

EDITORIAL

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Front Cover // Taja Strle

Why British Food Doesn't Suck

t's a story as old as time, it feels. Along with other stereotypes like our bad teeth (not scientifically true), excessive politeness (have you been to Scotland?), and biting understated sarcasm (definitely accurate), the prejudice against British food is widespread and endemic. It's frequently tossed in my face during my occasional indulgences in internet flame wars on one of my favourite Facebook groups - a gem called "Italians Mad at Food – The Group", which I thoroughly advise following.

Well, this week I dearly want to disabuse you of this notion. Food is, thankfully, one of the few areas in which one can have national pride these days without being construed as a madman. Us Brits don't really do patriotism, anymore we're far too obsessed with self-deprecatingly ripping on ourselves in an orgy of masochistic self-loathing, like the proper stiff upper-lipped gents and ladies we are - but goddamn do I feel just fine standing up and saying that Eton Mess is effing delicious.

I think the conception largely stems from the perhaps blander palettes of the war generation - a group of men and women so stoic in the face of the German war machine that they even sacrificed their tastebuds. Yes, a generation of people raised on rations as children and denied the simple pleasures of salt and pepper might occasionally underseason their meat. We all adjust to favour the flavours we consume when we are young. The payoff is that they'll all live until they're 109, while I will go out in a blaze of failing cardiovascular glory at the tender age of 35. Wait, I smoke as well – make



that 33.

For some reason, this particular subset of British cuisine – the underseasoned and overboiled vegetables with a slab of tough meat and potatoes – has become conflated with the concept of British food itself. While, yes, it does make up a decent portion of our diets, it doesn't really make sense to conflate it with modern British food.

modern After all, British food is pretty great. We have the resurgence of old industries, especially dairy – did you know that Britain has one of, if not the, broadest and most diverse selections of cheeses produced here in the world? If I recall correctly, it even outstrips France. (No, I won't fact check that - this is an Editorial written on a Thursday evening. Take me to prison for my gross breaches of freedom of speech.) Cheese is great.

I haven't met many people who can honestly say they find meals like Eton Mess, Beef Wellington, a well-made full English breakfast, or steak pie to be conceptually gross or bland meals. They're the quintessential British dishes, and yet the cuisine they are from is considered tainted by this image of blandness. It

doesn't make sense to me.

Of course, the most exciting aspect of British food by far is fusion food. Personally, I see this as much British cuisine as meals eaten here for thousands of years. I believe that anybody born here is British, and meals like Chicken Tikka Masala now a national dish – that were developed by British people in Britain don't become not-British-food because their parents came from somewhere else. That's just my take.

And this is, without question, the most exciting place to be to experience fusion food in its wonderful variety. The largescale immigration we have into the British Isles has led to a lot of multicultural diversity. I've been to a lot of cities around the world, and in very few - if any - could you walk down a street in the centre of town and come across the same incredible range of cuisines you get spread across one block in London. We treasure and value food from everywhere, from France to India to Korea to Chile, and our most exciting developments in cuisine are coming from this particularly marvellous sector. It's awesome to watch in action.

It's rare that I'd use

something as seemingly trivial as food to justify taking a serious political stance, but truly — if globalisation has led to such amazing growth and change in the world of food, I take that as a fairly convincing argument to remain in the EU. More convincing than anything I've heard out of a politician's gaping mouthhole in quite some time, anyway.

What's particularly awesome is that in the UK, it isn't spectacle. It isn't limited to top-end cheap restaurants or takeaways. This variety of food is carried into our homes. What we cook in the average week contains elements of cuisines and ingredients from every corner of the world. I'd comfortably have ramen, curry, and tacos on the same day, all prepared with my own hands in my own kitchen.

The area in which we fail, in the UK – and perhaps where all the bad conceptions come from – is that we don't seem to carry our passion for food into a passion for cooking. I am, of course, referring to the ready meals aisle.

We do not set aside time in our days to cook and prepare food. We do not go home for lunch. We eat a ludicrously overpriced premade Tesco sandwich at our desks, instead. We buy ready meals on the way home from work. We're tired so we bang something in the oven, or run down the local chippy.

It's a shame, and a shame I'm very guilty of sharing. I cannot count the number of blooming Burger Kings I've eaten at 2 AM over the past couple of months, during late night shifts at the office. Hell, I will probably end up doing the same tonight.

This is, however, a failure of Britain's food culture – not of British food!



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NEWS

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Food in Union Stops Due to Electrical Fault; "No Timeline" on Return

The Union kitchens have been closed for two weeks, with no known timeline for when food service will return

NEWS

Henry Alman
Editor-in-Chief

he Union has not been providing food service in 568, its flagship venue on the South Kensington campus, for two weeks. The cause of the disruption is an "electrical fault" – specifically, that the circuit board to which the various kitchen appliances are attached to was being overloaded.

As a result, there are health and safety concerns around continuing to use the kitchen appliances. In a concurrent but reportedly unrelated electrical fault in the kitchens behind the Union Dining Hall, a member of staff received a minor electric shock.

The issue has arisen concurrently with the promotion of the health and safety committee within the Union's structure, and recent considerations of employing a member of staff whose sole remit is health and safety (discussed in this week's A Conversation With section of Felix.)

There is currently no timeline on when food service may return to 568, though there may be food by the end of this week according to Fifi Henry, the Union's Deputy President (Finance and Services). Rough estimates from various members of Union staff place the expected wait at several weeks, potentially through to the beginning of second term in January. A replacement "pizza vendor" service will come into place next week in Beit Quad as an



The Union has not been selling food for two weeks $\ensuremath{/\!/} \textit{Henry Alman}$

"Rough
estimates
place the
expected wait
at several
weeks, if not
through to
January"

interim measure.

Regarding the long expected wait for return of service, Julia Matting-ley, the Union's Head of Commercial Services, said "We don't just want to put a sticking plaster on an axe wound - we need to sort out the fundamental problems, not just symptoms but causes, so that we aren't just back in the same place in a few months' time."

Specifically with regards to the kitchen on the ground floor - which services 568 – the Union President, Abhijay Sood, explained: "my understanding is that people have been violating normal health and safety procedures - there are members of staff in the bars who have been continuously resetting tripped circuit breakers in order to keep appliances operational.'

Key to note is that these issues are not new – they have existed for some time, though this is the first time the Union is becoming aware of them, so it is impossible to say how long they have existed for. Typically, electrical problems such as these would fall under the remit of one of College's divisions, Estates. However, Union bar and kitchen staff were not successfully reporting

the problem to Estates while they were ongoing, and were implementing temporary fixes themselves in an effort to keep the kitchen running.

"There has not been a strong culture of adherence to proper protocol," Abhijay said.

This has not deterred an ongoing working relationship, however. College's Campus Services division has been providing support to the Union, delivering a food service for external clients the Union has booked in. "The Head of Campus Services, Jane Neary, has been especially helpful, as well as Nick Roalfe and Surrinder Johal, the Directors of Facilities and Property Management, and Safety respectively. We want to form closer relationships, and look at how the College and Union can work better together," said Julia.

Additionally, the College is aiding in conducting electrical testing of the circuit boards as

"There has not been a strong culture of adherence to proper protocol"

well as PAT tests on all the light and heavy equipment in the kitchens, as well as liaising with the Union about bringing Union spaces into alignment with College standards.

This is not the first notice of procedural issues in the 568 kitchens, or of health and safety issues in the Union. Prior to the

start of term, the kitchens were subject to a standard inspection by an Environmental Health Officer, who raised concerns with certain processes not being followed correctly. However, Abhijay raised assurances that the problems flagged during the inspection could now be dealt with, specifying that some of the issues arose due to staffing vacancies – especially in the Head Chef position – and throughout the Commercial Services directorate but that those vacancies have now been filled.

Concerns have also been expressed about how this will affect bar staff, as well as the Union's financial status. Fifi clarified with regards to the former that staff will not miss out on shifts; they will instead be reshuffled in order to fill in shifts that would previously be covered by agency staff.

The financial impact is, as of yet, unknown. Food sales' importance is now prioritised for the bars, and for the Union as a source of income, due to declining drink sales in recent years and the launch of the new menu at the start of the year, and so the expected impact may be large. However, with the close of food service also comes a reduction in costs – in costs for agency staff, for produce, and so on. The Union typically runs a full financial assessment at the start of each academic year, but revisits it in January – the ramifications financially of the loss of food sales will only become apparent at that time.

NEWS

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Survey Shows What Students Really Think of Brexit

The survey conducted across over 35,000 students showed that a significant majority oppose Brexit and deeply distrust British politicians; student interviews conducted at Imperial corroborated

NEWS

Henry Alman
Editor-in-Chief

survev ducted Dig-In - of freshers' week welcome package fame demonstrated that a strong majority of students in the UK oppose Brexit. Out of over 35000 students surveyed, 38% stated that they 'hated' that the UK is leaving the EU, while a further 24% 'dislike' it – totalling for a 62% disapproval rating.

The statistics do not vary significantly between UK and international students, though there is a notable split based on gender – 58% of men, 66% of women, and 77% of those who identify otherwise responded with 'hate' or 'dislike', showing a significant stasticial variance.

By contrast, only 9% responded that they 'liked' or 'loved' the UK's proposed departure. A further 28% of students responded that they feel 'indifferent'

"62% of students nationally 'hate' or 'dislike' Brexit"

 a statistic described by Felix's Ameena Hassan as "expected if it were an Imperial-based study, but shocking considering it was nationwide".

The apathetic cohort may instead reflect a desire for politicians to focus on other topics. When asked about the topics they felt should be the top priority, 53% said climate change, 21% were for healthcare, and only 17% for Brexit. Students appear to feel the urgency of globalised, existential issues more heavily than more shortterm and localised ones, perhaps encompassing an ideology best described by one Imperial student speaking to Felix: "we are in a globalised world; we are meant to unite, not separate each other."

Felix interviewed students on the South

Kensington campus, and received a variety of responses approximately in line with the survey's findings. Most Imperial students felt strongly that Brexit will be negative for the country, with the next highest cohort being those who said they did not know anything about Brexit.

One student commented that Brexit had directly affected their decision to stay in or leave the country: "I don't think I am going to stay after my studies. It's sad but I have no idea what is going to happen." They confirmed that they would definitely have stayed if Brexit was not occurring.

This lack of certainty, and a resulting dearth of optimism, is shared nationwide. Only 7% of students responded that they 'love' or 'like' the thought of the UK's near-future – a 20% drop since last year – while over half (53%) either 'hate' or 'dislike' it.

On the matter of trust, the statistics are even more damning – particularly towards British politicians. 84% distrust Boris Johnson and 76% distrust



The People's Vote march on 23rd March 2019 // TeaMeister, Flickt

Jeremy Corbyn. Almost three-quarters of students were convinced that the UK would not leave the EU on October 31st – a prediction that turned out to be accurate.

An interviewed Imperial student commented: "Labour was against it, and now suddenly they are for it. Everyone's policies seem to change every day. It's confusing for the people, because we don't know who to trust."

The CEO of Dig-In, Chris Platt, added: "These findings are hard to hear our student community is clearly concerned about its future. Much has been said in the past about the split of leavers vs remainers being heavily weighted by age, but this large scale poll shows just how opposed to Brexit these young people - the potential future leaders of this country - feel. My hope is that their thoughts, feelings and future outcomes are carefully considered by whichever government is in power in their near future."

However, there seems to be little faith that any government, regardless of the general election results, would be able to deliver on their promises. Another student said "a new parliament will have to renegotiate – that will

be another couple of years of delay. I don't think it will happen in the next five years."

Despite the verbosity of many students' comments above, Comment Editor and reporter Charlie Titmuss noted a distinct reticence amongst students about the topic of Brexit. "A lot of people were initially happy to talk to us, but as soon as we mentioned Brexit they backed off and were kind of scared to speak. It's still a controversial topic even three years later."

Felix is recruiting!









SCIENCE

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Snap! Goes the Future...

Natural innovations: New research shows how far the development of biomimetic sensors has come and the potential they have for mimicking real-life nervous systems

SCIENCE

Christine Parry
Science Editor

ave you ever played with one of those snap wristbands. when you were younger?" Andres Arrieta asks. In the Engineering lab at Purdue University, Dr Arrieta and his team have designed a novel data sensor that uses a similar snap-change; from a curved shape that is under tension, to a flat structure which generates an electronic signal when triggered. The latest in the field of biomimetic sensors, this sensor has the potential to function like a real-life nervous system.

In their flat form, the sensor's two layers are held apart. Then, when an impact triggers a snapchange by a clever trick of engineering, the layers are brought together, allowing tiny flecks of nickel that are spread throughout the top layer to become close

enough to conduct an electrical signal. A magnet in the bottom layer resets the switch.

"The shape is encoding the message," says Dr Arrieta. "It's just like having ones and zeros in a binary system." And he's right: the two shapes translate into a binary '1' and a '0', allowing the sensor to generate a simple string of data. Biomimetic developments like these, taking inspi-

"Biomimetic developments have revolutionised fields that rely on data sensors such as automotive technology and robotics"

ration from nature, have revolutionised fields that rely on data-sensors such as automotive technology and robotics.

advanced, yet The mildly terrifying Cheetah robot at the MIT Biomimetics lab uses similarly novel biomimetic sensors in the Cheetah's footpads. The limiting factor in advancing robotics to reflect human actions is not a mechanical problem, but one of data-sensing. Data-sensors need to capture a complex amount of data, process this in real-time, and yet be made of lasting, durable materials.

Biomimetic units like these completely redesign data-sensing. Current digital models improve sensitivity by upping the data input, relying on a sophisticated processing unit to sift through the volumes of information. But nature has already found a more efficient answer; filtering at the point of data sensing, triggering a signal only when past a set threshold.

This means Dr Arrieta's unit only snaps when it should, and ignores the background noise. Yet, Dr Arrieta explains, this still doesn't explain the full potential of the research. Copying biology brings more advantages than just efficiency; Mother Nature has also worked out how to handle truly complex data, including non-binary data.

Dr Arrieta uses the example of a bird's flight to explain this; nerves in the bird's wings are sensitive to the angle of each feather and how they move in the wind as the bird flies. The extent of change to this angle determines the action the bird takes; a subtle 'wingtip' adjustment for a light breeze, or a bigger movement needed for a heavy gust. This unit, just like a bird's wing, also has the ability to generate a range of actions.

"Our signals can be interpreted in 'ones' and 'zeros', so 'on' and 'off'. But also - and this is really

the power of it - every time there is a snap, there is a pulse of electricity. Binary logic has only a 'one' and a 'zero', but our [unit] works with pulses of information. So, depending on how fast, slow, strong, or weak the sensor is triggered, the pulse pattern will be different, and our unit interprets these differences."

"The limiting factor in advancing robotics to reflect human actions is not mechanical, but that of data-sensing"

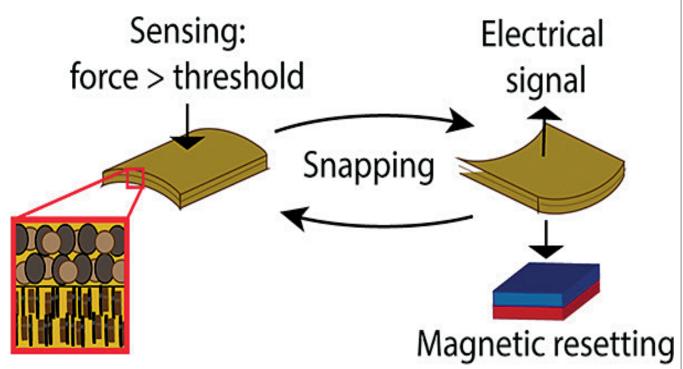
These unique electrical patterns can be mapped to a learning algorithm, which translates these signals into various actions. This brings the potential of the system closer to a real-life nervous system – completely different from digital data-sensing.

So, it's different - but is it really that much better than digital methods? Daniel McKenna, robotics software engineer at the artificial intelligence start-up Emotech, thinks that both digital and biomimetic sensors have their pros and cons. He does, however, point out that while developers have now designed that processors can handle huge amounts of digitally generated data, overcoming past limitations, there is a recent "drive to simplify things".

"There's a push to try miniaturise things, move them back onto devices while avoiding battery drain, rather than relying on the cloud servers that enable large amounts of processing power. These sensors would filter unnecessary information and lead to faster on-machine processing."

Asked to explain if Dr Arrieta's excitement over the potential to read unique electrical signals may be warranted, McKenna points to his own analogy. Referring to data like this as non-linear, he describes water in a bucket responding to vibrations. The water converts a time differentiated input (the beat of the vibrations) into a spatial signal (the pattern of ripples seen in the water), at a much quicker speed than an algorithm could. Likewise, the electrical pulse translates data at a much quicker speed than a digital sensor would. "The processing that biomimetic sensors offer gives that element of non-linearity a lot easier than a digital system," he notes.

But before starting a wristband-wearing, mechanical cheetah-wielding robotics revolution, McKenna warns it will need hours of testing before it goes to market due to the high-stake safety implications. But despite a long road ahead, it's come a long way from a simple snap-band toy. Don't you think?



The basic mechanism of the biomimetic sensor // https://pubs.acs.org/doi/10.1021/acsnano.9b01095

A CONVERSATION WITH...

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This week, Felix sat down with the Union President, Abhijay Sood. He spoke about the loss of the Union's Managing Director, halls' rent renegotiations, Union policies, ethical investment at the College, and more!



Abhijay Sood, the Union President ///ICU

Felix: How are you doing? Things heating up a bit, getting a bit stressful?

AS: In terms of the stress—Unions have peaks and troughs. Welcome is a peak, then it calmed down a bit, and now it has heated up a lot. With the upcoming departure of the Managing Director—the most senior staff member in the Union—things are going to be difficult.

For reference, the Managing Director (currently Jarlath) is the most senior member of permanent staff in the Union.

Felix: How does the departure of someone in that senior role impact you and your job?

AS: There's a personal impact whenever someone is leaving. Each of the Officer Trustees (OTs) work closely with different members of senior staff. Jarlath is the one I work with most closely personally - we share an office in the Union building. He's been a soundboard for me, for example, to test ideas, and we've worked on various projects together. So in an official capacity there's also a direct impact there.

Felix: Jarlath is one of the most experienced staff members in the Union and the second most experienced member of the Senior Management Group. What do you think the impact of losing his experience will be?

AS: A big reason we need full time staff in the Union is that students aren't here all that long – OTs are only here for a year, for example. You

need some continuity in terms of direction and experience. But I don't want to conflate this with our Union's broader issues around staff retention. It's not the same as losing someone who was here for a shorter time. And the reasons behind him leaving are very different to why most other staff leave.

Felix: In terms of people leaving, the Union has also just seen the resignation of one of their most senior student volunteers in Thomas Cross, the CGCU President. What are your thoughts about his departure?

AS: Tom is a very outspoken person, and can be highly critical of the Union – but has also been one of our most committed student volunteers. That he's felt the need to resign at this point is not good news for any of us – for the Union, or for the CGCU. My understanding is that this has come about as a result of tensions within his committee, which he can talk about better than me, and the high workload on his course. We all do tough degrees, and the Constituent Union President roles are among the most time-consuming of the volunteer positions. It's understandable that he would want to put it to one side if he feels his work is slipping. For our part, we want to ensure the CGCU is supported going forward so they can deliver their best effort to the students of the Faculty of Engineering, and also that any volunteer who has experienced difficulties feels comfortable approaching us.

Felix: Student rep-

resentation has come under other scrutiny recently after the recent Union Council. How come 60 of 61 **Union policies were** allowed to lapse? The Union was left with a single active policy. How can this have been allowed to happen? Did this not result in the Union taking action without proper democratic input, via policies established by Union **Council?**

AS: I wouldn't say that – there is democratic accountability built into, for example, the OTs' manifestos. While that '60 of 61' figure was true in terms of official policies on the website, there have of course been meetings with elected representatives in the last several years during which stances on various matters were established. The lapse in policy specifically could be due to administrative issues, staff turnover, a lack of urgency on behalf of previous student representatives, whatever it may be – but there are still things we have agreed within the last three years since some of those policies lapsed.

Felix: So if 60 of 61 policies can lapse and it makes no difference, do they matter? What's the point of them, are they at all important?

AS: First of all, I think the policies were ignored, and that was because there were too many of them, and still are. Anything the Union Council voted on was put into policy – such as a specific action to be taken by the Union President or Felix Editor – even if they only applied over a short time frame.

A CONVERSATION WITH...

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For example, a stance on a student protest occurring in 2015 would be voted on, and that stance would become official Union policy for three years, long beyond its relevance.

To fix that, we're trying to change the way it works. We have an action tracker at Council, which is a record of specific actions that need to be taken – a description of the action, the person responsible, and a date by which it needs to have been completed or by which an update needs to be prepared.

Then stances which have a long-term relevance, such as our stance that the College should not levy academic sanctions to enforce the payment of non-academic debt – like halls rent. We're strongly against that, and it's a standing policy of the Union, and should be a long-term policy.

With regards to them all currently being lapsed - we're fixing that too. Predominantly the Council Chair, Lloyd James, alongside the OTs and other members of staff, have done a big piece of work on looking at those old policies. We've scrapped old ones that were no longer timely, merged several policies with similar remits, and then renewed those temporarily for one year. We've then adapted the system to give more power to the various subcommittees of Council, so that they own certain policies where that policy falls under their specific remit rather than them all being held by Union Council. The subcommittees represent a broader and more relevant cross-section of our student volunteers.

Felix: Odd segue, but

- there have been
many health and
safety complaints at
the Union recently,

and there has been a change in the health and safety committee in the Union. Can you shed any light?

AS: We've had a Health and Safety Committee for many years, but now it's been 'promoted' in the organisational chart; it's being given a higher level of seniority to reflect the importance of health and safety as an issue within the Union. It is chaired by one of the external members of the Board of Trustees, Graham, and has student representatives as well as the Deputy Presidents of Education as well as Finance and Services on it too. Various staff members have responsibilities for health and safety around the Union, and they attend meetings with the committee to report in and be held accountable.

Felix: Was this change instigated by the various complaints about health and safety recently?

AS: Actually, I believe it predates some of those more recent escalating problems – we just thought it was very important. It no longer reports into Finance and Risk, because it isn't just about a list of risks, and is now established on an equivalent level.

Felix: How are the health and safety issues being addressed?

AS: We as the Leadership Team realised that we need more staff support to address health and safety issues in the Union. At the moment it is split between many people – operational staff like bar managers and such, in various ways – and we need at least one person for whom it is their full-time job and specific remit. That is what will help bring food back to 568, for example.

See this week's News about the closure of food service in 568.

Felix: I want to briefly touch on the food service situation in h-bar, given that 568 currently is not offering food either – what's happening with that?

AS: It's been gone for a while now – we gave a big update about this via Felix a few weeks ago. The Deputy President (Finance and Services) and I are working with various people in the Union and College, such as the Head of Catering, to further discussions about bringing food back to h-bar within the timescale of weeks - rather than it being a really long time. Whether that will be a full menu or a limited service will depend on what services the College is able to put behind this. We know how big an issue this is, and it's a priority for us to try to fix it.

