



Cut out 'Boo Brady' & 'Alice Ghost' masks for Halloween > p12-13

FRIDAY 28TH OCTOBER 2022

Trade unions and College "too far apart" on pay claim

- ▶ Joint Trade Unions brings a compromised pay claim for 10.9%
- ► College offers full and final pay offer of 3.3%
- ▶ Imperial UCU and Imperial Unite achieve mandate to go on strike

Ameena Hassan Editor-in-Chief

Two Imperial staff unions have achieved a mandate to go on strike over the next six months, pending further discussions on pay.

Staff at Imperial College London are represented by three unions: University and College Union (UCU), Unite (Unite the Union), and UNISON. Together, they are the Joint Trades Unions (JTU).

Over the last few years, the UCU has been the most active staff union at Imperial, in terms of balloting and conducting strikes in the Pensions dispute, which revolved around proposals to cut the benefits from the Universities Superannuation Scheme pension scheme. However, they have now banded together with the other two staff unions to reject a 3.3% pay rise, asking for a 10.9% increase instead.

Imperial College London reported spending £593.2m in staff costs of which £486.3m went to salaries and wages (the rest went into pension contributions), and had a surplus of £22.8m in the financial year ending in July 2021, according to the Higher Education Statistics Authority (HESA).

When compared to the previous financial year (Jul 2019-20), Imperial College spent 7.8% more in staff costs. This does not account for inflation.

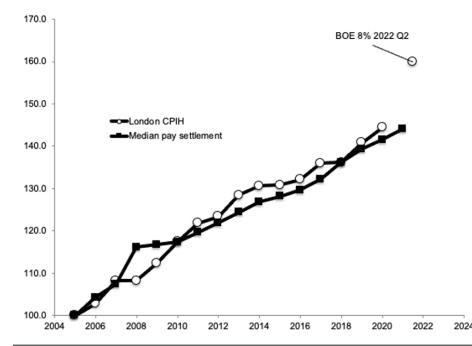
According to an annual report by the College, they reported their total comprehensive income for the year as £161.7m, a 31.6% increase from the 2019/20 year.

Last week, the JTU sent an email to President Hugh Brady and Provost Ian Walmsley, requesting a meeting with the pay negotiation team to reach an "agreement on how pay at Imperial can be improved this year", citing that both Imperial UCU and Imperial Unite had conducted a ballot that resulted in a striking mandate, and that Imperial UNISON were going to be balloting their members.

UCU:

The UCU conducted a national pay and working conditions ballot on 24th October, in which they achieved turnout of 57.8%, with 81.1% of these voting yes to industrial action including strikes. They demand "a meaningful pay rise to deal with the cost-of-living crisis". They justify that universities can "more than afford to meet staff demands" because the UK university sector generated a record income of £41.1bn in the last year, while spending on staff increased by £200m.

Imperial's branch of the UCU have conducted their own local ballot, in which they achieved a 61.2% turnout ("highest ever recorded in such a ballot"), with 79.5% voting in favour of industrial action including a strike, and 87.8% voting in favour of industrial action short of a strike. This gives Imperial's UCU members the mandate to take industrial action over the pay dispute at any point over the next six months, and they are under a legal obligation to inform employers two weeks in advance of any strike action.



JTC's pay claim plots CPI+Housing against median salary raises over 2 decades

Unite

On 19th October, Imperial's branch of Unite the Union (Imperial Unite) published a Facebook post, in which they reported a turnout of over 50% (the legal required threshold). 79.05% of respondents voted in favour of taking industrial action. In another ballot, the legal threshold was reached again, in which 79.49% voted in favour of industrial action including striking and 87.82% voted in favour of industrial action short of a strike.

Of the members who voted in the Imperial Unite ballot, 79.49% voted in favour of industrial action including striking, and 87.82% voted in favour of industrial action short of a strike.

They will now be balloting members on "industrial action in support of [JTU's] joint pay claim". They concluded the post stating that "strike action remains our least favourable option", but that they are looking for "a fair and appropriate pay offer which recognises the cost of living crisis facing members".

Originally, JTU based their request for a 10.9% increase on a Bank of England projection of an 8% inflation rate on the June 2021 CPIH (Consumer Prices Index plus owner-occupiers' housing cost) value in the second quarter of 2022. The JTU also requested an "additional 2% as a first step to reflect the loss of deferred salary from the cuts in USS and the differential inflation felt by the lower paid". To support their claim on 29th April 2022, the JTU cited April 2022 statistics:

Continued on page 4...

EDITORIAL

This issue was produced thanks to the work of

Jamie John	Deputy Editor and Chief Sci- ence Editor
Sam Lovatt	Managing Editor
Hahyun Lee	Comment Editor
Jonah Hewett	Film Editor
I promise to drecit all of you next week!s	Copyeditors
Tara Pal- Chaudhuri	Music Editor
Joe Riordan	Music Editor
Zanna Buckland	Books Editor
Zhifan Xu	Business Editor

And our numerous contributors



'Rady and Walms get £

Imperial College staff are in the middle of a historic pay dispute with the College, and students are facing incredible challenges in finding a way to afford staying at university. Just yesterday, the College

announced a one-off payment for staff, with the lowest paid (ahem Felix Editor) getting the highest amount of £1000, while the highest paid earners like the President and Provost will receive £400. This comes after the Provost Board rejected the Joint Trade Unions' inflationmatched pay claim for 10.9%

in May. The sudden announcement also arrived at the Felix inbox at 2pm on Thursday, 3 hours before we go to print, and almost exactly 48 hours after I asked the College for a comment on what they were doing to avoid strikes and disruptions to students' education.

Students are facing down a harsh winter, but majority don't qualify for hardship funding like the Student Support Fund, which received a £500k boost yesterday. The requirements are being reassessed continuously to "ensure that the fund remains fit-forpurpose", but it's likely that a large proportion of students will not qualify, and that's not what it's there for.

Additionally, the 1.1% raise for the top earners means that College leaders themselves have gotten a permanent 4k boost at the very least. That's relatively

fine when compared to other ways the College is gathering money for their "unexpectedly high energy bills". In the last year, Imperial's very own nursery raised their prices by 3% (higher than the average increase in staff salary), in an economy that reports

that mothers give up
their jobs as a result
of not being able to
afford childcare. For
those women with
two or more children
under the age of
two, it just doesn't
make financial sense
to be working. These
women are then classed as

"economically inactive", as if the choice to not be working and maintain some sort of financial independence is just about being inactive, and that a mother isn't paid for the hours of unpaid work that goes into household chores and raising a child.

In fact, this is why a charity called Pregnant Then Screwed is taking to the streets on Halloween to march, and are demanding increased funding for the childcare sector to enable affordable and high quality childcare for all children, properly paid maternity AND paternity leave, and for all jobs to be flexible by default, rather than as an added 'extra'.

31% of new parents will not be able to afford another child, and 43% of mothers are considering leaving their job because of childcare costs.

Statement of Intent

At Felix we believe that it is always in the interest of the students to know. Transparency in the workings of the College and the work of your student representatives is key. Therefore I, the Felix Editor, on behalf of the team promise that:

We will, to the best of our ability, tell you the whole truth and nothing but the truth.

We will keep your confidence and will only publish something you say to us if you have explicitly said that we can.

We will work to expose unfairness and discrimination in all forms that it takes at the College.

We will treat fairly any article sent to us, regardless of point of view, and do our best to work with you to prepare it for publication.

Signed by Ameena Hassan Editor-in-Chief

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

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

felixonline.co.uk @feliximperial

Printed by Iliffe Media Winship Road, Milton,Cambridge CB24 6PP

Registered Newspaper ISSN 1040-0711

Copyright (c) Felix 2020

NEWS

...continued from page 1

Cracking down

- Inflation rate of 6%, projected to rise to 8%
- 10.4% increase in National Insurance contributions
 - Rise in the energy price cap
 - Council tax rises, estimated at 5-6%
 - Increase in rental and house prices
 - Rail fare increases
- Rising childcare costs (Imperial's nursery increase their prices by 3%)
 - Food prices rising as a result of Brexit

The College responded to the "Pay Claim for 2022-23" brought by the JTU on 12th May, and recognised the increases in inflation and costs of living. The negotiating team stated that although the College's pay award had been more generous than national standards, they acknowledged that "this has not fully matched inflation". The additional 2% was rejected on grounds that the College had already made up for the cut to pensions by awarding an average 4% increase to all staff through the College's Total Renumeration Package (TRP). Instead, they offered an average 3.3% increase, and said that this would be "in addition to 53% of staff receiving an automatic incremental salary increase in October 2022". This would cost them roughly £22.3m, instead of £88.6m. Additionally, the College negotiation team stated that their overall operating profit of £22.9m was more reflective, as rising energy prices mean they will have

The JTU responded to the initial pay offer on 16th May, by accepting a "ceiling of £100k and a floor at £50k ... for this pay negotiation only", but that they required an "increase of 12.2% merely to maintain the value of pay". Additionally, they suggested that Imperial's "excellent performance in REF2021" would lead to "an increased [Research England Quality Related] grant to College in future years", which "reflects the efforts of staff at Imperial that deserve direct recognition". They then proposed a "good-faith" counteroffer of "8% with a £4k floor and £8k ceiling even though it would mean a real-terms pay cut for many".

The College negotiation team then published a "Full and Final Offer" on 27th May, stating: "we are unable to meet

this request, as it would .. cost [£59.6m]", and that "in the current climate ... an increase in [the grant] is not guaranteed". Their final offer was a 3.3% pay increase across the board with a £1,500 minimum and £3,000 maximum payment.

