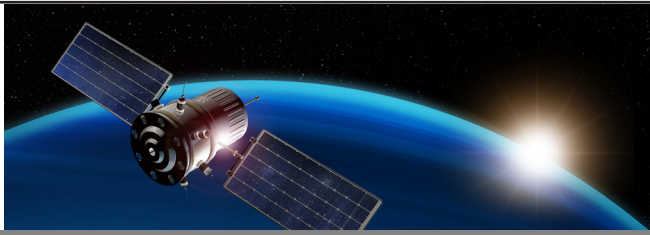


Felix



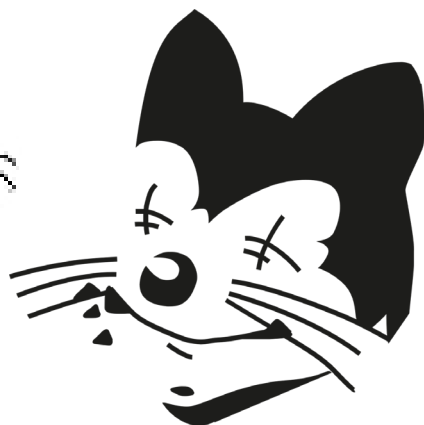
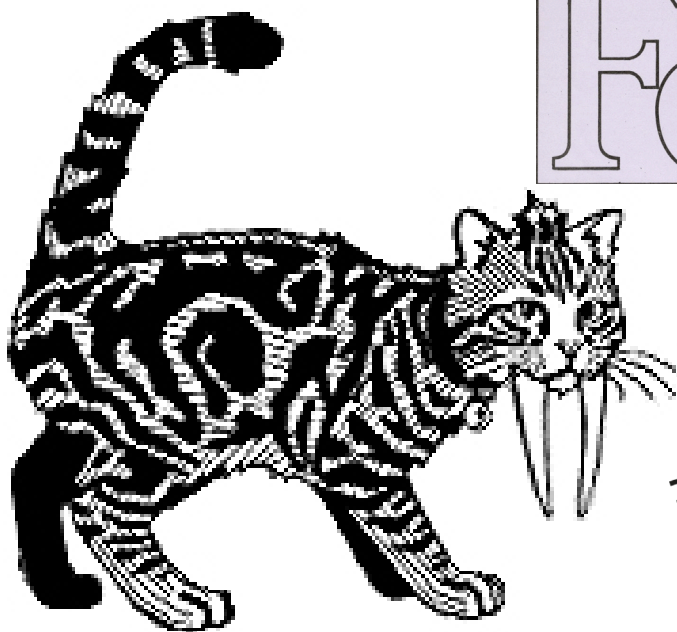
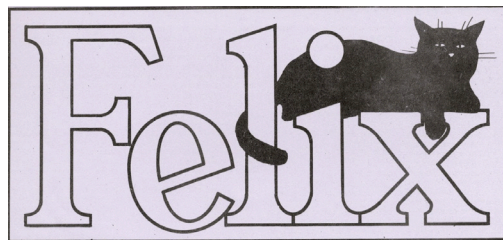
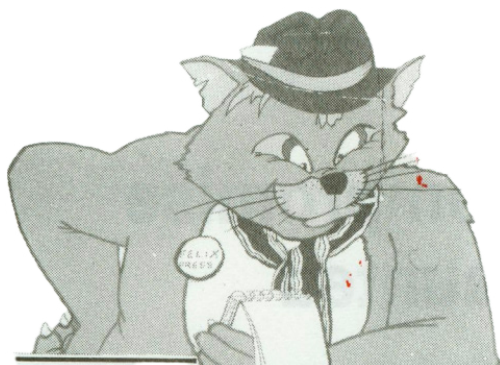
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ISSUE 1805

FRIDAY 24TH JUNE 2022

THE LAST ISSUE



EDITORIAL

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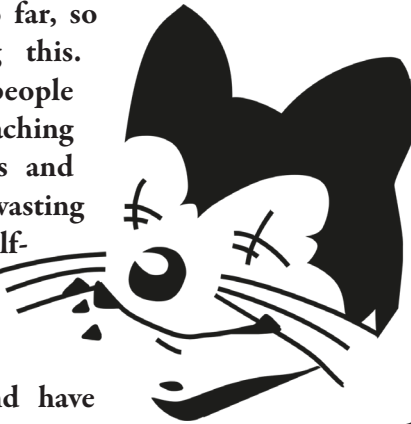
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Thank you

This year's final Felix has arrived, and with it probably the lowest readership so far, so thanks for reading this. I imagine most people are either approaching their final deadlines and therefore aren't wasting time reading the half-baked opinions of a 24 year old, or have jumped their final academic hurdle and have pissed off for the summer.



Even now I look back at some of the Editorials from earlier this year and cringe - I can't wait for an employer to find them in 20 years' time.

This has been the best year of my life, and I find myself thankful almost every day. Thank you to everyone in the College community for allowing Felix to do what it does - here's to another great year.

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 Sam Lovatt
Editor-in-Chief

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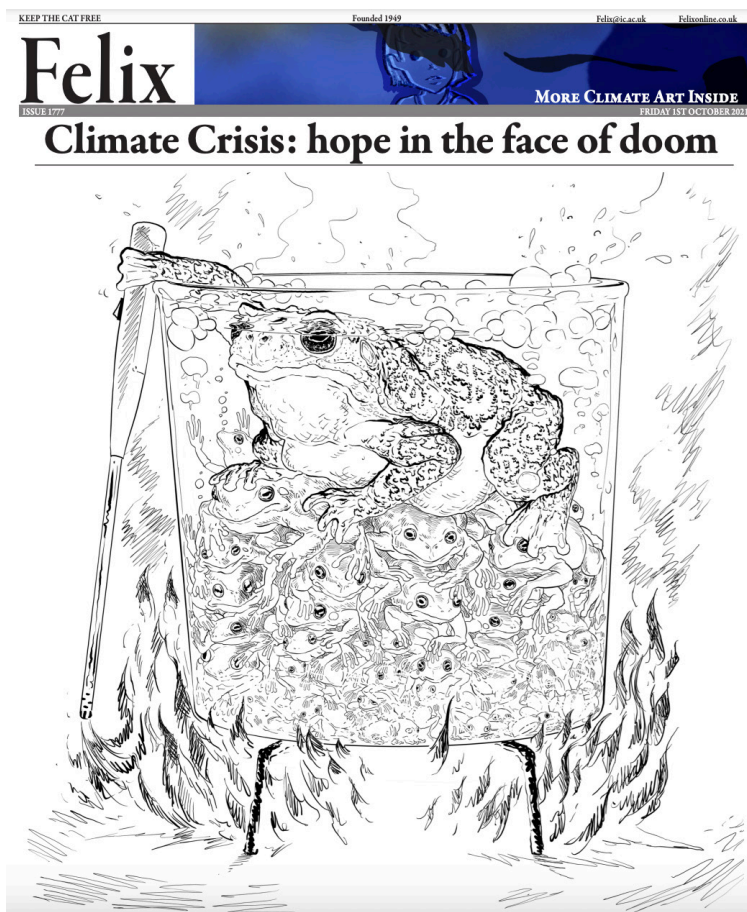
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The year in retrospect

And so the sun sets on another academic year at Imperial College London. 22,500 students and 8,000 staff have dealt with the throes of keeping a world-leading institution running, from the pinnacle of academic achievement, to administrative efficiency, to the day to day necessities that keep a £1 billion business afloat.

At Felix, we have been blessed with a fruitful news agenda this year, with bullying, data leaks and an ample supply of penis jokes taking centre stage. Here we take a look back over the year's highlights and lowlights.

Issue 1777 - Climate change



Felix kicked off the year with our only themed issue of the year, on climate change. Flicking back through this edition, it is quite obvious just how much the editorial team has progressed since. Errors are peppered across most pages (mostly the fault of the Editor-in-Chief) and some quite shameless techniques are used to make up page numbers. Nevertheless, the editors of each section came together to produce an issue almost completely consistent on the theme of climate change, and the breadth of topics covered within that vein was impressive.

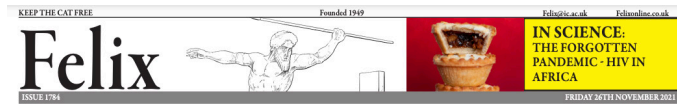
Issue 1779 - Data leak



Just three issues into the year we reported on a data breach, the coverage of which won the Editor-in-Chief the award of 'Best Journalist in London' from the Student Publication Association. On the Freedom of Information website WhatDoTheyKnow.com, we came across a conversation thread which outlined the process by which the College's data team had accidentally shared a spreadsheet containing the full names, UCAS numbers, dates of birth, home addresses, ethnicities and telephone numbers of every student who had stayed in College halls over the past five years. Through web data, WDTK and the College could tell that, even though the data had been publicly available for download for nine days, no one other than the original requester had downloaded the data. Because of this, the Information Commissioner was satisfied with the College's response, and no further action was taken.