Felix: Let's talk about a couple of the big projects you've been working on, rather than day-to-day fire-fighting! So, you've submitted an ethical investment paper to the College Council?

For reference, College Council is the governing and executive body of the university, composited of external members, deans of faculties, senior College management, and Abhijay as a student representative.

AS: Yes! There is a campaign at Imperial called 'Divest Imperial', whose goal is to get the university to take its money out of fossil fuels. They successfully passed papers at the Union Council in 2014 and 2017 that made it our policy not to invest in fossil fuels with our limited invest-

ment portfolio. At that time we surveyed students about what they felt we should or should not be putting our money into and the results came back saying that we should not invest into things like tobacco, the arms industry, fossil fuels, or amusingly even pornography! The Union was also mandated to campaign to get the College to divest from fossil fuels. Previous Union Presidents since then have hit a brick wall trying to make that happen, and I don't think it has been a priority for

More holistically, fossil fuels are not the sole matter over which you can have a debate here. There are other types of investments too. For example, the College is not meant to be invested in tobacco due to their relationship with the Wellcome Trust. I ran for this role on a platform on ending unethical investments generally, and I think it's important the College considers the ethical ramifications of where it keeps its money. It's important for publicly funded forward-looking scientific institutions to think about that kind of thing when it makes decisions. I have therefore written a paper for College Council with support from Fifi, the DPFS, and Francesca, the Ethics and Environment Officer, which suggests taking the first step – getting student and staff representatives, experts, and the senior staff responsible for the College's financial decisions together to talk about these issues. We're not demanding from the get-go that the College doesn't invest in certain companies or some such, but we want to agree on a set of principles. There will be disagreement, but I believe College Council will agree to create that group and we will be due to report back early next year. We will get the information from the experts, and make an informed decision that way.

Felix: The College have regularly defended their position by stating that they believe they need to work with fossil fuel companies – have you come up with an argument you think will convince them?

AS: No. And this is why I am not taking a paper that says "you must take your money out of fossil fuel companies". I'm taking a paper that says "let's talk about ethical investment". If you open a discussion with the former, about that specific issue, the door gets closed in your face and you don't get any traction. It stops any discussion of other changes that could be made to the investment portfolio. And it makes people both in Divest and in the College angry and frustrated. I'm trying to create a forum where we can discuss the issues in a constructive fashion, where the door is open and we can begin talking about what the social responsibility of the university is when it comes to its investment portfolio.

The College Council meeting at which this paper will be presented is on the date of publication, Friday the 22nd.

Felix: A related discussion is to do with the upcoming planned climate strikes – what do you know about that?

AS: So this is an initiative organised by the staff trade union, the UCU, following the action they took in September before the start of term. They're staging a lunchtime protest on the Queen's Lawn at 12.30 on November 29th. If this is an issue any student feels passionate about, I would

encourage them to go and lend support.

Felix: At some point, do you see the Union supporting student strikes or lecture walkouts over climate or sustainability issues?

AS: It's an interesting topic for debate. I don't want to speak for the Union generally, but if someone brought a paper to Union Council about it I would personally probably support it – depending on the specific or exact content in the paper. It's an important issue and our generation are the ones who will really start feeling it.

Felix: Regarding your other project, there has been big news this week about rent renegotiations, which we discussed last time we spoke. There is an event that went up on Thursday night about a meeting about rent issues? What's happening currently?

The Union and College periodically have negotiations about the price of rent in halls. This one has come about in time with the development of new halls in Acton, which roughly doubles the number of bedspaces out there, along with other changes to the rent portfolio. Historically, when these negotiations come up, the DPW and Union President take the different options to the Union Council.

The Council meetings are public, and we think students will really care about this issue. We'll be holding that meeting in the Read Lecture Theatre at 7 PM on the 3rd of December, and talking about this and inviting presentations from any student who wants to have their voice heard.

POLITICS

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The Eritrean-Ethiopian Conflict And The Man Who Solved It

Abiy Ahmed, Prime Minister of Ethiopia, won the Nobel Peace Prize for setting the issue, but his homeland still proves an oppressive country

POLITICS

Luca Ramelli
Politics Writer

today's world, where uncertainty and instability seem to always be on the surge, it is often relieving to witness the ability of men to repair the damages of their predecessors, to heal the cuts left open in the soul of an entire people. It is even more rewarding when such happenings involve a place like Africa, a continent whose history has been usually associated with violence, from slavery to forgotten genocides such as those against the Tutsis in Rwanda and the Hereros in Namibia. Although rare, such tragedies still happen, as the world was reminded last month when Ethiopian Prime Minister Abiy Ahmed was awarded the Nobel Peace Prize for his role in the reestablishment and normalisation of relationships between Ethiopia and neighbouring Eritrea. The dispute between the two countries was caused by the frontier between them: a frontier that sparked two years of war, from 1998 to 2000, which only came to a halt due to a ceasefire being reached, but without a peace treaty. The conflict was still officially ongoing until last year. Entire families living in proximity of the border as well

for almost 20 years.

To understand the issue better, it might

as a considerable distance

away from it, given the

deep bond between those

nations, were torn apart



Ethiopian Prime Minister Abiy Ahmed // Wikimedia

however be useful to take a step back to the end of the 19th Century. In this period jingoism ruled over Europe and the world economy was revolutionising itself on the wave of the Second Industrial Revolution: thirst for new lands was the result of such conditions for most western European countries. Among them was a newly formed nation, Italy, whose interests befell Eritrea. country, with its coast facing the Red Sea, was located in a wonderful position for trade given the recent opening of

the Suez Canal. Consequently, the maritime company Rubattino managed to buy some land in the area, which was later to be sold to the Italian State. This marked the beginning of the Italian rule in Africa; before the end of the century two attempts were carried out by the Italians to expand into the mainland by conquering neighbouring Éthiopia. In both cases a staunch resistance by the Ethiopians, along with a chronic disorganisation of the Italians, delayed their overthrowal. It was only in 1935

that the fascist regime managed to conquer the region as part of the newly established Italian East Africa, also compromising of Eritrea and Somalia. This domination lasted however just until 1941, when British troops occupied the colony during World War II. At the end of this, while Ethiopia regained independence, its Somalia and Eritrea passed under British administration, as a provisional measure. In this context Ethiopian emperor Haile Selassie successfully pushed for the transferring of the latter under his country's sovereignty. However, such happening sparked an armed fight for independence, which lasted 30 years from 1961 to 1991. Finally, in 1993 a referendum under the supervision of the UN took place and decided almost unanimously for Eritrea's independence.

In 1998, as stated above, war broke out again due to old scars and the dispute surrounding to whom the bordering town of Badme should

"Seeking peace with Eritrea is not the only risky move Ahmed has undertaken in his short mandate"

belong to. The ensuing ceasefire established a joint Eritrean and Ethiopian commission with the goal of solving the border issue. This ruled for Badme to be assigned to Eritrea, which Ethiopia refused to comply with until last year, when Prime Ahmed Minister promised to fully implement the decision. 11th September On border between the the nations was finally reopened, signing an impressive success for the newly appointed but

bold PM. Seeking peace with Eritrea is not the only risky move Ahmed has undertaken in his short mandate; among other things he has freed thousands of political prisoners and foster actions to decrease gender disparity in an authoritarian and deeply traditional land. He has also been the target of some murder attempts, including an explosion at one of his rallies. His approach of drastic reform has caused discomfort for many, including the countries own military. Having said Ethiopia remains an oppressive country and there is yet much to do to ensure things change consistently, especially to ensure that next year elections are carried out in a fully democratic way. The well-deserved Nobel Prize Ahmed won should not therefore lead to his political sanctification, as happened prematurely (and as it has been revealed, wrongly) to many other Nobel laureates. This shall instead take place in a long time to come, when it will be known whether the principle of freedom will have imposed itself or succumbed in its fight with authoritarianism.

POLITICS

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The Felix Mock Election: Have Your Say!

How left-wing is the Felix readership actually? Does the Felix readership support Remain or Leave? And do these answers differ across faculties, gender, age, party?

We want to know! Follow the link or use the QR code below to take part in the Felix Mock Election! And don't worry - it's completely anonymous

In the final issue of term (right before the actual general election) we'll publish the results. And when Felix is back in January, we'll publish an analysis of how the Felix mock election compares to national polling and demographic data.

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Please make sure you're registered to vote in the REAL election by midnight, November 26th.

COMMENT

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A Further Response to the Article "Companies in China"

Yuchu Liu provides further opinions on the situation in Hong Kong, the West's perceptions of China and China's peaceful regard for the rest of the world

COMMENT

Yuchu Liu
Comment Writer

't was a great experience that my previous article was published on Felix without any discrimination, so I would like to express my gratefulness to Felix at the beginning of this second response. In addition, I will also apologise for my emotional language in the previous paragraph if that negatively affected any of you reading the article. I hope it was not an insult to anyone, and as Mr. Titmuss "respectfully" pointed out in his response, I was in overwhelming rage.

Last week when I was first replied by Mr. Henry Alman who is the Felix editor, I started to understand how press in the UK works. I appreciate that it provides a platform where students can express their genuine opinion. However, it is quite different from press in China as I feel there is no censorship at all. Therefore, I wrote down some of my opinions from a Chinese perspective and sent to Mr. Alman in one of the email, and the contents were as follows:

- 1. Felix should take some responsibility to check whether the content published is objective, truthful, and respectful to the communities involved
- 2. If someone wants to use the British way to judge other countries, not only China, it is much more appropriate to consult that community if that is acceptable



Protesters and Police Stand Off in Hong Kong // Wikimedia

The request about an apology made by Felix was never mentioned again as I respect that Felix takes an absolutely neutral and objective position, and I would like to thank Mr. Alman for spending his time letting me know about Felix's position. However, I insist that Mr. Titmuss should apologise for this.

This article aims to respond to Mr. Titmuss's second article, which responded to my first article. As this starts to become a debate, I would like to first briefly summarise some key points what Mr. Titmuss argued in his second article to help both

the audience and myself to understand what is going on.

- 1. My previous article is an "insult to logic" because I relied on overwhelming personal outrage
- **2.** Mr. Titmuss made "reasonable points" in his second article
- **3.** I cited "Youtube" and that can be ignored as it is not a reliable source
- 4. The Chinese government is oppressive as it does following things:
 So-called "re-education camps"-Suspected selling organs from executed political prisoners Great Firewall on the internet
 Preventing people in

China exercising freedom of speech - China attempts to extend censorship to other countries

5. I was acting on behalf of the Chinese government and aimed to please Beijing

To the first point, it is up to your audiences to judge if I was logical or not, but I believe that rage does not necessarily make someone irrational, so let see what "reasonable points" Mr. Titmuss have. Oh wait, as this is a response to my first article, did he argue back? I will list some of my arguments below:

1. The exercise of freedom of speech carries

special duties and responsibilities for the rights or reputation of others and the protection of national security

- 2. I respect any rational and peaceful attempts made by Hong Kong people for calling for what they want, but what is happening in Hong Kong is neither rational nor peaceful
- 3. China is not oppressive as pictured by western media
- **4.** Misunderstandings of westerners about China
- **5.** It would be wrong, disrespectful and irresponsible if someone wants to judge China without truly knowing about China

- **6.** Differences between Chinese and Western values must be recognised
- 7. Some recommendations to help readers learn about China

It seems that Mr. Titmuss only replied the third and the seventh point, so I will start my arguments address these two.

The so-called "re-education camps," or what ever you call it, has nothing to do with diminishing the position of minorities in Xinjiang Xinjiang province. province is located near Afghanistan, and has long been influenced by extremist Muslims and terrorism. These facilities aim to provide professional training to those who have been influenced by terrorism but haven't reached the level of committing crimes so that these people can go back to the society, work, and earn their lives. As there is potential of terrorist activities, safety insurances in these facilities are necessary. I watched BBC's report on these facilities on Youtube, yes, Youtube again, and many things that the journalist found astonishing are actually quite common in China such as uniforms, 10 people sharing a room (actually some Chinese universities still have facilities of similar level). If this practice is inhumane, well, probably we should learn from the UK, sending fighters to bomb the terrorists when they have activities, kill them all and possibly some civilians?

I don't know how there could be such a ridiculous

COMMENT

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rumour about Chinese government selling organs from executed prisoners. If we use logic (which I am probably lacking according to Mr. Titmuss), the Chinese government is oppressive and has absolute control on everything, why would it care about the few organs from an executed prisoner? There are loads of ways that the government can make money, much more than selling organs, so why would government Chinese do that? Besides, Mr. Titmuss used the word "suspected." If anyone an accuse others just because they are suspected of doing something, oh well, I don't know what I should say. Oh wait, the UK actually did this right? The UK and the US suspected Iraq had weapons of mass destruction and bombed it completely. Did they find anything? What was that substance displayed in UNSC? Are you sure it is biochemical weapons rather than some washing powder? I was very curious about this rumour so I did some research, and what I found is that executed prisoners was a major source of organs few decades ago because by that time organ donation was extremely rare among the public be the demand was high. However, by law (this law has expired), the use of prisoners' organs must meet the following requirements first (there is no official translation so I translated it):

- 1. No one claims the corpse
- **2.** The family refuses to claim the corpse
- **3.** The executed prisoner agrees to donate if either 1 or 2 is met
- **4.** The executed prisoner and his/her family agree to donate

However, there were problems indeed. Corruption was a huge problem back in time and this was indeed a source of making good amount of money for



Protests in Hong Kong at a more peaceful time// Flickr

some corrupted officials, but the evilness of some corrupted should not be the only information used to judge China as a whole. Now the selling of organs has become a crime and is subject to serious prosecution. No country is perfect, including China, but we are willing to resolve the problems and change practices when the situation allows.

The Great Firewall is what we Chinese call a double blade. I would say it causes problem on Chinese people sometimes. I took the IB during high school and I had to write loads of papers in English. It was quite a pain as some contents cannot be accessed from China. However, I firmly believe that the benefits brought by the wall outweighs. Outside this firewall, what I saw are medias such as the Big Bad China, or sorry, the British Broadcasting Corporation, spreading distorted facts What's about China.

more, corporations such as Facebook encourage the terrorism, hate, and separatism in China. The firewall ensures that most information we get are positive, and prevents terrorism. All Chinese people therefore have common cause, which is making China prosperous.

The firewall creates feasibility for censorship, and again, its benefits outweigh the cost. As mentioned above, inappropriate content containing separatism, terrorism, hate are automatically filtered. If not, the police can find the person and prevent any potential adverse consequences. Mr. Titmuss may argue that the CCP tries to brainwash Chinese people. Well, I think this is not a serious problem as we are brainwashed to believe that we can make our homeland better by working hard and uniting together as a country. It is better than being brainwashed by western medias to believe China is bad and we should launch a revolution to take over CCP.

About the freedom of

speech, I have cited the ICCPR twice in this and the previous article. In China, behaviours like Mr. Titmuss have, spreading rumours without evidence on organ selling, will be questioned by the police and punished. Criticising the government with facts will not be punished in any ways. I wrote an article criticising the inefficiency of the urban management and law enforcement department in the city where I went to high school. I posted it on WeChat which is a Chinese version Facebook and nothing happened to me. So here I will just reemphasise to Mr. Titmuss that it is not a problem to criticise China on what you believed it has done. Show me evidence.

China has no interest to implant its influence in any other countries.

About foreign companies, I had discussed it in the previous article and Mr. Titmuss made no response. About foreign governments, if they don't know, do not want to know, or choose what they report about Hong Kong, we want them to keep mouths shut. If wearing masks in demonstration (banned in the UK) and committing vandalism is pro-democratic movements, there is certainly some problem with the legal system. It is disgusting that the UK when it colonised Hong Kong, shot locals when they launched any movement, arrest hundreds of them and beat some to death in custody, and now criticising China and the Hong Kong police officers for using arms without killing anyone while facing the brutal rioters. I suppose Mr. Titmuss has never heard of this, just as I would never heard what happened in 4th of June, 1989. Sadly Mr. Titmuss made a wrong assumption. I know about that, I know there were people killed, but they were rioters even worse than what we

"Rioters in Tiananmen Square were even worse..."

see in Hong Kong today. Soldiers beaten to death on street, and the rioters burned their corpses and hanged them on street lamps. You will not know about it because BBC doesn't want to tell you.

By writing these articles, I am not on behalf of the government, but of myself only. I mentioned the difference in values between the west and China, and being loyal to the country has been a virtue for thousands of years in China. I wrote the articles to defend the reputation of China, but

that has nothing to do with pleasing Beijing. That is my responsibility, even if the government does not issue that morality guideline. In addition, I want to have another message spread, which is try to learn about China from a different perspective. I have come to London for more than a month but I don't criticise the UK because I know I don't know enough about it. I will not easily criticise British politics until I completely understand British ways of doing things (which probably I will never achieve). I suppose Mr. Titmuss has never stayed in China for more than one month, and has never conducted any research on how Chinese people feel about the government. I recommended two sources to help you readers learn about China, including Mr. Titmuss, but he declined the Youtube one and I suppose he has never read On China. However, he does not stop publishing biased, irresponsible, insulting, and humiliating contents. That demonstrates his arrogance.

Shortly I will conclude this article that is probably "lack of logic" and "aims to please Beijing." It will take another thousand of words if I refute Mr. Titmuss point by point. However, the most important message that I want you readers to know is starting to learn about China from another perspective. There are many Chinese students at Imperial, and they will tell you about a China that you will never know from the medias. If you don't want to learn about China, that's also great, but please do not criticise China unless you have substantial evidence (do not trust the media). Lastly, Mr. Titmuss, shame on you for living in a country that has England, Wales, Scotland, and Northern Ireland as constituents but being a supporter for separatism.

COMMENT

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Felix Should be a Space for Rational Debate

Jun Liu argues that Felix should be a space for non-emotional discussions that focus on facts, not feelings

COMMENT

Jun Liu
Comment Writer

rguments usually help us explore k n o w l e d g e but quarrels often stop us from learning. The recent comments by Mr. Titmuss and Mr Liu on Felix have drawn my attention to the different opinions towards China. It is apparent that both of the authors only intended to have a discussion; however, the last response by Mr. Titmuss was seriously inappro-priate. Parts of Titmuss's comment are not included as the "proper operation of Freedom of Speech in the UK" and some arguments which he made are lack of supports.

Some language in Titmuss's response should not be rightfully used; on the other hand, such expressions in public might have broken the laws of UK. The Freedom of Speech only operates under the premises where the "reputation and rights of others" are protected. As Mr. Titmuss has admitted to "deliberately insult China" in his second last paragraph, the "Human Rights Act 1998" is not on his side. Moreover, it is doubtful if Mr. Titmuss is guilty of an offence to use "insulting words" under section F3.4A of Public Order Act 1986. Some may say that it is an exaggeration and Mr. Titmuss's use of language only intends to make his point; however, when "China" becomes accusative after "insult", it is an abuse to





Come sir, let us have a rational debate like gentlemen // Wikipedia

many Chinese nationals. Commenting and criticising constructively on the government of a nation helps it to improve yet it is unacceptable to insult an entire country. In this particular case, it is even more intolerable when inadequate examples are used in Mr. Titmuss's commentary.

Before raising objections towards the Chinese government's actions, it is necessary that the entirety of what had happened which is not included in Mr. Titmuss's writing. During the recent protesting in Hong Kong, it is worth to note that it started out to be a peaceful protest but the protestors' behaviours resemble terrorism to some extent as the conflict becomes more and more violent. Alongside with the delays at the airport and fires set at subway stations, the riot is causing civilian casualties. On Friday (Nov.15) morning, the Food and Environmental

Hygiene Department of Hong Kong confirmed the death of a 70-year-old worker who got hit by the protestors at Sheung Shui Station. A bit earlier in September, a visitor from mainland China was beaten to severe injury at the airport only because he did not agree with the protestors. Such incidents are so prevalent in Hong Kong that they can be easily found via a reputable and "oft-cited" venue, The Guardian. The protestors are currently "violence using intimidation, especially against civilians, in the pursuit of political aims" which is exactly the definition of terrorism in the Oxford Dictionary. The instability in Hong Kong has caused casualties in not only civilians but many more polices. For instance, thirteen officers were injured early in July when protesters threw unidentified liquids at them in a clash (CNN); a group of protestors beat a plain-

clothes policeman then threw a Molotov cocktail that briefly set the man on fire (The Guardian). Under section 89 of the Police Act 1996, "it is a criminal offence to assault a constable in the execution of his duty" in the UK; such laws are similarly present in almost every nation on this planet. Not all the protestors are to be considered as terrorists who attack civilians and polices, especially those who pursue political aims through peaceful means; however, it is also vital to notice that many of the protesters in Hong Kong are not in favour of peace. With these facts in mind, it is easy to understand why the police in Hong Kong have been arresting the protestors and the government of China has prohibited any support to protesters online. If not, consider how countries in the west dealt with terrorists and criminals who committed assaults on police officers. When

their "pursuit of freedom" results in the murder of innocent people and severe damages to the city, is it still "glorious" or even justified? When we, as spectators, irresponsibly shout out "Glory to Hong Kong", is it fair to those Hong Kong citizens who actually suffer from this social unrest?

Publications in newspaper must consider facts but not subjective impressions. Hong Kong is merely one of the examples. For instance, achieving political aims is only part of the reasons for creating the Great Firewall; some external online platforms indirectly brought about terrorist activities in China and many websites contain not politics-related but illegal materials. In Mr Titmuss's logic of connecting the Great Firewall to highly oppressive censorship, it is likely that many western nations also have such censorships, especially after

the "PRISM" incident. Also, before calling the 1989 Tian'anmen Square event a "massacre", it is probably better to know the true history behind the news. Based on stories from some of my family friends who are the actual witnesses of that event, I would not call it a "massacre". My three years of high school experience in Canada have provided me with many different perspectives other than that of a Chinese national; I have seen many kinds of arguments and discussions regarding Chinese politics and economy. All that I could see from Mr Titmuss's response, though, is disrespect and provocation. What I expected from Felix was the spirit of seeking the truth and the spread of constructive opinions.

In the future, it is important that writings on the college newspaper are respectful and rational. Mr Titmuss owes the readers of Felix an apology due to his inappropriate use of language and misleading dictions but it is still up to Mr Titmuss if such an apology will be made. Felix provides Imperial students with an excellent platform of informing the rest of the college of their opinions and it is delightful that people from various backgrounds could have their perspectives to collide; however, it is also worth to be mindful so that this platform is not polluted by emotions or insults.

