrowing pinstriped shirts from men's designs, pinafores and peter-pan collars from children's clothes and prominently visible buttons and zippers from industrial uniforms.

Her most iconic contribution, symbolic of women's growing autonomy over their own bodies, was the popularisation of the miniskirt - a garment that is to this day controversial in many countries and which remains a symbol of defiance and sexual empowerment in the Me Too era. Sixty years on, wearing a miniskirt can still feel like a rebellious act.

*Mary Quant's designs are currently exhibited at the V&A until the 16 February.*

# FASHION

felix@imperial.ac.uk



Iconic, ironic or plain moronic? // Instagram @teeharbi

## Likes, Likes, Fashion Baby

*Instagram's removal of visible likes could be the fashion moment of 2020*

### FASHION

**John James Humm**

*Fashion Writer*

At in the group study area overlooking the library café, I saw someone go by wearing a hoodie with a large American Express logo on the back. My immediate thought was that this was a designer hoodie employing a trendy but also ironic logo, the likes of which Balenciaga and many others have ridden to the top over the course of the last decade. Balenciaga's Creative Director Demna Gvasalia even went as far to play on the Mastercard logo for their SS20 collection, perhaps as a comment on consumerism in the industry, more likely because the Mastercard logo is instantly recognisable. A closer look at the hoodie in the cafe revealed that

I was sadly mistaken as the hoodie was from a conference sponsored by the credit card company. If the 2010's, especially the late 2010's, are to be remembered for any single trend, it must be logomania. Instantly

**“Logos meant likes, likes meant increased reach, and increased reach ultimately means more money”**

recognisable monograms and name-brand prints dominated runways, whether it was Alessandro

Michelle's resurrection of Gucci or Virgil Abloh's meteoric rise at the helm of Off-White. The last decade has been all about telling everyone, in no subtle way, who you are wearing.

Rather than focusing on distinctive silhouettes which have defined designers throughout the history of fashion, designers over the last ten years have become dependent on instantly recognisable logos for fear of being forgotten about at fashion week or worse, scrolled past on social media. Instagram's impact on fashion has been widely reported, and the rapid turn to relying on logos is but one feature. Logos meant likes, likes meant increased reach, and increased reach ultimately means more money for Bernard Arnault and his designers. For any designer to reach the upper echelons in the 2010's, creative use of

prints and collaborations were paramount along with, of course, crafty use of “Instagram influencers”.

Instagram has been trialling the removal of visible likes from the platform throughout 2019. If the platform is to remove likes completely from the platform in 2020, we could see a paradigm shift in fashion design and marketing, unleashed from the shackles of scrolling. Removing visible like counts would encourage creative content to be appreciated for what it is, not its number of double-taps. This is a shift so great that Instagram's decision could dictate future trends more so than any single brand or collection this year. The most dramatic change could be one of consumers looking en masse for trends outside of Instagram completely, relying on new sources of information and perhaps

returning to traditional forms of fashion journalism.

**“In recent years, I have clung to designers like Iris Van Herpen for hope of something more in fashion's future”**

Make no mistake - I have loved the irony and tongue-in-cheek of logomania, and I am undoubtedly addicted to Instagram. However, I deeply miss the ambitious and daring collections of the decade before last from the likes of McQueen

and, in recent years, I have clung to designers like Iris Van Herpen for hope of something more in fashion's future (who I highly suggest looking up if you have not seen her work). Popularity of these collections seem impossible at the moment for their expense and the sustained attention they require for consumers. The end of likes and the subsequent change of attitude on social media could enable a new generation of designers to explore complex, nuanced designs once again without the demand of every collection needing a logo t-shirt and hoodie to be successful. On the other hand, Instagram removing likes might allow TikTok to take its place as the fashion marketing social media. If that is the case, I am sorry in advance.

# FASHION

felix@imperial.ac.uk

## Imperial College Fashion Bible: Episode 1

*A comprehensive guide to campus styles, showing you what to wear and how to wear it. Find your tribe today!*

### FASHION

#### John James Humm

*Fashion Writer*

**H**ere at Felix, we take what we do very seriously because we believe our writing is a chance to turn a mirror to the world we live in and give us a moment to reflect on the part we play. Sometimes, that reflection is ugly (see Politics or the Comments section) and sometimes it is breathtakingly beautiful (see this week's centrefold). But here at Fashion, we prefer to use these reflections to fix our hair or make sure our tie is suitably asymmetric (*sprezzatura* is an artform). However, in the spirit of Felix and the search for meaning, we turn our full-length changing-room mirror to you guys. Take a good hard look and see if it's your likeness we conjure!

#### Brick Lane Ben

Brick Lane Ben is rarely seen on campus without his Tommy Hilfiger fleece

and dickies. He hasn't bought anything new himself in years and as a result smells somewhat funky, "Like a vintage store" you say to be polite. Ben's style icon is un-

**"...key items include Levi 501's, Ralph Lauren shirts two sizes too big, his dad's old vintage tour t-shirts, Adidas superstars and Vans Authentic."**

doubtedly Mac Demarco, but he'll probably insist you've never heard of him. Over key items include Levi 501's, Ralph Lauren shirts two sizes too big, his dad's old vintage tour

t-shirts, Adidas Superstars and Vans Authentic. Looking at him is like looking back in time... at your dad. "Timeless!" you suggest, still trying to be polite.

Where to shop: Vintage Stores in Shoreditch, Kensington Charity shops, Depop, ASOS Marketplace,

#### Canada Goose Flock

The gaggle don their jackets the moment the temperature drops below double figures (Celsius, not Kelvin).

Definitely not vegan,

**"... a series of abrasive honks that sound a lot like "Trust fund baby" ..."**

definitely sweaty and definitely richer than you, the gaggle know that other layers don't matter because they've got their coyote-fur-lined jackets. Don't be surprised if



Our target audience// FJ Gaylor, Imperial College Asset Library

they unzip to reveal the Emperor's New Clothes underneath.

The gaggle are protective of their territory and possession, deploying a series of abrasive honks that sound a lot like "Trust fund baby" if you get too close. They are probably the ones reserving a computer in the library with a pencil case and a box of tic-tacs

Fun fact: a gaggle of geese in flight are called a wedge.

Where to shop:

Canada Goose, Harrods

#### 2000s Tina

Tina's committed to bringing back the 2000s whether it's a good idea or not (it's not).

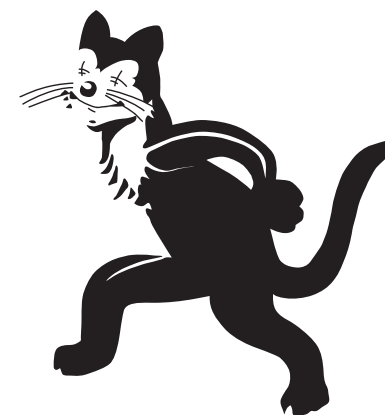
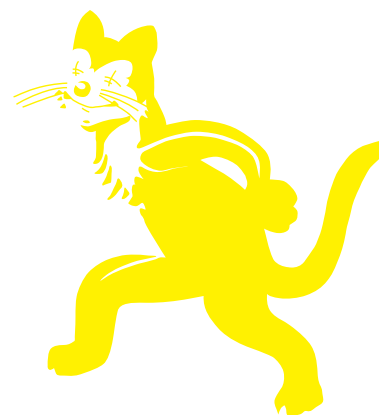
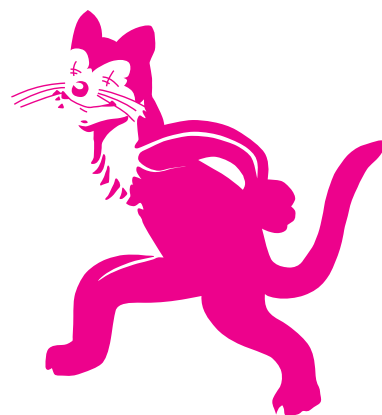
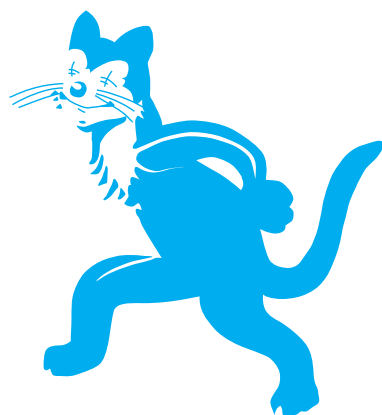
Flared trousers, crop tops, puffer jackets and bootleg Chanel are all staples of the daily look. They may think fondly of those as simpler times and maybe they were, but no amount of rose-tinting can excuse fishnet crop-tops or the sheer amount of denim.

Style icons include Paris Hilton (when she was relevant... which was when exactly?) and Britney Spears (pre-melt-down version) with soft goth elements mixed in.

Unfortunately, the cyclical nature of fashion is bringing some 2000s terrors back to the present so we might be facing a glitter hair-clip resurgence any day now.

Where to shop: Depop, Juicy Couture, OMighty, Lazy Oaf, Claire's

## Felix is recruiting!



**We want you – yes, you! We're looking for fashion writers, photographers, and illustrators to join our team. No experience needed – your passion will do! If you're interested, send us an email on [felix@ic.ac.uk](mailto:felix@ic.ac.uk)**

# HYPER



**Hyde Park Relays - Sat**

*Entries C*



**Scan For More!**



**Saturday 8th February 2020**

**Open Now!**

# Union Page



## Are you ready for Varsity 2020?

Varsity 2019 is nearly upon us and this is your chance to let us know who you think deserves the title of Headline and Showcase matches! The winner of the vote will be titled Headline and the runner-up Showcase.

Make sure you vote for the team you believe is most deserving in the VarsityFest poll.

Vote for your headliners by midnight on Sunday 19 January at [imperialcollegeunion.org/varsity](http://imperialcollegeunion.org/varsity).

Tickets for Varsity will be on sale from Monday 3 February.



## Welcome Back Fair

The Welcome Back Fair is around the corner, so get ready to meet some amazing organisations and some of your Clubs, Societies & Projects on Wednesday 22 January, 11:00-16:00, in The Great Hall and Queen's Tower Rooms.

Find out about some great opportunities, meet grad recruiters, get student deals and join a CSP. We're welcoming the likes of travel tour company, Contiki, as well as TargetJobs, InterExchange Camp USA, The Economist and more. You can also expect free pizza from Papa John's and free mochi balls from Little Moons.

This is also your chance to sign up to one of the fifty CSPs that will also be attending. Come and meet the Belly Dancing, Hip Hop, Debating and Sign Language societies and many more. Find out more at [imperialcollegeunion.org/wbf](http://imperialcollegeunion.org/wbf)



## Complete the National Student Survey

The National Student Survey gives you an opportunity to share your thoughts of your time at Imperial. We need your feedback so we can work even harder to deliver the world-class experience that all Imperial students deserve.

By having your say and answering the National Student Survey, you'll play a role in shaping the decisions and experiences of future students at Imperial.

You will remain completely anonymous, and can share as much or as little as you desire.

Take the survey now at [www.thestudentsurvey.com](http://www.thestudentsurvey.com)



## Comedy Night

Comedy Night is back in 2020 with bigger and better acts! Tickets are now on sale for Monday 3 February in The Union Bar, where you can catch our headlining act, Abandoman.

Abandoman is famous for taking audience suggestions and interactions, and turning them into hilarious hit songs and captivating tales. Winner of multiple awards and having previously toured with Ed Sheeran, this is a show you do not want to miss.