NEWS

Issues 1784 and 1788 - Dongoor Plaza



Dongoor Plaza - Imperial College lawn re-opens as statue plans seen

Sam Lovatt Editor-in-Chief

Dongoor Plaza was opened on Wednesday, allowing access to the renovated space for students, staff and the public.

The works, originally scheduled to be complete by the beginning of this term, are the result of a £5 million donation from the Dangoor family and the Esilarch's foundation. The Dangoor family say "Our family has a long history in South Kensington and many of us are also Imperial College alumni".

The donation has been used to transform the plaza, as well as funding a cancer research centre on the South Kensington campus and The Invention Rooms at White City.

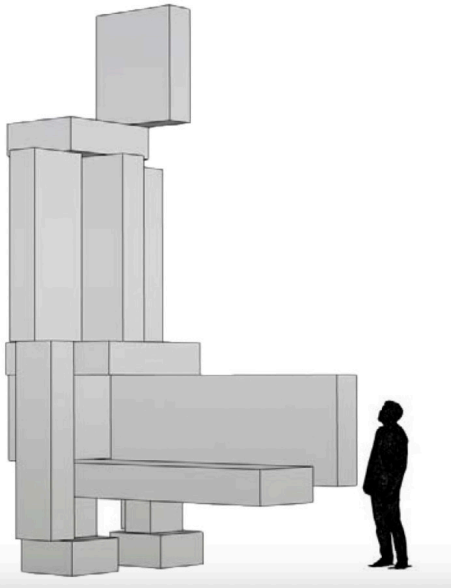
The sculpture, called ALERT, will weigh 67 tonnes and be comprised of a type of steel called Corten. It will stand 6.12 meters tall, 2.7m wide and 3.9m, um, deep.

The sculpture will be 1.14m in girth and 81cm off the ground.

Donated by alumnus Brahmaj Vasudevan and his wife Shanthi Kandiah, the piece will be installed at a prominent location where Imperial College Road used to run. The suggested positioning can be seen in the accompanying images. The figure will be inserted into the South Kensington landscape in Summer 2022.

The sculpture is the latest work of renowned artist Antony Gormley, whose previous work includes the widely-known sculpture the Angel of the North, which remains the largest sculpture in Britain. On his work, Gormley said "Through the conversion of anatomy into an architectural construction I want to re-assess the relation between body and space. Balancing on the balls of the feet while

Continued on page 4...

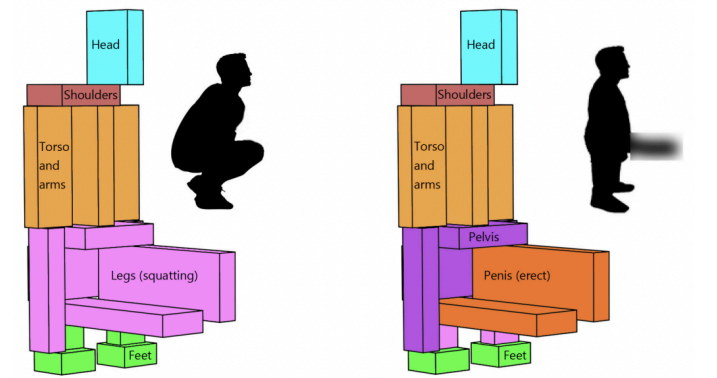


The most eye-catching subject that graced Felix's pages this year was the revelation of the statue named ALERT, designed by Antony Gormley and set to be installed at the Imperial South Kensington campus in Autumn this year. The statue will weigh 67 tonnes, be 6.12m tall and 3.9m from pelvis to tip. It will adorn the walkway that used to be Imperial College Road, casting its gaze over the Queen's Lawn.

Shortly after Felix revealed the statue plans, a paper was brought to Union Council opposing the statue, and thankfully it laid out exactly how the design studio envisaged the statue, versus how literally everyone else saw it.



Union to lobby against ALERT statue installation



Sam Lovatt Editor-in-Chief

The Union Council has voted very strongly in favour of lobbying against the installation of the controversial 'ALERT' statue, set to be installed in the summer this year. The proposal was passed by Council with 29 votes for, 1 against and 2 abstaining. EDI and financial issues were some of those raised in opposition to the statue's installation. An amendment to the paper that tabled the proposition, suggesting that

the Union refer only to the Queen's Lawn area as 'Dongoor Plaza' from now on was rejected. Felix is chagrined by this. The paper sparked controversy within the Union, due to a figure contained in the paper fully depicting two possible perceptions of the statue's form, which can be seen in the image accompanying this article. Fighting fire with fire, the figure is used to show how the statue can be perceived as phallic, by even more explicitly showing said phallus. Following certain, unspecified meddling within the Union, a retracted

version of the paper was distributed shortly after the first, but with the diagram's modesty slightly more in tact. The paper also expressed a complaint that students had not been consulted prior to ALERT's installation being agreed. One of the Union's resolves will be to share this paper, including the accompanying diagrams, with 'College Council and other relevant members of the college'. It is also stated that "if the phallic interpretation is not understood by the College, [the

diagram] should be used to explain the ambiguous anatomy of 'Alert'. The statue, donated by alumnus Brahmaj Vasudevan and his wife Shanthi Kandiah, is set to be installed this summer. It will weigh 67 tonnes and be 6.12 meters tall. The statue has been designed by prominent sculptor Antony Gormley, who said "The work will beckon towards the passers-by on Exhibition Road, providing a point of interest and intrigue, and encouraging a closer look".

Felixes passim ad nauseam - The bullying scandal



Bullying inquiry to be published as College loses privacy battle

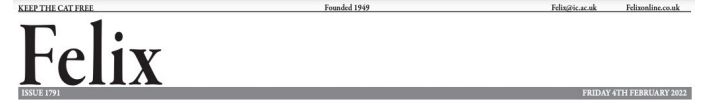
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Without a doubt, the most impactful story we covered this year was the bullying scandal which embroiled President Alice Gast and ex-CFO Muir Sanderson in 2020 and came to a head earlier in 2022.

The saga was kicked into the public realm when an email was sent to all College staff, and later students, on the 4th of December 2020. The message, from Council Chair John Allan, could scarcely have been worded more cryptically. We learned that "allegations were made about senior colleagues' conduct, including the President" and that Allan "immediately commissioned an independent inquiry and report, to be undertaken by a leading QC". We were not told what the allegations were concerning, nor what the outcome of the report was, as it was being held "confidential to protect the identities of those who gave evidence". Nevertheless, Allan was "more confident than ever that Imperial has the right leadership".

It quickly became public knowledge that the allegations related to bullying, and requests to make the contents of the QC's report public came from Imperial College Union, as well as multiple national



"behaviour was aggressive and intimidating" - Bullying report published

Sam Lovatt Editor-in-Chief

Imperial College has published a redacted version of the infamous 2020 bullying inquiry, shared with the College community shortly before the wider public. A decision, made by the Information Commissioner's Office (ICO) on January 19th, stated that the public interest of publication of the report outweighed privacy concerns of some of those involved. The ICO added that the privacy of those who had given evidence was paramount to disclosing the full report. As such, a version of the report with all details that could lead to the identification of witnesses redacted was published. The report makes it clear that at least one other person who was accused of bullying and/or harassment has had their details completely redacted. This is seemingly because no allegation against them was upheld. The report gives unprecedented insight into the behaviours of Alice and Muir prior to, and at the beginning of, the pandemic. A clear distinction is made between the behaviours of Alice and Muir, with Muir's conduct being recorded as notably worse. This is highlighted in the conclusions of the report: "I consider that in those parts of the College considered in this report, and at the most senior level,



newspapers. The College initially declined to release the report in order to protect the identity of those who gave evidence, a stance they reinforced through citation of the Freedom of Information Act. *The Daily Mail* challenged this decision, and in January this year, the Information Commissioner finished analysis of the case and found in favour of *The Daily Mail*, ordering the College to release a redacted version of the report.

The report was damning, and a number of factors, including a number of inappropriate comments made by Mr Sanderson, meant that he came off far worse than President Gast.

On February 22nd, Sanderson emailed all students and staff to announce his resignation, effective from the beginning of September, allowing him just over six months of what was widely assumed to be gardening leave. Alice made no comment on her leaving date, being already set to leave this summer.

Our worst blunder - 'Huxley-Haslam'

'Huxley-Haslam Building' considered as History Dialogue next steps announced

Sam Lovatt Editor-in-Chief

The Huxley Building may be renamed the Huxley-Salam Building, the College President's Board announced on Friday.

An email sent to all students, staff and alumni outlines the progress so far and details the decisions made by the President's Board following months of deliberation within the History Group and the wider Imperial community.

The bust of Huxley and the statue of Beit will be retained, but plaques providing "a fuller context" will be installed near them. The plaque by Huxley's bust will aim to "provide everyone with a more complete understanding of Huxley's

announcement was to celebrate under-recognised figures in Imperial's history, who may have been sidelined in the past for racial or sexist reasons.