COMMENT

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A Fourth Response on "Companies in China"

Charles Titmuss responds to articles from **Yuchu Liu** and **Jun Liu**. He hopes he doesn't end up in prison

COMMENT

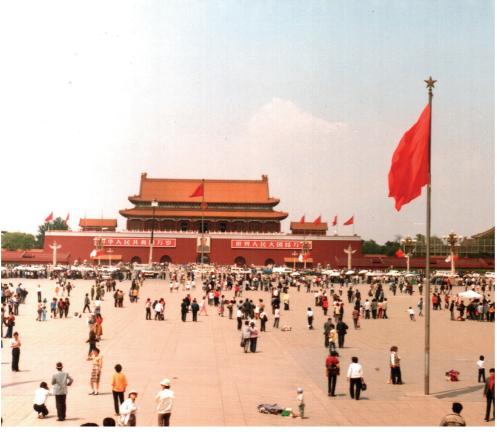
Charles Titmuss
Comment Editor

I t would appear that I have drawn the ire of two commentators due to articles that I wrote a couple of weeks ago. This is the last issue in which such an exchange will feature as there are other issues that deserve our attention

Before moving into the bulk of my response, I would like to make the following statements. Jun Liu's article is very keen to point out that I have broken UK law. I would encourage him to take these charges to the police. However, I would warn him that wasting police time is also an offence. I would also appreciate it if Yuchu Liu could read the content of my article more closely. I specifically stated that "I am absolutely not accusing the author of acting on behalf of the CCP." Do not mischaracterise what I have said, it is intellectually dishonest and beneath us all.

Responding to two demands for apology is more challenging than responding to one. Therefore, I shall make the following argument.

China in the international sense is a nation-state actor. Although it may act in concordance with the will of the people of China, it is distinct from the people of China. It takes the decisions and leads, and as such it must be treated as the responsible party for actions that China as a nation state commits. The conflation



Tiananmen Square Protests// Wikipedia

of the people of China, with the government of China is a fundamental ideological leap that I refuse to make. In order to make that association, one must suffer from a surfeit of nationalism. This prevents an individual from making rational and reasoned criticisms (or praise) of the government of the country in which one lives. I believe that the articles by the authors preceding these pages illustrate this point perfectly. Both authors associate themselves with their government and its actions to a degree where providing factually inaccurate and factually incomplete information is the only way to reconcile themselves with the situation as it is.

As an example of providing a non-national-

istic assessment of one's government I would say, in terms of foreign policy, the UK over the last twenty years, but by no means only in the last twenty years, made a terrible decision to invade Iraq and Afghanistan. Hundreds of thousands of civilians died and the UK has failed to investigate its soldiers that are accused of war crimes. This is of course, unacceptable. However, the UK government lets me write these things without throwing me in prison and beating me, as has been the fate of multiple Chinese journalists and activists. Thank you, the UK government.

I would briefly like to dive into the response articles that I received to examine examples of a not-so honest examination of facts. A good example that appears in both articles is the denial that Tiananmen square was a massacre. The events on 4th of June 1989 were the culmination of months of mostly peaceful protests that were eventually met with bullets and the steel of Chinese tanks. It is true that around 20 Chinese soldiers and policemen were killed by protesters and many more were wounded. However, it is also true that many more civilian, unarmed protesters were brutally killed or wounded by the Chinese security forces and many more were subsequently arrested. Estimates range between 300-1000 killed, with many thousands being wounded.

Yuchu Liu's piece make an extensive reference to what he describes as "so-called re-education

camps." His article frankly and honestly admits to the camp's purpose of arbitrarily detaining an entire ethnic group. However, he feels it is justified because , in his words, as Muslims they are vulnerable to becoming terrorists. This is of course, an obscene attempt to justify the presumption of guilt of Uyghur and Khazak minorities in Xinjiang, simply because of their ethnicity and religious practices. There currently an aggressive

"I would encourage Jun Liu to take his accusations to the police"

campaign against Islam in China, executed brutally and without mercy at the behest of the CCP leadership. Papers leaked to the New York Times. reveal the discrimination that ethnic minorities in Xinjiang face from the Chinese government. More interestingly, it also shows that not all Chinese state operators agree with the measures enforced there. 12000 investigations into local officials have been opened for failures to pursue repressive policies with sufficient zeal. Yuchu Liu's position is not one of duty. It is a personal choice to defend the indefensible.

When it comes to Hong Kong, it is true that reporting in Western media has been more than partial. The violence of the current protests has

come a very long distance away from the initial mass peaceful protests. Despite the violence of the Hong Kong police and various underhand strategies used by the pro-China side, such as the involvement of the Triads, I do not think that petrol bombing and amateur archery is the way forward. However, at the same time, I think the dogmatic response of "Hong Kong is China" is unhelpful for the resolution of this situation. At the root of the conflict is the fact that some areas of China have separatist sentiments and China has responded to these separatist sentiments with varying levels of brutality and inhumanity. The right to self determination is enshrined in the United Nations charter, which China is signed up to. To deny the opportunity of Hong Kongers to determine their own future for themselves is in itself an overly repressive response to the issues of separatism and a symptom of the increasingly assertive behaviour of China on the international stage.

Overall, I am afraid that this debate has failed to convince me that I need to apologise. In fact, it has convinced me of the opposite. Instead of complying with Yuchu Liu's demand that I "keep my mouth shut," I'll probably just be more mouthy than ever.

I will leave you, dear reader, with this: Free Tibet, Taiwan Number One, Glory to Hong Kong. And of course, make Xi Jinping Winnie the Pooh again.

COMMENT

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Political Pacts are Cheating the Electorate

Eamon Farhat, official part time Unicorn trainer at Fact Check UK, gives a one-star review of electoral pacts

COMMENT

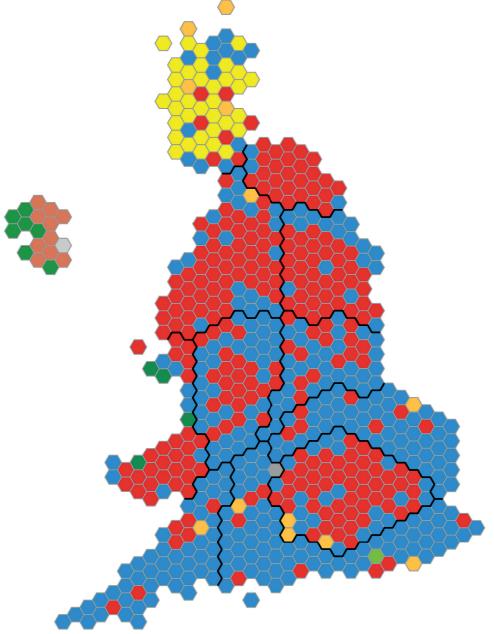
Eamon Akil Farhat
Arts Editor

ince the election was announced a little over two weeks ago, there have been some big movements in the area of political pacts. With the Remain Alliance instigated between the Lib Dems, Greens and Plaid Cymru and the Brexit party making its own unilateral alliance, some voters find themselves abandoned.

As with everything nowadays, Brexit plays a huge part in this election. On the remain side, three parties, the Green's, Lib Dems and Plaid Cymru have formed a remain alliance in over 60 seats across the UK. In practice, this means that in each seat, they are all throwing their weight behind the party with the best chance to win in a bid to get strong remain candidates into Parliament.

This may seem noble to some: politicians putting aside their ambitions and views for the greater good of a Britain in Europe,. However Brexit is just the tip of the iceberg of political issues facing the British public. An election is not a referendum and uniting behind a single issue such as Brexit leaves voters who also care about other issues lost.

But isn't Brexit all that matters? Isn't Brexit the issue that will define our lives forever? The jury is still out but no issue is big enough to compromise all your values for. This may seem a bit dramatic but let



Map of the UK General Election Result 2017// Wikipedia

me paint a picture.

Imagine you are a Green voter, passionate about the environment and excited about strong socialist policies. Under this alliance, you are now inexplicably being pushed to vote for the Lib Dems and Jo Swinson. The same Lib Dems who were in bed with an austerity addicted Tory monster. The same party who supported the bedroom tax, benefit cuts and universal

credit. The real kick in the face is the Lib Dems environmental record: voting to sell forests, encourage fracking and reduce subsidies for renewable energy.

In over 40 seats, the Greens have vanished into thin air, leaving the Tory-lite Lib Dems with a rather abhorrent policy record in charge. Clearly, the Greta Thunberg's of Britain will definitely not be voting Lib Dem on December 12th. Many will

probably vote Labour. But is all this political reshuffling worth it for a couple of percentage points more towards a remain candidate who already has little chance of winning for a party which has even less chance of getting an overall majority. If this remain alliance had the ability to change who would be our next prime minister, maybe would all be worthwhile but for having such a small impact, compromising core party issues is really disappointing and disenfranchising genuinely passionate Green voters.

On the other side of the chasm, there is the Brexit Party. This week, their king, Nigel Farage, made his own leave alliance. He decided not to field candidates in seats where there is a sitting Conservative member of parliament. This is a sensible decision and will reduce the chances of a split leave vote allowing remain candidates to sneak in. Brexit is of course Nigel Farage's raison d'etre. We can only hope that after it is all resolved in the year 2054,

"The Greens have vanished in over 40 seats"

he will simply vanish into a puff of smoke. This election presents a real route for a second referendum which could end up halting Brexit. So, for him, making sure leave MPs sit on the benches in the House of Commons is key.

The oven ready Brexit deal which Johnson is pinning much of his campaigning on was initially rejected by Farage who called it a "reheating of Mrs May's EU Treaty". Farage continued to be very critical of Johnson and called for an unequivocal pledge for a no deal Brexit. Many voters agreed with this and saw his Brexit Party as the only option for a real Brexit.

By taking themselves off the ballot, the Brexit Party is restricting the choice of the electorate. Voters who were inspired by the party's pledge of a real clean Brexit are now being mugged off and told to vote for the Tories and their soft Brexit.

Similarly, with the Lib Dems, the actual impact on the outcome of the election of this decision is not certain. The Conservatives really need to win seats if they want a majority, and in many seats, they would potentially win were a Brexit Party candidate not standing. So is this fundamental shift in policy for the Brexit Party worth it for the little returns it could yield. Although the Green

voters being pushed to the Lib Dems and the Brexit voters who are being told to vote Tory have very little in common in terms of politics, they are both being left in the dust. These groups are being cheated as they can no longer vote for what they truly believe in. This entire issue stems from the outdated electoral system but in a way, these parties who would like to see it reformed, are simply caving in. If all parties had ran everywhere the result of this election would probably have been very weird due to the vote splitting it would cause. However, such a result could have presented an even stronger case for reform and proportional representation.

I feel sorry for these voters who may feel lost and I can only tell them one thing: Vote Labour.

ARTS

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Imperial College DramSoc Presents: 11 Miles

ARTS





Where? Union Building **When?** 13th – 16th Nov **How Much?** £4

Aya Hayakawa Arts Writer

ased on the real journal entries, 11 Miles follows Captain Scott's journey to the South Pole with his four companions: Evans, Wilson, Bowers, and Oates. The audience comes to understand the meaning behind "11 miles" during the play as they hear about the tragedies that struck the team on the way back.

Presented by our very own Imperial College DramSoc, the intense physical and mental

hardships endured by the original explorers were captured effectively by the actors: Hamish Macdonald, Lucy Chandler, Alfred Engedal, Alex Jones and Annie Knight. Throughout the play, each character reveals their own insecurities and internal conflicts; the acting in those personal scenes were incredible. feeling Scott From responsible for their unexpected circumstances; and Wilson lack of self-belief to Oates' homesickness, each scene exhibited a genuine human side of the characters as they let out the pent up emotions. The yelling and disputes within the team also manifested the level of stress and their flawed and human response to the stress they were under was something the audience could really relate to, some of them with tears in their eyes.

Despite taking place in a small meeting room, the lighting, designed by Kacper Neumann, was clever and compensated for the limited stage space they had. The scenes outside and inside the tent were differentiated by lighting up the whole stage and spotlighting the tent respectively. The sound effects, designed by Harman Chang, further enhanced this transition, as they altered the volume of the windstorm which made the audience feel as if they were sat inside a warm tent or stood outside in the extreme cold with the team. The deafening storm added to the tension on-stage but unfortunately drowned out Scott's last few lines.

The costumes, props and set design by Kay



View of the stage // Jakub B Dranczewski

Parker-Hunt and Becky Rogers were also well thought out. The few cans of beans had no labels on and looked rusted, emphasising the fact that they were the last sources of food the team had left. Winter hats and gloves were put on and taken off every time they left and

returned to the tent. The tent, set in the middle of the stage, though minimal, played a critical role, portraying the line between life and death for the team.

Overall the production retold the story of the Terra Nova Expedition in an authentic and emotionally touching way. Highlighting the personal struggles of the team members, while also focusing on the bonds between and sacrifices for each other, 11 Miles was a professional production by DramSoc. I hope we will have more opportunities to see their talent in the future.

Touching the Void Review

ARTS





Where? Sadlers Wells When? 19th – 20th Oct How Much? From £15

Claire Chan
Arts Editor

ased on Joe Simpson's mountaineering memoir adapted by David Greig, Touching the Void is a story about the adventures of Joe and Simon to Siula Grande in the Peruvian Andes. As the double meaning of the title infers, the significant factor of the play are the feelings of the characters and their fear of being and dying alone. Since people with more ordinary lives also

share these emotions, focusing on them so deeply makes the play relatable, distinguishing it from other survival stories.

The direction is innovative and creative utilising minimal props. The tables and chairs in a bar become a foothold, the base camp and rocks on a mountain road. The simple set de-

"The astonishing cast of four is the crucial element that makes the complex plot... work"

sign draws attention to the details of other parts of design such as their mountaineering equipment and clothing, giving the play a realistic feel. The audience's perspective changes as they freely alter the orientation of the stage. In some scenes, they see the vastness of the mountain from the foot as Sarah, Simon and Richard look up to the ceiling of the theatre, while in others, the auditorium is set inside a crevasse, as Joe is hung from the top of the theatre with a single rope.

The astonishing cast of four is the crucial element that makes the complex plot, which relies greatly on the audience's imagination, work. The hysteria and sorrow provoked by Josh William's (Joe), Fiona Hampton's (Joe's sister) and Angus Yellow-

lees' (Simon) performances contrasted with Patrick McNamee's (Joe's companion), which brought comic relief to the play and laughter to the onlookers. Joe and Simon's life-threatening journey is represented on an immense metallic and paper structure elevated on stage which represents the different parts of the mountain. They accurately enacted techniques used in mountaineering recreates the scene in a way that reminds the crowd of visual effects one usually expects from films.

With its originality and inventiveness, Touching the Void allows the audience to explore Joe and Simon's extraordinary adventure in a thrilling and emotive way as it spotlights the limits of human tolerance when in peril.



The immense structure mountain// Michael Wharley

ARTS

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La Clique: a cabaret show





Where? Leicester Square Spiegeltent When? 8th Nov – 4th Jan 2020

How Much? From £21

Disha **Bandyopadhyay**

Arts Writer

'nderbelly's vaudeville cabaret show. Clique has finally returned to London after ten years of coasting in Spiegeltents across UK, now offering a magnificent, jaw-dropand titillating escapade. Bernie Dieter's vivifying performance is somehow both salubrious and salacious, promising an unpredictable host of

performances: some that you watch with wide eyes, and others through gaps in your fingers and goose bumps of awe. Lest be assured, it is impossible to look away.

A theatrical seduction, the wide and unique variety of acts is a thrilling watch. Ranging from sword swallowing, Cyr wheeling, aerial hair hanging to Kelly Wolfgramm's rendition of "It Must Have Been Love". La Clique has it all, and tuned to excellence. It is a joyous celebration of difference and oddity, absolutely doubt of skill. Stunned and marked by David unabashedly Pereira's flexible performance with a shopping trolley and shaving cream or Heather Holliday emerging as a feisty dragon as she licks, eats and breathes fire, La Clique is the embodiment of erratic burlesque. Each act has its own character, each contributing to the success of this marvellous

The audience is encouraged to react and interact, and what better way to fully immerse yourself in the realm of eccentricity than with a glass of prosecco or two

"the embodiment of erratic burlesque..."

from the open bar. The show is split in two parts, with a short interval for boozy refills. But where the first act ends with the Famous Bath



Heather Holliday - a fiery spectacle // Craig Sugden

Boy, Stephen Williams's jaunting aerial performance in "It's a Man's World", it is difficult to top the act and make a comeback in part two.

In fact, the show ended all too soon after that, and part two remained unhinged and unmatched to the spectacle in part one. Albeit a balance in the order of acts is much needed, the set was beautiful and aesthetic, lighting: scintillating, live orchestra: flawless. With such a merry atmosphere, it is difficult not to linger and hope to be part of this regale for longer.

located Cosily the middle of Leicester Square's Christmas market, La Clique is a wonderfully diverse and festive break from the outside world, where you get a chance to experience extreme skill and passion like never before. cut loose, grab a seat and get comfortable because 'darlings, the world is too full of shit" and sometimes a moment of erudite juggling is just the moment of respite you may need.

Leonardo: A journey through Da Vinci's mind

ARTS





Where? National Gallery When? Until 12th Ian How Much? from £14 for students

Ambika Bharadwaj Arts Writer

eonardo Da Vinci was a man ahead of his time; only he could bring his brushstrokes & muted pencil shading to life. The exhibition, which opened in November at the National Gallery allows the public to have an immersive Da Vinci experience, unveiling hidden sketch & fingerprints. Although Da Vinci's talent as a painter and his approach to light & shadow

are explored, the main focus is the painting "The Virgin of The Rocks". The entire Ground Floor of the Gallery becomes a painting studio, an imaginary chapel and a room-sized experiment in this immersive exhibition that leads you through Da Vinci's mind. The exhibition is divided into four distinct spaces, each equally entertaining & educational, carrying secrets of his masterpiece, inviting you to look at the painting in a

There are two versions of "Leonardo's Virgin of the Rocks" (the version in the Louvre was painted first). These two paintings are a good place to start to define the qualities of the new style of the High Renaissance. Leonardo's concern of creating an illusion of space, Mary

being seated on ground (Madonna Humility), the fabulous & mystical landscape with rivers that seem to lead nowhere and bizarre rock formations that recall the Dolomite mountains of north-eastern Italy all make the piece divine.

The painting has been undergoing significant scientific investigation, uncovering the original, hidden sketches of the artist as well as mystery handprints left in the paint. According to a spokesperson for the Gallery, "These new images were found because the drawings were made in a material that contained some zinc, so it could be seen in the macro x-ray fluorescence (MA-XRF) maps showing where this chemical element was present, and also through



The iconic painting by Da Vinci is the subject of this exhibition // Wikimedia

new infrared and hyperspectral imaging.

"Why Leonardo abandoned this first composition still remains a mystery."

Of other discoveries, he added: "Handprints resulting from patting down the priming on the panel to create an even layer of more or less uniform thickness can also be seen, probably the

work of an assistant - but perhaps even by Leonardo himself.'

Dr Gabriele Finaldi, National Gallery director, said: "This exhibition represents a fascinating new venture for the National Gallery, combining the most recent technical research on The Virgin Of The Rocks with an immersive, enveloping experience,

visitors the opportunity to explore Leonardo da Vinci's creative process in making this masterpiece."

The show celebrates Da Vinci's finest works; it washes you over with its provocative & brave composition, it carries a certain playfulness that Leonardo adds in all his paintings, and it is, in fact, a true treasure.

ARTS

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Crisis? What Crisis?: How to Save a Minority Government or Die Trying

ARTS



Where? CoLab Factory When? 12th Nov – 8th Dec How Much? £29

Felix Swift Roberts

Arts Writer

government he has no workmajority, ing millions are protesting on the street and economic catastrophe seems imminent. Sound familiar? Well, the year is 1979: in the midst of mass industrial action and the coldest winter in two decades, the Labour Party's grip on power hangs in the balance, and it's up to you to save it.

No, literally. This is

every decision made during the course of the night is up to you and your fellow theatregoers, so it's best to get your armchair politician out. The instant you get into the control room (a condensed Whitehall, replete with 70s decor and serviced by a fax machine) a Party membership card is thrust into your hands, a few light pleasantries exchanged, and you're given 150 minutes to stop the government from falling.

And what a state it's in: tonight's the night of a vote of no confidence; the lorry drivers are on strike, with nearly every sector of the industrial economy looking to follow suit; martial law is hours from being declared; and nobody's even bothered to clean away the cigarette

covering the table. If you think this all seems too much to solve in a single night, you're completely right - and that's what makes Crisis? What Crisis? such unabashed fun. Once HQ's been tidied, it's entertainment as a spinning plates act: in a single flourish, you can start a trade war with the United States, join the Soviet Bloc, or get Junta'd by the British Military as you reel from one crisis to another. This is a pre-Thatcherite world of trade unions, correspondingly much of the night is spent appeasing one sector of the economy only to stir another into open revolt the experience of getting roundly hammered by a dead-red union leader at the negotiating table (a an immersive production stubs and apple cores more humbling turn-of-



events than I can possibly express) alone justifies the ticket price.

So it turns out governing is hard, and for all our idle speculation it's easy to forget that good intentions do not necessarily produce good outcomes. As enjoyable as Crisis? What Crisis? is, it might also be the best bit of civic education I've

ever received, even if that comes with the depressing realisation that governmental ineptitude might be the norm rather than the exception - though we did actually end up saving the government, whatever that counts for (of course, without spoiling anything, there are far more entertaining outcomes possible). Perhaps the

only drawback of the production is that its striking verisimilitude rewards a passable knowledge of the era, so it might be worth reading up the Winter of Discontent on Wikipedia before you go. Still, that's not the worst pre-show requirement in the world: you know what they say about not learning from

#WeAreArrested - the brutal reality

ARTS



Where? Arcola Theatre When? 13th Nov - 7th Dec How Much? £10; £24

Byron Gamble Arts Writer

WeAreArrested poses some very important questions. What is the power of the press? How do we protect its freedom when its own government acts outside its legal jurisdiction? This is a deeply personal account of a globally relevant story. In such strange times where lies and truth indistinguishable, are #WeAreArrested reminds



Peter Hamilton Dyer soars high in this faithful adaptation of "We Are Arrested" as Can Dündar // Ellie Merridale

us of the importance of integrity, and the mightiness of the pen.

Almost immediately we are thrust into a make-believe meeting room, with three editors debating whether to publish their most impactful story: footage of

weapons linked to their own government being smuggled into a neighbouring nation in a brutal war. What follows is the tale of a corrupt government overstepping its legally designated power. It's surprising how much this true story plays out like a

crime thriller.

In November 2015, editor-in-chief Can Dündar and bureau chief Erdem Gül for Turkish newspaper Cumhuriyet were detained prior to their trial for allegedly "divulging state secrets", referencing a story published earlier in the year. For 92 days, Dündar remained in solitary confinement, oppressed by what he called to be a "lack of colour". "We Are Arrested", his memoir of this time, is evidence that a free mind cannot be imprisoned, that thought and self-expression endure.

This idea is a recurring theme throughout the production. There is a truly enchanting scene in which the protagonist is imagining all his favourite delicacies at brunch; a bitter coffee, warm pastries and Buck's

Fizz. This is followed by him dreaming of dancing with his wife one more time, a rebellious, careless, intimate dance. He finds every opportunity to find pleasure in the smallest things: a cheese toastie cooked between the grills of the radiator, and the blissful few seconds of sunlight against his face each

The whole ensemble comes together thanks to

"#WeAre-**Arrested** is a welcome reminder that power can corrupt"

Peter Hamilton Dyer (as Can Dündar), who is completely enthralling. The dialogue bounces between speaking directly to the audience and other characters, which limits the other performers from reaching their potential, but does not detract from an otherwise wholly captivating production.