The rest of the lineup will be announced in the coming days, so stay tuned on the event on the Imperial College Union Facebook page. To get your ticket now for £6 (which includes a drink!), head to [imperialcollegeunion.org/comedy-night](http://imperialcollegeunion.org/comedy-night)



THE UNION BAR  
est. 1957

## Wine Tasting: Spanish Wines

20 January 2020  
The Union Bar

imperial  
college  
union

**17** January, Friday

**Thank Goodness It's Friday**  
Metric | 20:00 - 02:00

**Bop**  
Reynolds | 20:00 - 02:00

**20** January, Monday

**Wine Tasting**  
The Union Bar | 17:30 - 19:00

**21** January, Tuesday

**Super Quiz**  
FiveSixEight | 20:00-22:00

**Games Night**  
h-bar | 19:30-23:00

**22** January, Wednesday

**CSP Wednesday**  
Beit Bars | 19:00 - 01:00

**23** January, Thursday

**Pub Quiz**  
h-bar | 19:30 - 21:30

**24** January, Friday

**Beit Me I'm Famous**  
Metric | 20:00 - 02:00

**Karaoke**  
h-bar | 19:30-23:00

[f](#) [beitbars](#) [f](#) [hbarpub](#) [f](#) [reynoldsbarcx](#)



#icuelections

# Think about standing

Nominations open soon for major student leadership positions at Imperial for academic year 2020/21. See the Leadership Election dates below and start thinking about the roles.

## Nominations open

12:00, Monday 3 February

## Nominations close

12:00, Friday 28 February

## Voting begins

12:00, Monday 9 March

## Voting closes

14:00, Thursday 12 March

---

See positions at:

[imperialcollegeunion.org/elections](https://imperialcollegeunion.org/elections)





Imperial College Union

# Welcome Back Fair

22 January 2020

Wednesday 22 January, 11:00 - 16:00  
South Kensington Campus

## MUSIC

music.felix@imperial.ac.uk

## Love Techno, Hate London

## MUSIC

## Anonymous

Music Writer

Queue. It's midnight, in East London during Autumn. As always, you're waiting in the cold. The fear of peaking whilst in the queue is daunting. And you still need to contest with all the people "finding their friends". But slight annoyance dissolves into ecstasy as the bouncer pats you down and gruffly says "next", and like that you're in. But then there's still the obligatory need to

use the toilet and then the scamper to the cloakroom before you finally enter the main room.

Noise. Waves of pulsating bass and hypnotic synths fill your head and reverberate through your body. Your bones rattle. Your feet buzz. Your mind dances. You quickly find your rhythm, accompanied by you, yourself, and the music. Your friends are beside you forming the huddle that would last the entire night. Your breath catches in your throat and your pupils dilate; excitement takes hold. You begin bobbing your head backwards and forwards, rotating

your hips, swinging your shoulders. Starting slowly and gradually building until you've locked into sync with the tempo of the music. The crowd perfectly mirror the emotions bubbling within you.

Release. It's 1am. You look around the room, light is absorbed by the dark interior. Occasionally, the whirling light illuminates a stranger's face. For the briefest moment, your eyes make contact. From that one look it's clear that you've both been brought here to find the same fix for your mutual addiction. It's very intimate. This is the reason you came – to be

part of a culture, member in a society, dancer within a rave. With a sluggish, fuzzy feeling you turn back to look unfocusedly at the DJ booth where a black silhouette fiddles with turntables and dials. Just as the night has begun, it seems, your friends motion upwards. With a sinking feeling, you know the night has come to a close.

Dark. The shimmering from the streetlight down the road dazzles your eyes. You push your cold hands deeper into your pockets as you admire the steam from your breath. It's 3am; you're wearing a hoodie layered with a



Inspired by the Berlin based club events // SI-Blog

puffer jacket. Usually you'd be tired at this time of night but you're fully alert and dialled into your senses. Part of you wants to stay, the other knows

the night is finished. You head towards the bus stop, to your two friends waiting for the N25.

## Felix Recommends...

## MUSIC

## Patience



**Artist:** Mannequin Pussy. **Label:** Epitaph. **Top Tracks:** Drunk II, Who You are; **Fans Of:** Sleater Kinney, Parquet Courts. *24 minutes*

## Miles Gulliford

Music Editor

Mannequin Pussy is a punk band hailing from Philadelphia, *Patience* is the group's 3rd LP, and their first on indie label Epitaph, home to Weezer, Rancid and The Offspring among others. While patience brims with sizzling guitar lines and raucous drums, it's production (courtesy of emo veteran Will Yip) gives the record enough space to conjure a range of emotions.

Shorter tracks like 'Drunk I' and 'Clams', bring the high tem-

po head bopping energy hardcore punk fans live for. These tracks bowl the listener over in waves of distorted guitar and screamed vocals,

Meanwhile, introspective lyrics and atmospheric, shoegazey instrumentals, make tracks like 'Drunk I' and 'High Horse' veritable highlights of this tour de force. "...the nights I called you/I was so fucked up/I forgot we were breaking up/I still love you, you stupid fuck" croons Marisa Dabice (lead singer/guitarist) over fuzzed-out guitar. The harmonic depth of the songwriting adds power to her intimate and vulnerable lyricism.

'Who You Are' is a great example of this. With a hook built around vi-I intervals, stirs up angst reminiscent of hardcore/emo bands: Tiger's Jaw, Rilo Kiley and Sunny Day real estate. Lyrics questioning "Who taught you

to hate the way you are?" add to the track, resulting in a punky-power ballad worthy of serious pop rotation.

*Patience* is well worth a listen for any punk or indie fan, as it exquisitely toes the line between a violent, viscera spewing romp and a more introspective, emo influenced collection of tracks. And it's less than half an hour!

## MUSIC

## Bedroom Tapes



**Artist:** Ebi Soda **Label:** Roc Sola Terra **Top Tracks:** Lake, Dimmsdale; **For Fans Of:** Ruby Rushton, Ezra Collective; *30 minutes*

## Miles Gulliford

Music Editor

Ebi Soda are a Brighton based jazz septet. Their tracks revolve around sputtering

grooves, floating synths and a sticky sweet horn section. I had the fortune of stumbling across their debut LP *Bedroom Tapes* over christmas, and have found myself listening regularly since.

The tunes here ease the listener in with spacious melodic hooks, ornamented with languid synths. Where they go from here however, is anyone's guess.

Track 'Libre' chooses to excentuate its melodies with intertwining horn harmonies, while 'Dimmsdale' and 'Resent' opt for more raucous solos, the opener in particular, is notable for its squaking sax-work.

'Lake' is notable for its blown out drums & RnB vocals.

With their debut, Ebi Soda have successfully carved a nook of their own in the new jazz movement, a pleasant listen for aficionados and newcomers alike.



Whose idea was this album cover? // Wikimedia



Mannequin Pussy set the world on fire // Wikimedia

# MUSIC

music.felix@imperial.ac.uk

## Wiley vs Stormzy

*Another in a long history of clashes that lie at the core of grime's enduringly raw spirit.*

### MUSIC

**Asad Raja**  
Music Writer

**D**rawing influence from the lineage of genres spawning from the late 50's Jamaican sound system culture, where "sound clash" competitions were fundamental, grime has historically held clashes and beefs between artists as sacrosanct. Jammer's iconic Lord of the Mics is testament to that – a series that saw MCs sparring bar for bar, its first instalment being recorded in the grime legend's basement back in 2004. Since then, grime has evolved and reinvented itself. 2015 stands out as the year of the genre's biggest second wind, catalysed by a grime war spearheaded by Chip's viral clashes with Bugzy and Yungen. Thus, grime's next phase, that of its greatest commercial successes, was built off of clashes. The new grime war that has unfolded

over the past few months, climaxing in clashes between Wiley – grime's undisputed godfather and Stormzy – its most successful commercial output, could point to an exciting re-ignition of the scene's innate personality and energy.

The typically convoluted timeline of this one started with Dot Rotten sending for Jay1, before going on to attack a host of other big names in grime over the course of 12 dubs in total. Wiley got involved, ever the manic clashing veteran, dragging

**"... asserting that Wiley only mentioned his name in the first place for clout"**

in a bunch of other MCs. A tweet asking Wiley when he would respond to Jaykae's scathing 'Shush'

response track was the start of Stormzy's involvement, Wiley responding by mocking both artists' collaboration with Ed Sheeran. After some back and forth, Wiley dropped:

#### Eediyat Skengman 1



Artist: Wiley.

A lot of the bars here are lazy, generic assertions that he will always be the original to other rappers' imitations. The most direct attack on Stormzy is: "You never cared about grime, you just used it / Worse than Ed with your watered down music".

Surprisingly, despite a response being non-essential for someone as successful as Stormzy, he returned with his own dub:

#### Disappointed



Artist: Stormzy.

Stormzy didn't spare

any niceties, immediately getting personal by bringing up an altercation between himself and Wiley's brother, before asserting that Wiley only mentioned his name in the first place for clout.

**"... overall the track is just more of the same..."**

He also mocks Wiley's erratic behaviour towards him whilst bragging about his commercial success, saying: "Wiley's a prick cos he loves talking shit then he sobers up and then begs it / I'm so big the only thing bigger than me last year was Brexit".

#### Eediyat Skengman 2



Artist: Wiley.

"If I see your mum down Croydon market I'm gonna rip that weave off

her head" made me laugh the first time I heard it, but overall the track is more of the same and just sees Wiley emphasising that he feels Stormzy hasn't paid his dues to himself and other pioneering grime MCs.

**"He cleverly toys the line between mercilessly shaming and belittling sympathy in his bars"**

#### Still Disappointed



Artist: Stormzy.

The best track to come out of the clash. Stormzy employs Pusha T level savagery by presenting the embarrassing, pitiful

reality of Wiley having moved his mum to Cyprus due to threat of violence his past has imposed. He cleverly toys the line between mercilessly shaming and belittling sympathy in his bars – "Got so much money I want to lend her".

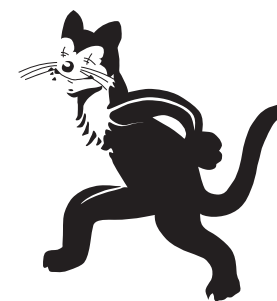
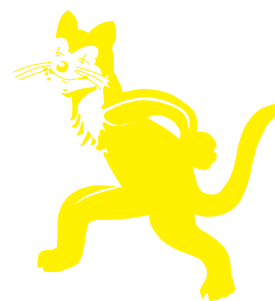
#### Eediyat Skengman 3



Artist: Wiley.

A decent dub, but Wiley's itching to have more material on Stormzy is audible. He is made to spend bars disputing the claims about his mother and offers more flat shots about Stormzy's image and legacy. It would seem grime's godfather has officially gone stale.

## Felix is recruiting!



**We want you – yes, you! We're looking for writers, photographers, editors, illustrators, reporters, computer experts and grammar nerds to join our team. No experience needed – we'll teach you everything you need to know. If you're interested, send us an email on [felix@ic.ac.uk](mailto:felix@ic.ac.uk)**

# THROWBACK

felix@imperial.ac.uk

This week in Throwback, an interview that Felix had with Brian May back in 2006 when he came back to Imperial to finish his PhD, almost 40 years after he began it!

## Brian May: BSc, CBE, PhD?

Colin Barras chats to the Queen legend about his new book, Jimi Hendrix jamming in the Great Hall and his return to Imperial to finish the most overdue thesis ever

Brian May returns to the studio to work on new album? That's not especially newsworthy. But Brian May returns to Imperial to work on PhD? Now, there's a scoop! Tape recorder in hand, I phoned Brian for a chat.