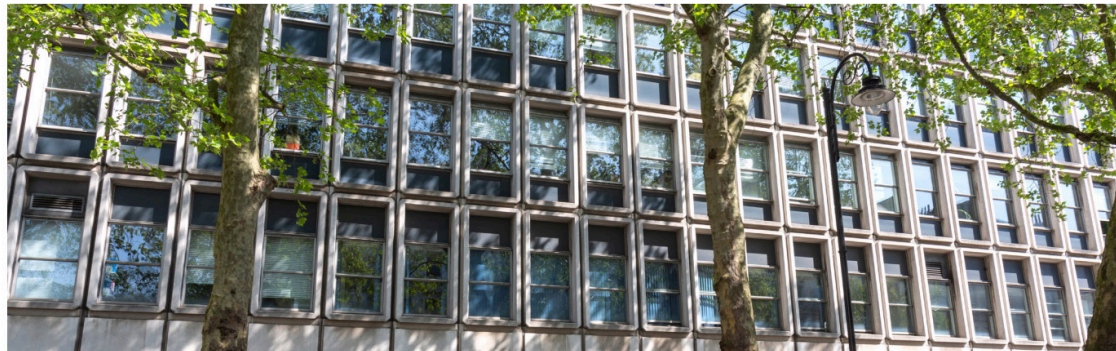
These figures include Professor

Abdus Salam, Dr Margaret Fishenden and Dr Narinder Singh Kapany.

The announcement details decisions made by the President's Board on what will happen, rather than recommendations

and suggestions made by the History Group in previous announcements, who do not have the power to decide what will and will not happen.

The announcement is not as



In issue 1795, published on March 4th, we went to print having not spotted our worst typographical error of the year. That week, the President's Board announced that they would consider renaming the Huxley Building to the Huxley-Salam Building, commemorating the poorly recognised yet hugely impactful Pakistani physicist Abdus Salam.

Through what can only be assumed to be an insatiable urge for alliteration, the article was drafted, edited, copyedited, and sent to print, under the title "Huxley-Haslam Building" considered as History Dialogue next steps announced'. To this day, we don't know where the name Haslam came from. Sorry.

A great year

Despite the tribulations, the College as an institution had a year of outstanding achievement and recognitions for this came flooding in. The second issue of the year (1778) reported that the College won the *Sunday Times* University of the Year award, in part thanks to its response to the pandemic in adopting a hybrid learning environment. This was reaffirmed when issue 1785 reported that the College had been awarded a Queen's Anniversary Prize, the highest honour that can be bestowed within the HE sector, again for the pandemic response.

The *National Student Survey* reported a three percent rise in student satisfaction at Imperial College, in a year where satisfaction declined across almost all other UK universities as students struggled with the pandemic. This surge led to the *Good University Guide* naming Imperial 'University of the Year for Student Experience 2022'.

The College was also recognised as having produced the most 'world-leading' research of any UK university if the six-yearly REF2021 results, and just this month the QS World University Rankings rated Imperial sixth globally, tied with CalTech.

改善

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SCIENCE

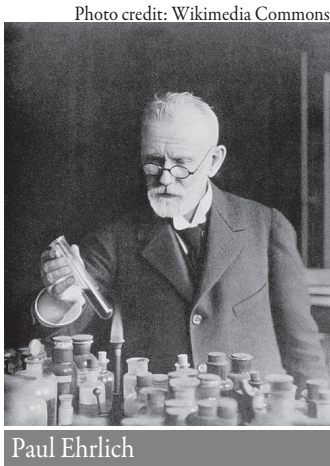
115 years since the magic bullet

► Science Writer Wang Guo tells the story of Paul Ehrlich, who devoted his life to research and revolutionised medicine with the first antibiotic and origin of chemotherapy

Wang Guo Science Writer

Paul Ehrlich was a German scientist that contributed enormously to the fields of immunology and chemotherapy, winning a Nobel Prize in Medicine in 1908 for his work with antibodies to fight against diphtheria. He was a strong believer in the potential of science to help society and this was reflected in his life dedicated to research. From his undergraduate days, Ehrlich was obsessed with the idea that different chemicals can effect microorganisms and tissue in a variety of ways. He was the pioneer in connecting chemistry and biology for a medicinal purpose through the usage of chemical dyes. He was a genius, without doubt, and earned the nickname 'virtuoso of test tubes', but he had some quirks such as smoking 25 cigarettes per day or carrying very sharp colour pencils in his pocket.

At the beginning of the 19th century, there was not any synthetic drug developed yet. Plant extracts were widely used to cure many diseases but without knowing the particular healing molecule behind them. Even though plant extracts could sometimes treat mild ailments, they were futile against more serious ones like syphilis. Ehrlich thought that particular chemicals could act effectively against one disease in specific without causing any side effects. That is, the concept of magic bullet emerged. Imagine a bullet that could change its direction, dodging different obstacles on its way, just to hit precisely the target without harming anyone else. Ehrlich thought this could real but with a drug and the disease instead of the bullet and the target. The magic bullet of Ehrlich was too innovative



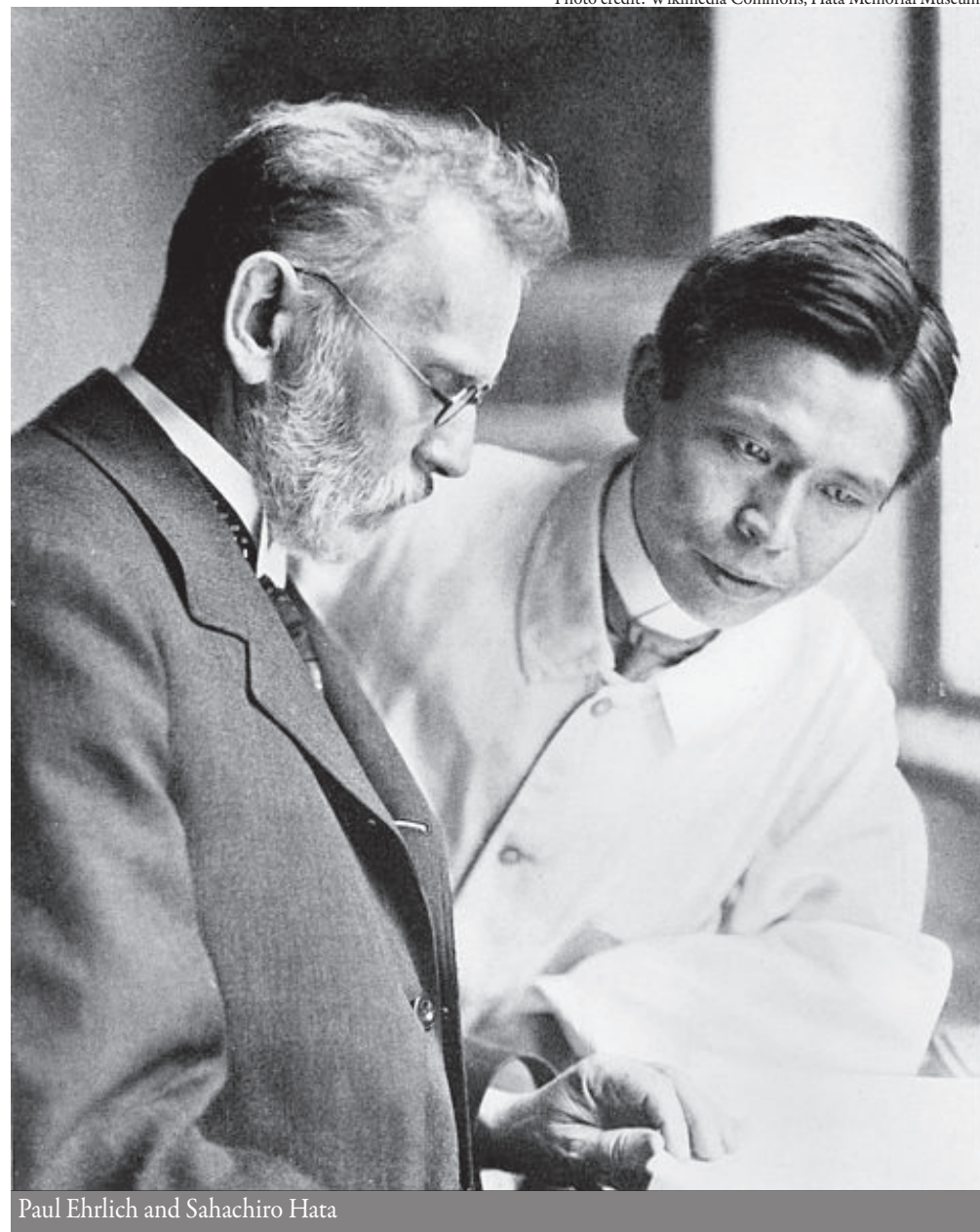
Paul Ehrlich

Photo credit: Wikimedia Commons

for his time and he was mocked by his colleagues, but this did not stop him. His conviction was much stronger than the naïve criticism of others. He spent many hours testing different synthetic chemicals for their potential use in therapeutics until compound 606, a game-changing discovery.