Despite being heavily drawn from a true story: no specific names or locations are given. It is clearly a conscious decision to omit these details to let it become a parable. It is a common frame of mind to think that hush deals and censorship are issues other nations face, especially when sitting in the Arcola Theatre, a couple thousand miles from Turkey. Nevertheless #WeAreArrested is a welcome reminder that power can corrupt.

ARTS

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I Will Still Be Whole (When You Rip Me in Half)/ Before I Was a Bear

Double-bill production: an emotional play depicting mother-daughter bonds followed by a one-woman dark comedy production

ARTS



Where? The Bunker Theatre

When? 12th-23rd Nov How Much? £26 (double-bill), or £16 each

Kestrel Maio

Arts Writer

Will Still Be Whole (When You Rip Me in Half) harnesses you from the offset, the two characters stand facing outwards towards the audience, hands by their sides and speaking with urgency. It describes the events that take place for a young woman, EJ (Aoife Hinds), and her estranged mother, Joy (Tuyen Do), prior to and during their first meeting in 22 years. It navigates their emotional struggle as they face their fears of inadequacy, loss of direction and loneliness. The artful stage management encapsulates the tone of the play perfectly, the subtle interactions between the characters as they enact their separate stories manages to show the enthralling and emotional bond between both Joy and EJ. Hinds was particularly magnetic in her role, skillfully depicting the EJ's struggles with abandonment and loss of direction with the necessary emotion, a heartbreaking listlessness and enough humour to lighten the heavy subjects at hand. Joy's story was perhaps the more complex one, working through trapped feeling

incapable of providing sufficient care and love for her daughter.

The opening scene strikes a stark contrast between the two: EJ's anger and insecurity are highlighted from her first lines, as are Joy's feelings of fear, resentment and sadness. The characters don't fully address each other until the very end. The majority of the play is spent with them dancingfiguratively- around each other, avoiding each other's gaze, but still tentatively reaching for each other. The audience feels a sense of responsibility for both of the characters, and the

"The audience is drawn into this weirdly wonderful production further by Cally's interaction with its members"

writing manages to instill a sense of empathy for both, as the central themes of self-destructiveness, loss, anxiety and lack of fulfilment are common feelings in most people. Impatience laces the lines they deliver, you get a sense of 'waiting' as they undergo their menial day-to-day tasks. On occasion, however, the story is quite difficult to follow, the



Cally is a bear reflecting on her childhood through to her young adult-hood // Tara Rooney

abundance of metaphors at times unnecessary and thrusting the audience into a spiral of trying to translate the meaning behind every act. All-inall this play is a beautiful depiction of love, loss and expectation and delivered a thought-provoking perspective on mother-daughter relationships.

The dancing bear in the opening scene of this 'Before I was a Bear' is more than enough to pull the audience in and convince them to invest their full and unfaltering focus into Cally's (the bear) story. Even without the mask, Cally, is incredibly endearing and relatable. Her complex persona is portrayed by the actor, Jacoba Williams, and writer, Eleanor Tindall, delivering the line 'my voice is bountiful and heavy and full' which introduces the perfect pitch for the start of this one-woman-play.

The audience is drawn into this weirdly wonderful production further by Cally's interaction with its members, handing individuals a variety of props she uses in the play. Cally describes the transition from the 'unstoppable' feelings of childhood to the insecurities and obsessions of the young teenager with startling accuracy, her eager smile and fervent way of communicating her arguments with her brother reflecting her youth. Some of the more impactful themes of this play is its exploration of friendship and sexuality. The unstable nature of friendship is explored in her account of events and the roles of perspective and self-interest are conveyed with profound accuracy.

The main storyline is centralized around her obsession and affair with a married TV detective. It reflects the modern problems surrounding social media and the tendencies of society towards villainization and victimization of women in an address which rang with an Attwood-like analysis. Her subsequent isolation

is explored through her life as a bear, her shame, her lack of self care and her feelings of not belonging. Cally's pain is delivered profoundly in the words 'they want me dead.' The feelings of loneliness and self-doubt are rife throughout this play. Its delivery is combined with plenty of humour and it provides the audience with an enjoyable evening but its analysis of the more modern issues of society, specifically for young women, are what make this play most worth the watch.

The production itself is given a more 'home-y' feel by the surroundings. The Bunker Theater is a small former parking garage down a nondescript alley which was difficult to locate but worth the search. Mismatching chairs surround the small stage and fairy lights are hung along the ceiling- it's a perfectly Instagrammable place. For any potential viewers, however, I would recommend maybe bringing a

pillow if attending the double bill production, the chairs are designed for their aesthetic not for their comfort. The audience and the staff helped to make the environment even warmer, investing fully in the characters from the start to the end of the show, laughing uproariously at appropriate points and more importantly listening when the scene required it.

Overall the experience was an extremely enjoyable one, with credit going to both the environment and the skills of the actors. On a more personal note, on further research I found out that the Bunker Theatre is to close down in 2020, which feels like a loss to the arts community of London. The friendly feel to the theatre itself is unmissable and the skill of the actors and writers it supports make it even more of a must-see.

FILM

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Hell, only with more feathers: The Birds (1963)

A lookback on one of Hitchcock's Horrors, through the eyes of a modern watcher

FILM

Jasmin Daley
Film Writer

lthough unlikely antagonists, director Alfred Hitchcock solidifies his mastery of the horror genre by making everyday birds as menacing as any Freddie Kruger or Mike Myers. On a roll after the success of Psycho just three years earlier, Hitchcock brings to life Daphne du Maurier's short story of the same name. The story follows party girl Melanie Davis, the 60's more perceptive answer to Paris Hilton, as she goes on a mission to deliver a pair of love birds for a man she becomes enthralled with. In order to get the birds rightfully delivered, Melanie follows the man, Mitchel Brenner, to the sleepy coastal town of Bodega Bay, where it becomes clear that the birds are beginning to act eerily out of character.

A notable characteristic for the first half is the picture postcard ready shots thrown about, tying in with the mood of the

scenes. With it being a full hour before the birds start showing much violent behaviour, Hitchcock spends time effectively painting a picture of the tranquillity of the town and building a cheeky rapport between our main protagonists. If your appetite for horror is only satiated by constant frights from the get-go, The Birds is not for you. However, the 'scary scenes' in this film creeping in so slowly means the audience is able to soak up the hints of things going awry before we're confronted by them, leading to a more enjoyable payoff. When things finally do start to go crazy, the boundaries of reality are ripped open, with children being pinned to the floor and dragged by their hair.

The Birds was nominated for its special effects soon after its release, with film editors from MGM and Disney studios being employed to utilise new 'yellow screen' technology to overlay some of the masses of birds over the cast. Even with this, I believe that if this film was made today with modern day CGI and robotics, it wouldn't be



Hitchcock and one of his star crows // Sunset Boulevard/Corbis

the special effects that would make it stand out, but the sound technology. This film hasn't got much of a soundtrack in the traditional sense, rather a carefully composed symphony of birdsong that, as the movie progresses, trains the audience to fear it. This is particularly memorable when real trouble starts to brew: it's a dusky evening and Melanie and Mitchell

are having a dispute while a crescendo of birdsong begins. The audience realises this first, then Melanie, and then we see a sinister murder of crows perched on a nearby tree. Yikes.

A more unfortunate reoccurring motif in this film is that every single female character seems pretty much useless at trying to fight away these birds. This ridiculousness reaches its apex when Mrs Brenner, Mitchell Brenner's mother, attempts to shoo away approximately 300 birds with a handkerchief. Meanwhile it seems clear that it is only the male characters intent on doing anything particularly useful, such as nailing shut windows and doors and attempting a plan to lure the birds away. It is worth considering that this may be an unfortunate by-product of looking back on a film from the 60s directed (obviously) by a man, when the writer of the text

this film is based on is in

fact a woman. It is also worth mentioning that du Maurier disapproved of Hitchcock diverging from the story in some respects, for example setting the film in west California instead of Cornwall.

Aside from the characteristics that firmly root

"Hitchcock makes everyday birds as menacing as any Freddie Kruger or Mike Myers"

The Birds as a film from 1963, the themes of the movie are timeless. It is not lost on the town members that this scenario is reality turned on its head, with it usually being humans culling any species that seems fit. In stark contrast to the beginning of the

film where hundreds of birds are caged in a bird shop, we see birds of all species working together against the common enemy: mankind. Much like how the planet is currently fighting against us now with devastating forest fires and floods, the audience is warned against the dangers of exploiting nature. Alternatively, a similar argument could be formed, with du Maurier portraying the birds as those being exploited, who, with their strength in numbers, can rise over those oppressing them.

Without taking itself too seriously, *The Birds* manages to show us that there is a hint of horror in anything. Despite being released almost 60 years ago, this story shows only small signs of aging. And again, despite its age, it is an essential watch for any fan of horror and like it or not, you're not going to appreciate birdsong for a while.



Melanie and a murder of crows looming overhead //Universal Pictures

FILM

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The King (2019)

FILM

THE KING





Director: David Michod **Script:** David Michod, Joel Edgerton **Starring:** Timothée Chalamet, Joel Edgerton, Robert Pattinson 140 minutes

Charlotte Arrand Film Editor

would like to preface this by saying that under usual circumstances, this is probably not a film I would be inclined to watch, however, as a result of my undying love for Robert Pattinson, I have been somewhat anticipating the release of The King since watching its trailer. And whilst my love for Robert remains strong, I think I was correct in presuming that this type of film isn't really my

cup of tea. Though don't get confused into thinking I am saying this is a bad film, it isn't – at the worst, it is average, and in some aspects, rather good.

The film follows "Hal" (Timothée Chalamet), son of King Henry IV, and his sudden ascension to the throne to become King Henry V of England. Intent on having a much less violent reign than his father, Hal starts out gentle, but after some pushing from his closest advisors, he is forced to declare war on France. Based on multiple plays in Shakespeare's Henriad, the film isn't historically accurate, which was obvious enough when watching it.

Personally, I found the half-hearted Shakespearean language jarring, and the script, which was slightly lacking, didn't make up for it. I thought the development and coming-of-age of Hal could have been fleshed

out more, but instead we saw him go from the 15th century's version of a party boy to a war-waging king almost at the flick of a switch. Nonetheless, Chalamet's acting was definitely the strong point of this film. Timothée has proved that he is an incredibly skilled actor before now and he doesn't fail to showcase this

"If you like chunky character development, I doubt you'll be singing its praises"

talent here. Sporting an English accent and noble look, he makes a convincing king; his screen presence is compelling



Timothée Chalamet as The King // Netflix

and domineering, even when he isn't speaking. Whether that is due to his good looks or transfixing stare, I don't know. But Chalamet's acting isn't the only one worthy or praise: Pattinson's appearance as the Dauphin of France, although brief, added to the film, even if it was simply through a bit of comic relief with his laughable French accent and some well executed lines. But more importantly, Joel Edgerton's character Falstaff, Hal's

perfectly, with Edgerton simply melting into the role.

The King started off slow and, in my opinion, was a bit too long, but the last 40 minutes or so, containing a gripping sequence of the Battle of Agincourt, proved rather enjoyable. If I was to watch a Netflix original, which The King is, a little over a year ago, I undoubtedly would have entered the film with low expectations (justified or not). But since watching Roma – a fantastic Oscar-nominated **Netflix** release of last year, I have gained more confidence in Netflix as a production company and believed this film had the potential to be decent, which it is. If you enjoy medieval films, this is definitely worth a watch, but if you're like me and like your films to have some chunky character development, I doubt you'd be singing its praises.

Big Fish (2003)

FILM

BIG FISH





Dir: Tim Burton. Script: John August Starring: Ewan McGregor, Marion Cotillard, Helena Bonham-Carter 125 minutes

Zuzanna Janusz

Film Writer

earching for a heart-warming film to watch on a November evening in an attempt to combat mid-term blues, I came across Big Fish, a childhood classic. I did remember it was entertaining and uplifting,

but having seen it such a while ago, I had forgotten some twists and details of the storyline. I checked if it has stood the test of time - and I was not disappointed.

Set in two different timelines, the film tells a story of Will who reunites with his terminally ill father, Edward, and has one last chance to hear what the real story of his early days was. Blinded for so many years by surreal tales, Will is desperate to prove that his father made them up and in fact lived an ordinary

Edward's stories are indeed bizarre, in true Tim Burton style – it is a weird gallery of giants,

witches, circus artists, presented with a good deal of slapstick humour (which my 8-year-old self probably found more hilarious). That said, one could expect something explicitly darker from the director of Corpse Bride and Sweeney Todd, while this is (for the most part) a sweet, feel-good film. Its seriousness, however, is hidden in plain sight. After all, Big Fish tackles resolving a family conflict at the end of life and contains some very poignant scenes. Will, once convinced his father is nothing more than an egocentric mythomaniac, gradually discovers that when real life gets daunting, these extraordinary tales are what let you escape. They are also what is left once you are gone.

closest friend, was done

What I forgot since I last watched it, is the fact that young Edward Bloom is portrayed by Ewan McGregor, and that he is by far one of the most

likeable and admirable characters you will ever see on the screen. From the supporting line-up Hollywood stars. Steve Buscemi's role as a frustrated poet is the most absurd – it goes well beyond a stereotypical fairy tale character.

If you need an extra push to get you through to Christmas or just an excuse for a study break, watch Big Fish. 15 years after its release in the UK it is as touching and peculiar as ever.



Daydreaming in daffodils// Columbia Pictures

TELEVISION

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Binge of the week: Fleabag (Seasons 1 and 2)

A perfect blend of comedy and pathos, play-turned-series Fleabag takes you through the journey of a broken, sexually voracious lady

TELEVISION



Creator: Phoebe Waller-Bridge **Starring:** Phoebe Waller-Bridge, Sian Clifford, Olivia Colman, Bill Paterson

Jia Qi Tan
Television Editor

BC's tragicomedy (yes, genre exists) Fleabag centers around its titular role Fleabag (played by Phoebe Waller-Bridge), a young woman living in London, with the first season focusing on the feelings of guilt and grief, while the second exploring the themes of love and sin. Originally based on Waller-Bridge's 2013 one-woman show that premiered at the Edinburgh Fringe, the TV series presents a more coherent production while retaining its interactive nature with the protagonist constantly breaking the fourth wall, voicing her thoughts out loud to the audience and staring straight into the camera while doing so.

The most difficult part of the show is certainly bringing the two worlds of comedy and tragedy together, yet Waller-Bridge executes it flaw-lessly, both with her sharp writing and her acting. Fleabag's dark, witty comments are often intertwined with her painful losses. This perfect blend is not exclusive to Fleabag but is vividly played out in other characters

and scenes. The most thought-provoking words are often juxtaposed with the most hysterical jokes, yet it just works. Both the scenes where Fleabag visits her counselor (played by Fiona Shaw) and where the businesswoman Belinda (played by Kristin Scott Thomas) rants about the pains of being a woman exemplify this tone perfectly. One way Waller-Bridge retains the essence of her one-woman-show in this series is, as mentioned before, breaking the fourth wall. Many who choose this approach use a fixed screen and a voiceover, but Waller-Bridge directly incorporates this into her acting, a choice that is clearly fully intentional This brings out the comedic elements, even at the most unexpected moments and creates a seamless style of storytelling that bridges the play and the series.

What stands out the most for me is not the cinematography nor the acting but the story itself. It is meaningful, impactful, beautifully written and poignantly delivered - it's been a while since I have related to a protagonist this much. The two seasons are so similar yet so different. The first season is a

"Her way to cope with everything is through copious amounts of sex"

multidimensional story that unravels as Fleabag runs away from but eventually faces her trauma

and losses and her way to cope with everything through copious amounts of sex. She is both the hero and the villain. The very first episode already hints that Fleabag is more than just a comedy. It features Fleabag's monologue as she turns up at her father's doorstep at two in the morning, "I have a horrible feeling I am a greedy, perverted, selfish, apathetic, cynical, depraved, bankrupt woman who can't even call herself a feminist." Fleabag puts on a facade of a put-together woman but when you look underneath it's riddled with insecurities and shattered pieces of her heart. Sometimes it feels like we've fucked everything up but it's life and we can't run away from life. The first season ends with a speckle of hope and would have been an amazing standalone, but the second season adds

a necessary layer to the already-perfect show.

In the second season, we see a brand new Fleabag, trying to let go of the past and move on to the future, and she meets someone, more specifically, a Catholic priest (played by Andrew Scott, and dubbed as "the hot priest" all over the internet). As Fleabag puts it, "This is a love story." Indeed it is but not just Fleabag's, but also her sister Claire's (played by Sian Clifford) as well as her father's (played by Bill Paterson) and godmother's (played by Olivia Colman). Here we see Waller-Bridge delving deep into many forms of love, with the iconic line "I think you know how to love better than any of us. That's why you find it all so painful." It's amazing that even with such a short series, there is phenomenal character development, and every

character has a moment of redemption or vulnerability. Every detail, every scene, every line is exquisitely crafted. The ending is heartbreakingly beautiful, with Alabama Shakes's "This Feeling" adding the perfect touch to the final scene.

It's been confirmed that the second season is the final season of Fleabag, perhaps because Waller-Bridge feels like she has told the story she needs to tell. Her brutally candid writing combined with her skillful performance has created a show that is so endearing, hilarious, and emotional. It's so shockingly relatable that I keep finding shadows of myself with Fleabag's every emotional breakdown, and there is no doubt that this has risen to the top of the list of my favorite shows of all time.



Fleabag goes to church // Amazon

Union Page



Disability History Month

UK Disability History Month is an annual event that creates a platform to celebrate and focus on the history of people with disabilities. It runs from 22nd November to 22nd December every year.

This year's national theme is Leadership, Resistance and Culture. As approximately 80% of all disabilities are hidden, Imperial is focusing on the hidden disabilities of our community. The College and the Union will be joining forces on our new campaign More Than Meets the Eye, and we have put together a calendar of events including panel discussions, comedy night, a film screening, and a lunch.

Find out more about the events at imperial college union.org/DHM







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Emerging Leaders is our new development programme designed to help you develop essential skills for 21st century leadership.

With a mix of online and face-to-face learning and events, you can complete the programme at your own pace and obtain recognition from the Institute of Leadership and Management (ILM).

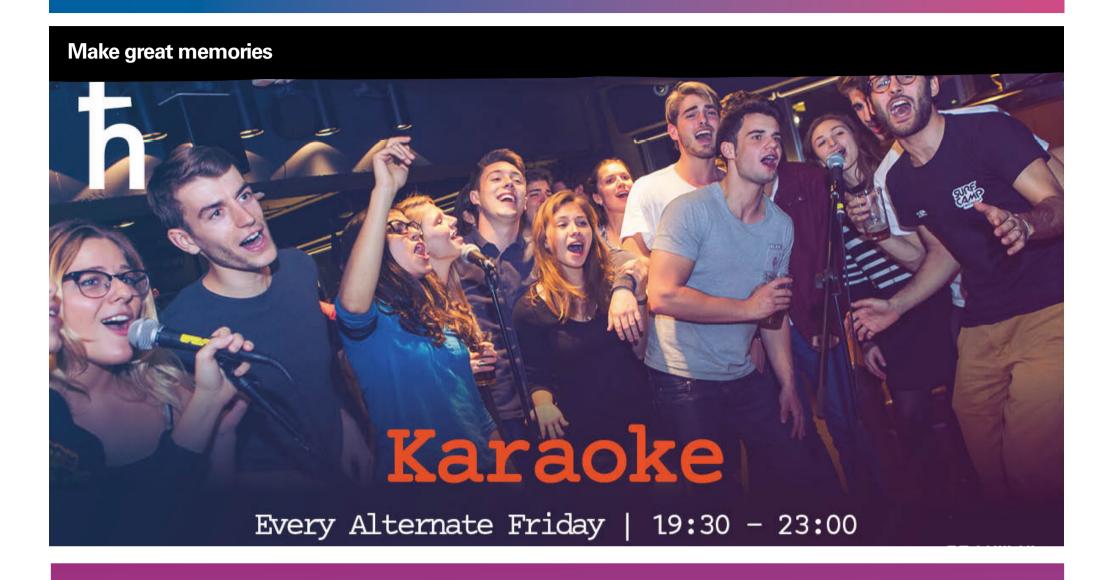
Sign up for one of our popular workshops or events, or register for the entire programme to gain access to the online community and additional online resources, and receive personalised feedback on your development.

To find out more about the programme and to register, visit **imperial**college**union**.org/**eleaders**



Your Union Events

Friday 22 November



22 November, Friday

Thank Goodness It's Friday Metric | 20:00 - 02:00 26 November, Tuesday

Super Quiz FiveSixEight | 20:00-22:00

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

28 November, Thursday

Pub Quiz h-bar | 19:30 - 21:30 29 November, Friday

Beit Bars | 19:00 - 01:00

November, Wednesday

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

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

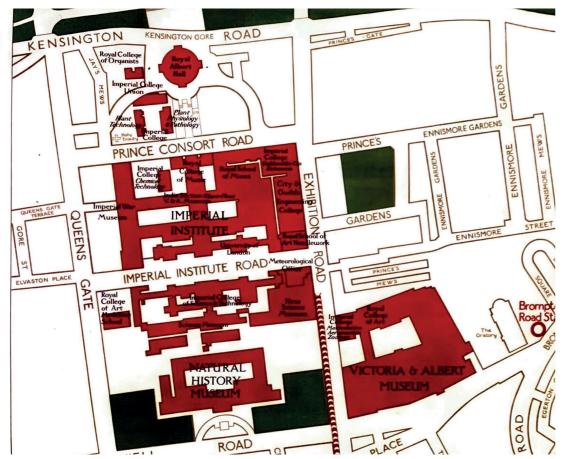
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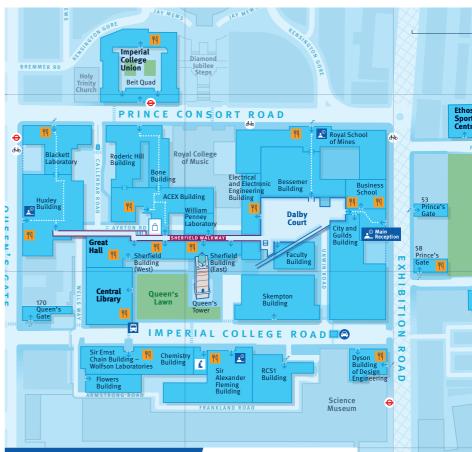


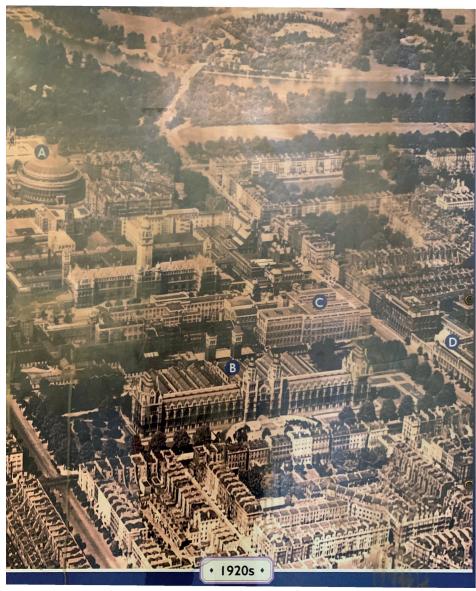
THROWBACK

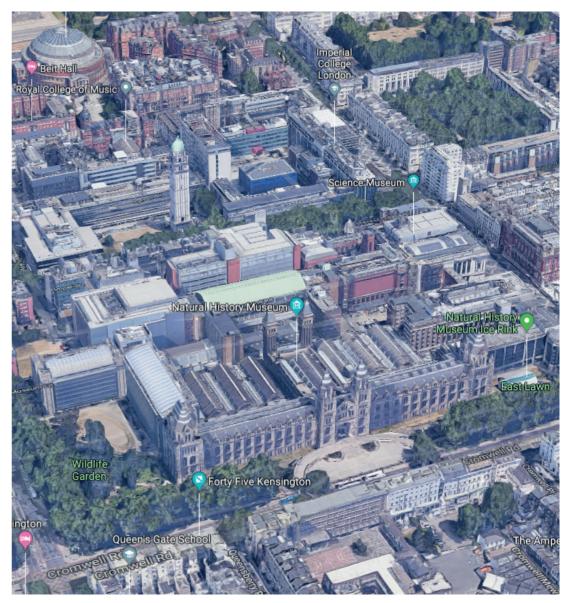
felix@imperial.ac.uk

This week in Throwback, we compare the way campus has changed over time. In the late 1960s, the old Imperial once occupied by the Institute is filled with newer additions like the Queen's Lawn and the Sherfield Walkway. Other building! See what other changes you can spot. On the right side, we include features from Felix in 1968-69 about the









THROWBACK

felix@imperial.ac.uk

Institute was demolished, leaving the newly freestanding Queen's Tower as the only remnant. Today, the space changes include the Mathematics department being moved - it used to reside in the Victoria and Albert Museum demolition, student opinions, and coverage of when the Queen came to officially open the new buildings.