Long before Queen, Brian had developed a great passion for astronomy. He chats to me about zodiacal light; "A beautiful light you can see just after sunset if you're lucky and you live in the tropics." This, then, was the subject of his PhD. "Most people think it's due to dust in the solar system that's scattering the light. People were wondering where the dust came from and there was the inkling of the idea that it might be something to do with the way that the solar system was formed. It was an object of great interest at the time." The time in question, the late 1960s; Brian, a recent

graduate from the Physics department, was deeply involved in post-graduate academic life at Imperial.

What was life like for an Imperial student in those halcyon days? "Well, a lot of hard work," Brian admits. Some things never change. But this was the world of Swinging London, and Imperial saw its fair share of action. "It was a fantastic time to be around musically," he recalls, "I was on the entertainments committee and we booked a lot of great groups: Spooky Tooth, for instance." I maintain a polite silence. But a Wikipedia search later reveals this group to be noteworthy for its Cumbrian origins, greatly increasing the rock credentials of

my home county. Back to the 1960s Imperial music scene, Brian is soon on more familiar ground. "Well, Jimi Hendrix... that was a great coup. He was playing in the Great Hall. We sold 1000 tickets!"

Brian's own music career took off at around this time. One of his early groups, 1984, supported Jimi's Imperial gig. "If you could call it supporting!" says Brian, bashfully. Later, an early ancestor of Queen was to have its first rehearsal in a room somewhere behind the Great Hall. "In those days it was called the Jazz Club Room. I rented it for a couple of days and that's where Roger and I first played." This being Queen drummer Roger Taylor, then a student at London Hospital Medical College. "So, Roger turned up and set up his drum kit and started tuning them and I was quite amazed. I'd never seen anyone tuning drums before," recalls Brian, used to the hit-it-and-hope approach of most rock drummers. "He tuned them in the most amazing way so they all started to blend together. I was absolutely stunned."

Brian and Roger, with their friend Tim Staffell, played under the name Smile. But within a short space of time the band line-up had changed to include Freddie Mercury on piano and vocals, and John Deacon on bass. Queen was born and Brian began to drift away from his astronomy research. I wonder if he ever considered quitting the band for academia? "I think I was slightly discouraged with academic life because my supervisor was raising so many issues about the thesis, saying 'write a bit more, write a bit more'. I got to the point where I thought:

I can't do this any more!" This is probably a familiar story for many going through the PhD process. Brian decided to give up the research entirely, and soon Queen had released their first album. The rest, as Brian jokingly agrees with me, is rock and roll history.

But, while you can take the student out of academia, you can't take academia out of the student. Brian continued to be fascinated with things astronomical and ultimately developed a close friendship with Patrick Moore, astronomer and populariser of science. Patrick is one of Brian's co-authors on *Bang! The Complete History of the Universe*, published earlier this month. The book claims to be a readable account of astronomy. Is this a direct reference to the work of Stephen Hawking, famously an author whose books are bought but seldom read? "We have boundless respect for Stephen Hawking," Brian says, "but I personally found *A Brief History of Time* a difficult book. A lot of people who are deep into their disciplines don't realise how simple things have to be before a normal person can understand them."

The science communicator's job is a tough one, as Brian concedes, "There's this fine line you walk. You don't want to sacrifice major concepts but you don't want to get deep into problems that people can't follow." He has in mind one area of understanding that remains baffling to the non-scientist. "I think very often it's the maths that puts people off. I personally love maths, but a lot of people get an instant block when they see an integral sign."

But Brian's interest in science communication goes beyond this. "In many disciplines you're wrestling with a problem in one small area and the problem could already have been solved in another area and you wouldn't know about it." To help the spread of scientific knowledge even within the science community, the authors of *Bang!* have set up a website, [www.banguniverse.com](http://www.banguniverse.com). "I encourage everyone to visit. We're hoping it will develop over the next few months as an organ of interaction."

This newly re-kindled passion for astronomy has encouraged Brian to finish that PhD he began almost 40 years ago. Surely this is one of the longest running PhDs ever? "I know! It's going to be a record!" he jokes. "I've been in touch with Professor Rowan Robinson, who's the head of astrophysics, and he's very kindly offered me a desk and computer." Brian has already been down to "re-recce" Imperial. I ask him if much has changed. "The big surprise was trees in Beit Quad! There was nothing there when I was a student. You guys have done a good job making it into an area that can be used and enjoyed. And with tables where you can sit and have a beer!"

He may be older and wiser, but Brian is beginning to think like a student again. Isn't it wonderful?

## Bang!



**Bang! The Complete History of the Universe**  
Brian May, Patrick Moore and Chris Lintott  
£20, Carlton Books, London 2006.

This is a beautiful coffee-table size book, filled with gorgeous photographs of the universe and elegant explanations of the state of our knowledge about the cosmos, its origins and its future.

Divided into seven chapters, it tells the biography of the universe, sidling through the beginning of light, the universe's evolution, the formation of stars and planets and the emergence of life. The final chapters look into the future and to the anticipated end of the universe.

The text is accessible and engaging without coming across as dumbed down. It is aimed at a non-scientific audience and includes asides (in 'grey areas') explanations of the Kelvin temperature scale and other concepts that might be unfamiliar to a non-Imperial student.

Like bonus tracks on a CD, after chapter 7 we come to more fascinating information. Tips for getting into practical astronomy and guides to the night sky help you go further; biographies of sixteen astronomers and physicists, whose research has led to our current understanding of the universe.

What is unclear is who wrote what parts of the book. An entire section is dedicated to the biographies and achievements of astrophysicists - it would have been nice to know each of the author's own contributions. There's a Bang! website [www.banguniverse.com](http://www.banguniverse.com) you can look at.

Joanna Carpenter

## Win Bang!

Felix has 10 copies of *Bang!* to give away. To win, answer the following question:

**What musical instrument did Brian May play in the band Queen?**  
a) The kazoo  
b) The guitar  
c) The cello

Email to the answer to: [science.felix@imperial.ac.uk](mailto:science.felix@imperial.ac.uk)



# THROWBACK

felix@imperial.ac.uk

Though both music and astronomy have been his interests since childhood, May finally decided to fully pursue music when his doctoral research funding started running out.

## Brian May's cosmic background

Felix looks back in time at the Imperial alumnus' poor student days and the formation of rock icons Queen



Brian May's (far left) writing partners for *Bang! The Complete History of the Universe* including Patrick Moore (left) and Chris Lintott (right)

### Colin Barras

There are many roads to rock stardom, but few are as unlikely as the one travelled by Brian Harold May. He was born in Middlesex in July 1947 and his first ambition was to become a surgeon rather than a musician claims his mother. Indeed, his music career had inauspicious beginnings with much-hated compulsory piano lessons from the age of five. His father, an accomplished ukulele player, was undaunted by this apparent lack of interest in all things musical. He introduced Brian to the ukulele the following year and Brian quickly showed an aptitude for the instrument. On his seventh birthday, after persistent nagging, Brian was given his first guitar. The seven-year-old Brian was developing in other directions too; his love of astronomy and photography date to this time.

Academically gifted, Brian won a scholarship to Hampton Grammar School at the age of 11. He maintained his interest in music during

his teenage years, famously working with his father, Harold, to build an electric guitar from the wood of a nineteenth century fireplace. The unique sound of this guitar, the "Red Special", was later to become as recognizable to legions of Queen fans as Freddie Mercury's vocals.

But, ever the realist, Brian still recognized music as a mere hobby. Encouraged by his parents, he continued his education at Imperial College in 1965, reading physics and infrared astronomy. During his time at Imperial, he continued making music, initially through a band formed during his school days (called Smile) and later through the short-lived group Smile. It was through Smile that Brian met future Queen drummer Roger Taylor.

In due course Brian graduated with a BSc Honours degree in Physics and Mathematics, and embarked on a PhD, also at Imperial. He studied zodiacal light, the sunlight reflected off interplanetary dust particles. The research went well, and Brian published in both

*Nature* and the *Monthly Notices of the Royal Astronomical Society*. An academic career seemed assured.

But then the financial reality of student life hit. Brian's doctoral research dragged on into a fourth year, and the grant to support his living expenses dried up. Brian resorted to teaching in a comprehensive school in Brixton to make ends meet. Meanwhile, his evenings were devoted to music. By now, Smile was no more; in 1970 the lead singer, Tim Staffell, had left the band to pursue new musical horizons elsewhere. Tim's roommate, Freddie Bulsara (later Mercury) persuaded Brian and Roger to continue performing, and together formed Queen. In 1971 John Deacon joined the band on bass.

Short of both the time and money necessary to complete his PhD, Brian chose to discontinue his academic work. The decision proved to be a wise one; Queen recorded their eponymous first album in 1973 and debuted in the UK singles charts with *Seven Seas of Rhye* in 1974.

The band was incredibly prolific, releasing a further fourteen studio albums and three greatest hits packages between 1974 and 1999. This was a band of musical equals; all four band members contributed memorable songs to the Queen canon. Brian was responsible for rock anthems *We Will Rock You* and *Now I'm Here*.

Following the untimely death of Freddie in late 1991, Brian coped by throwing himself into his solo music career. The Brian May Band was formed in 1992 and toured the world and elsewhere on the back of a successful album. Brian continued to explore new musical directions; Queen had become the first rock band to become involved in film scoring, for *Flash Gordon* in 1980 and *Highlander* in 1986. Brian penned the score for the French art film *Furia* in 1999. Elsewhere, he was involved in the successful translation of Queen's music to the stage; The Queen musical *We Will Rock You* is now well into its fifth successful year at the Dominion

Theatre on Tottenham Court Road.

Brian continues to make the music headlines in the new millennium. One of the abiding images of the 2002 celebration of Queen Elizabeth's Golden Jubilee is Brian's rendition of *God Save the Queen* from the roof of Buckingham Palace. In 2005, Roger Taylor and Paul Rodgers, lead singer with 1970s band Free, joined Brian on the first tour by Queen in twenty years. Later in the year, Brian received a CBE at Buckingham Palace.

But Brian has not forgotten his early interest in astronomy and photography. He has been a regular guest on *The Sky at Night*, the BBC's long-running television show devoted to astronomy, and is reportedly working on a biography of nineteenth century photographer T R Williams. He was awarded the honorary degree of Doctor of Science by the University of Hertfordshire in 2002. Recently, Brian has decided he will finally return to his academic studies to finish the PhD he began in the late 1960s.

# FILM

film.felix@imperial.ac.uk

## Should you care about the Oscars?

*The nominations are in, the elite are gathering, but should you really care about the 92nd Academy Awards?*

### FILM

**Dominic Ede**

*Film Editor*

With the recent announcement of the nominations for the 92nd Academy Awards, there comes a host of backlash on social media with many people weighing in on the issue. From some of the more obvious snubs (namely Greta Gerwig for best director), to some more *Uncut Gems* we wished could have made it on the list (pun intended), there seems to be something askew; but what's new?

With every year of Oscar nominations there comes a new wave of criticism or controversy, and so this year were you really expecting any different? The long standing imbalance and unfairness in the academy stems from years of elitism in Hollywood, manifested from systematic racism and sexism that has long been apparent. In this respect, the film industry is still in recovery after having stood with such an imbalance for so long. In 2012 a study conducted found The Academy to have a membership of 94% white, 77% male, and 86% age 50 or older. This is an absolutely unacceptable figure that clearly does not represent the film industry as it stands today.

This isn't to say that The Academy hasn't been trying to diversify their membership. Since 2016 they've been committed to try to decrease some of these numbers. Inviting more women and minorities, each year has moved a little closer to a more

representative version of the film industry as it stands today, and yet still an overwhelming misrepresentation endures.