Before the 1900s, syphilis, a sexually transmitted bacterial infection, was treated with mercury, which is extremely toxic. In 1909, Sahachiro Hata travelled from Japan to Germany in order to work as a research assistant for Ehrlich. He discovered that arsphenamine, discarded by previous assistants, was effective against syphilis by testing *in vivo* with rabbits. The reason for negative results in the past was attributed to the poor methodology of the other assistants. Arsphenamine was named compound 606 as it was the 6th chemical test by Ehrlich and Hata. The chemical was later commercialised as Salvarsan, which is considered the first magic bullet as Salvarsan kills mainly pathogenic bacteria and has fewer side effects compared to mercury. Salvarsan is also the first antibiotic ever created. Despite Salvarsan achieving these two milestones, there were many sectors, particularly religious, reluctant to accept Salvarsan in Europe because they viewed syphilis as a divine punishment to sinners. Another important contribution of Salvarsan to science was the establishment of the methodology to develop new drugs and influenced greatly the commercialisation of penicillin, discovered 19 years after later by Alexander Fleming at Imperial, which substituted Salvarsan as a remedy against syphilis.

The objective of Ehrlich's magic bullet



Paul Ehrlich and Sahachiro Hata

Photo credit: Wikimedia Commons, Hata Memorial Museum

was to kill pathogenic microbes whilst doing the least possible damage to other body cells. However, this is a problem when your own cells are trying to kill you! This is cancer, the most infamous disease in the world. 50% of people will get cancer at some stage of their lives and it is one of the major causes of death worldwide. The magic bullet inspired and encouraged future scientists to develop novel therapies to fight against cancer using chemicals, saving many lives. The scientists followed the research and thinking principles of Ehrlich, who also coined the term chemotherapy for the first time.

Ehrlich defied the standard medicine of his time, which was tremendously inefficient and dangerous, for a new idea with more accuracy and fewer side effects. Now, 115 years since his ideation of the magic bullet, the magic bullet is more alive than ever!

Does SpaceX's Starlink make sense?

Shrey Bohra Tech Writer

Accessing the internet is a fundamental part of modern life. As technology has progressed, so have the methods for delivering internet access to our devices – we have gone from the early days of dial-up to broadband, fibre optics, and five generations of cellular networks. Elon Musk's SpaceX hopes to disrupt the internet industry by providing internet access via satellites.

Satellite internet is not a new technology – the first launch of an internet-capable satellite was in 2003, with several launches from multiple companies following in the years that have followed. These satellites have typically been launched into geosynchronous orbits, where the satellite remains in the same area of the sky above the surface of Earth. This has two main advantages; a very simple antenna can be used, and one satellite can service a very large area of the surface. The side effect of this orbit is the large distance from Earth, which limits speeds and causes any information to be delayed by around 250ms (known as latency) – this is the amount of time it takes light to travel to the satellite and back. While this does not sound like a lot, it makes many of the modern uses of the internet such as gaming and voice communications effectively impossible.

SpaceX have solved this problem by deploying many more satellites in a much lower orbit than their competitors – they have deployed over 2,400 satellites in orbits around 550km above the surface, compared to almost 36,000km for geosynchronous satellites. This lower distance allows for comparable latencies to traditional, ground-based communications such as fibre optics, and the greater number of satellites allow for a higher speed per user. SpaceX has permission to launch 12,000 satellites and have applied to launch 30,000 more.

In order for a stable connection to be maintained, any antenna must be able to track a satellite accurately. For geosynchronous satellites, this is easy – as the satellite does not move in the sky, a dish can be pointed in the right direction and left there. However, at low altitudes such as those SpaceX is using, satellites appear to move very fast across the sky.

This necessitates an incredibly complex antenna capable of following the signal coming from the satellite as it moves across the sky. This is not attainable with a mechanical system – the antenna must be “steered” electronically.

This technology, known as a phased array antenna, has not been used widely outside of military purposes in the past, which leads to high costs. Despite charging users \$500 for the equipment required to connect to Starlink, SpaceX is still making a loss on each user – experts estimated the manufacturing cost of the very first units to be over \$3000, with updated models still costing over \$1000 per unit to manufacture.

Internet in the US is often more costly and of a lower quality than in comparable countries, due to a lack of competition. As a result, in the US, Starlink is able to compete with traditional internet providers, coming at a slight premium but often with a better service. This, however, is very unlikely to translate to the rest of the world.

In the UK, the landscape is far more competitive. Venture capital-backed startups such as CityFibre compete with Virgin Media to install fast internet to

households, driving down the cost for internet access. Starlink in the UK costs £89 per month, with a £529 set up fee. However, internet of a better quality can already be had for a third of this price. The numbers look even worse for SpaceX when considering developing countries. In India, for example, unlimited 4G internet costs about \$3 a month - the setup cost of Starlink alone could pay for almost 14 years of internet access. As all manufacturing is conducted in the US, it is unlikely that SpaceX will be able to lower prices in areas with lower incomes by taking advantage of lower labour costs – they will have to choose between severely limiting their customer base and keeping a profit margin.

There are several niches in which Starlink is currently unbeatable – for example, when ground-based systems were destroyed, Ukrainians were able to access the internet through donated Starlink terminals. The technology also has the potential to greatly improve internet access away from land or civilisation, for example on planes and ships, and in cell towers in remote areas. Once fully deployed, the Starlink constellation could send a message

over longer distances than traditional methods, as light travels faster in air than in the glass used in fibre-optic cables. This capability would be highly valued by large investment banks and hedge funds, where a slightly faster system could give their trading algorithms an edge over competitors. The military benefits of an additional redundant communications method are clear, and SpaceX has already secured a contract with the US Space Force.

SpaceX are not alone in the satellite constellation space – competition is coming in the form of OneWeb (part-owned by the UK Government) and Amazon's Kuiper Project. It is unclear whether the niches are wide enough to sustain all three companies. SpaceX is investing over \$10 billion to complete the Starlink constellation, and they are expecting revenues of over \$30 billion by 2025. Even accounting for military and industrial contracts, there are a significant number of individual customers that SpaceX will need to convince to reach this goal.

Credit: SpaceX, CC BY-NC 2.0



60 Starlink satellites stacked together before deployment on 24 May 2019

ARTS

THE BLYTH CENTRE AT 20

AN INVITATION TO THE FIRST EVER
FELLOWSHIP EXHIBITION page

12

Edited by:
ALEXANDER COHEN
ALEX JACKSON

The Blyth at 20 — bringing music, art and science together

FEATURE

**CELEBRATING TWO
DECADES OF ARTISTIC
AND SCIENTIFIC
COLLABORATION AT
IMPERIAL.**

The Blyth Centre represents a core aspect of the music and visual arts scene at Imperial; and 2021 marked the twentieth anniversary of the Blyth Centre as the College's much-cherished resource for artistic and scientific collaboration. There has been a lot going on over the academic year: and are excited to announce a first ever exhibition of the Blyth Fellows' recent work!

The anniversary launched with a marathon 14-hour multi-media art installation in the College Main Entrance, centred around Erik Satie's eccentric piano work, *Vexations*. "Many agree on a common sequence of reactive stages to the work: fascination morphs into agitation, into all-encompassing agony; but participants who withstand that phase enter a state of deep tranquillity." Attendees of the exhibition described a thrilling performance --- as if they were hearing sound can for the very first time.