The JTU responded that they were "extremely disappointed by the offer", which "falls far short even of the current inflation rate of nearly 11% in London". After this, another response was published from the JTU, stating that after consultations with their members, "all three trade unions have voted overwhelmingly to reject".

The negotiation team accepted the rejection, and passed the issue to the Provost Board for further deliberations, as per usual procedure.

The JTU then met, and agreed to put forward their revised, "good-faith" pay claim to the Provost Board.

The Provost Board then responded, saying that they "were somewhat surprised that the revised offer was one already put forward", and cited the negotiation team's response. Additionally, they stated that the College's financial position meant that they "[would] post an operating deficit this year and are budgeting for the same next year". They then stated that "our positions are so far apart that we are left with no option but to implement our full and final offer". They also mentioned

that they would be "happy to continue the [..] dialogue ... other options we can consider, outside of base pay".

The JTU responded to the statements with confusion, claiming that the response "insinuate[s] ... had the JTU put forward a lower percentage increase, management might have increased the offer by some degree", and refused to "accept the 'blame".

On Thursday 27th October, the President and Provost sent an email to all staff, explaining that the College would be making "non-consolidated, one-off payments in the November payroll". These payments are:

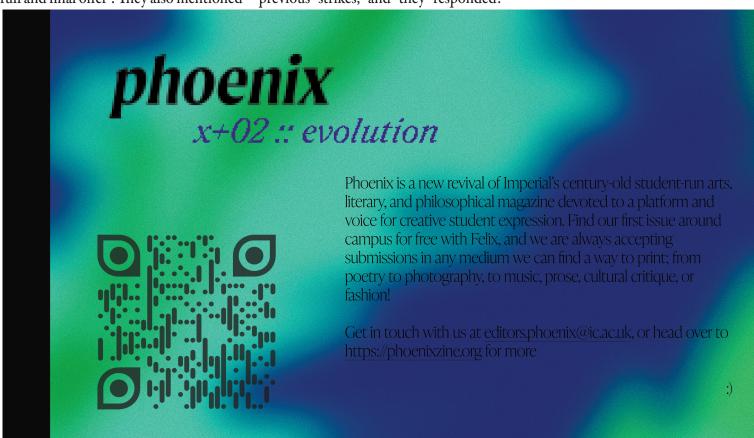
- -£1000 for staff earning up to £37,141
- -£750 for staff earning up to £50k,
- £400 for staff earning up to £71,264,

and "are on top of the pay award applied to salaries from August this year", and this is the most recent annual increment applied to staff salaries.

It is unclear if Union staff will be awarded the same pay rise, as their salaries are funded through the College grant, which has not been updated recently.

The Union was asked if they would support strikes, given that student grades were impacted as a result of lecturers taking industrial action in previous strikes, and they responded: "A culture of valuing staff and students is paramount to ensuring Imperial is a world leading university – if staff feel valued, then this creates a better environment for students. To that end, the Union would encourage the College to return to the negotiating table with staff to come to a positive conclusion. If strike action goes ahead, the Union will be seeking a position through our democratic channels".

An Imperial College London spokesperson said: "Every effort would be made to ensure disruption of learning and assessment activities is minimised. Suitable alternative methods would be arranged to ensure learning outcomes continue to be met for every degree programme."





Letters (Emails) to the Editor

Every week, Felix receives emails from a wide range of people. Here are some of our favourite ones! Write in to felix@imperial.ac.uk, and you might get featured.

Dear Exhibitor,

I am following up to confirm, if you are interested acquiring the Attendee List

Access MBA - Sofia

26 Nov 2022

InterContinental Sofia, Sofia, BulgariaGet

Directions

Counts: 1,000

Each Record of the Attendee Includes: Client

Name, Business Name, Title, Email Address,

Phone Number, and Web Address etc.

Let me know your thoughts, so that I can send

discount cost & additional information.

Thank you

REDACTED | Attendee List Consultant

Good afternoon

I have just purchased x 4 boxes of Felix....
And there was a serious smell when I got home ... On further investigation on opening ALL the boxes x1 pouch was blowin and the smell is horrendous.... I have taken photos for your (maybe) Investigate please see attachment i have used Felix for about 10 years and have never had a problem ... I bought it from.. IIDEL.. In Almoradi

Spain

And a letter of our own:

Dear Felix (the cat food company),

Please advertise your email address and

complaints site better. Thank you.

Dear Felix

My philosophy and creative writing colleagues and I almost choked on our Earl Grey tea and cucumber sandwiches as we read in Felix that our humanities subjects are totally shunned by the College.

All best

REDACTED

Art Historian

Imperial College

Hi,

I've been purchasing large boxes of Felix mixed Fish variety for my cat for many years.

Never been a problem ever.

Last box I purchased from Iceland last week.

I always discard actual box, and store pouches in my

cupboard, to space save.

As per photo sent, 4 pouches total empty and sealed!

To be honest I was not going to bother contacting you, but

at the end of the day I'm 4 pouches down on food.

I look forward to your response and hopefully resolving

this issue.

Many thanks

Angie.

COMMENT The Kill-Some-Time Culture

Wang Guo Science Writer

here there is life, there is death. In my view, modern societies are living without thinking carefully about how they spend their time. The amount of time we spend doing things we do not like but are forced to, or over-thinking about elements outside of our control is unimaginable. People live their lives as if they are immortals, forgetting that their time is limited.

Death is the end of all biological functions, e.g reproduction, nutrition and relation, forever. In the case of a bacterium, death is when that single cell dies. In our case, as multicellular organisms, it is defined as brain death if you lose an arm, but your brain keeps functioning, it is not considered death. Brain death means that all memories and skills you have obtained throughout your life will be gone forever; not only will all the sadness and sorrow, but also joy and love will be gone forever. Your body will never move again and just be an empty shell. Death is the utmost expression of indifference towards the environment, of complete stillness and emptiness.

It has become increasingly normalised to say things like "I will be looking at *Instagram* for 10 min while commuting". The phrase "I am just gonna kill some time" has become alarmingly innocent and innocuous. We spend countless hours going from one YouTube video to another only to emerge having learnt nothing, gained nothing and having had no meaningful experiences. We have a mentality of brainlessly wasting time in anticipation of something new. We spend copious amounts of energy on irrelevant things like Instagram just to "pass time", even though we will forget these useless activities instantaneously.

Why do most people love scrolling through social media or watching *YouTube*? Because it is simultaneously effortless but stimulating. The human brain is designed to remember the activities that were challenging for itself, those that require you to push yourself to your limits. *Instagram* is just scrolling down the screen, occasionally giving



a "Like" here and there. It requires no degree of effort, but it gives you enough little bursts of dopamine and serotonin for you to get addicted.

We don't get paid for using social media, but can for writing a book, developing a new cure for diabetes, among other achievements. Our society rewards people who do hard things because not everyone is willing, or able to sacrifice instant gratification for longterm reward. You could easily spend your "Instagram" time reading a book instead, increasing your intrinsic value, or having quality time with your family, bringing more authentic joy. The list of meaningless things we do every day is almost infinite: Instagram, YouTube, small talk, video games, TikTok, etc. However, some of these activities are useful when done so in moderation. You can learn a lot from YouTube provided that you choose informative channels such as Kurzgesagt, and small talk is essential for bonding. I am not in favour of being ultra-productive all the time - there will be times that you will just want to watch some Netflix on the couch. What I am against is the systematic way we waste our time without even realising almost every day.

I think one of the main reasons people spend their time so carelessly is the lack of awareness of the inevitability of death. The general population avoids thinking about death because they are afraid of excuses such as "It is too far away," or "I am still young". However, they do not realise that our bodies are in a process of constant degeneration. Our hearts, muscles, brain, etc. are deteriorating NOW, not just 40 years later. Each day, a new cancer cell appears in your body and the risk of that cancer cell becoming a life-threatening disease increases exponentially with your age. You have a 50% chance of getting cancer at some point in your life. Another fact to remember is that people live an average of around 80 years in developed countries. Therefore, if you are 20 years old, you have already lived a quarter of your life. Well, you can still say that you have 60 years more! But that is tricky because the quality of life of your last 20 years will probably not be the best. Chronic diseases will emerge rampantly. One in three people older than 65 years have diabetes. Mobility restrictions will be common. Heat stroke during the summer days will be a serious threat. You would no longer be able to eat whatever you want. Therefore, in reality, you only have 40 years of good health left. Some people still stay in good health in their 60s, 70s and even 80s, but if you go to the statistics, the majority will suffer from chronic diseases and general body degeneration. Therefore, are you going to spend that time with people that you do not care about

dying - who isn't? They usually make excuses such as "It is too far away," or "I meaningful relationships and work am still young". However, they do not realise that our bodies are in a process of constant degeneration. Our hearts,

Credit: Envato Elements



Edited by: MARIE MORI

ENVIRONMENT

Permanent BST: a bright idea or a dim one?

Zanna Buckland

Books Editor

ast week, Professor Aoife Foley of Queen's University Belfast spoke to The Guardian about how leaving the clocks on British Summer Time (BST) instead of reverting back to Greenwich Mean Time (GMT) could save us all money on energy for heating and lighting in the winter. This year, autumn daylight saving happens on Sunday 30th October.