So we know that there's a huge imbalance in the voting members of The Academy, that much is apparent, but what this doesn't explain is the overwhelming praise that *Joker* has received this year. I mean come on, 11 nominations? Now a lot of these come from the behind the scenes staff in costumes, make-up, sound editing and others; I can hardly claim to be any expert in any of these fields, but from what I can tell these are fairly just. So it begs the question, has there ever been such a disappointing film that excelled in so many specific categories?

Breaking down the awards in this way you can really begin to see where the flaws lie. If I

**“The Academy has a membership of 94% white, 77% male, 86% age 50 or older”**

were to select the perfect parts of different humans and combine them to one, I wouldn't have a perfect human, I'd have a Frankenstein. In a lot of ways this is what *Joker* is, it's a Frankenstein of a film that when dissected into different aspects it appears as though it shines; the only glaring blunders I can see in this nomination are for Best Picture and Best Adapted Screenplay, what



Joaquin celebrating as Joker receives 11 nominations at the 92nd Academy Awards // Niko Tavernise Warner Bros.

was the academy thinking here?

With a wealth of excellent films this year, it does come as a welcome inclusion that *Parasite* has been recognised as one of the stand-out films of the year, receiving a host of nominations including Best Director and Best Picture. Yet some equally brilliant films have been given far less praise in this ceremony. We saw Awkwafina take home Best Actress in a Comedy or Musical at the Golden Globes for her excellent performance in *The Farewell*. But the brilliantly moving film set in China, with outstanding direction from female director Lulu Wang, has been given 0 nominations despite being hailed as one of the best films of the year. This together with *Uncut Gems*, *A Portrait of a Lady on Fire*, and others (that you will have to forgive me for leaving out), showcase the real unfairness when you start comparing them to what have been nominated.

All three of these films mentioned are (in my opinion) worlds better than the likes of *Joker* and *Jojo Rabbit*, yet have been wholly excluded from this awards ceremony.

I find myself wondering if the voting members of the Academy have seen a lot of the Best Picture long list of nominations,

**“The Joker is a Frankenstein of a film that when dissected into different aspects, appears as though it shines”**

and with a length of 300ish pictures, I can conclude they probably haven't. It easily explains

why the Oscars regularly only highlight the 'big' films of the year and often fail to negate some of the smaller excellent films. Let's also not forget that The Academy is an organisation compromised by huge body of Hollywood elites where (in 2012) one third of the members had received an Oscar previously. This damning statistic really does point to the overtly clear fact that the Oscars is merely one great attempt at Hollywood giving themselves one huge pat on the back for another year of making millions in the film industry. With the exception of some of the smaller categories appearing slightly more earnestly throughout the night, you really do need to keep things in perspective when considering what is 'good' by the numbers of Oscars it wins.

Perhaps one of the only upsides to the Oscars is year in year out, it highlights the inequality in the film industry and brings awareness to the

sexism and racism instituted by the Academy as a subsidiary of Hollywood. More and more people are beginning to take action on this and a noticeable shift in people's attitudes towards cinema is moving towards greater and greater inclusivity. If nothing, the Oscars give some very influential people a huge platform with which to convey a message on the state of Hollywood, with some individuals choosing to make a statement.

So if you're watching the Oscars this year, remember to take them with a pinch of salt; the nominations are flooded, the ceremony is grandiose, and it lacks a true representation of all that was great in cinema this year. The Academy is getting better, but it's still got a long way to go.

# From Superfoods to Hyperfoods

*Imagine a world where all you need to do to stay healthy is eat certain foods - with the new research trend in hyperfoods, food may someday become the new medicine*

## SCIENCE

**Mery Shanin**  
Science Writer

With the steady rise in average life expectancy, we are facing unprecedented levels of chronic diseases such as cancer, cardiovascular, metabolic and neurodegenerative disorders. The lack of available treatments or definitive cures for most of these illnesses has shifted the public discourse from therapy and palliative care to prevention, searching for ways to avoid such diseases altogether. As the single biggest modifiable aspect of an individual's health, diet has become a major focus for disease prevention, with research showing that up to 40% of cancers can be prevented by minor nutrition and lifestyle alterations.

Recent advances in artificial intelligence technologies and the growth of databases on food, drugs and diseases have made it possible to identify molecules within food that can prevent or combat diseases and their symptoms. A set of such molecules has already been discovered by examining structural similarities between food molecules and existing therapeutics. A team of Imperial College London researchers have further developed a novel machine-learning strategy to predict cancer-beating molecules, which influence the same cellular processes targeted by current clinical therapies. These molecules regulate cell growth and inflammation, therefore

suppressing cancer cell survival, proliferation and spread. The Imperial scientists analysed 7962 food molecules to discover nearly 110 potential candidates for the fight against cancer which are predominantly found in plant-based foods, such as tea, carrots, celery, orange, grape, coriander, cabbage and dill. Their machine-learning strategy is not limited to cancer research but can also be used to pinpoint general

**“The Imperial scientists analysed 7962 food molecules to discover nearly 110 potential candidates for the fight against cancer”**

health-promoting food molecules or those applicable to other diseases.

The ultimate goal of such research is to generate a database of food ingredients, rich in disease-fighting molecules, that can later be used to design “hyperfoods”. Hyperfoods are envisaged to have health-promoting or therapeutic effects, to improve disease treatment outcomes and decrease the overall healthcare burden. They are a multi-disciplinary endeavour, requiring not only

scientific and technological expertise, but culinary optimisation (improving aesthetic features, such as colour, shape, and texture, and sensory characteristics, such as taste, smell, mouthfeel) and large-scale industrial production. Indeed, in 2018 an international group of academics, chefs and local food producers signed a Manifesto on the Future of Computing & Food with the aim to revolutionise the production, distribution, and consumption of food. The manifesto pledges to educate people about the impact of their diet on their health and wellbeing, to enable data-driven informed food policy decision making and to ensure transparency on the origin and heritage of food.

Hyperfoods are thus paving the future to gastronomic medicine, an unusual kind of personalised medicine with “food passports” that provide tailored and therapeutically functional foods for each individual. Currently, there are some obvious limitations to this preventative approach. It is unclear whether any of the identified molecules are present in sufficient concentrations within food items to perform their proposed health-promoting functions. It also remains to be established whether the molecules can retain their biologically beneficial properties through the process of cultivation, preparation, cooking and storage. So, despite structurally resembling drugs or acting on the same cellular processes as current therapies, the health effects of the predicted hyperfoods are yet to be validated and

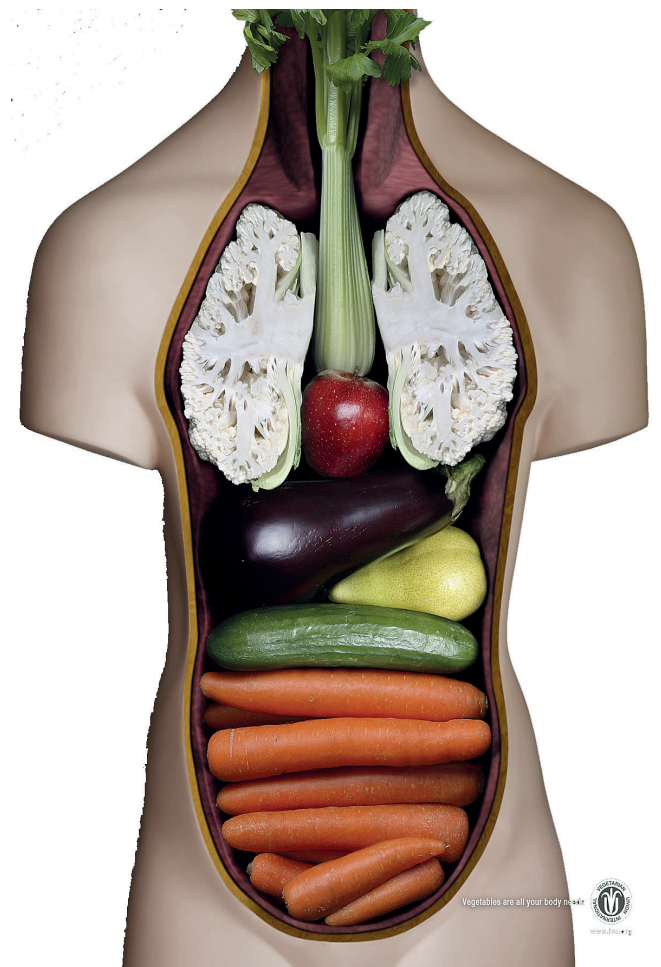
quantified.

In that sense, hyperfoods are quite similar to the widely popular superfoods. Superfoods are marketed as nutrient dense and beneficial to our health - they are supposed to be full of antioxidants to fight off cancer, healthy fats to prevent heart disease, and fibre to keep the digestive system in check. Popular superfoods include blueberries, kale, pomegranates, goji berries and chia seeds among others. There are, however, no set criteria for determining what makes food “super” and there is no scientific support for the superior health-promoting effects of superfoods.

Pomegranates, for instance, are suggested to reduce arterial damage caused by cholesterol and decrease the progress of prostate tumours, but the evidence behind these claims is either inconclusive or incomplete. Similarly, goji berries have been used in traditional Chinese medicine for thousands of years, boasting cancer curing and preventative abilities.

**“Hyperfoods are paving the future to gastronomic medicine”**

However, clinical studies have failed to validate the healing properties of goji berries, and in terms of nutrients, goji berries do not outperform other berries or fruit. Another case of misleadingly advertised superfoods



Fine tuning of consciousness // Ivu.org, Thigala shri

is chia seeds. They are highly rich in omega-3 fats, which are a staple of the notoriously healthy Mediterranean diet. However, the omega-3s in chia seeds are disparate from the health-promoting omega-3s in fish, and our bodies are very inefficient in processing the former into the latter. While fish is widely accepted to protect against heart diseases, chia seeds have shown no significant effects with the regards to risk from cardiovascular disorders.

Bombarded with superfoods in supermarket aisles and wellness trends on social media, we are more health conscious today than ever before. But the high pace of everyday life is not always compatible with a healthy lifestyle – homecooked 5-a-day meals and regular

exercise. So, naturally, we seek little cheats such as superfoods - obviously it is comforting to believe that eating a kale salad for lunch or drinking charcoal shots for breakfast can help us avoid the horrors of being chronically or terminally ill. But, it is only a small leap from superfoods to hyperfoods. As scientists are trying to identify and extract the best health-promoting molecules from all food in order to create a hyperfood meal that can alleviate our health concerns, it appears that wellness and medicine might finally meet.

# TECH

technology.felix@imperial.ac.uk

## Tech Headlines

Your Weekly Tech News In Short Snippets

### TECH

**Sudarshan Sreeram**  
Tech Writer

At CES last week, Samsung unveiled quite a lot of products, of which the Odyssey G9 was covered in last week's issue. This week would cover some more products from Samsung as well as other tech headlines..

#### Samsung - The Sero

The Sero represents Samsung's highest-end flagship television line.

behind this is to mimic the orientation of smartphones when streaming content to the TV, which is primarily targeted at those who watch a lot of vertical videos as those found on Facebook, TikTok, Instagram, and elsewhere. This interesting device joins Samsung's Frame, which was unveiled last year, and is priced at £1230.

#### Microsoft Edge

Edge is back with and new engine under the hood - Chromium. Although it does share a lot of similarity with Google's offering, the browser does indeed

to compel users to switch to Edge.