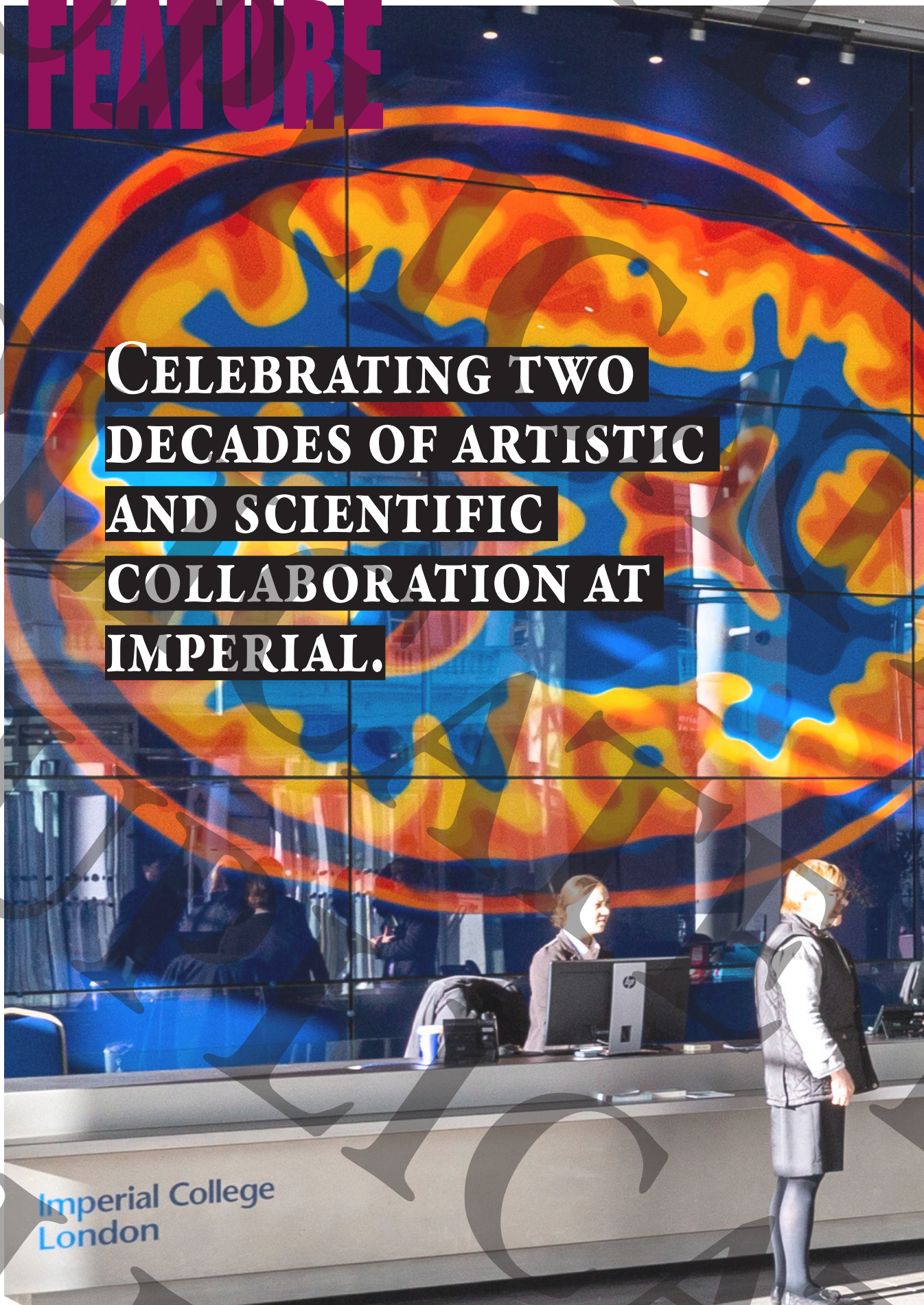
The autumn term brought music and art together again for Orlando Consort's lecture-recital, *Listening to Pictures*. "A visual and aural feast featuring some of the greatest composers and painters of the early Renaissance."

The lecturer, Tim Shephard from the University of Sheffield vividly reveals how "Renaissance art is full of sound - angels sing from altarpieces, ancient deities compete in musical contests, and music provides an essential backdrop to sensuous, amorous encounters."

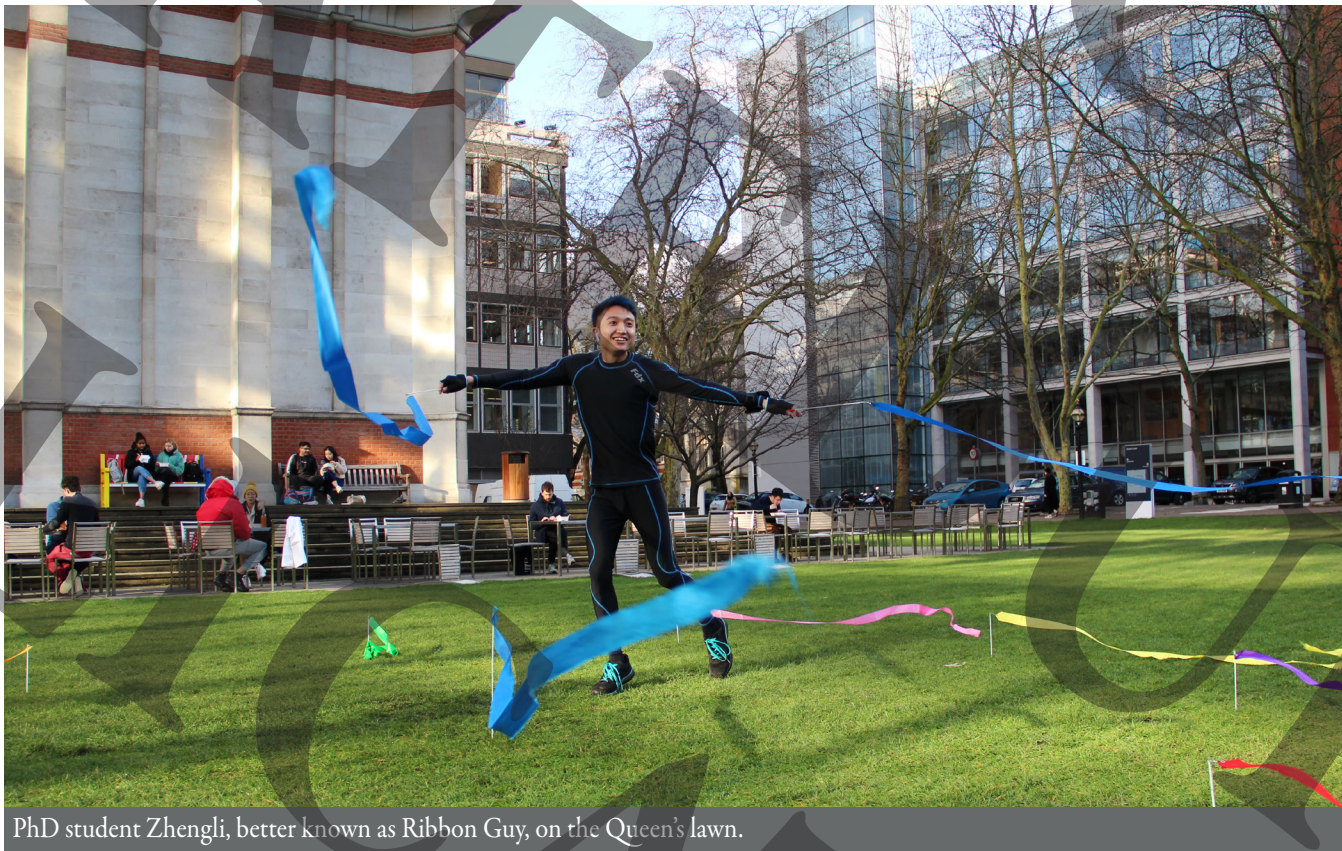
Director of the Blyth Centre Oliver Gooch argues that one of the most beautiful examples of mathematics in musical motion is J.S. Bach's *Goldberg Variations*. In a collaboration between mathematician Marcus du Sautoy and pianist Charles Owen, the *Sounding Symmetry* exhibition examined how the ideas of symmetry are at work throughout the thirty variations of Bach's work.

Finishing off the year, the immensely popular *Supernova* exhibition in the Blyth Gallery, curated by guest artist Sarah Kogan, was a mus-see event.

2020 saw the RCA Imperial EDI commission, an exhibition of extended portraits of Imperial's community created by Royal College of Art students and alumni showcased before they become an important part of the College's permanent art collection. In March, music and medicine came together with Professor Robert Winston's *Musical Analysis*. Alongside violinist Jacqueline Roche, Lord Winston examined "the particular relationship between music and the medical conditions of classical composers."



Credits: Photo/Martha Nahar



PhD student Zhengli, better known as Ribbon Guy, on the Queen's lawn.

Finally, the Blyth Centre's 20th anniversary is due to culminate this June with the Blyth summer party on the Queen's Lawn (pictured above).

"Join us for an afternoon showcasing the multifarious talent of our music societies and get creative with the beautifully simple art of block printing with Louisa Loakes. Food, drink and good cheer will be in abundance so join friends and colleagues to round off our anniversary in style."

Exams or not...

Check out all the latest Arts content on the Felix Website!

“PRINCE ALBERT CREATED ALBERTOPOLIS WITH THE VISION OF BRINGING TOGETHER MUSIC, ART AND SCIENCE IN A MEANINGFUL WAY; WE [...] CELEBRATE THAT EXTRAORDINARY VISION.

OLIVER GOOCH

DIRECTOR OF THE BLYTH CENTRE

You're invited to the FIRST EVER Blyth Art Fellowship Exhibition!

The Blyth Art Fellowship enables Imperial students to fulfill their artistic desires through training, mentoring, and a materials stipend.

This year, the Blyth Gallery is excited to host the two fellows: Andrea Perez Navarro, and Rosalind Crosbie as they showcase their work they have been producing throughout the academic year.

This event will also mark the 200th exhibition at the Blyth Gallery hosted by our Head of Art, Mindy Lee.

2 Artists. 20 Years. 200 Shows!



What's coming up? ...and get involved!

OTVETKA by Neda Nezhdana.

Available from the **30th May** on the **Finborough Theatre** YouTube channel.

"This war is not just on territory but inside us all. Cities being bombed, yes, but the brain is bombed even more. Cyber-attacks, fake news, fabricated terrorism, election fraud..."

#VoicesFromUkraine

The Throne by John Goldsmith.

World premiere on the **23rd June** at the **Charing Cross Theatre**.

Mary Roscoe and Charlie Condou star in a new comedy by award-winning TV and film screenwriter John Goldsmith.



Photo/Carla Evans

Gloriana by Benjamin Britten.

A very special Jubilee Performance at the **English National Opera** on the **8th December**.

Originally written to celebrate the coronation of Queen Elizabeth II in 1953, this concert will be staged this year in celebration of the Queen's Platinum Jubilee.