Daylight saving is when the UK's time zone goes back by one hour in the winter—this means there is more sunlight in the morning hours and less in the late afternoon and evening. The Daylight Saving Time (DST) time zone itself is equivalent to BST. Around 70 other countries also follow this in spring and autumn with respect to their own time zones, many of these are in America and Europe. The practice of bringing clocks forward by an hour in summertime originated in the UK in the early 1900s, when people began to notice that in summer, daylight hours weren't being utilised as effectively as they could

AN AVERAGE
HOUSEHOLD
COULD SAVE
£1.20 ON ENERGY
PER DAY UNDER
DST

be. One person who was particularly responsible for advocating the idea of changing the UK's time zone in summer was an English builder named William

Willett.

Willett wrote and published a paper called 'The Waste of Daylight' which detailed his observations of people wasting their time in bed in the mornings and his logistical ideas about implementing daylight saving. Unfortunately, Willett died in 1915, a year before daylight saving practices were actually started. Germany and Britain began observing it in 1916, as a method of conserving energy from coal during World War One. Aligning sleep schedules to more closely match sunrise and sunset times meant less coal was required

However, is important to that note the idea of daylight saving cannot be attributed to individual, it being a notion that many people around the world had considered in that era. In 1895, New Zealander George Hudson (an entomologist) wrote a paper for the Wellington Philosophical Society on the benefits of daylight saving for his insect collecting activities.

for light and heating.

Daylight saving was implemented in even greater measures during the Second World War, and in response to fuel shortages in 1947, with what was called 'British Double Summer Time' (BDST). Instead of going forward one hour for summer, the clocks went forward two hours, so, for example, if the sun was rising at 4am on GMT, it would now be rising at 6am (GMT+2). The original GMT period in winter was

then placed on regular DST (GMT+1).

This all sounds confusing, but essentially the logic was to maximise the use of sunlight during commercial and sociable hours in order to reduce energy usage and waste. This was useful in the war periods when everything was being rationed, from tyres to tea, and a large portion of the country's resources

were being redirected towards military purposes.

The British Government trialled using DST continuously for three years from 1968 to 1971, arbitrarily calling it 'British *Standard* Time'. During this period the clocks remained on GMT+1, and various assessments of public responses were carried out. The most prominent aspect of the Government's 'comprehensive review' was data collected by the

Department of Transport on road accidents, as one of the major consequences of daylight saving is that there is more daylight for evening travel and less in the morning. It was found that overall, the number of people involved in serious accidents (deaths and severe injuries) decreased by around 11% despite there being an uptick in morning road incidents. It is theorised that low-light accidents are more likely to happen in the evening due to factors such as drivers being more tired after work, and people travelling to different places for social engagements or running errands as opposed to the direct journeys between home and school or work in the morning.

The experiment was completed by 1971 due to an overwhelming majority of MPs voting for its discontinuation. There was also some public resistance, and both MPs and citizens from the northerly parts of the country (particularly Scotland) spoke about the

ENVIRONMENT

detrimental impact it had on children's safety when having to walk to school in the dark.

Energy conservation—the primary benefit of implementing permanently—is an especially relevant topic at the moment, with both energy bills and the climate crisis weighing heavily on people's minds. Professor Foley, who studies and advises on renewable and sustainable energy, has estimated that an average household could save £1.20 on electricity per day under DST. While less artificial light would need to be used for working in the afternoon, there would also be less need for heating, as buildings would start to lose the sun's heat later in the day too. The same energy savings that would reduce a household's bills would also result in lower carbon emissions from those providers still operating with coalbased power. However, this proposal has been brought to Parliament and rejected many times before, so it is unlikely that it will get passed any time soon, particularly in the country's current political state (we have yet to see what Rishi Sunak has in store for the UK's climate and environmental policies).

Ontario, Canada was the first place in the world to adopt the DST in 1908, and is now one of the first states in Canada to move towards permanent DST. Iceland adopted permanent DST in 1968, as the extreme difference between summer and winter daytime renders daylight saving slightly nonsensical. The European Union and the US have both considered remaining on DST in the last few years, but neither has fully halted the turning back of the clocks yet. A major factor in this is the vast range of the two regions, and discrepancies in the preferences of their constituent states or countries. Similarly to Scotland, most Northern regions are opposed to constantly being an hour ahead, while Southern areas tend to be more amenable to the idea. Either way, it does not appear to be at the forefront of anyone's current political

If DST were to be implemented permanently, it is estimated that less energy would be used for light and heating during the day, leading to lower household costs and environmental impact. The change in time zone has

been associated with a spike in physical and mental health issues, such as heart

The decrease in the number of people involved in serious accidents during the three year experiment

attacks, strokes,

seasonal depression, and circadian rhythm disruption. As discussed above, there is also a link to lower rates of road accidents, particularly in the evening rush hour. Furthermore, arguably more work is now done during the afternoon and evening, at least in the corporate sector, and it would be beneficial to have more daylight in that period of time.

On the other hand, jobs that begin operating earlier in the morning, like farmers and rail workers, as well as people driving in the morning, could suffer from having the sun rise later—there would then be an unfair negative

impact on blue collar jobs. There is also the consideration that children would spend more of their morning travel and lessons in darkness— although this could be remedied by also shifting school hours forwards throughout the year. People living in the north of the country would also be more disadvantaged by the transition than others.

I am only the most recent in a long line of people who have written about whether or not our country and others should remain on DST year-round. It's surprising how seemingly mundane matters can have such an impact as to be continually discussed and revisited, but every year the question comes back round with the changing of the clocks. Who knows whether a policy change will ever be implemented in our future, among all the other policies being considered, but at least you now have the power to lecture your flatmate on the pros and cons of changing our time zone every six months!

What YOU can do about the climate crisis

Charlie Lindsay

Environment Writer

By the end of this century, more than a quarter of the population could be living in places where the average temperature is 29°C, which today only scorches the Sahara. Farming in these regions would be impossible, forcing one billion people living in rural regions to migrate. Due to resource constraints, those still living in cooler climates might be forced to close their borders, potentially resulting in conflicts. Thankfully, there is still time to turn things around.

The media suggests you can combat the climate crisis by donating to chari-

ties, joining climate rallies, and reduc- of these 3 ciring your carbon footprint. Whilst these cles; note help, this one-size-fits-all advice wastes that t the individual's unique talents; We need these people with very different skillsets to at- c a n tack this crisis from all angles: research- b e ers, entrepreneurs, policymakers, teachers, journalists, community organizers and activists. In her TED Talk, Elizabeth Ayana Johnson suggests that, to find our role, we each should create a Venn diagram with three circles for three questions: 'what needs doing?', 'what brings you joy?' and 'what skills do you have?'. The aim is to then spend as much time doing things that are at the intersection

of these 3 circles; note that these can be etime spent a t

ENVIRONMENT

or during your free time. The remainder of this article aims to help you answer these three questions in the context of combatting climate change.

Now, imagine a doughnut; this is not the sugary kind, but instead a diagram created by economist Kate Raworth to illustrate an answer to 'what needs doing?'. Raworth states that 'we must strive to meet the needs of all people (be above the doughnut's inner ring) whilst staying within the planet's 9 ecological boundaries (be within the doughnut's outer ring)'. To exist in the sweet spot of the doughnut, there are many possible strategies like implementing carbon-free energy solutions and restoring biodiversity. However, one overlooked strategy is stabilizing the global population; perhaps the most effective way to do this is through empowering women. In Sir David Attenborough's 'A Life on Our Planet', he states that 'wherever women have the vote, wherever girls stay in school for longer and wherever women have access to good healthcare and contraception, the birth rate falls.' This is because when women gain freedom of choice, they choose to have fewer children. Austria's Wittgenstein Centre found that if the education systems of the poor-

WE MUST STRIVE TO MEET THE NEEDS OF ALL PEOPLE WHILST **STAYING WITHIN THE** PLANET'S 9 **ECOLOGICAL BOUNDARIES**

est countries improved as quickly this century as the richest countries did last century, we would reduce the forecasted

peak human population from 11 to 9 es that required by the challenge. billion! Fewer people mean less carbon 4: Your attention is singularly focused. emissions and in improving education, 5: You stop being self- conscious. If you are yet to find a we work towards creating a safe and just future for all; 'flow' activity, considwe move closer into er learning a new skill which inthe doughnut on both fronts. corporates There are these five therefore compo-What brings you incredinents; ble reasons to have **IOV?** be exfound s u c h What needs **What skills** doing? do you have?

sical-1 y motivatto act, but often the main barrier is a lack of intrinsic motivation.

As combatting the climate crisis is a marathon, not a sprint, it's important to fill your time doing things which intrinsically motivate you and bring you joy, or more specifically, 'flow'. In his book, Mihaly Csikszentmihalyi defines 'flow' as 'a state in which people are so involved in an activity that nothing else seems to matter'. The experience itself is so enjoyable that you do it for the sheer sake of doing it, even without the benefits of money, praise or recognition. Csikszentmihalyi conducted over 8,000 interviews and found five components which contribute to a flow experience: every 1: At moment,

clear you have a goal. 2: There is regular feedback as to how wellyou are progressing towards this goal.

skill

level

tivity, yourself how the activity itself or the skills gained from it can be applied to tackling the climate crisis.