**"Vision for electronics that blend into our surroundings"**

#### Samsung QLED 8K 2020 - Q950TS

Apart from The Sero, Samsung unveiled a massive 85" QLED 8K television. The most striking part of the TV was its bezels, or rather the lack



Samsung QLED 8K 2020 // Samsung Newsroom

#### Samsung Galaxy S10 Lite and Note 10 Lite

Samsung unveiled two new semi-flagships bearing the names of two high-end, flagship Samsung lines - Galaxy Note and Galaxy S. These two new phones, the Galaxy S10 Lite and Galaxy Note 10 Lite, are similarly spec'd, affordable offerings from Samsung that, according to the company, "Brings Galaxy to More People." The phones are both equipped with large, 4500 mAh batteries and triple-camera modules, with the S10 Lite having a 48 megapixel wide-angle camera. Furthermore,

both phones have 6.7" Full HD+ Super AMOLED Infinity-O displays and share the same amount of RAM and internal storage for

**"An 8K TV that achieves a mind-blowing 99% screen-to-body-ratio"**

the base specifications. The Galaxy Lite series looks quite promising, but it does question the existence of the Galaxy S10 E.

#### Electric Air Taxi

Joby Aviation, a company that look to be the first in the electric air taxi business, has received \$590 million dollars in funding. Around \$394 million came from its lead investor Toyota, which has had a long term vision for air transportation. This investment from Toyota only firms up its seriousness and dedication towards achieving that vision. Maybe in the next decade we might actually see the deployment and widespread use of flying cars, something that was predicted and talked about more than half a century ago.



Samsung Galaxy Note 10 Lite // Samsung Newsroom

It represents Samsung's vision for electronics that integrate well into our daily lifestyle, essentially blending into our surroundings. The TV does challenge the conventional television design that has stuck on for more than a decade, much like how Tesla's Cybertruck challenged the design of a pickup. The Sero has the ability to rotate itself in order to adapt to the content playing on the large 43" 4K QLED panel. The idea

compete with Chrome. Edge does comes with the standard features that you'd find on almost any other browser, but still lacks features that make it unique. To address this, Microsoft does seem quite optimistic about Edge's upcoming collections feature, a kind of advanced bookmarks manager / mood board where you store images, text, and links for future reference. Apart from this, Microsoft has a lot of work to do in the near future if it intends

thereof. This television achieves a mind-blowing 99% screen-to-body ratio. Samsung promises that the display, aptly titled "Infinity Screen," would deliver the best LCD picture quality on the market. Furthermore, it's speedy processor helps in the upscaling of non-8K content to "true-to-live 8K resolution." Just like 4K, it's inevitable that 8K would be the norm in a few years time; though, this year does look optimistic for televisions.



The Sero // Samsung Newsroom



# SUSTAINABILITY

sustainability.felix@imperial.ac.uk

## The Devastating Australian Fires

*...and the appalling governmental response*

### SUSTAINABILITY

**Xiuchen Xu**

*Sustainability editor*

Over 63,000 square kilometres of bush, forests and parks have been burnt down, and at least 24 people have been killed so far in the devastating bushfires of Australia. As of now, over 2000 houses have been destroyed in Australia's months-long bushfire crisis and power was lost in multiple areas as fires engulfed transmission lines. Recently, the fires have been tamed slightly by some rains which brought relief during this period of drought, but the conditions are said to be worsening which will threaten to intensify blazes and allow the fires to continue for months.

It is estimated that over a billion animals have died in the wildfires. Many images of koalas hurt by the fire have appeared

in the media, and there is the extreme concern that koalas may become functionally extinct. Recently there was also the announcement that there will be the culling of

**“The prime minister Scott Morrison was found to be taking a holiday in Hawaii during the bushfire crisis”**

10,000 camels who will be killed by shooters from helicopters, as the camels are perceived to threaten water resources in south Australia.

The catastrophic fires are the result of a combination of weather factors including the extreme heat, prolonged drought

and strong winds. People have also played a big role, with 24 charged for bushfire-related offences, and a further 53 people were arrested for failing to comply with state-imposed fire bans.

The response of the government has been hugely unproportionate and considered by many to be inappropriate. Firstly, the prime minister Scott Morrison was found to be taking a holiday in Hawaii during the bushfire crisis; this along with the attempt to cover up the holiday, spiralled into a PR disaster with the satirical #Hawaii and #how-goodishawaii trending on twitter, followed by more aggressive hashtags of #Wherethebloodyhellareyou and #wheresScotty.

Furthermore, the prime minister has been criticized for the compulsory callout of 3,000 army reservists without consulting the rural fire service commissioner or communicating with the defence force personnel working from the state control



63,000 square kilometers of land has been burnt // piqsels

centre. There are an estimated 3,600 firefighters combatting fires across New South Wales.

Among the chaos, instead of tackling the issue at hand and reviewing policies on climate change, the liberal party has taken the bushfires

**“Australia has previously faced huge amounts of criticism for their climate policies”**

as a press and publicity opportunity. The prime minister tweeted a 50 second video promoting the liberal party, and pretending that they are dealing with the issue with great care, which faced huge backlash. The video was basically an advert for the political party and contained lots of

misleading information.

To add insult to injury, as the fires escalate, the prime minister continues to defend Australia's current climate policies, reliance on the coal industry and emissions targets. Scott Morrison continues to attempt to distance the fires from climate change and has faced widespread criticism for doing so.

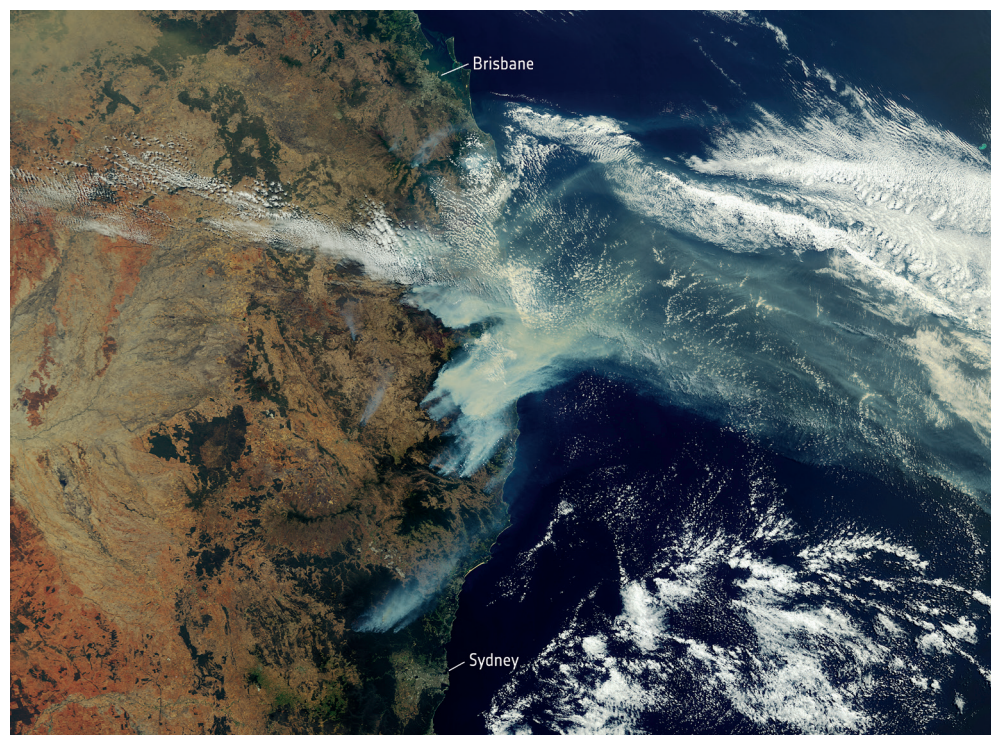
Australia has previously faced huge amounts of criticism for their climate policies. A huge controversy arose when they were accused of using an accounting loophole to meet emissions target for the UN instead of actually cutting down emissions.

Data indicates that Australia is indeed getting hotter, as the all-time temperature record was broken twice in December with 40.9C recorded on 17 December, and 41.9C a day later, beating the record 40.3C from 2013.

We can only hope the government will strengthen their response to the fires, so that it can be contained as soon as

possible, and further devastation can be prevented. A sad reality is that as climate change continues to be denied and not taken seriously by politicians; even when the catastrophic consequences have already taken place, profit still remains the priority.

**Felix Sustainability was founded to create a platform for discussion about environmental issues and sustainable development. We are open to articles from all points of view. Please get in touch if you would like to write for us using the email address in the header.**



Recent Satellite image of bushfire smoke over Eastern Australia \\\ Wikimedia

# INVESTMENT

icu.investmentsociety@imperial.ac.uk

## Mouvement des Gilets jaunes – A very French dilemma

### INVESTMENT

Kevin Wang

ICIS

Investment Student Writer

You must remember the name of the current president of France, don't you? Emmanuel Macron. The French people voted him into the Élysée palace in 2017. The ones before him? Nicolas Sarkozy, a right-wing politician and François Hollande, a left-wing leader. As far as the author is aware, the French public is currently not in good terms with any of the three. If the French people do not like the right, the left, or the center, what is the problem? Is it the rigid political system of the Fifth Republic or that of the bureaucracy of the European Union? Or is it the shrinking economy with increasing public debt? The author

shall investigate the last question in depth.

### The French economy at a glance

First, an extensive overview of the French economic structure is necessary. France is, without doubt, the second most important economic driver in the European Union, after Germany. It is also home to many native European corporate conglomerates and banks, such as the Dassault Group and BNP Paribas. Surprisingly, it is also one of the many countries in breach of the Maastricht criteria\*. As seen in Figure 1, its proportion of industrialized goods sold in the European Union was standing at 12% in 2017 (the most recent available data), albeit significant, unproportionally small compared to the role France takes in the Eurosystem, being less than half of that of Germany and even smaller than Italy, a country deeply entrenched in economic



Demonstrators of the Yellow Vest movement in Belfort on 1st December 2018 // Thomas Bresson (CC BY 4.0)

stagnation and rising debt levels.

### French Debt Levels

But what does this data have to do with the protests? The logic is a complicated one. One must be aware that the French government has the habit of borrowing in large amounts. Most countries borrow, but France borrows uncon-

trollably. Sound economic strategy requires a country to reduce its debt level during periods of growth and the vice versa during recession. France has not recovered fully from the 2008 crisis, evident from the accumulating debt from the last decade seen in Figure 3. Referring to Figure 2 and Figure 4, it begs questioning why, when Germany had turned into surplus in 2014, France remained in deficit to this day? If one determines it is the unsustainable pension system and public welfare of France being the culprit, the author agrees that it is a major contributor. On average, a Frenchman was expected to receive a net payment of 890EUR from the French national government in 2018. Though this number has been steadily reduced in the past years, the French public seems to no longer accept cuts to their benefits. Is the policy of cutting social welfare necessary for France? Not if Emmanuel Macron can find ways to ask Dassault or BNP Paribas to pay more tax. Though if he wishes to continue his presidency in the next election, he must not make these powerful organizations his enemy.

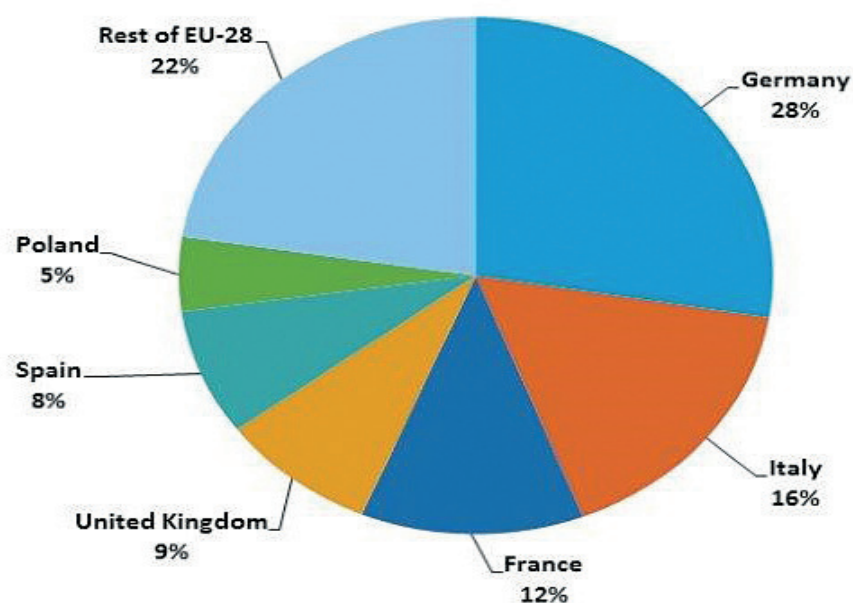
As expected, the French president has once again decided to demand more from his people than to the ruling elite.