Under 21s come free!

But book early to avoid disappointment.

Jitney by August Wilson.

Opening the **9th June** at **The Old Vic** for a one month run.

"It don't always turn out like you think it is. You don't always have the kind of life that you dream about. You know what I mean?"

Jitney explores the bond between eight men as they live, love and work in a racially segregated, post-Vietnam America.

PUZZLES

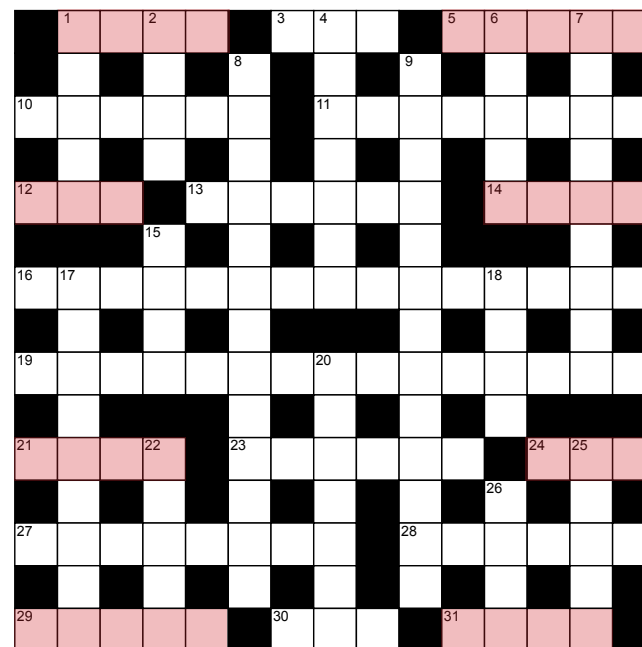
CRYPTIC Crossword Clues

Across

- 1) It's great that he embraces his studies. [4]
- 3) Certain warriors from Becontree? [3]
- 5) Bless the mysterious northern peak of Kathmandu. [5]
- 10) There's no point changing your choice! [6]
- 11) Advantage (outside of Australia) to a kind of microbe. [8]
- 12) The second person to answer this clue? [3]
- 13) He judged that it's pretty much essential. [6]
- 14) Lads with explosive character? [4]
- 16) The disease's effect smelt in Virginia. [5 10]
- 19) "Heart drawings! Heart drawings!" demand the scanners. [15]
- 21) Build/mould out of. [4]
- 23) If I have it, it sounds like they have it! [6]
- 24) It's slathered throughout this article. [3]
- 27) The gunners by the dock made a sauce. [8]
- 28) Test if he's embraced by the party. [6]
- 29) Its issues might be cat-alogued? [5]
- 30) Letter in "half past noon", e.g. [3]
- 31) Its members are peculiar copies of itself! [4]

Down

- 1) At last tough, I step up to that animal. [5]
- 2) The ship's bottom's been turned up and scratched - it's dire! [4]
- 4) Crank on a boat trying to best this crossword setter? [7]
- 6) It's spoken among almost all hospital priors. [5]
- 7) One confused by my mud I made into magnetic material. [9]
- 8) Crazy lunatic seizes granny and talks nonsense. [13]
- 9) Chopped roughly, perhaps, for sundry, oniony comfort. [13]
- 15) Condiment of the month? [4]
- 17) Driving him in person. [9]
- 18) I shout "they're some lapis lazuli crystals!". [1,3]
- 20) They were uncooperative, then ungracefully fainted. [7]
- 22) In the era of my exit, jail became rather odd. [5]
- 25) We laugh at sleep in this polygamous group! [5]
- 26) Image shared by an egocentric person? [4]



Reverse Cryptic

C: Solitary, the atomic dipole vibrates.

A: MONASTIC

R: _____

C: Feathery smoke?

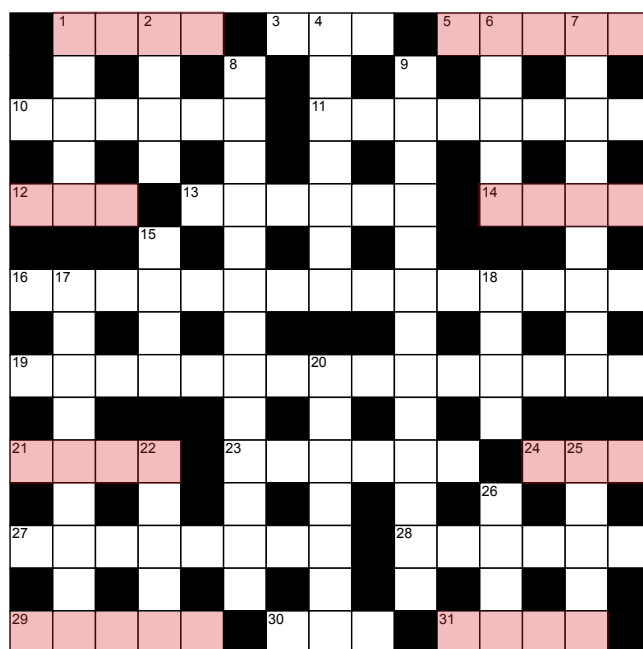
A: PLUME

R: _____

C: At first, some people lament the desire to spend money.

A: SPLURGE

R: _____



REGULAR Crossword Clues

Across

- 1) That made on a star. [4]
- 3) Slang term for expensive jewellery. [3]
- 5) It precedes "the above" in a survey. [3 2]
- 10) Disease or curse. [6]
- 11) Makes a lord, e.g. [8]
- 12) There's an impolite and polite form of this in French. [3]
- 13) Country with a cactus on its flag. [6]
- 14) It can be of the Irish or the draw. [4]
- 16) Becoming familiarised. [15]
- 19) Krakatoa and St. Helena, e.g. [8 7]
- 21) Suffix to forth and prefix to out. [4]
- 23) Plastic explosive. [6]
- 24) Most common word in the English language. [3]
- 27) Discontinuous. [8]
- 28) University grounds. [6]
- 29) Angry. [5]
- 30) In which you might dream. [3]
- 31) Perhaps the most self-descriptive clue I've ever written. [4]

Down

- 1) Wally, to Americans. [5]
- 2) One of four herbs in "Scarborough Fair." [4]
- 4) Boots, e.g. [7]
- 6) You cannot do this to the dead. [5]
- 7) Stuff to the brim. [9]
- 8) Describing a worldview rejecting free will. [13]
- 9) Error, contradiction. [13]
- 15) Group of politically allied countries. [4]
- 17) Member of a religious singing group. [9]
- 18) Means of transportation in Croydon. [4]
- 20) Butt heads. [7]
- 22) Desires. [5]
- 25) Cur. [5]
- 26) One might need to reload a weapon with this. [4]

Points

Cryptic Crossword 5 pts

Regular Crossword 3 pts

Reverse Cryptic 3 pts

Special thanks to Stanley Scott, Mihaly Ormay, Lito Chatzidavari, and Raluca Ana-Maria Constantinescu for keeping the Puzzles section amazing. Final scores will be released on our Instagram: @felix_imperial

FUCWIT

We apologise for the delay. Here is a breakdown of all the scores throughout the entire term.

FUCWIT Spring 21-22:

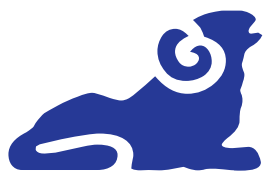
# Team Name	Up to 16-Mar	Spring Total
1. Deep-Fried Charizard	150	183
2. AKGroup	130	154
3. It's not fat, it's power	139	149
4. Lucky's Magic Whisk (now Jimbobs Fanclub)	65	88
5. Plont Palace	30	30
6. Hea-ing	13	13
7. First Order Physicist	6	6

FUCWIT Summer 21-22:

- # Team Name
- 1. Deep-Fried Charizard - 77
- 2. AKGroup - 63

We are sad that Deep-Fried Charizard is leaving us. We wish you all the best!

As always, you can send your solutions to Puzzles.felix@imperial.ac.uk before Wednesday at 12 noon.