Perhaps it is therefore better to rephrase 'what skills do you have?' to what skills could you have after leaving Imperial?'. Firstly, these may be entrepreneurial skills like business management; Attenborough hopes for a sustainable revolution in which innovators create products that reduce our impact on the

The time that the average person spends working

planet. A new society called Climate Entrepreneurs has been created to help inspire new ideas and connect you with sustainable start-ups. Imperial's Enterprise Lab also hosts the Venture Catalyst Challenge, which can help fund your ideas. A previous winner is Salty-Co, who create biodegradable and

carbon-neutral textiles as an alternative to the norm, which uses up vast amounts of land and creates swathes of plastic pollution. Secondly, these could be skills of lifelong importance like critical thinking and communication, which could be improved by joining societies like Debating and Model United Nations. Lastly, these may be skills you gain from your degree; A mechanical engineer could design affordable heat pumps, a materials scientist might create a low-carbon alternative to concrete and an elec-

trical engineer could implement microgrids for renewable energy production. The average person spends 80,000

hours working; if you can fill this time doing activities which are at the intersection of the Venn diagram, which simultaneously moves us closer into the sweet spot of the doughnut, brings you joy, and matches your skills, you could massively help to avert a climate catastrophe. So, fill out the Venn diagram and better yet, spread the word and encourage those around you to do the same.

Environment Writers Needed!

Interested in climate change and sustainability? Email environment.felix@imperial.ac.uk to submit an article to be featured in Felix!

Community & Welfare Forum

Cost of Living

Tuesday, 1 November 2022 18:00 - 20:00

Beit Quadrangle Union Building, MR5

Come along for some refreshments and an open-ended discussion on how the Union and the College can best support students!





Read the manifestos online now at:

imperialcollegeunion.org/manifestos

Voting opens at noon on

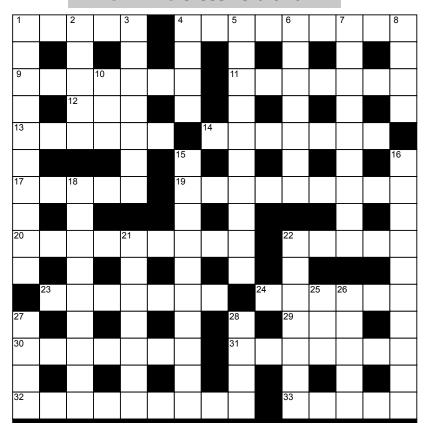
MONDAY 31 OCTOBER



Nonogram



CRYPTIC Crossword Grid



CRYPTIC Crossword Clues

Across

1 2 4

1 5 2

- 1) Basic action to slice prickly plants. [5]
- 2) Co-dependent boys I'm playing with to induce calm, initially. [9]
- 9) Yet drag forcefully into stage production. [7]
- 12) Cry when you take the rubbish back out of the hole. [3]
- 13) Seafood enjoyed through a tube? [6]
- 14) Collected a crude report. [7]
- 17) What you'll be if you don't write this. [5]
- 19) Venue of the band this coming Monday? [9]
- 20) Weird toffee you get in a string of parking lots.
- 22) Count degrees from 1 to due East. [5]
- 23) Got excited when new scythe cut out one in the constabulary. [7]
- 24) In agreement, almost, that we'll make a difference. one's game plan. [7] [6]
- 29) Cosmetic procedure to remove cubic shape. [3]
- 30) Frenzied whale in a punctured vessel. [7]
- 31) Note 50 amps at last ion excitement. [7]
- 32) Clash with angry Pole over meat. [9]

2 1 2

33) In the end, a thousand people speak it. [5]

Down

- 1) Material that will endlessly catch on low-back threads. [6
- 2) The students are out of order! [5]
- 3) I see a funny looking water bird on that floe. [7]
- 11) Spice up Imperial College building for a point. [7] 4) Pesky English emigrants on the island. [4]
 - 5) Tim saucily dances to show his sense of rhythm. [10]
 - 6) Devastating fire under the mad emperor f***in' about. [7]
 - 7) At last, limit the slower orator's poor sense of brevity. [9]
 - 8) I heard you sent the money. [4]
 - 10) Took up the softness of the duvet I received. [3]
 - 15) That dessert on your cheek: case-in-point messiness!

 - 17) In the exam, I nail almost everything related to the colon. [10]
 - 18) Mix in cubes of chopped taro to hide the taste? [9]
 - 21) Sensational number 1 hits end up being about some-
 - 22) Thesis about weathered graves is just a bunch of hot air.
 - 25) Half-potent psychoactive. [3]
 - 26) Assumption of max. 10 exchanges. [5]
 - 27) Comb back top layer once, looking fly. [4]
 - 28) A kiss on your king's chest. [4]

Points

Cryptic crossword

5 pts

Nonagram

3 pts

You can send your solutions to Puzzles.felix@imperial.ac.uk before Wednesday at 12:00!

Previous reverse cryptic answers DEW = condensation, sounds like (said) "due" = should happen soon

- S = sleepyhead, bed = COT; S in COT = COST = burden
- Stern lip = anagram (snapped) of SPLINTER = sharp one

Nonogram	2	2 2	2	6	5	7	6		2	3	13	13			3	11	3	3		6	4	5	5	2	3	3							
	4 8	8 12	14	9	10	3	3	7	3	1	1	2	14	16	13	2	1	1	7	3	3	10	9	13	11	8	4						
2 6 10 13 15 15	5 3	3 3	2	2	1	8	6	5	5	3	2	1	4	4	4	1	2	3	5	6	8	1	2	2	3	3	5	15	15	13	10	6	2
2																																	
2																																	
4 2 4																																	
9 2 8																																	
2 4 5 4 3																																	
3 6 6 5 4								T																									
4 6 8 5 5																																	
4 7 8 6 5																																	
5 5 12 5 5																																	
4 5 10 5 4																																	
5 4 8 4 5																																	
5 3 6 3 5																																	
6 7 10 7 6																																	
6 7 10 7 6																																	
5 7 10 7 5																																	
5 5 6 5 5																																	
4 6 4 6 4																																	
5 5 5 5																																	
4 6 6 4																																	
5 8 7 5								ightharpoonup																									
5 6 7 5 5																																	
4 6 5 5 4											\Box																						_
3 6 3 5 3								_																									_
20																																	

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

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





Felixonline.co.uk

Top 4 things Rees-Mogg is bringing back now that Boris is out of the question

Not wanting to waste a good slogan and all the BBB stickers he had printed, sources close to Jacob Rees-Mogg, the former Business Secretary and notorious ladies man has decided to turn his attention to other important campaigns close to his heart.

Bring back bullying

Stopping bullying was all well and good but it has gone too far. There are people who are far too comfortable expressing their 'authentic' selves who need to be told that their true self is a dick and to go and have a long hard look in the mirror. JRM is investigating whether the NHS could take on the responsibility, giving arseholes an accelerated three week course of name calling, psychological torment and hair style criticism.

Bring back back hair

JRM has long felt that the modern crusade against body hair was a Marxist attack on the male form. He has a particular affinity for back hair, describing his nanny's back hair as 'soft as the Lethe' and telling reporters that he has fond memories of running his hand through it during his childhood. Unfortunately, the feminisation of men has led many to trim or hide away their natural gifts. JRM is encouraging all men to join him in a Back Power March on Parliament square on the 25th November.

Bring back burgundy passports

An eternal traditionalist and independent thinker, JRM is reportedly furious at the change in the colour of the British passport. He has written several letters to his MP, declaring that Brexit was an outrageous

infringement of the natural rights of Britons to travel far and wide and was clearly orchestrated by a cabal of socialist 'wokesters' who hated Britain.

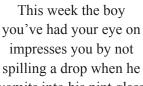
Bring back bubonic plague

JRM has reportedly expressed frustration at the poor quality of the pandemic that the current generation have been able to come up with, declaring Covid 'a bout of the sniffles' that couldn't compare to the pandemics of yesteryear. In recognition of the controversy of his position, he has volunteered to be injected with the disease live on television in order to show the youth how a real man gets sick.



ARIES

you've had your eye on impresses you by not spilling a drop when he vomits into his pint glass





LIBRA

This week your Diwali celebrations are cut short when you're told that you cannot set fireworks off the tip of ALERT



TAURUS

This week you raise the price of your event to separate the wheat from the chaff



SCORPIO

This week you're 'let go' from your philosophy elective for saying the pen is meatier than the sword



GEMINI

This week you deliver another blow to Putin by ordering a White Ukrainian at the bar



SAGITTARIUS

This week you feel the weather is exactly one degree too warm for autumn and wonder who let the weather go to university



CANCER

This week Suella Braverman really deserves the role of Home Secretary



CAPRICORN

This week a worm turns into your girlfriend



LEO

This week you start a boycott of bottled water to try to combat the increasing prevalence of Evian Flu



AQUARIUS

This week you wonder what ACC actually stands for



VIRGO

This week the Somerset Gimp Man pays you a visit



PISCES

This week you wonder "maybe Xi's born with it, maybe Xi's seized power for an unprecedented third term"



POETRY OPENING IN SUPPORT OF THE NSPCC

FEATURING ELLA DORMAN-GAJIC



THURSDAY 10 NOVEMBER
7PM-10PM
TICKETS PAY-AS-YOU-CAN
ALL PROFITS GO TO THE NSPCC



Retro Cafe 2.0

241 Munster Rd, London SW6 6BS

Contact:
Jiaying Liu
NSPCC Volunteer
Poetry Night
Coordinator
+44 (0)757 027 7838

Book your tickets here!

Or search for "Poetry Open-Mic in Support of the NSPCC" on Eventbrite



Disclaimer: this is a supporter-led event, instead of an NSPCC-led event. All tickets sale profits will be donated to the NSPCC (National Society for the Prevention of Cruelty to Children) to help fight against child abuse.

Edited by: Jonah Hewett

Film Review

21 Angry Imperial Students Watch 12 Angry Men Film Society journalist Caleb Eferakorho presents a review of their most recent film screening



Caleb Eferakorho FilmSoc Reviewer

Angry Men is more than just your run-of-themill court drama, but rather an exploration of the shortcomings of the American judicial system, as well as the misuse of power, prejudice, and the devastating effect of groupthink and the power one has to dismantle it.