From Figure 3, French public debt stood at 98.4% of GDP (2018), and its deficit on the rise. To restrain from further bleeding, Macron had no other choice but to impose the fuel tax with all of his reforms. In fact, even if Mr. Macron was selfless and demanded the corporations to pay more, the legislation would never have passed in the parliament - nevertheless are these reforms and cuts enough to cause massive demonstrations on the streets of Paris? Perhaps not, though the author believes they are merely the fuse to larger social discontent. Let us examine it from an economic perspective: Eight out of every hundred in France are currently unemployed. And within that eight people, three are suffering from effects of long-term structural unemployment. Why is the unemployment rate so high in France? In contrast the German rate hovers at only 3% and Belgium at 5%. It could be the effect of overlapping business cycles, which would be an unfortunate

**“Is the policy of cutting social welfare necessary for France? Not if Emmanuel Macron can find ways to ask Dassault or BNP Paribas to pay more tax.”**

coincidence. On a very macroscopic scale, France enjoyed extensive growth after the Second World War, it should not come as a surprise that the growth is slowing down. Unless the France would like to suffer the same fate of the Japan in the 1990's (the lost decade), it must not allow long-cycled economic growth to overheat and boil over. After the 2008 crisis, Germany recovered quickly afterwards because its economy was deeply rooted in manufacturing and technology, but France was not. Its heavy

EU-28 value of sold industrial production, by country, 2017  
(% of total value of sold production)



Note: EU-28: Except Cyprus, Luxembourg, Malta  
Due to confidential reasons the EU-28 total is rounded and do not sum up the countries' total  
Source: Eurostat (online data code:DS-066341)

Fig 1. France stood third in its proportion of industrialised goods sold in the European Union // eurostat

# INVESTMENT

icu.investmentsociety@imperial.ac.uk

## Mouvement des Gilets jaunes – A very French dilemma

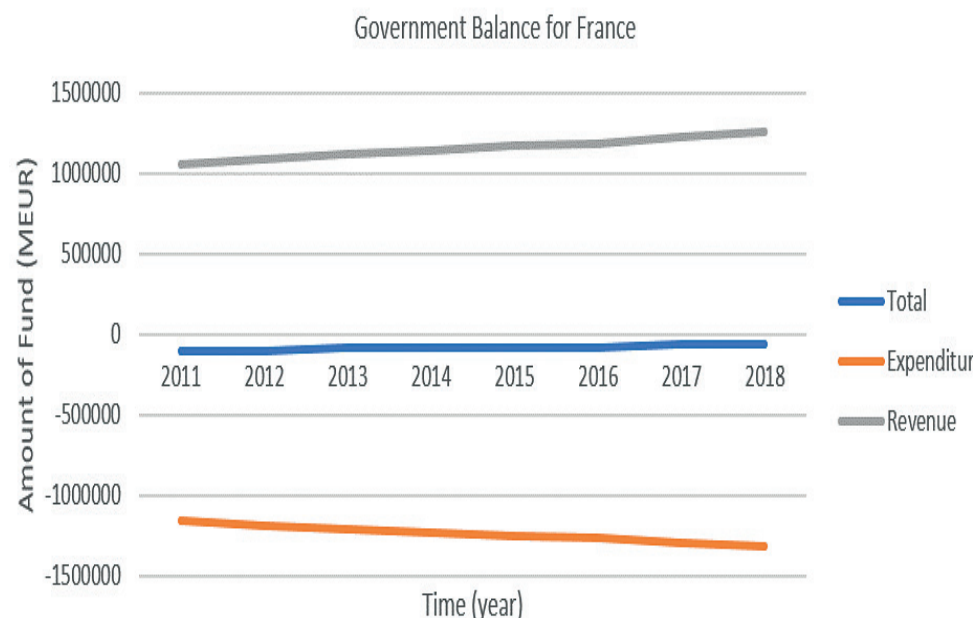


Fig 2. France’s government expenditure constantly exceeded revenue from 2011 to 2018 // Kevin Wang, data sourced from eurostat

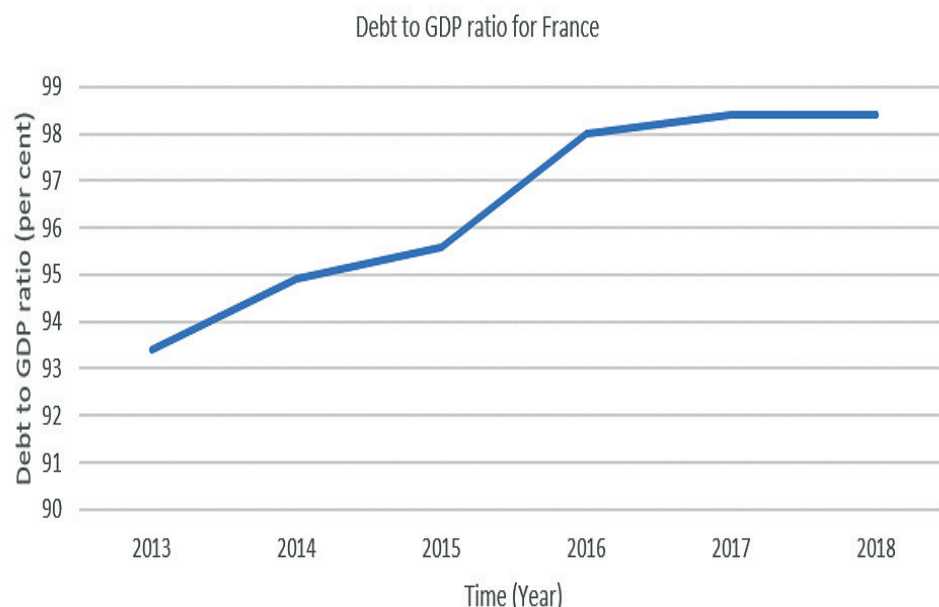


Fig 3. Debt to GDP ratio has grown steadily in the past 5 years // Kevin Wang, data sourced from eurostat

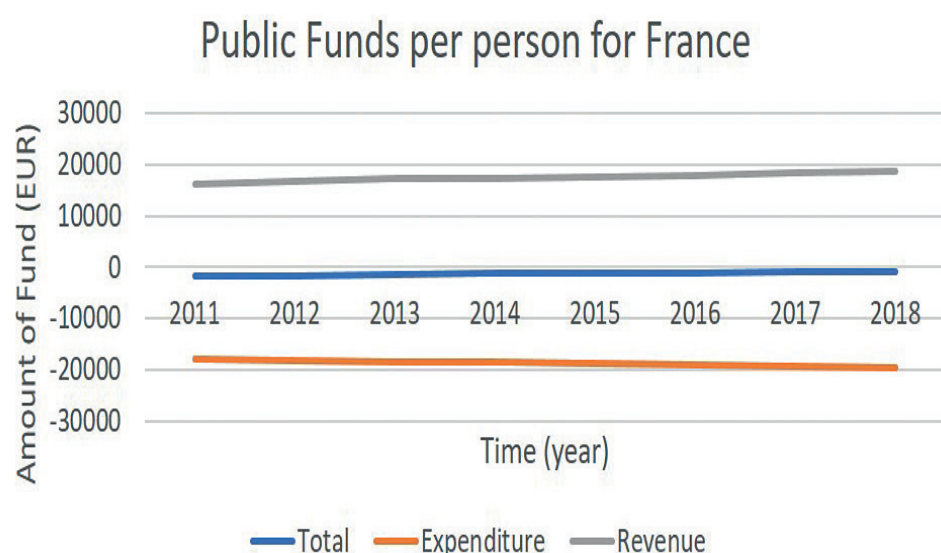


Fig 4. From the perspective of the treasury, expenditure corresponds to the amount payable to a person whilst revenue is receivable via tax and other means // Kevin Wang, data sourced from eurostat

dependency in the banking industry meant that heavy losses were incurred due to wide exposure. This was relatively microscopic. Now the reader should understand why it took so long for France to re-establish itself on the right track. At last, what can the French people do? Nothing. History has told time and time again that the ordinary middle class is to be held accountable for economic failures on a national scale. They have the most to lose. It was the case in 1930 and 2008 in the United States,

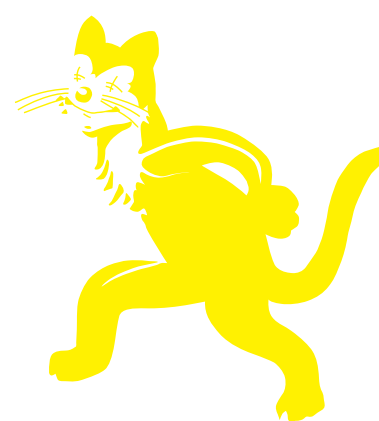
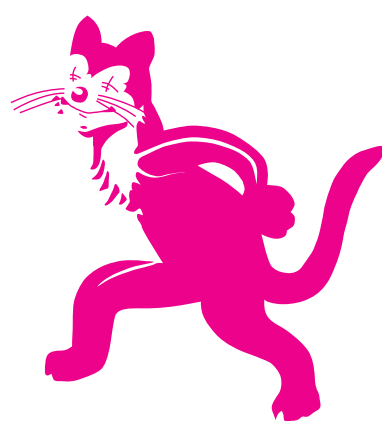
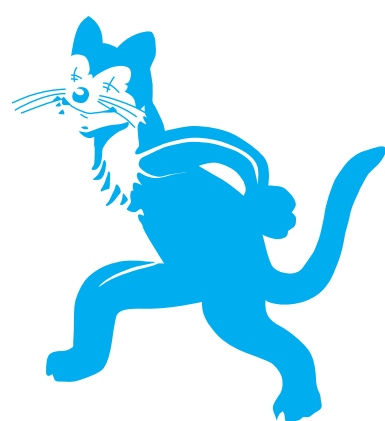
in 1991 in Japan, and in 1994 in South Korea. Will corporate conglomerates cease to exist? No. They will survive and thrive, perhaps under the guise of national bailouts. Eventually, all of this will be paid for. Unless deep structural changes occur for the next decade, French troubles are far from over.

\*The Maastricht Treaty specifies reference values for the general government sector of the various EU Member States: 3% of gross domestic product (GDP) for the government deficit and 60% of GDP

for government debt (the Maastricht criteria).  
- Bundesbank

**“History has told time and time again that the ordinary middle class is to be held accountable..”**

*Felix is recruiting!*



# FOOD

food.felix@imperial.ac.uk

## Mozzarella ‘Sticks’ - Here’s how to get your fix now that you can’t get them at the FiveSixEight

### Food

**Mariam Jallow**

*Food Writer*

Since FiveSixEight’s recent decision to remove mozzarella sticks from their menu, I have been left feeling wronged and desperately craving the breadcrumb covered cheesy delight. Instead of staging a campus wide protest as I had initially intended, I decided to take a level headed approach and try making them myself.