ARIES

This week you realise that 'deadline' is quite a morbid thing to call it



TAURUS

This week, after two and three-quarter years, you finally overcome the visceral embarrassment of studying Mechanical Engineering



GEMINI

This week she's a 10 but she thinks Catnip is real news



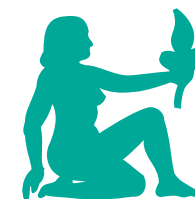
CANCER

This week you see someone wearing wired headphones and ask them why they're poor



LEO

This week the longest day of the year passing means that the daily suffering will now get shorter and shorter



VIRGO

This week, for your work on bicycle noise reduction, you receive a Nobell prize



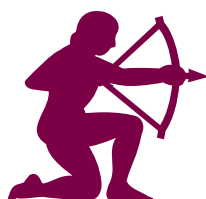
LIBRA

This week you remove the seven-week-old smoked haddock from the back of the fridge and retch profusely



SCORPIO

This week your landlord comes round to sort out your moth problem but fills your room with acorns



SAGITTARIUS

This week you try to plan a terrorist attack on the city of Bath but keep getting redirected to Lush.com



CAPRICORN

This week you use the carnival stall's own air rifle to rob them of all their cuddly toy prizes



AQUARIUS

This week, you start dating your flatmate but are disgusted by how messy their kitchen is



PISCES

This week your therapist gets you to make a claymation of the moment you walked in on your girlfriend riding your best friend

OUR FAVOURITE HOROSCOPES OF THE YEAR



ARIES

This week you're so startled by a beggar you accidentally post your wallet in a nearby post box



TAURUS

This week it's 'dick in the conical flask' for you and 'formal complaint' for your lab partner



GEMINI

This week you learn that Roman soldiers couldn't tell the difference between Attila and his warriors. I guess it takes Hun to know Hun



CANCER

This week you learn that adultery in the USA is most prevalent in Colorado - what a state of affairs



LEO

This week you mis-hear "the clocks go back tomorrow" and spend the next day with your member duct taped to your perineum



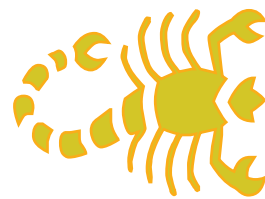
VIRGO

This week you see the bar staff replacing the Prava keg with a vat of milk - part of a conspiracy that goes all the whey to the top



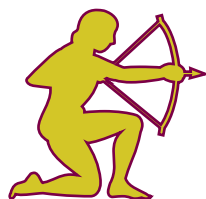
LIBRA

This week your arachnophobia and your botanophobia come to a head where you soil your pants at the sight of a spider plant



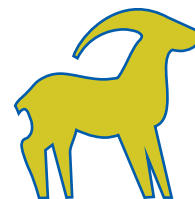
SCORPIO

This week your girlfriend compares your scrotum to a pelican's throat sac



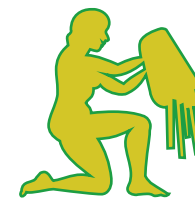
SAGITTARIUS

This week you take Old el Paso to court over a mouldy tin of beans, as justice delayed is justice refried



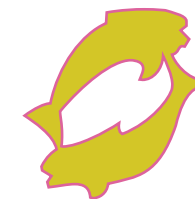
CAPRICORN

This week inflationary fears are realised, as it's reported that a bird in the hand is now worth just half of a bird in the bush



AQUARIUS

This week you watch an old war film that seems to have been cut way too short. You decide it was abridged too far



PISCES

This week you have a loud wank on the ISS - in space, no one can hear you cream

CATNIP

Is it time to stop pandering to people with allergies? Three readers discuss

Earl Beforewine, 56

These snowflakes with their so-called allergies have gone far enough I think. When I was a child back in 452 BC no one had to request a special lunch because they had other things to worry about! We all ate peanuts, we all ate shellfish, and we all snorted 40 lines of pure, freshly produced pollen a day. But of course, now the same doctors who caused 9/11 are telling us that a select few among us can't eat certain delicious foodstuffs. Yeah right. They've probably been injecting children with some kind of artificial 'allergy' inducing microbe through those darned videogames they always play. There were no allergies before video games.

Polly Stirene, 24

Right my little summer children, here's the run-down on allergies. Allergies were invented by the British Empire to further their agenda of colonisation and white supremacy. The core idea was to separate white people from the natural products of Mother Earth, products which indigenous peoples were so closely tied to. They began teaching children that a superior, civilised, white human would have a visceral repulsion to these 'barbaric' substances, such as violent sneezes or puffy faces. In fact, the allergic sneeze reaction is an allegory for the sexual violence of imperialism. Knowing all this, only the most vile of bigots could continue to uphold the pretence of suffering from an allergy. To call it suffering is an insult to the poor and meek of the world. Allergies truly are a first world problem of the highest degree, and frankly I'd put anyone claiming to have them under the guillotine during the upcoming revolution.

Ida Jackoffsky Toyourmumsky, 18

I wish I could write a longer piece for this but my nose has been hermetically sealed with snot for the past five days. I can't sleep, I can't breathe, I can't eat without getting tired. All the mouth breathing has left my lips so dry that they're cracking and bleeding. I just want it to end. All this pointless suffering, too mild to elicit pity, but too severe to continue with my usual activities. And for what? Because plants are reproducing? Why can't they do it through in-vitro fertilisation like normal people? Sick of this.

Imperial College Union employees revealed to have been on strike for years

In a chance discovery, a NegaFelix reporter has found that Imperial College Union employees have in fact been on strike for the last six years.

This was revealed only coincidentally after Hameena Assan, NegaFelix's top investigative bloodhound, went up to the Union offices to follow up on an inquiry sent several months before. When she arrived at the offices, what she had previously assumed to be a pile of rubbish was in fact a cobweb shrouded picket line, made up exclusively of people called Tom.

Tom, the head of the Imperial College Union Workers Union (UWU), told NegaFelix "We have been sitting here for six years now not letting anyone into the office hoping that when the Union ceases to function, people will acknowledge how vital the services we offer are and that we deserve a pay rise".

The conflict appears to have begun as a wage dispute that dragged on after UWU employees appealed to representatives of the student body to discuss a pay rise. After the student body failed to send any delegates to negotiate with them, industrial action became necessary, said Tom, the UWU workers experience VP.

Expert Union watchers have suggested that this goes a long way to explain the slow email response times as well as the publicity materials that have long been suspected to have been produced by a robot.

Assan's intervention did, however, appear to have disrupted the stasis in the Union building. Having pointed out that, as the Union, they are themselves representatives of the student body, UWU immediately convened a highly productive round of negotiations that agreed on an inflation busting pay-rise. Other demands, including a take-away expenses card for every employee and compulsory foreign away-days for staff were dismissed as employees already enjoyed these rights.

Tom Tomson, another one of the strikers,

told NegaFelix that she was glad that negotiations had come to an end and that she was looking forward to getting back to her day job, expanding Imperial Athletes and the launch of the exciting new initiative, Imperial Students, a framework that will allow students to elect representatives to represent them in Union and College meetings.



FRIDAY 24TH JUNE 2022

FILM

Edited by: JONAH HEWETT
EVA BORRAS

Howard Shore, and the importance of score

Jonah Hewett Film Editor

Arguably the most critical - and certainly the most abused - component for generating audience emotional response in film is the score. The score, or the set of original musical pieces composed specifically for the film (in contrast to the soundtrack, which includes the use of already existing music), is written deliberately to help evoke the appropriate emotional response for the scene; if a nice character is dying, generally, you'll hear a sad song. And I can think of no better example for a discussion of its importance than Howard Shore's score for *The Lord of the Rings*, which in full disclosure is my favourite of all time. Shore's work for *LOTR* is notable for its sheer length, its broad stylistic range, and the extensive use of leitmotif. If you aren't familiar, *leitmotif* is the name commonly given to a short musical phrase that is repeatedly used to represent or allude to a specific idea, place, or character. Famous examples include Darth Vader's famous 'Imperial March' theme - you don't even have to hear all eighteen notes of that refrain to know that a big, bad, cyborg dude with a red lightsaber will be arriving shortly.

In writing the music for *LOTR*, Shore endeavoured to focus on narrative to deliver emotion rather than the mood of the music itself, and his expert use of leitmotif is the thread that binds the massive thirteen hours of

story together. *The Lord of the Rings* is a fantasy epic, with a plethora of distinct races each with their own language, culture, and home - creations representing over thirty years of Tolkien's life. These cultures themselves are a mixture of invented ideas and influences from real cultures. All of this is represented in the individual themes that Shore writes for each main character, which themselves are formed from patterns present in the themes of their own culture. The music written



for the hobbits borrows largely from Celtic influences, using connotative instruments like fiddles and tin whistles. There is a more lively, cheerful version of the Shire theme that is only heard in the Shire itself, and a more wistful, pensive version used for moments of reminiscence. The music of the elves is regal, elegant, and meandering - following the forms of their architecture, and their immortal lives. It uses clear toned female choirs

and its melodies often borrow from the Phrygian mode (a collection of related notes common in Ancient Greek music) to emphasise its ancient and foreign qualities in comparison to the younger cultures of Middle Earth.

There are over a hundred distinct themes in the score overall, and as much as I'd like to, discussing them all here isn't practical. But it's also the way in which the themes are used that makes Shore's work so special in the context of film. A good example is 'The Fellowship of the Ring', the main theme for the fellowship itself. This is a sweeping, orchestral, and heroic piece that frequently soars through the mix in the first film. After Gandalf's death however, and the breaking of the fellowship thereafter, the theme is only heard rarely and in fractured parts, woven into the themes of the separate characters. Towards the end of the final film, when the remaining members of the fellowship rally and charge towards the Black Gate, the theme returns in style, this time sung by a full choir.

Shore's work is possibly the best demonstration in history of how the music of a film can be used to elevate the narrative, and how important it is to the viewing experience. There's a lot more that could be said, and I wish I had the music theory knowledge to do it. But, honestly, it's just really, really, *good*. If I ever stop getting goosebumps at the charge of the Rohirrim in the Battle of the Pelennor fields, somebody euthanise me.