The film was written by Reginald Rose and directed by Sidney Lumet, and it takes place in a New York City courtroom where twelve men deliberate over a trial to decide whether a Puerto Rican teenager with a criminal record, and supposed evidence supporting his guilt, should face the death penalty after being accused of murdering his abusive father.

Reasonable doubt

Apart from the opening and closing scenes, the film takes place in the jury deliberation room, where the protagonist pokes holes in the prosecution's case. The main protagonist is Juror #8, and he leads the charge to prove that there is a reasonable doubt in this case, while taking the audience on a journey with him as he, along with fellow jurors, unravel the prosecution's case. In doing this, the film leaves us with no definite conclusion as to whether the teenager did it, but it leaves us with reasonable doubt and allows us to question whether he did it or not, treating the audience as if we were jurors, and by not revealing the truth, we are also left uncertain and left with reasonable doubt.

film and "below eye level" in the final act, which had the effect of the walls closing in and the ceiling lowering, used in order to not only make the jury trapped, but also treat us as if we are entrapped with them.

"A true anatomy of murder and of the human impulse to defend their values" - Stefano Veroni FilmSoc Member

The dismantling of groupthink and the willpower

The term "groupthink" was first mentioned in George Orwell's 1984, and it is when you conform to group ideals to thrive within that group. The idea of a jury inspires groupthink, with the need for a unanimous vote suggesting everyone should think the same. Juror #5 is intimidated at the start by Juror #3 and #10. However, it is the willpower of one man to go against the group that drives the dismantling of groupthink. The film masterfully presents this dismantling in a believable way, from the evidence presented by the switchblade used in the murder, as well as the reliability of the witness statements, all the way to the defendant's thought processes. With each step, more and more jurors have their minds changed.

Interestingly, the director revealed that he shot the Prejudice and the shortcomings of juries in the American judicial system

One standout scene is in the final

act, where Juror #10's racial prejudices are fully exposed: "I've lived among them all my life; you can't believe a word they say."

Juror #10 allows prejudice to cloud the discrepancies the jurors present to him, leading to a fit of rage. This then causes Juror #5, who grew up in "slums" and understands prejudice, to finally stand up to him (literally), and one by one, the jurors follow suit and stand up to face away from him. The silence says it all. A truly powerful scene, highlighting the shortcomings of the American judicial system, as people with prejudice can slip through the cracks of the judicial system and affect the outcome of a trial.

The misuse of power and the planting and payoff of Juror #3

The power of the jury is established even at the start of the film, where the jury is standing and the defendant is sitting. The levels show the power the jury has. This film does very well to explore the misuse of power, from Juror #7 switching his verdict from guilty to not guilty just to leave the proceedings, to Juror #3 projecting his feelings about his son into the case. The film "plants" his thwarted relationship with his son as a key motivator in the case: "When he was 16, we had a fight. Hit me on the jaw. He's a big kid. I haven't seen him for two years. Kids. Work your heart out."

> "You have to see it to believe it" - Liam Bagole FilmSoc Member

The juror clearly sees himself and his son in the case, as that is the main reason why he can allow the case to go to not guilty; he sees the case as what could be if his relationship with his son is not repaired, and if he does not accept responsibility. Interestingly, the thing that kept him stubborn was the very thing that caused him to change his vote to not guilty; his son, and that is the "payoff."

I highly recommend that you watch this film; it is just that good! This film has a simple, yet wonderfully done plot that keeps you on your toes for the whole 96 minutes. A must watch!

Film Society have screenings every Thursday at 6pm, showing a plethora of hand-picked films from classics to comedies. Find them on instagram @filmsoc.ic

to find out more.



Edited by: Joe Riordan Tara Pal Chaudhuri

Music

Album Reviews

Arctic Monkeys Enthral with their Seventh Studio Album – 'The Car'

How strong is the pull of funk and string from Sheffield quartet's indie rock origins?

Written by Tara Pal Chaudhuri Music Editor

However, those

here are many words to describe the sounds Arctic Monkeys have produced over their two-decade rock music career. Their debut album, Whatever People Say, That's What I'm Not (2006) defined British garage rock from the noughties, checking all the relevant boxes: gritty, disillusioned teenage rants, Strokes and Libertines-inspired post-punk revival riffs, danceable hits that can find homes in indie clubs, and the unmistakable Northern accent that the group made the executive decision to retain. This was the band that achieved internet fame in 2006 having circulated a few free CD demos literally "beneath a boardwalk", finding their music skyrocketing to number one on UK charts. This was the band with Matt Helders, who only took up the drums only because the rest of the band had picked up guitars.

who

matured along with the band know that with conseceach album, the original punk rock angst of their sound was slowly being traded in for sounds with a softer edge. The reverbed and ambient timbres heard in Humbug (2009) had a dark and almost sinister undertone that relied on orthogonal analogies, instead of the on-the-nose narrative that separated the band from other garage rock bands in the first place. Although it didn't perform as well, Suck it and See (2011) gave the band a chance to flirt with contrastingly sweeter, guitar pop elements - airy, sparkly guitar with an understated bass line, and a version of lead singer, Alex Turner, that was very sing-alongable. AM (2013) reserved some of that romance for some sultry, soft rock numbers, while cashing in on Turner's distinctive brand of nonchalant seductiveness and dialling down Helders' inventive drumming.

With the occasional heart-in-my-hands poetry, the Arctic Monkeys discography took a detour upon the arrival of *Tranquility Base Hotel & Casino* (2018) – a space, lounge concept album with an in-

strument no one thought to hear on an Arctic Monkeys record – a piano. Turner experimented with Bowie-influenced voice modulation in vocals that clung loosely to the album's tonal backgroud. It is this jazz-tinged and instrument-heavy sound that the Arctic Monkeys have brought forth to their seventh, and most recent studio album – *The Car.*

The album opens on the first single released by the band, 'There'd Better Be a Mirrorball', immediately setting the tone for the rest of the album. A blossom of ominous string arrangments means the band definitely pursued the path their previous album took - an exception to which would be 'Sculptures of Anything Goes' whose haunting 80s synth sound can be attributed to guitarist, Jamie Cook, putting a drum machine through a Moog synthesiser. Not to mention, the occasional guitar twangs throughout the album that give it a mature, yet funky touch. But orchestras introduce dynamic, in a controlled and sophisticated way - a way that was modestly explored in Turner's other band with Miles Kane, the Last Shadow Puppets, in their last album, Everything You've Come to Expect (2016). Although, the band occupies more of the spotlight in this album than in its predecessor, I would agree that criticism for Tranquility Base Hotel & Casino still stands: Turner's vision for an album still reigns supreme over this record, for better or for worse. Turner's voice has grown more depth -

not deeper, just depth. Listening to Arctic

Monkeys is always an exercise in try-

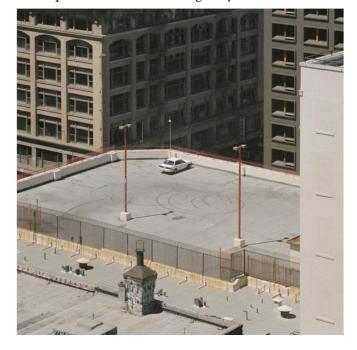
ing to understand what about Turner's voice is so incredibly appealing on this record. Is it the seductive eyebrow-raise in a leather jacket in AM or the crooning meanders of Tranquility Base Hotel and Casino? Turner uses this album, instead, to propound his falsetto, especially in 'Body Paint', while trying a raspier, whispy sound in the album's second single, 'I Ain't Quite Where I Think I Am'. Much like his live performances (even of old material), Turner's jazz-inspired vocals hang tenuously from the frame of these orchestral symphonies, because, after all, the focus of the album has successfully shifted to the instrumentals more than his (still seductive) voice. Tonally, this album signals a complete departure from their youthful unrest that translated into sharp guitar

riffs and frenzied rhythms. Turner has stopped sounding like the cocky try-hard he was beginning to impersonate in 2013, around the release of *AM*, and has certainly moved past describing indie club bouncers and underage drink-



View online here!

ing in a fraught, yet blasé voice from 2006. The album-opener this time is nostalgically romantic – even if



it may be about love past its prime, the romance comes more from the simple pendulum of synth and string that backdrops Turner's voice. He sings about the uncertainty and insecurity that comes with

being a middle-aged rocker with a reputation he simply cannot live up to anymore in 'Big Ideas' This album is the big idea he enticed the band with, but now that he stands with the orchestra at his disposal, the excitement is replaced by consternation. Even through interviews, the band has drawn tenuous comparisons to songs from The Car to those from AM, the differences in their styles the similaries. And isn't that

despite

greatly outperforming the similaries. And isn't that the whole point? The instruments on the album soak up the band's tonal shift without hesitation, even if Turner and the rest of the band might take a moment's thought before accepting the same. Despite this, the album definitely takes a more honest look at where the band are right now, both sonically as well as in their lives, never looking at events – only at the emotion.

Edited by: ZANNA BUCKLAND

Event Recap

Notes from the London Literature Festival

Sophie Reck Pointon Books Writer

I ave you heard about this? By the time this edition is printed, the London Literature Festival (LLF) will almost be over (running as it does from the 20th to

30th October), but I can offer you the consolation of knowing to go next year.

If you haven't heard of the LLF, have you at least heard of Rob Delaney, Malorie Blackman (Noughts and Crosses), or, I don't know, Greta Thunberg?