Prior to this I was vaguely aware of how to make mozzarella sticks but watched a couple of YouTube videos to consolidate it. All it required was a square block of mozzarella cheese and a production line of flour, eggs and breadcrumbs. Sounded simple enough until I realised I had never seen a square block of mozzarella cheese, nor was I aware that they even existed.

Nonetheless, all the youtubers had them and so I decided to ignore that thought and put it down to me never having had the need for it before. This was quickly tarnished when I roamed the cheese aisles of Asda, Sainsburys and Tescos only to find the shelves stacked with endless variations of cheddar cheese and not a single block of square mozzarella. I had no choice but to settle for the next best thing I could find which was a cylindrical mozzarella block. Due to this I was unable to make actual mozzarella sticks so I opted for more mozzarella discs.

I first began by cutting the mozzarella into circles roughly half a centimeter

thick. I then set up the production line; placing the flour, mixed eggs and breadcrumbs into separate bowls. The mozzarella then needs to be coated in flour, then eggs and lastly the breadcrumbs. To ensure everything is fully coated it’s best to re-coat it in the eggs then the breadcrumbs again to make a double breadcrumb layer. This process gets very sticky and very messy very quickly; to minimize this you can try using one hand for the wet ingredients and another for the dry. Once finished place them on a separate plate.

The recipes that I looked at suggested refrigerating/freezing the mozzarella sticks for a few hours before frying. However, I do not have that level of patience so I

**“I have been left feeling wronged and desperately craving the breadcrumb covered cheesy delight”**

fried them straight away

Nothing went horribly wrong so I assume it isn’t a crucial step in making mozzarella sticks. To fry the mozzarella discs, you need roughly enough oil to drown a baby shark (or enough to allow them to float). Heat up the oil on a medium low heat and make sure to wait until it is fully hot before adding in the discs. It’s wise to use one of the less good-looking discs



New year, new shape // Mariam Jallow

as a tester to check if the oil was ready. Once the oil is heated, fry the discs in batches of 4 or 5; you don’t want to overload the pan as it will lower the temperature of the oil jeopardizing that all important crispy coating. The mozzarella discs are ready when the cheese starts bursting out, when this happens transfer them onto a lined plate to soak up the excess oils.

I decided to make some sweet chili sauce to go with it which, if you haven’t made before I fully recommend. It’s really simple to make and just requires putting chillies, sugar, water and vinegar in a pan and leaving it to boil for a few minutes.

To help me decide if my homemade mozzarella discs measured up to the ones from FiveSixEight, I wrote up a pros and cons list.

### Pros:

The mozzarella discs still had that typical crispy crusts reminiscent of the mozzarella sticks at FiveSixEight as well as the classic cheese pull.

Making them yourself is also much better value for money. In total I spent around £5 on 2 packets of mozzarella and breadcrumbs, I didn’t need to buy the eggs or flour as I already had them at home. This is just a little over the price of mozzarella sticks at restaurants and you get considerably more for your money.

**“I decided to make sweet chilli sauce to go with it which if you haven’t made it before I fully recommend it”**

### Cons:

The mozzarella itself did not taste the same as the ones from restaurants. I found it to be a lot more bland and rubbery. This might be because of the brand I used or it may be that commercialized mozzarella sticks use an adapted version of mozzarella that’s not what you find at the supermarket. I just personally didn’t like the flavour of fresh mozzarella, especially when compared to the ones from FiveSixEight.

Another issue I had is that I found it a bit unnerving seeing all the oil needed to make the mozzarella discs. It’s one thing being told that something is unhealthy and another to witness it for yourself. Making them from scratch means can’t turn a blind eye to how bad it is for your health. There is the option of baking them but it may mean compromising on the crispy textured coating.

All in all, the mozzarella discs were good but they just weren’t as

good as the ones from FiveSixEight. However, I wouldn’t be opposed to making them with a different type of cheese as the only real issue was that I didn’t like the taste of the

**“I knew that nothing would measure up to the mozzarella sticks from FiveSixEight”**

mozzarella. However, if I’m completely honest, I knew that nothing I made would measure up to the mozzarella sticks from FiveSixEight; I was just looking for something to fill the mozzarella shaped hole in my heart.

# CONSTITUENT UNION

felix@imperial.ac.uk



## The Role of Postgraduates in Faculty Unions

RCSU

**Lloyd James**  
Council Chair

Let's start with an honest admission: the vast majority of Postgraduate students will be entirely unfamiliar with the term 'Constituent Union.' While many will be aware of the Graduate Students Union (GSU) as something that pops into their email inbox from time to time, for most the disparate other acronyms (RCSU, CGCU, RSMU, ICMSU) are entirely foreign. This should not

be surprising. Given that Postgraduates are not members of their Faculty CU, and since their engagement with the GSU tends to be fairly limited,

**"Until 2012, PGs were members of both the GSA and their relevant Faculty CU"**

they have little reason to

be familiar with, or even aware of, these organisations. But this hasn't always been the case.

Until 2012, PGs were members of both the Graduate Students' Association (predecessor to the GSU) and their relevant Faculty CU. There was a clear division of responsibility between the GSA, which was responsible for representing the interests of Postgraduate students across the College, and the Faculty CUs, which were responsible for building a sense of Faculty community. In 2012, following scarcely any consultation or scrutiny, PGs were stripped of their Faculty

CU memberships and the GSA was elevated to the lofty status of Constituent Union. This experiment has failed, and has led to further atomisation and isolation of the Postgraduate community.

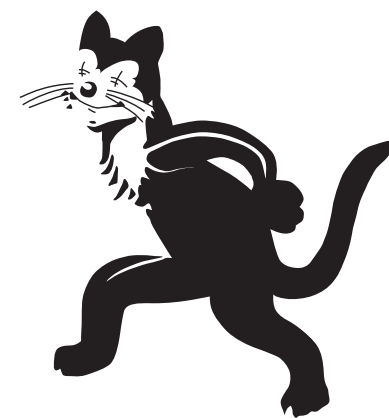
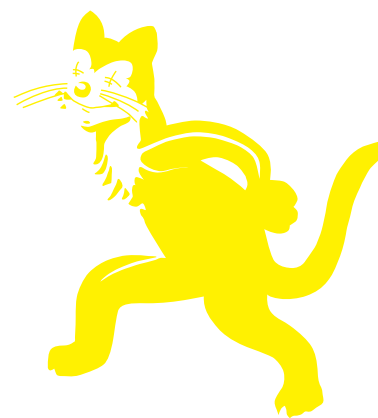
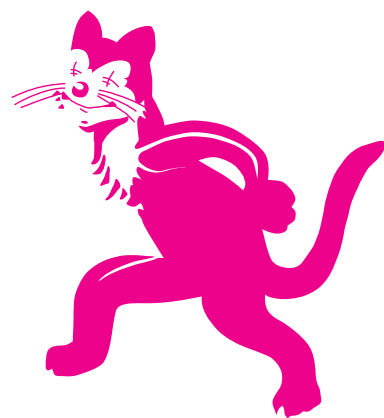
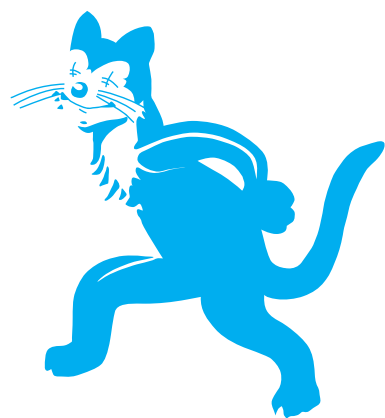
For those who have not had much involvement with Faculty CUs, it may seem odd to suggest Postgrads ought to be involved with them. After all, all they do is organise piss-ups, right? Well, not really. Consider the RCSU – yes, there are piss-ups (and good ones, at that), but there's a lot more. Broadsheet. The RCSU magazine, which has in the past featured

Postgraduate writers. Science Challenge, their science communication competition, which every year relies on Postgraduate judges. BAHFest, their annual comedy event, which is run by a Postgraduate. By barring Postgrads from engaging in these endeavours and experiencing the rich sense of history and tradition that the Faculty CUs offer, both the PG experience and the activities of the Faculty CUs are diminished.

There has been a lot of opposition to undoing this blunder, in recent years. While I don't have the space here to dissect their

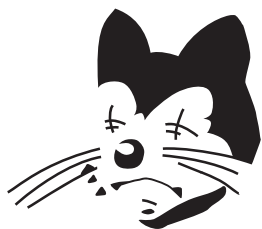
arguments in detail, they mostly rely on an implicit assumption that Faculty CUs are somehow fundamentally Undergraduate in nature, and that catering to Postgrads would be a distraction. I hope that our present CU leaders will put this idea aside, and with a little historical perspective and a little boldness, take steps in the right direction. They will see how including and engaging each and every section of our diverse Faculty communities, Undergrad and Postgrad alike, will reap dividends, for the benefit of us all.

## *Felix is recruiting!*



**We want you – yes, you! We're looking for writers, photographers, editors, illustrators, reporters, computer experts, and grammar nerds to join our team. No experience needed – we'll teach you everything you need to know.**

**If you're interested, send us an email on [felix@ic.ac.uk](mailto:felix@ic.ac.uk)**



# Hangman



An artist's rendition; actual images of physics students begging for new papers to fuel their habit were considered too disturbing to publish // Linnaea Mallette

## Stanford prison experiment recreated at Imperial

### HANGMAN

Negafelix  
Editor-in-Chief

This week Professor Aran Faylward gathered Imperial physics undergraduates in his lab at Hammer-smith hospital in order to repeat the legendary Stanford prison experiment. This was in response to claims that results achieved in the 70s were no longer reproducible due to modern undergraduates' elevated pain thresholds. Initial results were unpromising as prisoners slept blissfully

while their guards beat them with truncheons and yelled abuse. The breakthrough came when Faylward changed the disciplinary methods used. Rather than resorting to physical violence, Faylward set his prisoners an exam at the end of each day and guards were instructed to ask misbehaving prisoners "Oh you haven't read that paper yet?".

Feb Senton, one of the participating student guards, recounted the effect this had on the prison populace. "It was hilarious. All I had to do is open a folder and pretend to read something. It only took twenty minutes for the majority of them to

**"Rather than resorting to physical violence, Faylward set prisoners an exam every day, and guards asked prisoners 'Oh, haven't you read that paper yet?'"**

start chewing the bars."

The study has drawn widespread condemnation from human rights groups and the Chinese embassy. While the tones of anger were similar the content of the two complaints was very different. While the former argued that this was inhumane treatment the latter voice concern that the Falun Gong practicing student study-participant had left the study with both kidneys.

The results of the study are to be published later this month in the world renowned journal 'Investigations of the Royal Society of Libertines'. The Scottish government has already expressed interest in applying Professor

**"The study has drawn widespread condemnation from human rights groups and the Chinese embassy"**

Faylwards work.

Scottish education minister, Nicola Red Snapper, declared "What this study tells us is that there are better ways of educating

our students rather than just beating them. We look forward to following a data driven approach to bring our education system into line with other developed economies".

# HANGMAN

negafelix@imperial.ac.uk

## Concerns of hypergrade inflation grow

### HANGMAN

Negafelix  
Editor-in-Chief

Politicians and parents alike were gripped by terror by reports that last years final year students had performed better than the year before. There are worries that British universities are following the example of Venezuela where students had to collect their diplomas with wheelbarrows.

Parents of current students have written a letter to the Prime Minister to demand that he does 'something about this'.

Many have looked back nostalgically at their own university days and asked why things have changed. "Back then you got one degree and were happy with it."