JOHN BETJEMAN, on the Imperial Institute

In this article, John Betjeman, poet and expert on architecture, talks about the old Imperial Institute which was planned as an integral part of the South Kensington architectural scene. John Betjeman played a prominent part in the fight against the demolition of the Institute.

The Imperial Institute in South Kensington was built between 1888 and 1891. It was subscribed for from all over the British Empire, and private soldiers in India paid for the bricks. For this reason bands of bricks were given great prominence and used in the Portland stone exterior as though they were of rare marble. The architect of this fine uninhibited building was Thomas Edward Collcutt, 1840-1924. Collcutt had been a draughtsman in the office of G. E. Street, the famous Gothic revival architect, who designed the Law Courts in the Strand, and inspired his pupils, William Morris, Philip Webb and Norman Shaw, who were much concerned with the arts and crafts movement of late Victorian times.

MUSEUM

COMPLEX

the heart and centre of the

great complex of buildings in

the Museum district of South

Kensington. It was thought

The Imperial Institute is

Collcutt himself in reaction from the Gothic which was fashionable when he was a young man, designed one of his first big public buildings, the Town Hall at Wakefield, in a renaissance style of his This was further developed in the Imperial Institute, which owes something to Spanish renaissance, but is really what might be called, the Collcutt style. Inside, it had suggestions of English Jacobean, Collcutt resembled the Gothic followers of Street in designing all the fittings for his buildings, as well as the building itself. He designed furniture, stained glass and light fittings. The most splendid example of his interior style, still surviving in Lon-don, is the interior of Lloyd's Registry of Shipping in Fen-church Street (1900) with its stair, library and boardroom, and Brangwyn and Frampton paintings and carvings. He also designed the Palace Theatre and the Midland Bank on Ludgate Hill. hall for exhibiting the products of Empire, but this was never completed. The central tower was, as it were, buttressed by the entrance hall, side buildings and rear exhibition. It was never designed to be standing on its own. Smaller towers, over the wings, led the eye up, to the great central feature.

Collcutt, like Wren and all

decorated. Behind the cen-tral tower was to be a great

sumptuously

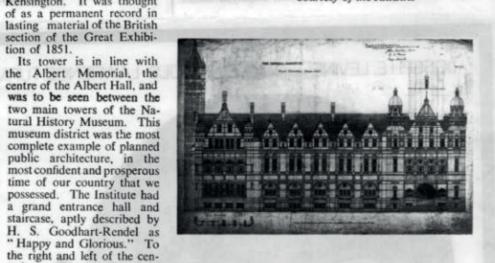
good English architects, rea-lised the importance of sky-line in our generally grey climate. The Imperial Institute had a most carefully considered skyline.

DEMOLITION

When the University authorities decided to enlarge Imperial College on the site

of the Institutue, many public bodies and private people urged the University to in-corporate the Institute and its towers in their plan, if a new building on this site was re-garded as really essential. The University and the architects had neither the imagination, willingness or ability to do this. There was still a spirit this. There was still a spin of old world withitry lingering from the 1930's and the Imperial Institute was Imperial Institute was thought fussy, dust-collecting and old fashioned. So care-fully detailed, grandly scaled and joyful a building would probably have survived, if its demolition had been proposed today. As it is, we have at least been left the outline of Collcutt's tower, as seen from Hyde Park, And Londoners can be grateful for this small mercy.
JOHN BETJEMAN

The Imperial Institute, an original sketch Courtesy of the R.I.B.A.



After two months of full use, the college block was finally and officially opened last Thursday by Her Majesty the Queen, accompanied by Prince Philip.

The opening ceremony together with the unveiling of the plaque, took place in the Great Hall which was crowded out for the occa-

The Queen was due to arrive at 3.30, and whilst the platform party was being presented outside, those in-side the hall were being treated to some fine organ playing from the organist from Salisbury Cathedral. This gave an ideal chance to judge the quality of acoustics in the Hall; and according to reports from various position in the hall it is in-deed very high.

The Student Bedell (Keith Guy), complete with mortar board and staff, then heralded the approaching platform party, numbered amongst whom were Her Majesty, Prince Philip, Lords Sherfield and Penney, Ed-ward Short, Sir Dennis ward Short, Sir Dennis
Logan (Principal of U.L.)
and Piers Corbyn. The party
having reached the platform,
the National Anthem was sung (at least by some of the audience), and Lord Sher-field proceeded to welcome the Queen to the college.

In his speech, which was incredibly badly delivered, Lord Sherfield brought attention to the relations between the Queen's ancestors and Imperial College. He went on to give details of the de-velopment of I.C. and mentioned the growth in the last 17 years from 1650 full-time students and an annual budget of £834,000 to 4000 students and a budget of £7,500,000. He stressed that despite the magnitude of the expansion, the college had not only maintained but had improved its academic performance.

After a short mention of the people who made this possible, Lord Sherfield asked the Queen to unveil the plaque. In her speech before the unveiling, the Queen made references to her trips to the Science Museum as a child. She then proceeded to unveil the plaque by remote control, at which point there were mur-murs of laughter throughout the audience, followed by a silence in anticipation of it failing to work.

In his speech of thanks to the Queen, Lord Penney traced the earlier history of the college. He mentioned that the foundation stone of the Royal College of Chemistry (the oldest constituency part) was laid in 1845 by the Prince Consort. The College, Lord Penney said, was founded to train students and to undertake research in science and technology. This purpose was still the same, but he felt that the students "mainly by their own efforts but with assistance from us" have managed to extend their horizons beyond their disciplines.

The Queen's procession then left the hall, and Her Majesty was shown around the libraries contained in the college block. On returning to the Students' Common Room to join the assembled throng in tea, the Queen was handed a letter (the copy of which appears on this page) and a pamphlet comprising the Union's feelings on Representation and Diversification. This was immediately handed to her private secretary but in Her conversation over tea she promised to re-ply to the President after cogitation and consultation. The Queen stayed for an extra 20 minutes engaged in conversation on Union poli-cies, 3rd world and the U.S. moon project.

The Queen to open College Block

tral tower were offices and





MORALS AND ECONOMICS

What is Colcutt?

Colcutt was a person, not a thing, and was responsible for the erection of Colcutt's Tower, otherwise known by its more correct name of the Queen's Tower (the Queen in question being Victoria). This tower was part of the Imperial Institute, now mostly demolished to make way College Block. Only tower was preserved.

was cleaned up and greatly strengthened at a cost of over £200,000. It is rather difficult to miss standing alone before College Block.

"Colcutt" is the pseu-donym under which a prominent Union personality writes a comment column in FELIX. The identity of the author of this piece is normally known only to the Editor. The writer is imagined as sitting on the top of Colcutt's Tower surveying the IC scene, and passing comments thereupon.



MUSIC

music.felix@imperial.ac.uk

FKA Twigs makes album - is good

MUSIC

Magdalene





Artist: FKA Twigs.
Label: Young Turks. Top
Tracks: Mary Magdalene.;
Cellophane.; Fallen Alien.;
For Fans Of: Bjork;
Perfume Genis. 39 minutes

Miles Gulliford

Music Editor

ahliah Barnett, aka FKA Twigs quickly rose from 'Video Girl' to adored songstress in the mid 10's, earning critical acclaim and a cult following from a series of releases including her 2014 record *LP1*. Here, atmospheric synthesisers and industrial drums left plenty of space for Twig's vocals to croon, soar or

caress. Whilst being an aesthetically satisfying record, one well worth a listen for any electronic or art-pop fans, Barnett's song writing often felt hollow and repetitive to the point of redundancy, dampening the records listenability.

On Magdalene Twig's lyricism is significantly more rewarding, adding a layer of emotional precocity to her gorgeous sonic creations. Opener 'thousand eyes' sets the scene, embodying the terror of celebrity as a many-eyed-beast, behind a plodding, orchestral instrumental which splinters intermittently as if Twig's insecurity corrupts the song's file.

The centrepiece of the record is its title track. Here, Barnett explores the expectations her lovers, and society have

of her femininity, behind a powerful hook and glitched, industrial production reminiscent of the LP's Cover.

On thematic twin 'holy terrain', Future (of all people) steps into the fray to illustrate the fractious nature of modern masculinity. A feature which is thematically if not sonically satisfying.

Much of Magdalene finds FKA Twig's eye turned upon the many facets of a particularly complex relationship. The beauty "Taste the fruit of me/Make love to all you see" on 'sad day', the mistrust on 'fallen alien'; "Don't tell me what you want 'cause I know you lie" and the tragedy of no longer having a partner to "chase the pain away" with on 'mirrored heart'. Barnett is an artist of few words, but here the precision of her writing cuts through icy instrumentals to distil truth more poetic than factual.

Perhaps her best writing can be found on Magdalene's penultimate tracks. On closer 'Cellophane', a wonky piano progression becomes the scaffold for vocal acrobatics, Twigs delivering lines like "Didn't I do it for you?/ When all I do is for you", which splay rejection's bitter jaws wide. Before this 'daybed' oozes by over clouds of synth, Twigs works to capture the ugly character the everyday takes on during a depressive episode "Dirty are my dishes/ Many are my wishes" and "Lower is my ceiling/ Pressing are my feelings' distil this uniquely 21st century malaise perfectly. 'daybed' is also notable for production by Oneo-



FKA Twigs is buffering // Wikimedia

htrix Point Never, erring from near silence, muffled percussion and shots of white noise to oppressive organs and orchestral flourishes, each moment feels tailored to the ebb and flow of Barnett's delivery.

The rest of Magdalene's track list features an equally impressive roster of producers: Skrillex, Cashmere Cat, Kenny Beats, and Berlin-based wunderkind Nicholas Jarr have all played their hands on tracks. The result is a collection of fascinating instrumentals, with well written chord progressions and a plethora of detail rewarding repeated listens.

I didn't get tickets to see Twigs live so i'm sad, if you have a spare, or want to deliver some killer journalism, drop a line to fmusic@ic.ac.uk.

The Old Blue Last hit by furious punk noise

MUSIC



Fifty Fest

Venue: The Old Blue Last. **Date:** 14/11/2019. **Price:** £5.50. **Bands:** Do Nothing, Girls in Synthesis, The Cool Greenhouse

Emily Freeman

Music Editor

hiked up to Shoreditch last week to catch one of my favourite bands at the moment, Girls in Synthesis, as they played one of the 'Fifty Fest' shows to promote the new music on the bill for Brighton's The Great Escape Festival. Before GiS came The Cool Greenhouse, who offered up low-key Talking Headsesque tunes, complete with

synthy sounds. While the band played tightly together, their music seemed to need maturing, but you could easily tell they were looking at the start of something good, just needing a few more years maturing before that emerges. Having seen GiS once before I set the bar extremely high for what I expected - mainly furious political messages set to absolute uproar. GiS managed to blow all assumptions of what I was going to see out the water. As their set started bassist John Linger asked to

"They pumped pure angry punk energy through the room"

have the lights off, plunging us into semi-darkness with a spotlight throwing up Linger and guitarist Jim Cubitt's shadows across the stage. They didn't stay there for long though and soon were both in the audience accompanied by their mics as drummer Nicole Pinto provided a heavy beat to the chaos. 'Tainted', the band's take on Trump, set off the band and crowd alike into a frenzy, pumping pure angry punk energy through the room, irresistible to ignore. It was refreshing to see a band not glued to their mics, or the stage even, and who were very happy to relinquish control of both in a set that was victorious in assaulting as many senses as possible. Linger managed to fight back onto the stage in time for 'Howling', a fuzzy, swooning interlude in the set, before jumping



Aggressive post-punkers Girls in Synthesis shook up Shoreditch//Sara Bowery

back into their new song 'Arterial Movements'. For GiS classics 'The Mound and 'We Might Not Make Tomorrow', the audience swarmed over the band, casting them aside from their mics and leaving them struggling to play their own songs. Overall it was explosive, abrasive, aggressive and any other –ive adjectives

you can think of. After their set I stayed to recover before the tube home, and managed to catch Do Nothing, a funky, punky band hailing from Nottingham. Frontman Chris Bailey seemed to take the lead here, often distracting us from the actual music, which wasn't dissimilar again from Talking Heads mixed this time with LCD

Soundsystem. Bailey seemed to put on an act which came across as a deadbeat, obnoxious salesman, certainly an interesting stage persona for any band. Do Nothing's bops weren't terrible, but after the attack from GiS they just didn't quite sound as good as they should have.

BOOKS

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My life with Michael: 10 Years of Thriller Live Written by Gary Lloyd

Arts editor Ozbil Ege Dumenci finds this book particularly interesting and gives it a rating of 2.5/5.

BOOKS

Ozbil Ege Dumenci
Arts Editor

t seems quite ironic to me that the author, despite the title, has never actually met Michael Jackson. In fact, this admission comes as

"Lloyd talks about the influence of Jackson's music on his upbringing and his life to this day"

the very first sentence of the book. With this out of the way, the book focuses on the long-running (10 years, to be exact) West End show, Thriller Live!, how it was conceptualised and how it has come together.

Written by Gary Lloyd, the director and the choreographer of the stage show, the book doesn't quite read like an autobiography, but a collection of diary entries, essays, press releases and more; and it starts with the day of Jackson's shocking death. It is safe to say that Jackson was gone too soon, and Lloyd artfully explores how this affected him, and others involved with him professionally and personally. Lloyd jumps from decade to decade, talking about the day he was born, his childhood, the influence of Jackson's music on his upbringing and his life to this day.

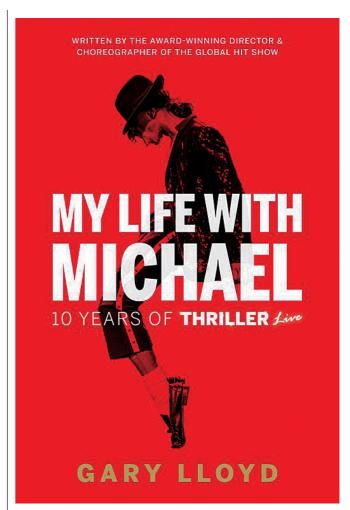
Having said all that, I am struggling to decide who this book is catered for. Big fans of Jackson would not be able to uncover what was behind the mask or feel closer to the King of Pop in any way. Fans of the stage show would potentially find the details of the show's inception mildly fascinating, but at the risk of being eaten alive or sounding like a monster, in no shape of form does this book feel necessary.

I appreciate the amount of cultural impact Jackson's music had over several decades. And this book does a decent job at showing how and why Jackson's legacy lives on 10 years after his death. However, the book feels overly long and without

any real point.

It would be naïve to expect a book that is focused on how a stage show came about and how it's been doing since then to be groundbreaking. However, the writing style is chaotic at best, and dangerously distracting at worst. It's not a bad read, but just like I said before, it's not necessary. It's human nature to want to tell how one's achieved something as big as Thriller! Live, however this doesn't quite feel like the right medium to do so.

Now, go back and count how many Michael Jackson song titles I've dropped in this article. Spoiler alert: it's eleven.

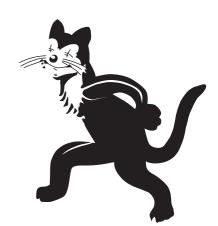


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GAMES

games.felix@imperial.ac.uk

Pokémon Sword and Pokémon Shield Review - The

GAMES

POKÉMON SWORD AND SHIELD





Studio: Nintendo
Director: Shigeru Ohmori
Genre: RPG
Platforms: Switch

Freddie Ugo Games Editor

ight, listen up everyone. You're all wrong. Pokémon Sword and Shield are amazing, the hate for it is, for the most part, unfounded, and here's why.

First of all, a quick disclaimer: this is a review of Pokémon Sword and Shield. I have fully completed Shield and am working my way through Sword (although the differences are minor). This is a spoiler free review but if you want to play the game knowing absolutely

nothing about it, I would return to this review after the fact.

On my 22-hour journey through the Galar region, I was constantly smiling from ear to ear at the beautiful game that truly brings Pokémon into a new generation. It was a struggle to put down my Switch when around every corner was a new, brilliantly designed, unique Pokémon. I have played every mainline game in the series and haven't felt this sense of joy since Diamond and Pearl. Every game in the series makes changes, big and small, but never has a game made me think "this is the new gold-standard of Pokémon".

The Good

The first thing I noticed when I jumped into the game was the sheer scope of the visuals. Many people have hated on the low-res texture (especially the trees), which are there, but it is barely noticeable when you are gazing over grassy,

rolling fields or sneaking through mystical, glowing mazes in the forest. Sword and Shield are a breath of fresh air for the series, introducing the first fully 3-D world with a controllable camera in parts and aspects of free **Unfortunately**, roam. the controllable camera is only available in the "Wild Area", a zone in the game available before the first gym where you can explore a massive area full of various Pokémon ranging from level 10 to 50+. It is a great addition to the typical formula where you can grind up as much as you want, meaning you'll never hit a roadblock throughout the story. The best thing about the wild area is the variable weather. The wild area is split into separate zones that each can have their own unique weather ranging from a sandstorm to snow, which affects the Pokémon you'll encounter. This is great for fans of only a single type; I, for one, love ice types, so the ability to catch multiple ice types in the early game

is a wonderful opportunity I rarely get.

Following the pattern of generation 6 and 7, a brand-new battle mechanic has been added. Dynamaxing (and its very similar counterpart 'Gigantamaxing') is an option available during major battles in the game that allows you to make your Pokémon grow to a massive size, increasing its stats and changing its moves to significantly more powerful versions. Gigantamaxing also does this but changes the form of certain Pokémon, such as Pikachu, that becomes an absolute chonk (reminiscent of the original design back in 1996). This lasts 3 turns and adds a new dimension to battling, as you have to manage whether you are going to Dynamax early on to get an advantage, or Dynamax at the same time as your opponent to effectively neutralise their advantage from Dynamaxing. Dynamaxing also features heavily in the wild area, with certain spots throughout shooting

pillars of red light to the sky. You can go up to these 'wells' and fight a Dynamaxed Pokémon which, if caught, will be a great addition to your team (as they generally have much higher stats).

Long term fans of the series will be pleased to know that the new Pokémon are fantastic. The unique designs bring back the philosophy of the earliest games, with a huge variety of creatures, any of which you'd love to have as a pet in real life! (No key rings or

"On my 22hour journey through the Galar region, I was constantly smiling from ear to ear."

literal piles of trash this time). Gamefreak, the developer of Pokémon, has done a great job this time round of not revealing too much before the game's release. I was surprised by new Pokémon around every corner, including Galarian forms that not only put a new spin on previous 'mons, but also give some of them brandnew evolutions, such as Obstagoon – the tantalisingly terrifying evolution to Galarian Linoone. With Sword and Shield keeping the trend of no HMs in the game, you are free to build your team however you like – a task that is extremely difficult with nearly 100 new 'mons and hundreds more returning.

After the omnishambles that was Alola, we finally see the return of gyms! And what a return to form. The puzzles before the main fight are

original and the fights themselves are breath-taking. The Galar region is heavily inspired by the U.K. and in true British form the gyms are effectively football stadiums. Seeing the roaring crowd cheer me on as I, fully kitted out in sports gear, make the finishing blow from across the field was a whole new level of immersion I have never experienced in a Pokémon game before. Not only the Pokémon, but the gym leaders too have amazing designs - each character emanates the love for their specialised type without saying a word.

Music

One of my favourite aspects of Sword and Shield is the music and art. Each town has its own tune - both new songs feature as well as remixes of older ones that hit that nostalgia nail right on the head while still keeping the general theme of the game intact. The art in the games is beautiful. Being based off the U.K., there are many areas which reference different cities and areas within the U.K. Grand castles, clock towers, charming little hamlets, and farm towns give the world a huge variety of scenery whilst still keeping under a unified theme which in the past has not been executed as well. (I'm looking at you Alola, you can't just put 4 islands next to each other and call it Hawaii).

The 'Bad'

This section is threefold. I will cover what actually missed the mark in this game but also cover what people, who haven't even played the game, think is bad and give my two cents on why they aren't as big of an issue as you may think.



The three starters from left to right: Grookey, Scorbunny and Sobble. LOOK AT HOW CUTE THEY ARE // Inverse

GAMES

games.felix@imperial.ac.uk

Eighth Generation Feels as Fresh as the First

Let's start by covering big controversy surrounding the game in recent months. Internet dubbed 'Dexit', referring to the fact that Sword and Shield does not contain a national dex (meaning this game does not contain every Pokémon ever, even if you transfer them from past games), has infuriated many people. This is understandable at the surface level. Every Pokémon out there is someone's favourite, so you are bound to be upset by this if you love Bidoof and find out he's nowhere to be found (sorry to the one person out there that likes them). However, I would argue this is a good thing for 2 reasons. Firstly, it means people get to branch out. If you typically catch the same Pokémon every game and have the same tactics every time, this change causes you to think differently and who knows, you might even find a new favourite Pokémon that you would never have even considered using. Secondly, and more importantly to those who typically catch EVERY

"Grand castles, clock towers, charming little hamlets, and farm towns give the world a huge variety of scenery."