All of these were part of the line-up for this year's events, and past speakers have included Margaret Atwood (The Handmaid's Tale), Richard Dawkins (The Selfish Gene) and Hilary Mantel (Wolf Hall). That's not bad, take it from

I went to one of their free events (of which there are quite a few), called 'Creative Future Writers' Day'. This event involved a series of talks and discussion panels in the Purcell Room at Southbank Centre, along with an exhibition of literary organisations, publishers, and societies set up in the foyer just outside. It was a fantastic experience. Being able to hear first-hand advice from people who know the industry inside out was something I'd never dreamed of being able to do. Looking

back over my eight pages of notes, I have to highlight the insights into indie presses that the speaker from Out-Spoken Press, Anthony Anaxagorou, shared with us.

Anaxagorou painted a vivid picture of a one-and-a-half-person team so enthused by their love of words and GO NEXT YEAR

deserves to be seen, published. There are people who open their emails in the morning looking for 'fresh, unique voices' and poetry 'they couldn't live without'. Is that how you feel when you wake up? If so, then this

might just be the career for you.

The audience broke into applause by the end of his speech, so infectious was his energy. The wonderful dynamic between the panellists continued throughout the day. Everyone kept running overtime, and the quality of answers to questions from the audience was brilliant as well.

However, unfortunately the programme was better than the reality: the Director of Faber Acad-

emy had tonsilitis and the absence of the Associate Editor of Dialogue Books wasn't even mentioned. In case that doesn't mean much to you: Faber Academy is one of the better creative writing schools, and Dialogue Books has just become part of Hachette, one of the 'Big Five' in the publishing industry.

I learnt about the distinctions between pamphlets, collections, and anthologies, shared a room with Joelle Taylor, the 2021 winner of the T.S. Eliot Prize for

> Poetry, and accumulated an infinite number of free poetry booklets. I was also introduced to this quote from Robert Graves: 'there's no money in poetry, but then there's no poetry in money,

You could hear the appre-

language that they work at all hours to get poetry that ciation in the applause when the day finally wrapped up. Many people in the audience had experienced getting their work rejected, but today had been treated with consideration by experts in their field.

> If you are reading this and even vaguely interested in what advice was given, here are three of the top tips I gathered:

1. QUALITY.

Go over your work again and again - don't discredit yourself.

2. RESEARCH.

Address your cover letter to the agent personally (behind the big names of Penguin and Harper Collins are actual human beings!).

3. COMMUNITY.

Writing is obviously a solitary pursuit, but you need connections. (There was actually a question from the audience asking if getting a job in the publishing industry would be a good way in for getting their book published, but that was shot down pretty quickly. Nonetheless, it's food for thought...)

And poets! Submit to indie presses, go to Open Mic nights, get involved in the scene, join Poetry Society! I did temporarily, before I found out there's a Writer's Society at Imperial, so here's some free advertisement for them.

I think it's appropriate to mention here that Imperial, STEM-orientated though it is, has at least two major connections to the creative world: the first ever Queen performance happened here (Brian May studied Maths and Physics) and when Imperial was still the 'Normal School of Science', H.G. Wells was one of its pupils.

In conclusion: you should never stop dreaming.

I CAN OFFER YOU

THE CONSOLATION **OF KNOWING TO**

Book Review

ResearcHER: For a Flash of Inspiration

Alexandra Cazacu Books Writer

Promising to 'smash stereotypes' about what research means and who research and the state of the means and who researchers are, the Women in Academia Support Network's ResearcHER is a collection

of short autobiographies written by female researchers across the globe. It's compiled and edited by three members of the aforementioned network, themselves also working in research. Recently released by Emerald Publishing, each of its chapters is written by a different

researcher working in a variety of fields spanning from engineering and biology to social sciences, and even silversmithing.

The book is relatively succinct, its chapters format-

An added 'Activity' section per chapter gives ResearcHER a fun and unique flair by describing thought exercises that anyone can do to participate in the chapter's described field of research. It thus serves to highlight the point that anyone can work in research, although it does seem that the book is aimed at much younger audiences - an impression furthered by the simplistic writing style used in most **RESONATE WITH**

Throughout, ResearcHER manages to present an ample breadth of experiences, owed to the chapters being written by researchers of many different socioeconomic backgrounds, ethnicities, sexual orientations, and gender identities. The book explores how their identities and lives have shaped them both personally and professionally, very often influencing their decisions to become researchers or their choice of research field. We see, for example, how one PhD candidate's Nigerian background has inspired her to study family planning in sub-Saharan Africa, or how another scientist's experiences with terrorism have motivated her to research trauma in relation to terrorist attacks.

Many of these researchers live with disabilities or neurodivergence, and do not hesitate to talk about their struggles with the prejudice and lack of accommodation that often come hand in hand with these conditions. In general, ResearcHER does not shy away from mentioning difficulties that might interfere with a career in research – from illness to parenthood to poverty and abusive relationships - but it always remains

ted in a way that constitutes a clear and concise read. appropriate for general audiences and does not go into graphic detail.

SOME OF THE

EXPERIENCES

PORTRAYED

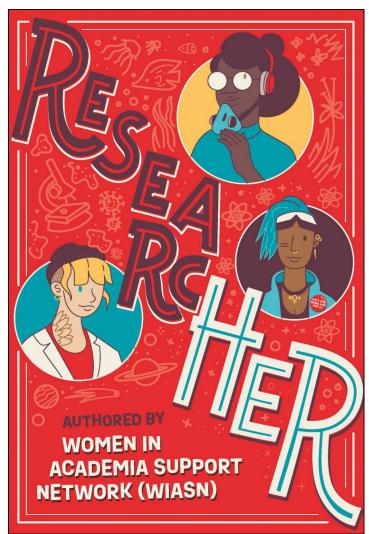
ME DEEPLY

Unfortunately, the book appears to have a few editorial issues, in big tonal shifts between some of the chapters, and the occasional clumsy sentence structure and erroneous use of punctuation. While the individual authors are not professional writers and can't be expected to pro-

duce a perfect work of literature, there are several oversights on the part of the editors which sometimes interrupt the flow of reading, and, while not necessarily a major issue, can be irksome. The emphasis on the fact that "not all research happens in a lab", omnipresent in the introduction and the book description, also reads as a bit dismissive of studies that do necessitate lab work, although this attitude is fortunately not present in any of the chapters.

Overall, however, ResearcHER manages to do what it sets out to do: prove that anyone can become a researcher, regardless of their circumstances, and that diversity in research is crucial in providing new ideas and avenues of thought. As a woman in STEM and an aspiring researcher myself, some of the experiences portrayed resonate with me deeply – be it that of a biologist who is also passionate about history and culture in her spare time, or that of an immigrant woman enduring culture shock as she transitions between education systems upon

moving to the UK as a teenager. With the variety of identities and backgrounds of the researchers that have written for this anthology, any reader will be able to find a story or experience to relate to. If you have any school-age female relatives considering a career in research, this might just be the read for them.



Author Interview

Speaking to Dr. Kelly Pickard-Smith: Unorthodox Research Careers and Smashing Stereotypes

Title: ResearcHER Publisher: Emerald Publishing Group

Zanna Buckland Books Editor

I had the pleasure of a conversation with Dr. Kelly Pickard-Smith, one of the co-editors of the *ResearcHER* title. Her journey to a career in research has been long and filled with a variety of internal and external barriers. As a young girl, she was faced with heavily stereotyped career advice that didn't properly prepare her to follow her goals. Now a Culture and Community Research Fellow at the University of Manchester and Co-Founder of the Women in Academia Support Network Charity, Dr. Pickard-Smith strives to educate and raise awareness about the disparity between women and men in the research industry. The network also aims to support young girls and teenagers who want to get into research careers, as well as providing a platform for women around the world to share their stories. Read the full interview overleaf:

BOOKS

Where did the idea for the book come from?

The idea for ResearcHER came about through wanting to elevate the voices of women researchers, because in the research world men are published and cited more often than women. Also, when we looked at what books were out there to encourage young girls into research, they are heavily science-based, and very much around the work of historically famous scientists - big, huge discoveries - but not everyone makes huge discoveries. Sometimes contributions to knowledge don't always make the press. We wanted to give young girls a better idea of different kinds of research you can do, that it doesn't always have to be done in a lab, and that there's a whole range of careers available. You don't have to be world-leading scientists, and sometimes research can be contributing in a small way to a bigger discovery.

How did you and your colleagues go about collecting and writing the profiles up?

One of our co-authors who helped collect profiles to actually be included in the book is co-founder and director of a charity called 'Women in Academia Support Network'. We have over 13,000 members from over a hundred countries across the globe, from early career stages (people just studying for their doctorates) all the way up to vice-chancellors of universities. We thought the best place to start was asking our members who wants to be included, so a call went out for chapter contributions, then when we got them back, we chose a range of career trajectories. For example, we've got some women who have only just finished their PhD along with some professors, and we wanted a range of global perspectives as well. It's still quite heavily UK-based because a lot of our membership is European, but there are people in there from the USA, for example, to try and demonstrate the diversity of where women researchers are in the world.

Did contributors write their own sections, or did you write for them?

They did, yes, we gave them a rough writing frame. We tried to think about what people would want to know about science and research. We asked them to provide a bit about their background, because often you think of researchers as quite wealthy, well-to-do

people, who went to the best universities, so we wanted to demonstrate that all kinds of people from various backgrounds go into research. They wrote a bit of a bio about where they came from, where they lived, how they

WE CHOSE A
RANGE OF CAREER
TRAJECTORIES

got interested in research, and another part about their current research topic. There are people researching things like goth metal rock as a disabled person, all the way up to the hard sciences. Then, in each chapter, they would give an activity or insight into their research that readers could have a go at, to get away from this idea that to conduct research you have to have a fancy lab setup or load of equipment.