International markets have responded badly with the exchange rate for British to European degrees reaching an all time low with 10 British diplomas now being equivalent to a single European equivalent.

Boris Johnson has responded to this crisis with the creation of the Grade Institute of Britain that has the instruction to maintain a 2% inflation rate written into its constitution. The Institute has already run into difficulties as its

preferred methods of distributing ketamine, condoms and vats of curry sauce to students in order to dissuade them from working so hard have failed to come to fruit. Governor of the Institute, Sexy Canadian DILF Cark Marney, has already issued a warning for the next quarter with grade inflation expected to exceed even the most pessimistic predictions.

Analysts have reported that the Institute will have to change its attitude if it wants to appeal to a new generation of students. "You used to be able to give a student a Pink Floyd poster and he would buy his own acid and spend the next four months

trying to work out a new system of government for

worms. Unless the Institute adjusts fast things are

only going to get worse."



//Special Meme Fresh



### ARIES

This week you spend your entire weeks food money on the Brexit bong fundraiser.

That will show that French hussy that broke your heart.



### TAURUS

This week you download the new Tom Watson X Stormzy album Heavy Was The Gut.



### GEMINI

This week you put your nudes online to raise money for australian koalas.

You make 5 pounds.



### CANCER

This week you start watching Love Island winter edition.

The huge duffle coats and ear muffs make for a challenging wank.



### LEO

This week, after years of contributions you finally get accepted as a moderator of the incel wiki.

Who says that the arts and sciences don't mix?



### VIRGO

This week your two year experiment ends in failure.

Putting apples in the fridge doesn't stop your medics stealing your milk.



### LIBRA

This week you're Felix. You print a confidential letter to someone's estranged parents while hacking their phones.

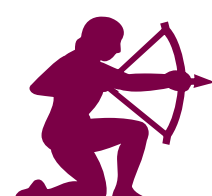
Who is a proper newspaper now?



### SCORPIO

This week you get zero in your Biochem exam.

Turns out when the lecturer was asking about toxic carcinogens he didn't mean masculinity.



### SAGITTARIUS

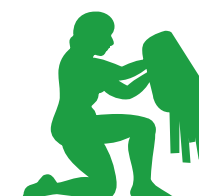
Sed sollicitudin tristique diam nec gravida. Fusce dictum enim id dolor pulvinar convallis. Cras vehicula mauris sed pharetra convallis. Aliquam hendrerit nulla dui,



### CAPRICORN

This week you become a Mormon.

Their church has the closest loo that hasn't been clogged up by your coursemates' nervous pooing.



### AQUARIUS

This week you swallow a AAA battery.

The Redbulls just weren't cutting it anymore.



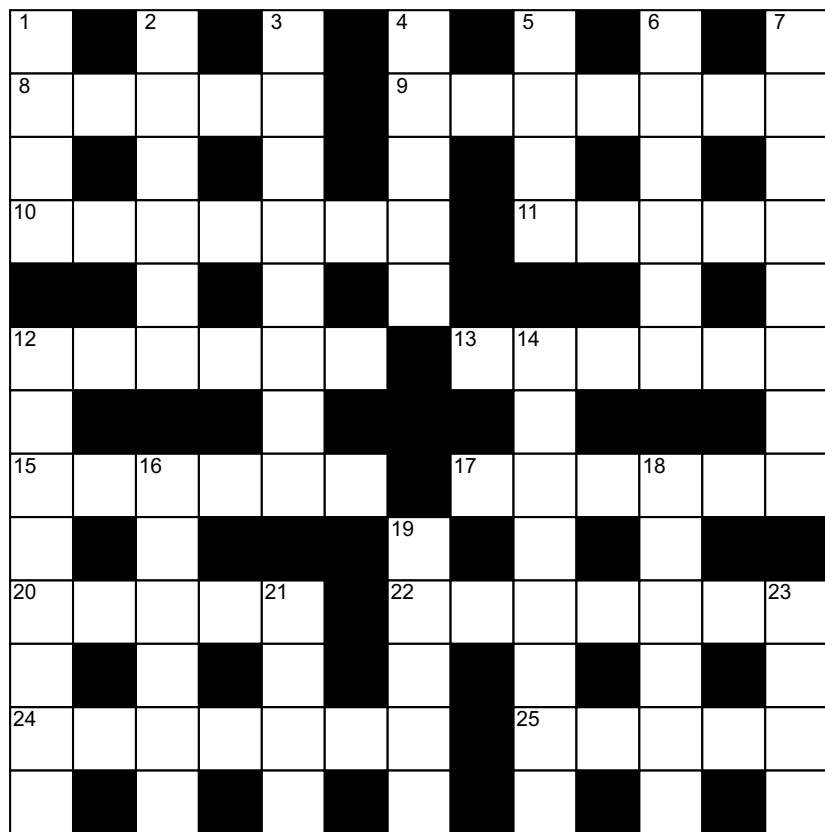
### PISCES

This week you are three days into your internship at the Russian foreign ministry. You've already discovered four new Russian provinces and you've still got a week to go.

# PUZZLES

fsudoku@imperial.ac.uk

## Last week's



## Across

- 8. American city or WW2 codename (5)
- 9. Ringo Starr, for one (7)
- 10. Arachnid Zodiac sign (7)
- 11. Arthur's weapon (5)
- 12. Ex-capital of Myanmar (6)
- 13. Crocheted blanket (6)
- 15. Common features between supermarkets and airplanes (6)
- 17. You can have a few loose (6)
- 20. Standard practices (5)
- 22. Accumulation of stuff that needs dealing with (7)
- 24. Can be folded in fancy shapes before use (7)
- 25. \_\_\_\_\_ on the cake (5)

## Down

- 1. Katniss' weapons (4)
- 2. Western watering hole (6)
- 3. Obsolete red box (8)
- 4. Used when necessary (5)
- 5. G.I.'s weapons (4)
- 6. \_\_\_\_\_ criminal (6)
- 7. Mermen's weapons (8)
- 12. Intense longing (8)
- 14. Italian bread (8)
- 16. Component of the American flag (9)
- 18. Lightning pastry (6)
- 19. What stares back if you look too long, according to Nietzsche (5)
- 21. Prisoner's weapon (4)
- 23. Prefix for -byte (4)

## FUCWIT

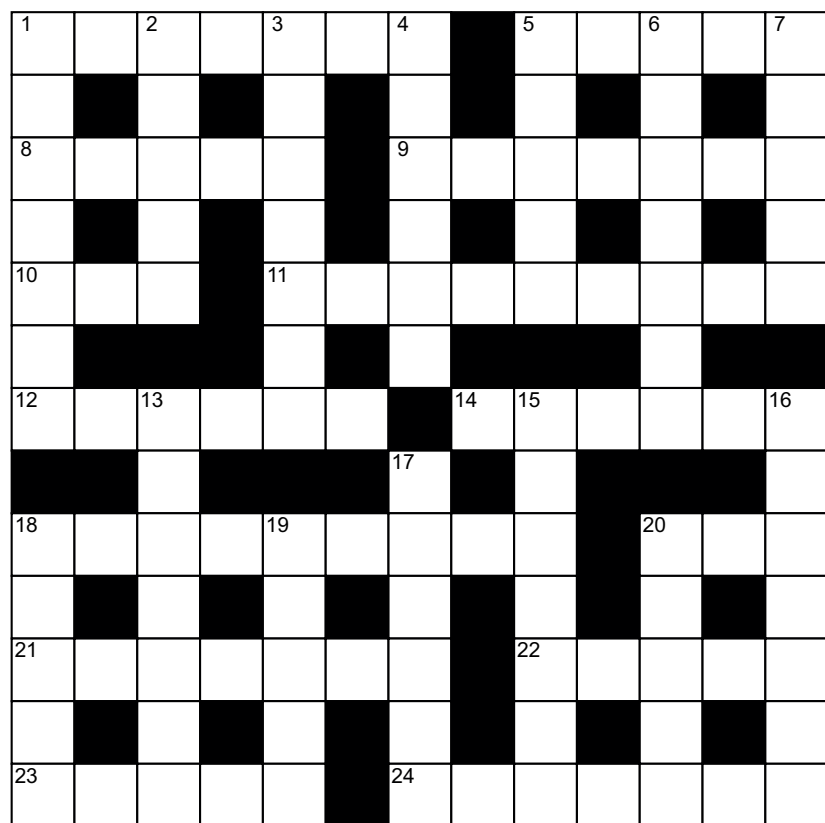
- 1 O1G
- 1 Lochy Monsters
- 1 RIP Pat
- 2 F\*\*\*URhys
- 3 DQ
- 4 StandWithHK\_Fight4Freedom

## Points available

16	Crossword (last week's)	5
16	Crossword	5
16	Sudoku	5
15	<b>Total</b>	<b>15</b>

9 Send your solutions to [fsudoku@imperial.ac.uk](mailto:fsudoku@imperial.ac.uk) before Wednesday noon to take part in the leaderboard!

## This week's



## Across

- 1. Little Thumb's trail-markers (7)
- 5. Usually two-or-three-seaters (5)
- 8. Fuming (5)
- 9. See 14-Across (7)
- 10. First half of a Chinese video sharing service (3)
- 11. Relating to the six-pack (9)
- 12. What you each get when you split a pie with two friends (6)
- 14. With 9-Across, what the Clash hears when they answer the phone (6)
- 18. Napoleon's first wife (9)
- 20. Cut and polished stone (3)
- 21. Hey there, \_\_\_\_\_ (7)
- 22. What the people in 14-Across, and 1,15,19-Down might be to some (5)
- 23. Basic apology (5)
- 24. Pre-Euro Spanish units (7)

## Down

- 1. With 2-Down, what Mick Jagger wants to do to a red door (5,2)
- 2. See 1-Down (5)
- 3. Downwind from (7)
- 4. What the U.S. South tried to do from the North (6)
- 5. Witch trial locale (5)
- 6. Faked (7)
- 7. Royal seal, for one (5)
- 13. From an island (7)
- 15. According to Dua Lipa, it's all it takes (3,4)
- 16. Goddess of revenge (7)
- 17. Piece that will always move on squares of a single colour (6)
- 18. People personally greeted in a Beatles song (5)
- 19. She wants a cracker, says Cobain (5)
- 20. Movie in which a potter slow dances with a spirit (5)

## Solutions

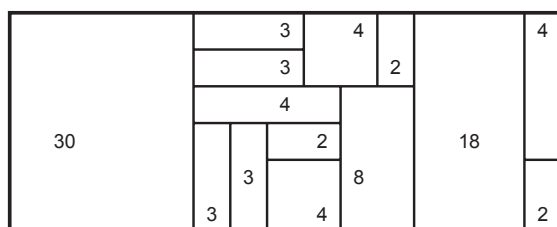
8	5	9	3	4	6	2	1	7
3	7	6	9	1	2	5	4	8
2	1	4	8	5	7	3	6	9
4	2	5	7	3	1	9	8	6
6	3	8	2	9	4	1	7	5
7	9	1	5	6	8	4	3	2
9	6	2	1	7	3	8	5	4
1	8	7	4	2	5	6	9	3
5	4	3	6	8	9	7	2	1

Welcome, all, to another week of puzzles!

Sooo, about last week... Our clues, like most proverbial elephants in the room, just didn't quite fit. Nevertheless, some of you managed to make good progress on the clues alone or the grid we published on Facebook (Shout-out to O1G, RIP Pat, and Lochy Monsters) and we'll reward that with some cheeky points. If you didn't get a chance, then look at the silver lining: you get two crosswords this week.

If you don't already follow the Felix Facebook page, do so now. We'll wait. now. That's where we'll post corrections next time we inevitably screw the pooch.

Enjoy!



## SUDOKU

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