Pokémon, the competitive scene will benefit massively. Each game from now on will have a meta defined by which Pokémon are available, meaning that you will see a diverse array of strategies



throughout the years as the meta game constantly shifts every year. This will keep the competition much more interesting as it will require players not only to have a deep knowledge of the core mechanics of Pokémon, but also require players to be versatile and have the ability to adapt to changes implemented in each iteration of the game. Finally, most people don't catch all the Pokémon anyway so most of the people complaining are doing so for no honest reason... from my experience most of the people complaining wouldn't have even played the game anyway!

Another issue some have, that I have already covered, is the use of low-quality textures and the re-use of old assets in animation. Now while this is annoying in some aspects, I generally found that I was too busy staring into the distance at a beautiful landscape or

city to notice a blade of grass being a bit fuzzy. Equally the animation quality is not noticeable because at the end of the day it's not possible to create unique animations for every Pokémon in the game using every move. With the art style being so refined and clean now after years of iteration, I think the actual graphical fidelity is not something that should be a focus, especially not from a Nintendo game which has never been renowned for being a market leader in resolution and detail alone (or at least not since the N64). I will say however improving issues in the future would be a welcome change, I just don't think it's reasonable to be outraged by something which makes little difference to the overall experience of a beloved RPG franchise.

Real Issue

My main issue with the game, however, is in its story and pacing. Generally, main series games have a great story, linking in with an evil team and the legendries of the region, no spoilers but this is not really covered as well as previously with Team Yell, the 'evil' team of gen 8 being little more than an occasional nuisance throughout the game was disappointing, especially given the lack of any true 'dungeon' to be found. Equally, I found the pacing to be quite uneven. It took me 22 hours to beat the game but 6 hours to even get to the first gym. Granted I like to take things slow, but it's a bit ridiculous that this is the case – especially when you are limited to catching Pokémon up to level 20 until you beat the first gym. Luckily after that the pace picks up a bit, but almost too fast such that the story takes back seat

and your only sense of

progression is how far you can make it through the wild area. This, coupled with a disappointing lack of post-game content was an unfortunate smudge

"It took me
22 hours to
beat the game
but 6 hours to
even get to the
first gym but
granted I like
to take things
slow..."

on an otherwise gem of a game.

Verdict

Pokémon Sword and Pokémon Shield blew me away and exceeded my expectations to the fullest. Despite a somewhat awkward pacing, the child-like feeling anticipation around every corner and the awe-inspiring view into the mesmerising Galar region is one that will not be forgotten any time soon. For people put off by previous generations, I highly recommend checking it out; for any long-term fan of Pokémon, you will not be disappointed. This game is Pokémon to its core and I loved every minute of it.

If you disagree, feel free to email games felix@ imperial.ac.uk. We love hearing you feed back and are always looking for new team member!

GAMES

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Poll: Valve and Steam, the PC Gamer's First Love

Thank you all for your submissions last week! This week's theme is focusing around Valve and Steam. With a New Half-Life game just announced!?!?!? There has never been a better time. We look back at the greatest PC games ever as well as a service that has cost many people countless hours of their lives.

What is your favourite Valve franchise?

a) Half-life/ Garry's Mod/ Day of Defeat

b) Counter-strike

c) Team Fortress

d) DOTA

e) Portal

f) Left for Dead

How large is your steam library?

Open Submission

Will Valve ever learn how to count to 3?

a) No

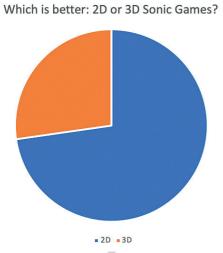
b) Definitely no.



The logo that brings joy to so many // Wikipedia

Submit your answers into the Microsoft survey - accessible through the Felix Facebook/Twitter page or scanning the QR code. No need to download an app! You can just hold down the screen on Snapchat or use your standard camera and it will scan the code for you. We'll get back to you next week, with infographics and more questions!

Poll Results: Sonic Poll



Question 3: What would be the best Sonic game to remake:

This week we recieved a very strong opinion that I would love to feature:

■ Yes ■ No ■ I always was!

Are you excited for the Sonic movie now that it

looks decent?

Sonic has been wholeheartedly shit since Sega went 3rd party. I quaff at those who try to claim it's just in a rough patch. They have about as much clarity of mind as I did when I fed a flock of seagulls dulcolax. We should bury our past and move on, fuck that tiny blue hedgehog and the years of disappointment he's put me through.

Some calmer answers:

Sonic Heroes (a personal favourite for the gamecube)

Sonic and the Secret Rings (That theme tune still gives me chills)

Sonic Riders (A games I can't vouch for but I have only heard good things about this classic racing game)

TECH

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Tech Headlines

Your Weekly Tech News In Short Snippets

TECH

Sudarshan Sreeram
Tech Writer

Audi E-Tron Sportback

t the LA motor Audi show unveiled second electric vehicle, the Audi E-Tron Sportback. Powered by a dual motor setup and with a range of of up to 446 kilometres, this car uses the same base drivetrain and battery as its older brother, the E-Tron SUV, which was unveiled last year. The car is expected to be priced at an expensive 71350 Euros for the base spec and would be available in the European market by early 2020.

Google Stadia

Google's online game

streaming service, Stadia, was released earlier this week, and the initial reactions seem to be slightly negative, primarily due to high expectations generated by Google's marketing. Users and reviews have even gone to say that it's a "beta that you pay real money for"

"MacBook Pro lineup received a facelift with a new 16" model"

and that "you don't get the promised performance." With a launch lineup of only 22 games and terrible latency, we can only hope that this product fulfills its initial, advertised goals in

the months to come.

Mustang Mach-E

Ford unveiled their Mustang Mach-E, all electric SUV that performance promises and practicality. It's a brave move from Ford to attribute an electric vehicle to the Mustang name, which is generally associated with pure American muscle. The car partially draws inspiration from Tesla Model 3's minimal interior and starts at a base price of around 42000 US dollars for a range of about 370 kilometres. The baseline model is scheduled to be delivered by late 2020, while the more powerful GT model is set for 2021. With Elon Musk congratulating Ford for taking the effort to go electric, it's only time before other popular automakers decide to shift as well.



Ford Mustang Mach-E // Ford



MacBook Pro 16" // Apple

Apple 16" MacBook Pro

Earlier last week, the MacBook Pro lineup received a facelift with a new 16" model replacing the old 15". So far, this new upgrade seems to have been very well received in the tech community, with some saying that the product is "reasonably well priced for the specifications" and that "Apple finally listened!" Apart from the larger 16" screen, the new MacBook Pro saw a redesigned thermal solution and audio system as well as a shift back to the oldstyle scissor mechanism keyboard. In addition, the escape key made a welcome return and the performance jump due to the upgraded processor, RAM, and graphics card proved significant. Overall, it looks like the MacBook Pro may be back in the game! For those of you waiting for a refresh to the 13" line, it's rumoured to happen early

next year.

Microsoft Project xCloud

Microsoft's game streaming service, Project xCloud, is currently under preview, and earlier this week, the company announced an additional fifty titles that would be available at launch, some of which include Forza Horizon 4, Tekken 7, and Devil May Cry 5. The service is set to release sometime next year, so

"The Razr Phone reflects the good old days of uniquness and innovation"

it provides considerable time for developers and testers to optimise the platform for the promised launch lineup of games. Even while in its preview stage, xCloud has more games than Google's Stadia, and Microsoft is planning to integrate this service in some way into its already existing Game Pass subscription for a low monthly price. Only time will tell how these two evolve and compete with each other.

Motorola Razr Reboot

Motorola finally announces the much rumoured modern implementation of the classic foldable Razr phone. The phone truly brings back the good old days when smartphone design saw the light of uniqueness and innovation. In addition, it still maintains the incredibly satisfying flick and snap of a classic flip phone. With a promise to be durable and practical, this phone just might see a positive outlook in the modern smartphone market and may even motivate other smartphone producers to tackle the challenge that is folding phones.

TECH

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The Huawei Ban

Surviving the Android Market Without Google Services

TECH

Sudarshan Sreeram *Tech Writer*

ci-fi based movies television and series often show a person or a group of people in their mid to late 20s cut off power to an entire city by hacking into a power grid or steal data from a 'target' by hacking their internet connected devices. A well-known example of this is CW's "The Flash", where satellites, communication systems, data centres, power grids, and security equipment are hacked into on a regular basis. Another example, well known in the gaming community, is Watchdogs, a game where you can trigger explosives, control traffic lights, hack bank accounts and personal information, and even jam cellphone networks all through a few taps on a smartphone. This may seem thrilling, dramatic, or even 'awesome' at

times in context of the series, video game, or movie, but it is, in actuality, a very serious concern.

With data being the world's most valuable resource, it's no surprise that there has been a huge surge in the number of cyber attacks all around the world over the past decade. Even the new Disney+ service, which

"Data is the world's most valuable resource"

launched under a week ago, saw its user base hacked within a few days of launch. Furthermore, in 2011, Sony's playstation network was hacked, and the personal data (including credit card information) of more than 77 million users was leaked. This cost Sony more than 15 million dollars in compensation and legal fees.

These examples show how even the biggest of companies are susceptible to malicious attacks and why cyber security plays a critical role as we head into the future.

In the past year, you might have noticed a lot of companies place an increased emphasis on the privacy and security of their users' personal data. From Apple introducing its secure "Sign in with Apple" feature to Facebook announcing "The Future is Private" at its annual F8 conference in May, it's clear that companies are, in some ways, trying (and often failing) to protect their users' data from theft. Oftentimes, companies themselves exploit the personal data of their user base to 'improve' the customer experience. A more recent example of this is Amazon's admittance of using human staff to analyse and grade short recordings of users' interaction with Alexa, Amazon's virtual assistant. These human



Technology Being Used To Spy On People // Matthew Henry - Unsplash

generated reports are used to improve the speech recognition and natural language processing capabilities of Alexa as a platform. Amazon claims that the recordings cannot be traced back to the user and that there are strict measures in place to safeguard privacy, but it's still eerie and unsettling to know deep down that someone somewhere is listening in on you.

On a much larger scale, more than people, governments possess highly sensitive, classified information and have to ensure that their facilities follow strict security protocols to avoid being tapped into by the wrong people. This brings cyber-warfare, or large scale digital attacks between different nations, into the story. With countries around the world accumulating a massive amount of intelligence on each other, it's only a matter of time before one of them uses it for economic benefit through means of hacking or blackmail.

In addition, if these attacks are used to disrupt military activities or to accumulate strategic information on a country's assets or plans, then it could prove fatal when used in physical warfare. Thus, to protect civilians and to ensure peace, governments around the world have taken several cautious security measures to safeguard their confidential information.

One such measure was U.S. President Donald J. Trump's move to ban U.S.

"Eerie and unsettling to know that someone somewhere is listening in on you"

based companies from working with Huawei through a national security order. Huawei, the Chinese telecom giant and one of the world's largest smartphone manufacturers took a hefty blow following the order as it was cut-off

from Google's android platform and services ecosystem. This, in fact, meant that Huawei was cut at its knees just when it reached the top of the tech market. In effect, the tech community seemed as if it lost a valuable player in the smartphone space.

Huawei caters to all three groups of the smartphone market: high-end or flagship, mid-range, and budget (through its subbrand Honor). Without further major software updates from Google, this ban effectively affects consumers in all three categories. However, the US government has eased restrictions, so US-based businesses are allowed to continue their operations with Huawei to abate the disruption on consumers using Huawei's widely distributed products.

So, where did this all start? Well, with Facebook granting it special access to user data and Vodafone finding hidden backdoors in its telecom equipment, Huawei has been controversial figure with regards to its security and privacy measures. In addition, the CIA's claim that Huawei is funded by Chinese



Cyber Warfare Operators // US Department of Defense

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state security only makes it more suspicious as to whether the company actually accumulates intelligence for the Chinese government.

With this suspicion as a basis, the move towards cutting ties with Huawei has been brewing for the past few years. In February 2018, FBI director Chris warned against Rav buying Huawei as well as ZTE smartphones. A few months later, the Pentagon banned the sale of those phones at US military bases, and towards the end of the year, Huawei's CFO was arrested in Canada and charged with bank fraud. Further, telecom providers in Australia stated that they wouldn't be using any of Huawei's telecom equipment in their 5G rollout plans and Britain's BT stated that they would effectively remove all Huawei based equipment from their current 4G setup by 2021. These events did not play well with the company's image as whole.

During the past week, the Trump Administration granted Huawei a 90-day extension from the ban. This comes as a breather for the forty or so small

US-based wireless carriers in rural areas that rely on Huawei's telecom equipment to sustain their businesses. This temporary extension would effectively help buy time for the US congress to raise around a billion dollars to help these carriers replace the equipment. The US Commerce Secretary, Wilbur Ross stated that "The Temporary General License extension will allow carriers to continue to service customers in some of the most remote areas of the United States who would otherwise be left in the dark."

"Huawei cannot use **Google's Android OS or Google based** services"

Shortly following the ban, Huawei was placed on the US department of commerce's entity list, which basically blacklists US-based businesses from selling or buying goods to



HUAWEI Mate 30 Pro

Rethink **Possibilities**

Huawei Mate 30 Pro // Huawei

and from Huawei due to national security reasons. Thus, although Google can work with Huawei temporarily to send out security patches, Huawei cannot use Google's android OS as well as Google based services in its upcoming

product lineup. The recent launched flagship Mate 30 and Mate 30 Pro run on a modified version of opensource Android, which doesn't include Google apps or services, let alone the Google Play Store.

"An app marketpace is critical to the smartphone experience"

Furthermore, Huawei reported that the blacklisting could potentially lead to the layoff of its 800+ US employees. However, a week ago the company reportedly gave staff over 286 million dollars in bonuses to stick through the ban.

Speaking of the ban, having anticipated it, Huawei has been working on an alternative operating system for the past few years. Known as HarmonyOS, or HongMen-

gOS in China, this operating system, which was revealed earlier in August, is expected to run on all Huawei devices, from their TVs, smart speakers, and wearables to infotainment systems in vehicles. this Thus, common operating system closely integrates their product ecosystem. According to Huawei's CEO, Richard Yu, "We're entering a day and age where people expect a holistic intelligent experience across all devices and scenarios. To support this, we felt it was important to have an operating system with improved cross-platform capabilities." This operating system is expected to be rolled out in China towards the end of this year and internationally in

Although Huawei has established its capabilities and strong efforts in building a custom operating system, it has yet to figure out how to build a successful app store and convince developers to adapt their apps for

Huawei's platform. To do this, Huawei announced a 1 billion dollar programme to encourage developers from around the world to create and support apps and games for its "AppGallery". As consumers, we know how critical an app marketplace is to the smartphone experience. Thus, the company hopes that this programme would help motivate developers to consider its app distribution marketplace as important as those of Google and Apple. Though, giving out money as an incentive to developers isn't enough to fix the company's image as a whole. In all fairness, this new software ecosystem would lack the middle man that is Google in ensuring a moderate level of security. Thus, it's up to the consumer to trust the company in its new, distinct path towards approaching the market.



Telecom Tower // Thomas Millot - Unsplash

INVESTMENT

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Asset Management: A closer look

INVESTMENT

Igor Fomenkov

ICIS

Investment Student Writer

ith such a huge focus on the sell-side nowadays (both in terms of career opportunities as well as industry-related news), the other part of the global financial industry, the buy-side, is oftentimes

"Hedge funds are a special type of asset management firms ...obtaining the largely above-average returns."

overshadowed and forgotten. Therefore, the aim of this article is to introduce the reader to the buy-side world, specifically to asset management firms and hedge funds.

What do they do?

So what do asset management firms do? Exactly what the name suggests: they assist their clients (which can both be corporate and individual) with investing into various mutual funds (i.e. a collection of different assets) according to the clients' needs and goals.* That is a pretty vague definition, isn't it? Well, this directly follows from the fact that (as we will see later) the range of services provided by different types of asset management firm varies a lot, and thus it is difficult to fully describe what this industry entails in just a couple of words. The profit that asset management firms make arises as a result of a percentage fee from the total assets under its management (also called AUM - the total market value of all the assets that a firm holds).

Is this Wealth Management?

It is also worth mentioning the difference between asset and wealth management industries both are often confused and are wrongly used interchangeably. Although the exact definition of each of those business units highly depends on the structure of a specific financial institution, the general purpose of the field of wealth management is to supply high net worth individuals (HNWIs) with the full range of financial services, ** which could potentially range from providing custodian services to forming the investment individual solutions based on their needs. In other words, asset management is just one part of more wider wealth management services for HNWIs.

Let's begin our analysis with the most widely used parameter for splitting the funds in two groups: whether their assets are

"...difference between asset and wealth management industries – both are often confused and are wrongly used..."

Who are the players in corporate finance?

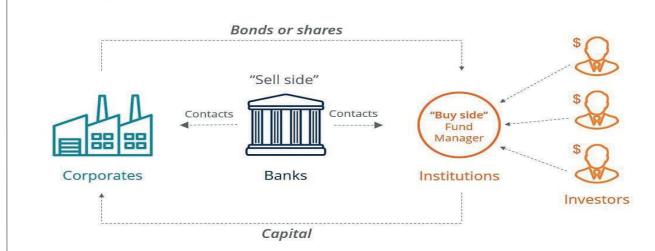


Fig 1. How the buy-side and sell-side bridge the gap between corporates and investors // CFI

managed on an active or passive basis.

Active Funds

Active funds are constantly overseen by portfolio managers and the allocation of their assets can vary on a regular basis according to how the market conditions are viewed by the funds' managers. They can be further split up in two other sub-types:

- Open-ended funds: the number of shares are unlimited, they are sold to and redeemed from investors directly by the fund manager.

- Close-end funds: there is a specific number of

shares issued in the beginning by a fund manager, which is unchanged, and all the shares are sold and bought only in the market (not through the issuer).

Passive Funds

Passive funds on the other hand, just track a market index or a market segment (e.g. S&P 500, FTSE100, MSCI), its asset allocation does not vary through time. The most common form of a passive fund are the exchange-traded funds (ETFs) which represent a basket of various securities and trade exactly like stocks.

To observe the differ-

ences in greater details please refer to the table provided in Figure 2. Generally, passive funds are more popular in the periods of bull (i.e. growing) market, while passive funds experience an upturn in the bear (i.e. falling) market. However, with the recent large-scale popularisation of ETFs this trend could change in the years to come as illustrated in Figure 4.

In addition to that, funds can also be split up according to asset classes that they invest in. The most common types of assets used include: equity (i.e. stocks), government bonds, corporate debt, commodities and private

"... the asset management industry is definitely a challenging, yet very rewarding experience... worth considering it as an option on any stage of one's career"

Comparison of ETFs v/s Open Ended Funds v/s Close Ended Funds:

	Open Ended Fund	Closed Ended Fund	Exchange Traded Fund
Fund Size	flexible	fixed	flexible
NAV	daily	Daily	real time (indicative net asset value)
Liquidity Provider	mutual fund itself	stock market	stock market / mutual fund itself
Sale Price	At net asset value plus load, if any	significant premium / discount to net asset value	very close to actual net asset value of scheme
Availability	mutual fund itself	through exchange where listed	through exchange where listed/ mutual fund itself.
Portfolio Disclosure	disclosed monthly	disclosed monthly	daily
Intra-Day Trading	not possible	expensive	possible at low cost

Fig 2. A comparison of the active open-ended and close-ended funds and the passive ETFs // CEPS

INVESTMENT

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Top 10 global asset managers 2019 AUM (€bn) 2018 AUM (€bn) Change **Company** 5,251.2 BlackRock 5,315.4 -1.2% 4,090.0 Vanguard 4,257.2 +4.1% **SSGA** 2,196.8 2,316.5 -5.2% **Fidelity Investments** 2.096.6 2,003.3 +4.7% **BNY Mellon IM** 1,498.2 1,585.9 -5.5% JP Morgan AM 1,486.0 +1% 1,471.2 **Capital Group** 1,467.3 1,504.4 -2.5% **PIMCO** 1,451.7 1,462.4 -0.7% **Amundi** 1,425.1 1,426.1 -0.1% **PGIM** 1,204.8 1,160.6 +3.8%

Fig 3. Top-10 asset managers in the world by total assets under management command assets that number in the trillions // IPE.com

"A special form of private equity – venture capital firms invest in early stage companies..."

equity. They can also vary according to the region of investment (usually split between well-established economies and emerging markets). It is also very common to mix various assets together and thus form hybrid funds (which are formed based on the level of risk that investors are willing to take).

Alongside with "typical" investment managers, there are several special types that

we look into below.

First of all, are the well-recognised hedge funds. Hedge funds are a special type of asset management firm that use high-risk investment strategies for obtaining the largely above-average returns. Unlike other asset management firms, they are much less regulated, and thus could employ the strategies unavailable for other organisations. At the same time, due to high

US funds: PwC forecast for active-passive split
Assets under management

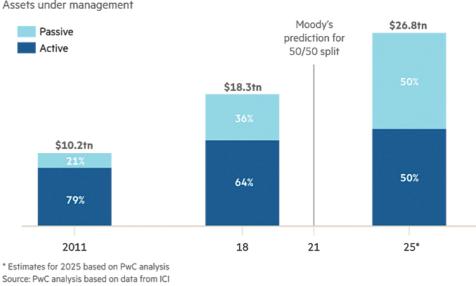


Fig 4. The year 2021 is predicted by this source to be a year of an even split between passive and active investing in US funds // PwC

risk associated with their activities, hedge funds are not allowed to advertise themselves and are only opened for accredited investors.

Another type of alternative investment managers are private equity firms. They earn their profits by buying shares within privately-owned companies. A special form of private equity – venture capital firms invest in early stage companies and

assist them with the initial development.

Overall, working in the asset management industry is definitely a challenging, yet very rewarding experience, and it's definitely worth considering it as an option on any stage of one's career.

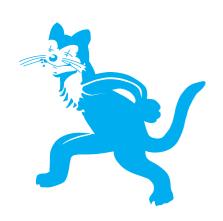
Disclosure: The author of this article is not attributed to any of the asset management firms listed above and is not planning

to invest into them in the next 48 hours.

*Not to be confused with custodian services, which are responsible for managing (i.e. holding) the assets on behalf of their clients.

**The exact definition may vary, but the minimum amount required for using the wealth management services is usually at least 1,000,000 dollars.

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

FOOD

food.felix@imperial.ac.uk

Take You and Your Study Buddy to Shake Shack Pronto!

FOOD

Zahra Abiola
Food Editor

tudents of Imperial College London, we have been done a great disservice. There is a trendy, self-service, American burger place right beside South Kensington station. And it's the one that doesn't have a student discount. If you are tired of a specific number of men not appreciating you, you can do the slight trek to your closest Shake Shack. Yes, I know that means heading to Victoria or Piccadilly, but they have a new student deal to make it worth your while.