Would you say you're trying to target younger boys, as well as young girls?

Credit: Envato Elements



Yeah, the book had two aims, the first was to elevate the voice of women's contributions in research. That's for everybody to read about the fascinating research that's happening in the world – for any gender, whatever end of the spectrum you're on. The second aim was to encourage young people to go on to research careers, and particularly young girls from geographical areas where they're unlikely to do that.

Is there a career profile in the book that particularly resonates with you?

There is one: Professor Jackie Carter. We were actually at the same university as each other for a while. Jackie had a very similar trajectory in research to me; she was working class, and not many working-class people, let alone women, end up at university in the first place, let alone continuing to a doctorate. She's also a mum; when she was studying for her PhD she had young kids, and I did too when studying for mine.

In fact, I went to university late because I was from a working-class background, and nobody really had as-

pirations for me. Careers advice was rubbish even though I really liked science. There's nothing wrong with any job you take up, they just didn't talk to us about a range of jobs. It was very much: you're from a council estate, you're obviously going to work in a shop, or for girls be a librarian or a teacher. It was very gendered and a narrow description of what you

THERE ARE OPPORTUNITIES FOR US LATE BLOOMERS!

could be. That spoke to me about Jackie's story as well, that she had a similar experience.

I didn't sit my final exams for my degree

until I was 32, two weeks before my first son was born. I didn't go to a university, I did the Open University, so six years part-time whilst working in a shop. Jackie's story was also similar in how she ended up at university – she became a maths teacher and then went on to do a PhD, and now she's a professor, so that's fantastic. It makes you feel not so alone that there's such a range of people out there going to university, doing degrees, and carrying on into senior roles. It's hidden because we don't talk about our backgrounds much, which is why we were encouraging people to write more about their backgrounds and not just the research they do.

How have your personal experiences influenced the writing of the book, and your approach to communicating your points about research careers?

My experience of careers education – I don't know what it's like outside of the UK - but I became a qualified careers advisor and worked for about ten years in 'underserved' areas or 'areas of deprivation', places like Wythenshawe in Manchester. I grew up in Wythenshawe myself, it's one of the largest council estates in the UK – it was shocking that even all those years later after I'd left school, the kids who finished school and wanted to go to work or college were still getting the same rubbish careers advice and being written off. I wanted to write a book that spoke to a wider audience and could show what was available for them, even if you didn't perform particularly well at school or didn't know what you wanted to do for a long time. I wanted to show that you've got the whole of your life to develop, it's not necessarily something that happens at sixteen. Even when choosing what options you wanted to take for GCSEs, your career still might change, and there are opportunities for us late bloomers!

Do you think that career advice in general has improved a bit, or is there still a lot of room for it to get better?

Funnily enough, I think what helped was the global pandemic, when across the world a lot of education moved online, and because of that people in different careers and in education started using social media more. It forced more adults onto social media, and the explosion of things like TikTok allowed more re-

BOOKS

searchers, and people in schools, and teachers, to post on social media platforms about careers.

There are more opportunities to find information now, but there's still this stereotype of the geeky, nerdy, quiet, bookish person going to university and becoming a researcher. Of course, that's fine if that's what you're like, but a lot about going to university and getting degrees is just about perseverance, rather than personality. Passion and real interest also factor in a lot, e.g., if you're interested in performing arts you can do a doctorate in that and become a lecturer or do research in it. It's a lot about tapping into people's interests, and social media has really helped with that.

You mentioned performing arts; is the book focused on STEM careers or is it a wider range of subjects?

No, it's definitely not focused on STEM, there are some STEM researchers in there but Dr. Allison Upshaw, one of the chapter contributors, whose research is arts-based, is also a fantastic opera singer, so it presents a whole range of things.

Do you read much in your spare time?

That's one of the stereotypes of people who do well academically, but I don't really read. I'm not the kind of person to pick up a novel. When I do read it's usu-



WE CONCENTRATE ON WHY PEOPLE AREN'T GOOD AT [STEM] OR WHY THEY DON'T ENJOY IT, BUT WE CAN LEARN JUST AS MUCH FROM PEOPLE WHO SUCCEED IN IT

ally for information – when I was really young, I liked looking at encyclopaedias, and looking online for information, but I don't read for pleasure – I do bingewatch shows on Netflix! It's one of those stereotypes that people think we live in libraries and have books all over the place. I don't even particularly like writing, which is why I did arts-based research – I made a film – but I did have to do some writing about it too.

What was the process of publishing the book – was it internal or did you send it out to publishers?

It was a very quick turnaround. We were lucky that

Women in Academia Support Network was selected by Facebook for a prestigious global community accelerator. We have a Facebook group that many of our members engage with, and we were one of only ten charities in the UK that got chosen, and about forty-four worldwide. That entailed getting some money and professional development for wider projects, and we were thinking about what we could do as a group of academics. We said, well, we write, don't we, and we want to get our research out into the world.

We'd already been working very closely with a publishing house called Emerald Global Publishing, who publish academic journal writing, and many of us al-



ready had articles published with them. We knew a publisher, had a group of people who write and research for a living, we thought, let's do a book! Emerald had never done anything like this before, because it's a

complete departure from just putting research in journals. We were very grateful they got on board, because we were able to have a fast turnaround, so the book was produced in just six weeks. That included getting chapter authors to contribute, writing the foreword and introduction, getting amazing illustrations, and getting it into print. We were so over the moon with the illustrations. That was such a brilliant day, when those images came through.

With the funding we then bought back a thousand copies from Emerald, and we're currently distributing those for free through a network of institutions to be distributed more widely by participation teams, who know their local areas better and know which groups of young people would benefit most from reading it. I'm in the middle of getting prices for shipping books out because we've got some going out to places like South Africa, India, Australia, and also around the UK. We're really pleased that people will get to read these books for free. They are for sale as well, and we're encouraging universities, schools and colleges to buy some copies for their libraries. For the general public, they make a lovely gift - I've gifted some to young people who I know would enjoy reading them, for long holiday journeys like Manchester to Cornwall in the car. Getting some copies out for free was a big part of the funding drive.

You said you went to the Open University for your bachelor's degree, where did you go after that?

As I said, I sat my finals two weeks before my son was born, so I didn't get to go to graduation. I never stepped foot in a university building apart from sitting some exams, but I did my final exams at home with a huge belly. Two or three years later I did a master's in Inclusive Education and Special Educational Needs at Manchester Metropolitan University, and being me, managed to complete it earlier than I should have because it was another part time course. I was at home with two under two, and I was working, but I got a distinction, and that enabled me to get a PhD scholarship at the University of Manchester.

There I researched: 'Why are mathematically demanding careers like the sciences and engineering seen as being for particular kinds of people, and so stereotyped?'. I got a load of people who did those kinds of demanding courses, like chemical engineers, maths teachers, quantity researchers, to do improvisational drama about their experiences with maths, and filmed that and made a documentary. I absolutely loved that; when you start a PhD you write a proposal saying what you think your research is going to be, and by the end of the first year I realised I wanted to do arts based. Often when we research subjects like maths or sciences, we concentrate on why people aren't good at it or why they don't enjoy it, but we can learn just as much from people who succeed in it.

The stories that came out from the participants who had gone into careers in maths or hard sciences were that they tended to have the same struggles as everyone else – not really enjoying it or finding it difficult. There were two participants who were in lower sets for

Credit: Envato Elements



maths at school, but managed to work their way up by asking questions and doing extra homework. Sometimes it just takes age and maturity to figure out how things work. It was really enjoyable, especially to bust that stereotype that people in those careers are quiet, shy, socially awkward. I met one of my participants at a drama group, we were both looking into science com-

BOOKS

munication with school kids, and they were teaching things like science magic tricks to perform at museums to get kids interested.

There's so much interesting stuff out there. When I finished my PhD another research position had come up at a university and it was researching ice cream. I was thinking 'why did I not do my PhD in ice cream???'; it was about the textures and flavours, it was awesome. I get so much FOMO when I hear other people's research and think that it's fantastic! I have a friend who danced her PhD about healthy ageing – she did a dance performance in front of her examiners. There are all sorts of things to do.



It sounds like the book would be helpful in getting people to want to go back into research too.

The whole point of research is to expand our knowledge as a human race, and one of the things we really learnt during lockdown was that we're nothing without the arts and humanities. The things people missed the most were going out to the theatre and cinema, listening to bands, going to eat at restaurants, watching football matches, all those arts and leisure, sociable things that set us apart as humans. That's our main distinction – we can be artistic, creative, imaginative. Creativity and advancement of human knowledge isn't just about what technology we can build or getting to Mars.

One of our editors recently wrote about the lack of humanities at Imperial – we have quite a limited view of the humanities and arts in general.

Yeah, there are all these distinctions, even at school

when you're selecting your choices, sometimes people are pressured to choose one over the other. When I was at school I loved art, but also really loved science, and they pushed me to do an extra science or further maths, but I wanted to do art and drama as well. Keeping education broad and not making people feel they have to drop things they love is really important.

Do you have any personal notes for women in STEM and in the research industry?

It's still very tough to be a woman in STEM or research, it really is. It's getting better and more women are getting into these careers, but it's also still

> very white. I'm mindful as a white woman, when I talk about us progressing, that, looking around meeting rooms, while there are more women, we're all very white. Diversity still really needs to be worked on, and because it's so tough, there's sometimes pressure from universities and society to try and act stereotypically male - to be strong, not show emotions, and act in a certain way – to get to more senior positions. We're still not really allowed to lead as ourselves. If you do progress into a research career, try not to be pressured too much by that and act stereotypically male to do well. I think the author of Lean In – Sheryl Sandberg – regrets writing that book now, because it was all about acting like a man

and power posing. If you do get into those careers, mentor other people as well, and shout about other women's achievements. Help each other out rather than going down the route of not bothering about the people coming up behind you. The more women we help out the more we can get in the door, and that's what we want – more women sticking around in these kinds of careers.

What advice would you give to the students at Imperial about studying at university and getting graduate jobs and developing their careers?

I think young people get a rough ride these days; there's social stigma that young people are on their phones all the time, obsessed with social media and how they look, that they're a bit empty-headed and lazy, and don't have ambition. Every generation had that, and every time the older generation thinks 'we weren't as lazy or feckless as kids are today'. But you've

had a really rough time, and the past two years you've missed out on loads of education and social skills development.



IF YOU DO GET INTO THOSE CAREERS, MENTOR OTHER PEOPLE AS WELL, AND SHOUT ABOUT OTHER WOMEN'S ACHIEVEMENTS

I would just say: be kind to yourself, you're living in tough times, and you do have your whole life ahead of you. There's a whole world of opportunities open to you, because people are breaking things like gender stereotypes. Don't necessarily see your career as just one thing – you might end up doing a whole range of things, and that's fine. If you fail sometimes that's also fine, because to get anything done right you have to fail a few times. Try not to let it get you down. It's all learning in the end, and if you're in the privileged position to have the time and money to travel – travel while you can!

I just want to point out that within the book *ResearcHER* and Women in Academia network we're a space who support and are inclusive of gender non-conforming, non-binary, trans sisters as well. When we talk about being 'for women', we don't mean cis-gendered, heterosexual women, we mean anyone who feels they identify in our space. That's important because, at the moment in places like the US and UK, unfortunately transgender and non-conforming people are also getting a super rough time. We're here to promote the inclusivity of people like that in research as well!

Follow the Women in Academia Support Network

Twitter: @wiasnofficial

Facebook: Women in Academia Support

Network Page

Website: www.wiasn.com

Edited by: ASHLEY XU

BUSINESS

Interview with Jonathan Aeschliman

Entrepreneur Spotlight

Ashley Xu

Business Editor

Since the early 2000s, e-commerce has grown massively, and continues to expand, as new innovations emerge. These innovations enter the market, offering better service, faster delivery, quality, and affordability. We have seen the rise of online payment, ultra-fast fashion, advertisement technologies, etc. However, not all of them are available everywhere. At the end of the day, human needs are similar, so there is a huge opportunity in localising products.

Y Combinator is an American startup accelerator which launched over 3000 companies since 2005, including Airbnb, Coinbase, DoorDash, Reddit, Stripe and Twitch. Jonathan Aeschlimann is a serial entrepreneur backed by Y Combinator, and is now targeting this gap through his two companies, DivBrands and Conversion Pattern. We will be looking into the DivBrands this week.

CEO Bio: Jonathan Aeschlimann

Divbrands.io co-founder. The company founded in 2018 reached a revenue of \$35 million and has a remote team of over 100. Received executive education at Stanford GSB and Chicago Booth.

DivBrands: From 0 to \$35M Annual Revenue in 3 Years

DivBrands operates like an in-house product incubator, using data-driven methods to discover new demands in everyday apparel products - such as slippers, tactical hoodies and cargo pants. Then it works with manufacturers and designers, and turns these products into something that solves real problems. The company has already launched 17 brands, and employed 100+remote members in 26 countries.

The First Steps to Building DivBrands

"Find the right products that customers really want

through hypothesis, testing and iterations."

Divbrand's product development process started from extracting insights from data and raising hypotheses. To test the hypothesis, they design the product at a creative studio in Cape Town, purchase a small quantity from suppliers, advertise to customers and review campaign



Jonathan Aeschelimann



performance. After products are delivered, they survey the customers, categorize their feedback, and absorb them into the design iteration. Eventually, they make strategic decisions such as whether to grow that brand or to change its direction.

Another thing that worth notice is that, although Divbrands is paying close attention to trends and evaluating internal opportunities, they only choose a very limited number of products to act on.

Data-Driven Sales

"The key to growing sales is to see what customers see. In other words, to find out, within the miscellaneous information demonstrated to customers, what exactly works."

What rocketed Divbrand sales were social media. In 2017 when most people had a phone, they were used to "scrolling" endlessly for more newsfeed. So Divbrands realised, to attract customers' attention, they needed to implement effective scroll stoppers. These are the first three to five seconds of a video that are very catchy and makes you want to stay. They then developed 10-20 variations of scroll-stoppers and adopted the one that worked better.

Data analytics is written into the gene of Divbrands. A prominent example is their new product launch.

"For the front-end, clicking, average time spent on a page and behaviours are important measures that help us figure out what obstructs consumers from buying. For the back-end, metrics such as manufacturing cost and shipping cost are closely monitored to guide strategic decisions. Our decisions are largely based on data. There is little space for non-substantiated, unsupported ideas."

Optimising Logistics as a Startup

Today's consumers are almost "spoiled" by next-day delivery and free returns. However, for smaller D2C companies that have yet to reach economics of scale, it is not easy to offer a cheap and fast delivery service for customers. According to Jonathan, their secret sauce to bringing down logistic cost is to lower the return rate.

"If shipping a bag costs \$5, returning it would cost \$8, in which \$6 is the small-quantity shipping cost and \$2 is the inspection fee. To further plague the problem, the industry also lacks reverse-logistics providers."

"One of our solutions is to be transparent to customers, meaning to provide clear descriptions of a product and avoid exaggeration. For example, we would clarify that a water resistant shoe is 'waterproof'. Another key strategy is to allow selection on product category. For example, fast-fashion apparel by nature have a high return rate, laundry, footwear, products with elastic materials such as polyesters."

Jonathan also mentioned the evolving landscape of data-driven marketing. Nowadays, due to increased customer preference for anonymity, less data is available for marketers. The gap between what data marketers are allowed to access and the data they need to upgrade products is huge. This is especially true for e-commerce companies which "breathe" on data. So, they face a struggle to ensure advertisement is relevant to their viewers. Thus, Jonathan co-founded Conversion Pattern to solve this problem. It is essentially a website tag manager that tracks purchases, gathering data across devices and through ad blockers, aiming to enable smaller companies to make the transition to a cookie-less era.

Our next edition will take a closer look into marketing technology and Conversion Pattern. Stay tuned.



EDIDAY 28TH OCTORED 2022

Join the Imperial College London Kilimanjaro team





- Registrations close 30th November
- Climb in August 2023
- Fundraise to bring clean water to communities in Kenya
- · Have the experience of a lifetime

CLUBS AND SPORT

Nightcycling – a fresher's experience

Sophie Reck Pointon Sports Writer

his is a fact: this city was not built for ▲ bikes. Any country bumpkin (AKA me) could have told you this without ever setting foot here. But it becomes blindingly obvious once you actually try to snake your way along disappearing and re-appearing cycle paths or to hunt down the Easter-egg-hunt-style bike icons on the road across four-way junctions.

Nevertheless, it's also something worth trying out, even just the once. It can be pretty fantastic.

I hardly need to vaunt the benefits of cycling: green, healthy, relatively cheap. It is genuinely also a really good way to get to know London better. Compare with the maze of bus routes and the soulless commute on the Tube (often as fast as cycling).

I feel I should highlight the fact that many more people cycle to work than you might expect: there are the inescapable tourists (and I still feel like half a tourist), sure, but there are also businessmen in sharp suits and with professional-looking briefcases. At the busiest times, you really feel as though

you're part of a movement stretching all over the city, not like a reckless youth wanting to save a bit of money.

The differences in quality of cycle paths changes hugely, so it's an adventure every time I try out a new route: sometimes it's gliding down separate bike lines,

> sometimes weaving through considerable traffic, sometimes sharing crossings with pedestrians. Mostly cyclists can use bus lanes, have cyclespecific miniature traffic lights and TfL is working on a project to improve London's cycling network (called 'Cycleways', formerly 'Quietways'), is quite evident even to me (I have only been here two weeks).

Apparently you can be fined £50 for how full each cycling through a red light, so I have been is). However, witness to many a crime already. Helmets are also scarce. A large with majority do signal stands -

with hands and arms, so that's a relief. I have joined up with the Santander Cycles scheme so can impart more wisdom if you're thinking about something similar...

Be warned: the Santander bikes rental only have three gears so it's impossible to give it your all on them and really reach good speeds. And it's the worst feeling when you arrive at a bike stand and all which the bikes are gone (there's a helpful feature on the app that tells you one of them central London littered these there

are four close to Imperial - so I've always been able to find something.

Student Beans has a 25% discount on yearly membership (I have not been sponsored by either organisation to write this, honest). Some advice: take a second to check the condition of the bike before you take it. It's easy to tell which ones are more modern and will work better.

Being able to cross the city under your own power and experience moments of unexpected beauty are also perks: flying through an empty Wellington Arch in the dark is definitely a worthwhile experience.

Last time I was cycling back from Imperial, I was ticking off highlights of London as I passed them: Harrods, Hyde Park, Buckingham Palace, Big Ben...

And then, my eyes snag on a set of far too familiar words: Institute of Civil Engineers. Oh hell, I think. I'm a first year studying Civil Engineering, and look what's on my way to uni. A coincidence? Doesn't feel like one.