Shake Shack now offers two for the price of one on their burgers for you and your study buddy. Your lab partner will hate you a lot less for always being unavailable if you offer to get them a burger. Simply

show this offer from your UNiDAYS account which you all have access to as students. This deal runs from Sunday to Wednesday, so make sure you are tactical about your visits. The deal says that the two people also have to be there as you order so may not be able to finesse yourself a double serving. I took a friend down to the one in Leicester Square during a day out in Central to see if it was worth the trip out.

Like with Pizza Union, you get a pager with your

"These burgers are well put together.
These burgers manage to stay awake in their 9ams"

order with their green logo. In fact, these two restaurants have a really similar aesthetic. Green is their accent colour all over the store, giving Halloween vibes against a black backdrop. Their seats are mostly arranged connected to a long table so you will find yourself with not a lot of personal space most of the time. We got the Double Shack Burger and the Shack Stack, coming to £8.75 for the both of us. That comes out as less for each of us than the dog food they sell. Yes, they sell dog food. And no, I don't know why.

Firstly, you've got to appreciate how beautiful these burgers are. These burgers are well put together. These burgers have done all their problem sheets. These burgers go for all their classes. These burgers manage to stay awake in their 9ams. These burgers submit their coursework



Mushroom was the highlight of this burger // Zahra Abiola

early. These burgers are on 12 societies' committee. These burgers already have their internships sorted. And they tasted good. Really good.

The Double Shack Burger is the remix for their classic cheeseburger now with an extra patty. The veggies were fresh and their special Shack-Sauce really complimented the whole thing. What surprised me was for the original price, the patties themselves are rather small. I know it's quality over quantity because you can really taste the difference compared to your average burger spot but at that price, I need thicc with at least 3 'c's.

The Shack Stack consists of their cheesy 'Shroom patty and a beef patty for good measure. The 'Shroom patty was actually the highlight of the visit for me and that is saying something as they were both so good. I know the vegetarians reading this are rolling their eyes as they don't need another mushroom burger, but this was better than the

actual meat. The deepfried breading was crispy and really well seasoned yet the mushroom in the centre wasn't overdone and still had its structure. I got a surprise at the cheese oozing out of the breading from my first bite. The portobello mushroom adds some serious height to the burger to mitigate the beef's thinness. The beef still brings a great contrast to the crispy mushroom as you bite through. All the textures and flavours combining in each bite made this one an experience.

Places like Shake Shack represent a new trend. You get restaurant quality food while keeping the fast food feel to the establishment. The food looks like there was a lot more care and effort put into making it compared to the average Maccies (though the beef patties are still the same size). Everything here looks and tastes fresher. Yet there is still no one pestering you on if you want any more drinks or how your meal is going to get a tip like at a Byron's

and it stays open later than a service restaurant. It's really the best of both worlds but this also brings both disadvantages. You can't exactly book yourself a spot and those benches can fill up fast during lunchtime. And I've seen a fair number of fights break out on my late-night trips there. It's

"All the textures and flavours combining in each bite made this one an experience"

not good for anything more than a casual meal with some standards. Food quality to price ratio is a very difficult one to balance but with this deal, the scales seem to have tipped in Shake Shack's favour.



Cheese shining brighter than my future // Zahra Abiola

C&S

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An Interview with the student-led Varsity Careers Hub

Felix: Tell us where the idea came from, what inspired you to develop platform, and the story of how that came to be from concept through to the current stage you're at?

Ahana: VCH's vision is to streamline the process of graduate recruitment. This is something that I have personally faced when applying to internships – you have to repeat the same information a lot of times in a lot of different places, and it's a very time-consuming process. It puts some students off of even applying to certain jobs in certain industries, and it can oftentimes deflect from academic studies. That was a problem that we wanted to see to.

Felix: A lot of people would look at this as shifting power away from the employer and towards the jobseeker in terms of time commitment and expectation. Was that something you feel was deliberately there during the process?

Luana: Personally for me, it's about students having an opportunity to be in contact with companies they wouldn't usually be in contact with or know about — more niche or boutique companies in a certain industry, which may not have the large brand presence that all students would know about

Ahana: To start with, we had big companies sign up to use the service – Morgan Stanley, UBS, and others. These are places that have enough applicants; they don't experience this issue. But they wanted to use the

service to supplement what they already have with their graduate recruitment teams.

The real gap in the market that we are trying to fill is for smaller to medium sized companies top students from top unis are only applying to big companies (say, Goldman Sachs), which only have a limited number of positions and for which there is fierce competition. But there are a lot of other companies which also offer equivalent salaries, experiences, and opportunities, but which students don't know about and which don't have the same infrastructure and manpower to have a strong presence on university campuses. So part of my job as part of client acquisition is to identify these very high-quality, smaller-to-medium size companies and match them with students that they ordinarily might not have managed to reach out to, and so to allow students to get a great job they might otherwise have missed out on.

Felix: On the site, you talk about some set of parameters by which you assess companies for inclusion – can you talk about those?

Ahana: At the moment, we're a student startup so it is somewhat up to our discretion and personal experience, but we've tried to construct our team out of people who have had some sort of industry experience – like people who have good connections in the industry, or have a good commercial sense of it – in a variety of sectors, so that choice is honed by expertise. The basic criteria we look for include things like general reputation. We then also utilise other rankings, such as the TARGETjobs top 300 employers – we can leave a lot of the 'dirty work' to the professionals, for now, and use those available resources.

Felix: Are you looking to incorporate things like anecdotal experiences from students who have taken placements at a company?

Ahana: Absolutely. However, we are not yet quite at the scale, and have not quite been around long enough, to see students through the entire process of being hired and undergoing internships and such. Most clients we're in discussions with will predominantly begin using VCH for next year's recruitment cycle.

We do always encourage feedback on all sides. On the client acquisition side, I'm always asking companies how we can improve and better service their needs. On the student side, we have a really strong team of people across all the universities who work directly with the students being hired. We also want companies to be giving feedback on the students - which they can then use on their profile to strengthen it, if they so desire.

Luana: The structure we have for that is interesting. We're currently looking to expand our network, at Imperial especially, but also at Durham, LSE, UCL, and Oxbridge. We'd like a lot more students to join, but also student advisors. Each student advisor would report to me. Their role would be to help obtain things like society partnerships – such that societies and their members could benefit from connecting



Ahana and Luana, Imperial VCH team // Luana Williams

with us, such as from networking events and information. My plan at Imperial is that when we partner with societies we would ask one of their committee members to be the student advisor for that society, and would run that section of the VCH for their society.

As a student advisor, you'd also liaise with the companies to talk about how to best provide for the students who want to undertake their internships.

Felix: On the student side – you're specifically so far looking at a specific set of very elite universities, mostly in a particular geographic region. Why those universities?

Ahana: That's just how we've started – we definitely have plans to continue to expand, and are currently in the process of expanding to Warwick. We certainly aim to bring more universities on board, as we think it will help everyone.

But we're setting it up so that there are enough people on the team at each university to provide proper support to ensure the project thrives – which involves a lot of time commitment. The long-term plans are to not only expand to the rest of the UK, but also to Europe in the next two years and – if all goes well – to the US within the next five.

Ahana: For the time being, considering where we are at, VCH would be Russell-Group-oriented. The nature of the jobs and companies we are working with at the moment specifically headhunt for top students. If we help even some students get a good job, then we have succeeded in our goal.

Felix: Funding-wise, does all funding come from companies that pay to use the service, and is it free for students?

Ahana: Yep, absolutely. We would never want to charge students to use the service – that would completely go against what we are trying to do! We charge companies based on their size and based on how much they use the database. It also varies from sector to sector – some companies have specific recruitment times, such as summer internships, with only a short recruitment cycle, so we plan around that.

Felix: What about the experience of being part of VCH?

Luana: In terms of being a student advisor, there are a lot of networking events to be involved with, lots of free merch, and so on. We want to make VCH a society at Imperial, for the student advisors, where we can meet and discuss our goals and actions. We'll run pub nights and things as well – we want to build up the network organically and socially.

Ahana: That applies to all aspects of the business. If you're someone who is well-connected and wants to work on the client side and get exposure to some great companies, there are opportunities within the team. The tech we're using is also our primary focus right now, so there are plenty of opportunities for student developers to get involved too. As Luana said, on the student side, the marketing and the fun events - there's a lot of opportunities for people who want to be involved.

Felix: Are you liaising with the College about this at all, such as the Careers Service, or is this entirely independent?

Luana: We did get in touch with the Careers Service, but they weren't interested! They offered us a stall at their Careers Fair, but a stall is very expensive so we couldn't take advantage of that. However, the Physics Careers Group has sent out emails to physics students and such. Mostly, no – this is student-led. However, we'd be keen to work with any department to help their students get access to the best possible jobs and internships.

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The 'Earthling' Ed Winters: Chuka Nwobodo Argues for Veganism

Veganism has many arguments for and against - here, the Speakers' Society VP (Events) talks about Ed Winters' and his own arguments for joining the vegan revolution

C&S

Chuka Nwobodo Speakers' Society VP (Events)

n October 29th, The Speakers' Society hosted 'Earthling' Ed Winters as he weighed the pros and cons of a vegan lifestyle and tried to persuade an audience to think more deeply as to whether we can morally exploit animals for food, medicine, and so on.

The statistics concerning animal agriculture are startling. A third of all the available land on Earth is cleared to make way for billions of livestock waiting to be slaughtered. Over 100 species are lost each day, and we are eliminating species 1000 times faster than is natural, according to Christine Dell'Amore of National Geographic. Many people seem to think that transportation is the most significant contributor to green-house emissions. They are mistaken! Animal agriculture beats them all, according to the Food and Agriculture Organisation and the United Nations. Moreover, up to a third of all usable water on Earth is reserved for livestock. Ironically, a convention between the Millennium Ecosystem Assessment, the IUCN Red List, and the Global Environmental and Biodiversity Outlook demonstrated that up to 90% of freshwater pollution is caused by animal agriculture.

Even still, perhaps you think this doesn't really



Ed Winters in 2018 // Wikimedia

affect you. Maybe you purchase meat that is supposedly 'ethical and sustainable'.

"My meat is organic, grass-fed, and raised by British farmers," you might say. First and foremost, Ed challenges us to consider what actually is organic. Often, farmers bend the rules to optimise their sales. This means

that they can still pack chickens into small barns by the thousands and be labelled as free-range or organic. Additionally, you may argue that grass-fed cows are more 'humanely' exploited than corn-fed since grass is closer to their natural diet than corn. Ed informs us they will still eventually be injected with major doses

of antibiotics until they are economically viable – which, I believe, is not humane. As Ed asks: is there any relevance in making livestock's lives 'freer' if we are just going to forcibly take their lives from them in the end anyway? I don't think anyone could relate to that kind of 'freedom'. Finally, while 'homegrown' live-

stock may taste better to us and be better for the environment, when the result is an increase in demand for local produce, does it really make a difference? We need to recognise that 'organic', 'grass-fed', and 'homegrown' may well be marketing terms vying to mislead us and to make us feel comfortable with seriously injuring our environment.

By now, you may argue that while using animals instead of more sustainable alternatives for food may be unjust, what about when they help to save lives? They have helped humanity enormously, after all. Just look at the trend in life expectancy over the years! Animal research has contributed to over 70% of Nobel Prizes in Physiology and Medicine.

I believe medicine is based on old-fashioned techniques. We still perform live demonstrations of dissecting frogs to explain the function of the liver, when YouTube videos would, in most cases, suffice. This is just one example of where a pedagogical shift should be made to minimise suffering.

Who is to say that the same could not be done for clinical trials? Clearly, the fixation on clinical testing needs to be challenged. Is there any way to map the responses an organism will have to a drug without the need to sacrifice lives to do so? I don't know of anyone who knows the answer to this. The existing methods are effective, despite their ethical dubiousness, and so few people bother to seek

alternatives. Ed claims that a vegan lifestyle can change the mindset. I can only imagine what could happen - what advancements could be made in this area - if the medical community became vegan.

Where do you, the reader, stand in all of this? A vegan lifestyle is both environmentally sustainable and naturally medicinal. In words, if we all became vegan, Ed argues that there would be enough resources available to solve world hunger, and we could save millions of endangered species and their habitats. Plus, we would never even contract many of the diseases we would normally treat with animal-tested drugs.

Support the revolution. Support veganism!

Ed (https://earthlinged. org/) is an acclaimed British activist who has preached to the masses and debated against die-hard Ivy League students on becoming vegan. His company, Surge, is starting a revolution and has already recently upscaled its restaurant, Unity Diner. He has given two TEDx talks with over half a million views. He has presented a stunning documentary, Land of Hope and Glory (https://www.landofhopeandglory.org/). He's also big on social media with over 200,000 subscribers on YouTube

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Social Mobility: A Pipe Dream for Disadvantaged Students in 2019?

C&S

Rachel Ong

Ark Campus Ambassador

witnessed no improvement social mobility since 2015 in Britain at all life stages starting from birth. Babies born from disadvantaged families grow up facing the additional task of overcoming numerous barriers just to get a shot at opportunities freely available to the rest of society. This is the sombre truth published in a report by the Social Mobility Commission (State of the Nation 2018-19: Social Mobility in Great Britain).

Today, education is one of the biggest factors determining the trajectory of the rest of our lives. A good foundation is the starting point for access to higher education, a specialist technical job, or an apprenticeship to earn a stable livelihood. But for a disadvantaged child contending with societal, financial, and geographical barriers, gaining this foundation alone is already a feat in itself.

And it shows.

According to the report, 43% of five-yearolds eligible for free school meals (FSM) did not achieve a good level of development in 2018 (as measured by the early years foundation stage profile assessment framework). This figure is almost twice as much non-FSM-eligible students at 26%. A 2018 study by the Education Policy Institute (EPI) discovered that persistently disadvantaged pupils - those who qualified for FSM for over 80% of their schooling time – are



Children participating at an Ark school // Ark Teacher Training

22.6 months behind their peers when they finish their GCSEs. By the end of secondary school, disadvantaged students were on average 18.1 months behind their peers in 2018, increasing from 17.9 months in 2017. Youths without good GCSE results are 27 times more likely to be unemployed.

Going into higher education is just yet another hurdle. While more students from low income families are now entering university by age 19, only 5% of students eligible for FSM are accepted to the most selective universities as compared to 12% of all students. Even then, financial and cultural barriers mean that these

students are more likely to drop out of university.

"Educational inequality on this scale is bad for both social mobility and economic productivity," says David Laws, executive chairman of the EPI and a former coalition government schools Rosamund minister McNeil, Assistant General Secretary of the National Education Union, shares this sentiment in her Government must commit to proactively reducing child poverty and commit to ending it. They must also provide what schools need to make education accessible... Schools can be the place where students gain a sense of optimism and agency about their futures, but we're not giving schools what they need to make this difference."

So, what ARE we doing? What can YOU, as a British citizen, do to help bridge this unacceptable societal gap? Well, bright and promising Imperial College student, you are now at a prime position to make a change.

Students can gain a Post Graduate Certificate of Education (PGCE) and Qualified Teaching Status (QTS) after an undergraduate degree in any subject studied either in the degree or at A Levels. Become a teacher and make the best use of your intellect and heart for others to

help make a positive impact in the lives of the over 4.1 million children across the country living in poverty. Due to a nation-wide shortage of teachers, trainee teachers in STEM disciplines are eligible for some of the highest first-year government bursaries of up to £32,000. Overall, less than half of the physics teachers in the UK possess a relevant degree, with figures dropping to as low as 17% in poorer areas.

If this article made you feel anything at all about the state of social mobility in the UK, investigate the possibility of gaining your official teaching qualifications with Ark

Teacher Training (ATT), who aim to provide a good education to every pupil, regardless of background or status, to give them real choices in life. Register your interest at bit.ly/ATTinterest to get more information.

CONSTITUENT UNION

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How can we communicate science effectively?

RCSU

Isabelle Zhang
RCSU Science Challenge

ith science, we have m a d e incredible advancements: in medicine we have vaccines and antibiotics, in agriculture with the engineering of pest-resistant and more nutritious crops, and in travel [self-driving cars etc.] The world we live in is becoming increasingly embedded in science and technology.

Yet, there are a growing number of people who don't believe in vaccines, peddlers of genetically modified food untruths, and a whole global energy sector that still has not yet transitioned to renewables. Public understanding of science is hugely inconsistent to what the scientific community agrees is consensus.

disconnect This matters. Public discourse shapes the policies adopted by governments, influences ethical thinking, and it guides the direction of future research by generating support and necessary funding. For this reason, scientific discussion shouldn't be limited only

to those with science backgrounds. In order for governments, businesses, and other institutions to make well-informed decisions, for the public to be properly informed on the issues that impact our increasingly scientific world, engaging the public with science is essential.

How can we communicate science effectively? There is a balance that needs to be struck between conveying the nuances of scientific thinking and being engaging to non-scientific audiences. The purpose of science communication merely to educate and combat the spread of misinformation, but it is also to share wonderment, to inspire new directions of research. Figures like Neil Degrasse Tyson and David Attenborough come to mind as figureheads who exemplify approachable, informative engagement of the public.

However, in academic communities, public engagement isn't as prized as it should be. The currency of this community is the number of papers published or the amount of grants received. This promotes a quantity over quality mentality, and perhaps stifles fresh thinking in favor of target performance indicators. In hopes of shedding more

light on the merits for science communication, the Science Challenge aims to make it clear that effective communication isn't as difficult as it seems.

The Science Challenge is the annual science communication contest hosted by the RCSU. Each year, four questions that will challenge students to convey science in an effective and engaging manner are released in December. Students have until February to submit either a 1000word essay or a 5-minute audiovisual entry. All Imperial students, and high school students in Y10-Y13 are eligible to

enter. For each question, one Imperial winner and one school winner is chosen. Shortlisted candidates are invited to an awards ceremony, held at a grand London venue; past venues have included the House of Lords, the Royal Institution, and the Science Museum.

The overall Imperial winner wins £1000 cash, and for each individual question, the winning Imperial entry wins £250. (the entrants win, not the entries) The RCSU is currently looking into non-cash prizes to provide on top of this. In the past years, an all-expenses-paid tour of CERN, or publication of the essay

in Daily Telegraph have been granted as prizes.

If you take part in the Science Challenge this year, you'll have the chance to think about science in a wider societal context, you'll be encouraged consider the stakeholders of science, and perhaps most appealingly - you'll gain communication skills that are beneficial to you no matter what industry you end up in, science or otherwise.

The Science Challenge Launch will take place on <u>December 5th</u> (Thursday) at 6pm, in <u>Skempton LT201.</u> Come to the Launch to find out

more about the contest, to hear the questions and prizes announced, and see past winning entries.

Let us know you're coming by filling this in: https://bit.ly/2OphDbD

And if you can't make it, you can still get updates here: https://bit.ly/2NX-v7fN

Visit sciencechallenge.org for more information.





DECEMBER 5TH, THURSDAY, 6PM SKEMPTON BUILDING LT201





Science Challenge launches on December 5th! // RCSU



CGCU

The Anonymous Guildsman CGCU Bolt and Spanner Bearers

please return davy

Editor's Note: we allowed this as a favour, just this once...

SUSTAINABILITY

sustainability.felix@imperial.ac.uk

Researchers show noise pollution is threatening the survival of a number of species

SUSTAINABILITY

Xiuchen XuSustainability Editor

ew research from Queen's University Belfast has indicated that noise pollution is threatening to over 100 different species.

The researchers found that noise affects the behaviour of a wide range of species including amphibians, birds, fish, mammals and reptilians. Noise pollution can affect species by interfering with their communication, which is important for picking a mate or warning for predator; this disruption may lead to lower survival rates.

Furthermore, noise pollution may disturb the balance of ecosystems, by changing the dynamics between prey and predators. For example, bats and owls rely on the sounds of the potential prey, and noise pollution makes it more challenging to hear and find their prey, forcing them to invest more time in sourcing food, which could lead to a decline in these species.

In the aquatic world, fish larvae find their home based on the sound emitted by reefs. Increased noise pollution in the sea, mainly as a result of ships, makes it more difficult for fish larvae to find suitable reefs, leading many to choose less suitable reefs, which may reduce their lifespan.

Noise pollution also has a huge impact on the natural migration of animals. Many birds will avoid noise polluted areas during migration which in turn affects where birds choose to live. These changes in distribution of species can in turn affect ecosystem health as each species forms an integral part in maintaining the functioning of a specific ecosystem.

The World Health Or-

"It has huge effects on the biology and physiology of amphibians, arthropods, birds, fish, mammals, molluscs and reptiles"

ganisation has previously said noise is one of the



A wide range of species are affected by noise pollution\\Queen's University Belfast

most hazardous forms of pollution for people, but this new meta-study found that it has huge effects on the biology and physiology of amphibians, arthropods, birds, fish, mammals, molluscs, and reptiles. Indeed, all

"Noise pollution must be considered as a serious form of man-made environmental change and pollution"

organisms studied, terrestrial and aquatic, were found to be affected, indicating that noise pollution affecting animals is the norm, not the exception. Previous studies have suggested that certain species are affected by

noise pollution, but this meta-study is the first of its kind to provide quantitative evidence on a widespread of species to encourage institutions to regulate noise pollution.

The study analysed the effects of noise in over one hundred species, which were divided into seven groups: amphibians, arthropods, birds, fish, mammals, molluscs and reptiles.

Dr Hansjoerg Kunc, from the School of Biological Sciences at Queen's University Belfast and lead author, concluded: "This large-scale quantitative study provides significant evidence that noise pollution must be considered as a serious form of man-made environmental change and pollution, illustrating how it affects so many aquatic and terrestrial species. Noise must be considered as a global pollutant and we need to develop strategies to protect animals from noise for their livelihoods." The study has not evaluated the

exact effects in terms of beneficial and detrimental effects for different species, but it seems clear that noise pollution can affect ecosystems in complex ways. Indeed, to combat noise pollution, there should be further research, and cooperation with governments and policy makers. A previous case similar to the one of noise pollution, was when light pollution was found to harm nocturnal wildlife, and local councils in UK started to implement policies to combat this.

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.



Noise pollution affects predators and prey\\Queen's University Belfast



Hangman

EEE students return with proof of Woodwards existence

HANGMAN

Cockroaches in the Cupboard

Guest Writers

Our men on dinghy the report back from a daring expedition

week students, EEE Thomas, Joao, Lucas and Luccas, set off to find out if Woodward actually exists. Taking to the water in a simple raft they set off from College at 5:30 in order to be able to make it back "to Salsa at two".

Their voyage, coming after hours of study of both satellite and OS maps, seemed to be well on its way and the crew dared to hope that they might in fact make it to their destination without further difficulty.

They were confounded, however, by the realisation that someone had forgotten to put the bung in the boat and that the boat was sinking beneath the grubby waters of the London canal network.

Tested beyond anything they had faced before, the crew managed to make it to the bank before being swallowed up by London muck

NegaFelix spoke to Joao, one of the survivors of the downing of the raft and he had this to say "This was an eye-opening moment for me. For the first time, I realised that machine learning was not the solution to all of my problems"

Luckily the team was able to pull together in this darkest of times. Luccas, the most moist



Where's the gold? // PEEEP 2

member of the team, tells us "Rafting with my mentors is dangerous, because I give them all my trust. When things go wrong, I have to pray and hope I will make it to Linear Algebra the next day". The crew rallied, put the raft on their heads and forged onwards.

It was at 8:45 as the sun began to come up that the next disaster struck. The team ran out of roasted corn, the one energy source that they had thought to bring with them. "This is the sort of scenario for which you can never prepare" says Lucas. Thankfully, the team was comprised of highly skilled individuals: Noé had trekked 250km, self supported, in the

arctic; Joao survived for 10 days in wild Sicily; and Thomas asked a girl out once.

At long last the storied heights of Woodward peaked over the horizon, the huge grey buildings rendering the explorers temporarily speechless. Here for the first time was tangible proof of Woodwards existence.

The fauna was eerie, the instantly recognisable blended seamlessly with the alien, herds of exotic students wearing strange bohemian clothes strolled past solitary engi-

neers wearing JP Morgan "insight day" t-shirts. The

adventurersapproached the building cautiously, unsure the response they would



Towards the promised land// PEEEP 1

by admiring security staff. When asked an anonymous guard said "This has been one of the greatest days of my career. I am used to dealing with foolish drunk students but

receive from the guards

at the Woodward gates.

They were pleasantly sur-

prised to be welcomed in

never daring explorers" When NegaFelix reached out for comment we received this statement "This discovery comes as a shock to us and we are currently investigating the situation. We are happy to hear that they made it alive but we want to highlight that we deny any connection between College and their finding.'

Disclaimer: This expedition came with legal challenges, and a significant amount of planning was done prior to the trip. Please do not attempt it by yourself.



Intrepid explorers // PEEEP 3

HANGMAN

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Union kitchen grinds to halt after single microwave breaks down

HANGMAN

Negafelix

Editor-in-Chief

They can take our dignity, but they can't take our curly fries!

Food production in 568 ground to a halt last week as the single microwave used to make food broke.

Chefs in 568 were in the middle of their evening service last Tuesday when the Third Assistant to the Sous-Chef (Nachos) wrenched the door of the microwave open too quickly. As this was the

only method the kitchen had for heating food a huge tailback of orders built up as the chefs struggled to fix the microwave. They managed to get the power back on but there was no getting the door back on.

The solution found was using the Third Assistant as a replacement door and simply trimming off and deep frying the tumours that developed. 4 hours after orders stopped being filled, a single plate of curly fries was delivered but it was too little, too late, and ravenous students stormed the kitchen chanting "Southern Fried

Chicken Wraps or death".

The students were not ready for what greeted them once they broke down the kitchen door. Giant rats, the size of small children, wearing chef's hats scattered, squeezing themselves into holes in the walls, leaving the filthy empty kitchen behind.

Shocked as the students were, the joy felt at tearing down the symbol of their oppression was great enough to overcome any doom and gloom. Third year IEI student Feb Senton was among the crowds. "It was a

historic day. For so long we students have tried to peek over the bar at the world of plenty beyond. Today, however, the bar has fallen!"

Furniture was piled up in a huge bonfire and students debated long into the night about how the kitchen could be run for the students. Carchie Coombs distinguished himself by advocating a student led model but there was silence when he asked for volunteer chefs.

In the end wannabe student revolutionaries had to resort to tempting the kitchen rats back in



An artists rendition of the uprising // Flickr

and making them pinkie promise "not to be gross anymore". Unfortunately, there is little sign that the events of the evening last week have led to any change in the culture of the Union. The freshly released menu includes a new item. The Tumour Mayo Wrap.



ARIES

This week you let Jesús take the wheel.

He's four minutes away in a grey Toyota prius



TAURUS

It's Day 14 without curly fries.

The withdrawal symptoms are hitting hard.



GEMINI

This week you have a foot amputated.

At least you never have to worry about wearing odd socks again.



CANCER

This week your wardrobe is making that noise again. Probably either the lion, the witch, or the collection of soft porn magazines you inherited from your dad that you're not sure what to do with.



LEO

This week your friend calls you a pushover.

Okay yea, fair enough.



VIRGO

This week you write your 5 year plan. Fortunately 30 million people don't need to die.

Just one.



LIBRA

This week all your hard work pays off.

Just unfortunately not for you.



SCORPIO

This week you realise its not the lack of height thats holding you back with women.

You're just really ugly.



SAGITTARIUS

This week you're Prince Andrew.

The Royal Family ostracizes you so you become a priest instead.



CAPRICORN

This week you're a third year Aero student.

You procrastinate by practising origami and accidentally get the highest mark in your year.



AQUARIUS

. This week your friends finally have the heart to tell you that you should use mouthwash.

Bleach it is.



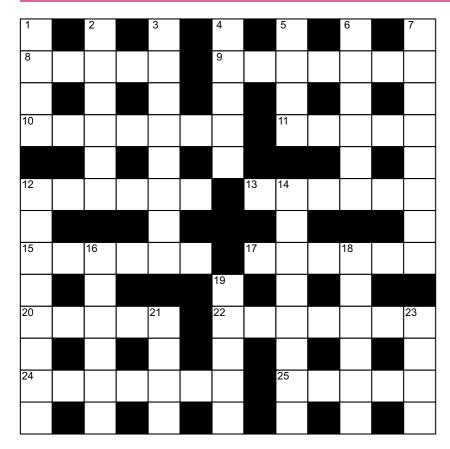
PISCES

This week you're a woman in STEM.

Sexism wasn't a thing in the past, those women just knew how bad Imperial was gonna be.

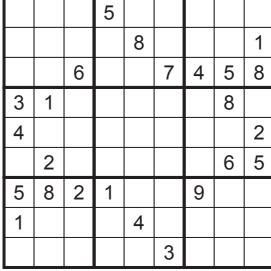
17

fsudoku@imperial.ac.uk



SUDOKU

Fill all the boxes with a number between 1 and 9. A number can only appear once in a row/column, and only once in each sub-box.



FUCWIT

1	TNT	165
2	O1G	161
3	GodBlessHK	146
4	F***URhys	142
5	RIP Pat	141
6	Lochy Monsters	136
7	RIPPCR	133
8	DQ	119
9	StandWithHK_Fight4Freedom	109

Send your solutions to fsudoku@imperial. ac.uk before Wednesday midday to take part in the leaderboard!

Points available

Crossword	(
Nonogram	
Sudoku	
Cryptogram	
Word Pyramid	•
•	

TRIVIA

1. Where specifically did Prince Andrew say he was on the evening when Virginia Giuffré accused him of forcing her to have sex with

Total

- 2. Which character delivers the opening monologue of Lord of the Rings: Fellowship of the Ring movie?
- 3. What two prepositions make up the name of the most notable work by Søren Kierkegaard?
- 4. Which eponymous trophy has exclusively been won by New Zealand, South Africa, Australia, and England?
- 5. Which composer wrote the aria "Largo ad factotum" sung by Count Almaviva to Figaro?
- 12. A major point to remember after a meet- 6. Which food, described by the Wall Street Journal as Britain's "biggest contribution to Gastronomy", was named after a card player who found that the food kept the cards clean?

Liked this quiz? Check out Quiz Soc's Facebook page to get MORE!!!

Martini. Gin, not vodka. Obviously. Stirred for 10 seconds while looking at an unopened bottle of vermouth. ~ Kingsman: Golden Circle

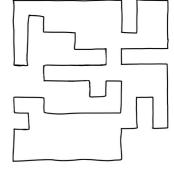
- 8. Kingdom (5)
- 9. A formal "tsk-tsk" (7)
- 10. Stitched up (7)
- 11. Evel Knievel's most famous was the Snake River Canyon jump (5)
- 12. Belief in any God (6)
- 13. Irish region that constitues Northern Ire-
- 15. Japanese region famous for its dialect (6)
- 17. Cleaning one of these was one of Hercules' jobs (6)
- 20. Name or month (5)
- 22. Grnaaam (7)
- 24. Horizontal angle between a plane of reference and a celestial body (7)
- 25. Blunder (5)

- 1. Greek god of war (4)
- 2. Something to lay siege to (6)
- 3. Sustenance for 1-DOWN (8)
- 4. Solutions more H+ than OH- (5)
- 5. Burden (4)
- 6. Month renamed in honor of the first Roman emperor (6)
- 7. Living with parents (4,4)
- ing (4,4)
- 14. Lassitude (8)
- 16. Of or relating to Scandinavian people (6)
- 18. Deprived of or lacking (6)
- 19. Steve Jobs' was designed by Starck (5)
- 21. Awkwardly brutish person (4)
- 23. Outward manifestation of personality (4)

Hello! Apparently, some baka (aka me) created a rule in Outlook that allowed us to sort through each week's submissions (everyone that says 1735 in their email gets put in the 1735 folder). Submissions got messy. Emails were lost before we could mark them. People wrote us emails with words in them (instead of pictures). We apologise for this sorry state of affairs, and will be responding to everyone who submits, (we usually reply on Fridays). Thank you for your continued patience with us.

ı	2	5	4	3	8	6	9	1	7
	3	7	6	1	4	9	5	2	8
	1	9	8	5	7	2	4	3	6
	8	3	9	2	6	4	7	5	1
I	4	2	5	7	1	3	8	6	9
	7	6	1	9	5	8	2	4	3
Ī	5	1	2	8	3	7	6	9	4
	6	8	3	4	9	5	1	7	2
	9	4	7	6	2	1	3	8	5





Last week's solutions

The letters of the alphabet have been scrambled and numbered 0 to 25! What is usually a movie quote is (for one week only) a Glenn Turner quote that has been hidden for you to decode. A grid has been provided to help you out! Hint: 20 = Y.

			••																						
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
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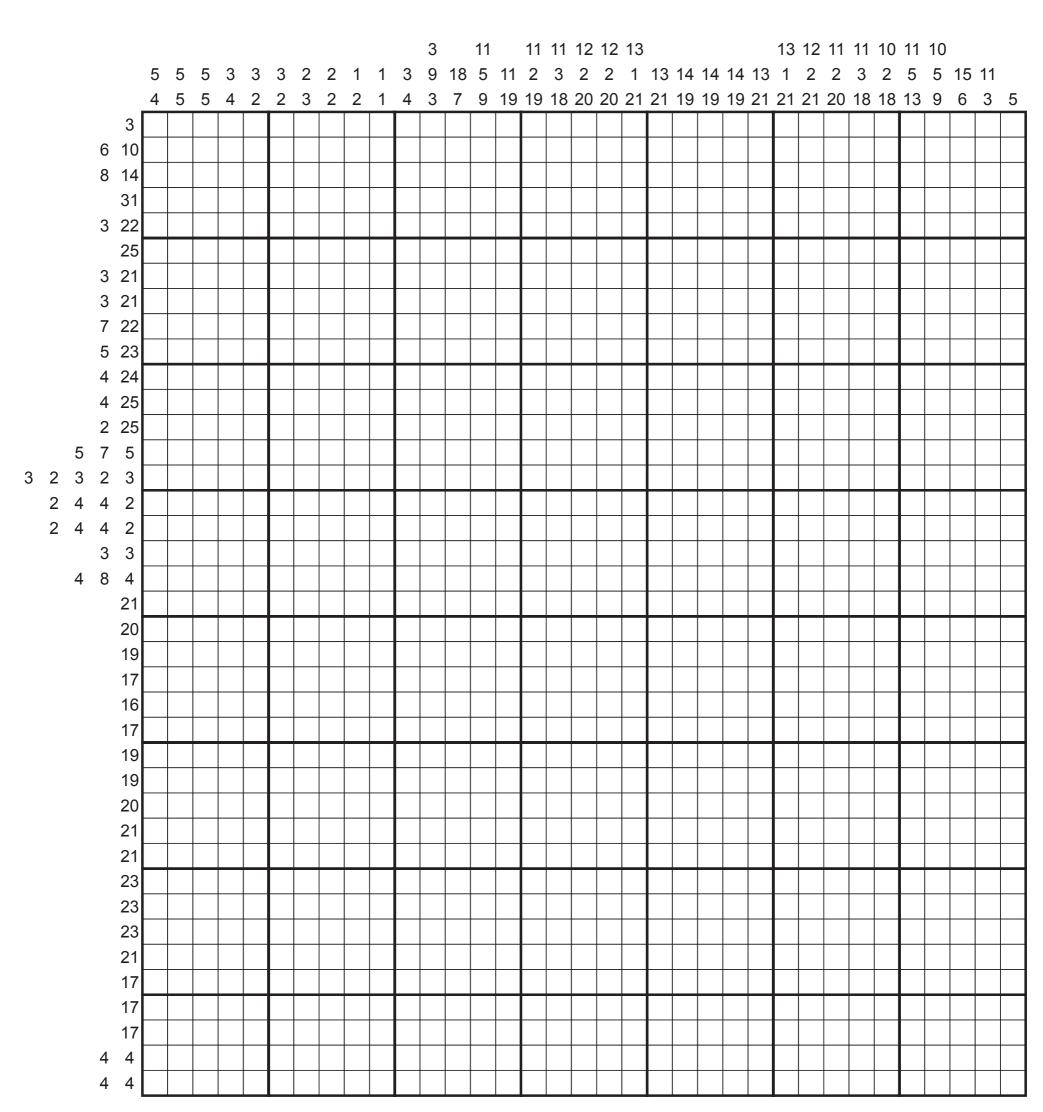
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WORD PYRAMID Clues: What one

might call their female sugar daddy (2) - Hades' animal (3) - Hogwarts' librarian (4) - Leading performer (5) - Obsfucate (6) - The new knock-off college resembling IC (7) - Original (6) -Name relating to the Northern hemisphere (5) - HQ (4) - Affliction (3) - Unit of measurement (2)

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Carnage in Canterbury

SPORT

Faf De Klerk

Sports Writer

n wake of Canterbury pipping the Imperial Mens 2nd team to the post last week, the 1s headed out with vengeance and hunger in their hearts. The type of vengeance felt when you twig on to the fact your flatmate has been knowingly using your milk without the common decency of asking. We were going for blood... (hehe and boy did we get it)

As we took to the pitch one thing was glaringly obvious. These chaps were blind. Either that or they had never looked in a mirror to observe the colour clashing monstrosity that was their kit. Let me paint you a picture... Imagine walking into a bathroom store and saying to the ineptest looking employee: "Excuse me good sir, do you by chance sell floor tiling?' They gaze at you taking a few seconds to register what you have said and respond, "yu hu, any pattern in particular?" To which you let out a gleeful: "Oh why aren't I glad you asked! Yes, in fact do you sell a set of mismatching tiles that are an orgy of red?" well that kids... that was their playing top. Accompanied by horridly blood red shorts. Anyway, I divulge.

From the kick-off it was clear they were in for a terrible day. There wasn't a single player on their team that would be able see their tinkles in the showers past all their chub and so we were ready to run them ragged. With numerous meat chops from the likes of Seen and Toby 'the destroyer of worlds' Daniels, it



1XV Daniel Kirrane scoring a try earlier in the season // Imperial College Rugby CLub

"A few stellar territorial kicks later and Big Bad Bagguley gave the onehanded show and go"

wasn't even five minutes in until we secured the first penalty, converted by Algeria's finest. Instantly followed by a line break, a cheeky kick and some sexy pressure, we were again playing rugby in their 22. Executing unbelievable strike moves, with both precision and flair it wasn't long until the boys in putrid red buckled and Tube trundled over for the first try of the game, with quite frankly, ease.

At this point, their fans whom last week wouldn't stfu could see the fruitlessness in their endeavours to taunt us as we were quite frankly unwavering. So they decided to change tact; one of our sexier players who goes by the name of Matt Speechley (ladies he is on FB) plays on the wing and with a chiselled jaw as prominent as the refs bald spot he attracted quite the female attention. "11,11, are you single?" "11,11, what's your number?" "Give us a wave 11... oooohhhhh he waved!"

These were just some of the questions I was able to earwig on as I zoomed across the pitch. Meownnnnn. A few stellar territorial kicks later and Big Bad Bagguley gave the one-handed show and go, selling every single player on their team, providing a VAT receipt and all, to waltz over the line for IC's second try. A matter of minutes later, IC were awarded a scrum on the halfway line. For once the Canterbury pack decided to put all their mass to use and put us on the back-foot. Do not fret dearest reader, for Ali Bagguley with his quick wit picked up the ball again in one hand and off he went down the pitch, offloading it to Imperials

very own Faf De Klerk who was heinously high tackled in a bid to prevent what would inevitably have been another try. This resulted in an immediate penalty and through Faf's ingenious quick thinking, a quick tap and a few moments later he was over the whitewash. Third try to the boys in blue. Frankly at this point I have lost track of the score. This saw the end of the first half.

Some more perfectly executed Munster's, Kiwis and territorial kicks later saw their nine (who had the most disgusting ponytail/bob thing going on top of his bonce) scrambling in D, franticly kick the ball straight to sexy 11 in open play and

following the ego boost he had received from all of his first half compliments nobody was going to stop him from getting over the line. I am almost certain I saw him give a cheeky wink and wave to one of

"This resulted in an immediate penalty and through Faf's ingenious quick thinking"

SPORTS

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the girls on the side-line.

This next passage of play may be what some consider karma for having such a dead trim however Canterbury managed to keep hold of the ball for a phase. Leaving the nine to pass it off to a heap of mess trundling forward who knocked it on. Meaning, quick thinking Beckmanni dove for the ball, in doing so acquainting the scrum half with the sole of his studs. Pop... out came the nines front tooth, root n all. He nearly passed out from the pain, what a p... (woah Faf, pull in the reins, the poor boy is toothless for life.)

The lesson here kids; get a good haircut. Following this kerfuffle, the destroyer of worlds had smelt

"This next passage of play may be what some consider karma for having such a dead trim"

blood and decided to keep the trend going. Living up to his name, he straight up signed a bloke's death warrant. He killed a man (okay he only knocked him unconscious, I'm using hyperbole, I learnt about it at English GCSE, got to keep the readers enticed.)

After this, the boys in blue began to play with almost illegal flair. With a few subs rolling on the integrity of the team didn't waver. Bosh after chop after filthy offload later and we had another line-out in front of their line. I'll give you one guess as to what happened

"Damn right, Tube + Line = Smashed."

next. Damn right, Tube + Line = Smashed.

Now that you are sufficiently lubricated from all of our previous antics, I shall let you climax with the piece de resistance that was IC's final try. Now up to this point Faf had been having an exceptional game. Crisp delivery, fantastic defence, just all round MotM calibre. But that wasn't enough for

him, he wanted more. Let's paint the scene... Canterbury in possession on the halfway, IC with solid defence; a two-hit tackle from Fresher Fraser and French Frog De Bezieux gives George 'no knees' Beckman the perfect opportunity to rip the ball. It spills out the side of the ruck. Mass confusion for all those who aren't Faf. He snatches the ball, looks up at what seemingly is a sea of rancid red shirts with very little in the way of opportunity. But no. He kicks the ball. *what is he thinking*. The crowd are stunned into silence as he

puts on his running shoes and hares after it. Surely, he won't beat the fullback and winger to the ball I hear you exclaim!? But oh boy oh boy does he! With an inch perfect kick meaning he can dive onto the ball as it crosses the line Imperial Men's score one last time! Ending the game in emphatic fashion with a score line of (my dad's estate2 - (my dad's estate + curlcream) to zero) or 39 – 0 to you 'orrid puces. Until next time folks x

National Synchronized Swimming Masters Championships

SPORT

Monica Fiorevanti Sports Writer

hat a wonderful experience today was, Saturday 16th November 2019. Coming back from the national's competition, the feeling that is in my heart is happiness! Before I even begin to describe my first synchronised

"On the day of the competition the team spirit and empowerment of each other were so strong."



swimming competition with Imperial College London, I would like to thank a few people that made it happen. Firstly, Juliette, Greta and Marine members of the society that put their hearts in it and we all had the chance to try it out and secondly

the volunteers on the day for giving up their Saturday to be with us.

So, my first synchronised swimming competition with Imperial was insane! Something that I will never forget with people that made it extraordinary. It is said

that what matters the most is not the destination but the journey you did to get there. Well, it is completely true. We didn't get the chance to win a medal (this time :D), but the hours spent in the pool practising and the land trainings to count the choreography made our journey to the national's amazing. I only joined at the beginning of the year, but we spent so much time together, from laughing at our first try and debating to find out the right count of the choreography. On the day of the competition

the team spirit and empowerment of each other were so strong. I loved every moment of this experience and seeing the breath-taking performances of the winning teams, duets and solos was very inspiring!

SPORTS

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Imperial Sailing Cosy up at Oxford Magnum



Imperial College Sailors // Imperial College Sailing

SPORT

Anita Plumley Imperial College Sailing Club Secretary

weekend Imperial Sailing sent their first team to Farmoor Reservoir for the annual, invite-only Oxford Magnum. The weekend really started on the Friday evening, when most of the team (*cough* Eve *cough*) made their way to the Commodore's house for a last-minute R&T (Raclette and Theory) sesh. After two hours of cheesing and gossiping, the tactics discussion began. While the helms tried to find a way around their different brain functioning, the crews' eyes slowly began to close and called it a night.

At around 8am the following morning, everyone piled into cars and drove to Oxford, with an obligatory Maccies midway stop. Upon arriving at the reservoir, the wind was fairly light but nevertheless, racing started, and the day progressed well, despite the cold and torrential rain. Although every race was lost that day, the team learned from the mistakes made and was not discouraged.

The initial plan for accommodation was to split the team up in different Oxford College floors. Everyone was quite disappointed by this cruel separation, when a solution

arose: Toby's Grandpa offered up his lovely home, only 20 minutes from the reservoir. This was by far the most comfortable of any event: a warm bed each, comfy sofas, warm showers and most of all... Maisie the adorable black Labrador that was cuddled and cooed over all evening.

By 4pm everyone

"maybe favouring the pub over socials is what leads to success..."

was starving and made the decision to ditch the 9pm Curry social for a delicious pub meal with Toby's Grandpa. Feeling warm and replenished, our 6 sailors strolled into M&S to get "shnackzzz" for the evening's cosy screening of Planet Earth II. David Attenborough's soft voice slowly made eyes close and everyone went to sleep in their large comfy beds. For some tired third years, this wholesome evening beats the usual Curry-Club-Carpet any day!

Refreshed and revived by a full night's sleep, after Anita's heart-breaking goodbyes with Maisie, the team headed to the reservoir for a second day of racing. Because of an interesting performance the previous day, Imperial Blue was placed in Bronze Fleet. Sailing under the sun, morals high as ever, 5 out of 6 races were won and overall, Imperial Blue came 10th in the event and 2nd in Bronze fleet, improving on last year's results.

Who knows, maybe this is a new phase for Blues – maybe favouring the pub over socials is what leads to success... Or will the appeal of Cardiff SU's VK bar be too strong to resist... stay tuned for news from next weekend's trip!

Special thanks to Toby for driving us everywhere, and many thanks to University of Oxford Sailing Club for organising such a well-run event! Thank you also to Rooster "Imperial Blue came 10th in the event and 2nd in Bronze fleet, improving on last year's results."

Sailing for providing us with sailing kit during the year – we're eagerly awaiting our latest order!