Film Review

A Grand Day Out

A practical guide on what to do if you run out of cheese.

Hahyun Lee Environment Editor

Over its ever-so recognizable theme tune, the words 'A Grand Day Out' are spelled out against the backdrop of a living room wallpaper, faded beige, patterned with little red flowers. Decorating the scene, a vintage camera hanging by its strap, a red and white beach chair, and a framed illustration of some swiss cheese. The camera then proceeds to pan across a variety of holiday magazines sprawled across the floor, a spinning globe and finally a familiar hand holding 'Picnic Guide', before finally introducing our main characters, Wallace and Gromit, lazily relaxing in their sofas on a quiet English evening.

For those of us already familiar with the series, perhaps through repeat watchings when we were young, these few seconds will be like revisiting an old friend, full of charm and nostalgia, not requiring any lengthy reintroduction. But it would be dismissive



to cast all the qualities of this little gem as products of sentimentality. Rewatching this now, it is so evident the craft and creative talent that must have gone into making this film. *A Grand Day Out* was made by Nick Park (with Aardman Animations) in 1989 as his graduation project, using stop motion claymation. The animation here so meticulous and beautifully human, the fingerprints on the character models still visible, the sweeping landscapes shining pristine.

With a short runtime of 23 minutes, *A Grand Day Out* keeps things simple. Three characters, of which only one can talk (voiced by Peter Sallis), and a tale as ancient as time: Wallace and Gromit have run out of cheese to have with their crackers, so go to the moon to get some. With the dialogue necessarily being quite thin (it does take two to tango, after all), a lot is done instead through visual storytelling and the combination of soundtrack and sound effects. Following the tradition of the silent movies of the 1920s, a lot of jokes inevitably end up being told through slapstick, and, childish as these jokes may be, it is hard not to get won over by them.

The third character, a dormant robot (a police

Directed by: Nick Park
Starring: Wallace, Gromit, Robot
Year: 1989



Image credit: Aardman Animations

robot of sorts) on the moon, is likely the most emotive character here. When activated by Wallace, through a ten pence coin, it cleans up after their mess, even issuing the rocket a parking ticket. As the robot looks through Wallace's picnic basket and finds a skiing magazine, we learn that the robot yearns to be on Earth, skiing away. In spite of its efforts to hijack the rocket to get to Earth, Wallace and Gromit jet off without it, leaving the robot back where it began, all alone, dispirited by its unrealised dreams. That of course is not the end of the robot's story, but I will not spoil any more.

MUSIC

Edited by: TARA PAL CHAUDHURI
JOE RIORDAN

DON'T MISS THE GIG! LCD SOUNDSYSTEM @ O2 BRIXTON: 27 JUN - 3 JUL!

THE NEW YORK DANCE-ROCK GROUP ARE GEARING UP FOR A 6 NIGHT RESIDENCY AT LONDON'S O2 BRIXTON IN CELEBRATION OF THE 20 YEAR ANNIVERSARY OF THEIR FIRST EVER LONDON SHOWS IN 2002. THIS IS LESS OF AN ANNOUNCEMENT AND MORE OF A LAST DITCH ATTEMPT TO PROCURE SOME TICKETS BECAUSE I WAS TOO SLOW AT THEIR RELEASE. IF YOU DO HAVE TICKETS, YOU WON, ENJOY THE GIG, I HOPE IT MAKES YOU HAPPY.



Single of the Week

'10:36' by Beabadoobee

Beabadoobee's iconic blend of unique instrumentation

overlaying a catchy bubblegum pop sound is always welcome to the alternative ear in search of something with actual melody. With a hint of hyperpop-inspired sharpness, the beabadoobee's most recent single, '10:36' steeps heavily in 2000s American teenage rock. Beabadoobee's airy head voice complements a prominent drum sequence in 4:4 timing while alternating between some interesting samples in the back and foreground of the soundscape.



Album of the Week

'Life is Yours' by Foals

Last week, we were blessed with the seventh album by Foals – the first album without both keyboardist Edwin Congreave and bassist Walters Gervers. Not that you can tell, because the angry disco drumming, funky guitar plucking and Yannik Philippakis' iconic vocals make up for any lost energy. Here, 80s-reminiscent synths and pumping bass lines headline the bridges.



Album Reviews

Wolf Alice rock us to sleep

Acoustic covers aplenty as Wolf Alice release *Blue Lullaby*

Written by Joe Riordan Music Editor

Just over a year from the release of Wolf Alice's stellar album *Blue Weekend*, the Brit award-winning band are back with their own new take on acoustic covers of their hits, an endeavour bands all inevitably delve into. Don't jump to conclusions though, *Blue Lullaby* is far from a regular acoustic album. As the name suggests the new takes on old songs are not just meant to be covers that we expect with a stripped back acoustic guitar and vocals, they are meant to be calming lullabies that soothe and nurture us.

When I first listened to *Blue Weekend*, I was just finishing my first year of university in London and facing a move back home for the summer. Just as the city was opening up again after lockdowns, I wasn't wanting to leave so I made the most of my time here last June and those memories are solidly linked to the music I was devoutly listening to at the time – *Blue Weekend*. Now, a year later, *Blue Lullaby* has made me reminisce with its intimate takes on 'Lipstick On The Glass', 'How Can I Make It OK?', 'No Hard Feelings', 'Feeling Myself' and 'The Last Man on Earth'.

To transform the tracks into lullabies fit to rock a

baby to sleep, Wolf Alice have traded booming drums and fuzzy guitars for fingerpicked rhythms, string accompaniments and laid-back percussion. 'The Last Man on Earth' and 'No Hard Feelings' already felt like lullabies, so these changes are most noticeable on 'Feeling Myself' where gigantic synths in the bridge have been swapped for elegant orchestral melodies.

You wouldn't expect there to be room for a string quartet to fit by a baby's bedside, so the most important part of a lullaby is usually the vocals and Ellie Roswell's angelic vocals fit all the tracks perfectly. These stand out in the songs where the instrumentation takes a back seat to exhibit Roswell herself. 'No Hard Feelings' is ethereal with only a piano accompaniment and 'The Last Man on Earth' builds up to a particularly celestial chorus with a choir of Roswell's belting out harmonies to end the EP.

Blue Weekend was such a beautifully unique album and I think this is what makes everyone listening have such an individual connection to it. Nostalgia for a summery London I was about to leave is mine and I'm sure there are thousands of others that will be awoken by the even more personal *Blue Lullaby*.



View online here!

Newsic

Running Up The Charts

Kate Bush reaches number 1 in the singles chart with her song: 'Running Up That Hill' more than 3 decades after it was released.

Written by Niamh Heneghan Music Writer

There's nothing quite like a gripping soundtrack to enhance the viewing of all our favourite shows and movies. 'Stranger Things' creators found the perfect song for a struggle towards the light in Kate Bush's song 'Running Up That Hill' and the reaction globally showed just how poignant the pairing was. Reaching a whole new generation of fans



through the hit TV show, the song immediately went viral on TikTok as a character's favourite song became one of our own. With a thrumming drum beat and moving lyrics, the song builds to a climax as viewers watch the character of Max fight for her life. A struggle that reflects into our own daily challenges as you listen.

As per the lyrics, it almost seems Kate Bush has "made a deal with God" as this popularity has been reflected in streaming and sales of the song. As the weeks have gone on, this has built to Kate Bush dethroning artist Harry Styles and his best selling single – 'As It Was' – from the top of the chart.

Noticeably, whilst 'Running Up That Hill' has been the most streamed song over the previous weeks, it

had been unable to surpass the newly released songs. This was due to a Top 40 rule to give newer artists a chance at breaking through the highly streamed classics. In this, older songs require 200 subscription service streams (e.g. Spotify Premium) or 1,200 ad-funded streams to make one “sale” whilst newer artists require half as many. This rule was revoked for *Running Up That Hill* by the Supervisory Committee in a clause regarding percentage weekly sales increase. As this playing field was levelled and the stream-to-sale ratios became the same, a rapid lead was seen with Kate

Bush receiving an additional 5,000 streams within a day compared to previous chart topper Harry Styles.

Alongside this, Kate Bush now holds the records for oldest female artist to have a number one hit and the longest time for a single to reach number one – a whopping 37 years.

This gap has highlighted the importance of exploring genres of music and being inclusive in usage throughout media as young listeners are now avidly working their way through her catalogue of work. Through this, cross-generational connections and cultural impact

internationally can be made, uniting people in a true uniting force – enjoyment of music.



Kate Bush

Hounds Of Love

Album Reviews

Stupid Title, Enjoyably Stupider Music

A look back at Music for Planets, People & Washing Machines by Randy Bernsen.

Written by [Hahyun Lee](#) Environment Editor

Jaco Pastorius is considered one of the greatest electric bass players of all time. From his debut record in 1975 to his death in 1987, he recorded with a wide variety of artists, showcasing his impressive versatility as a bassist, whether it be through his use of harmonics and 16th note grooves as part of the jazz fusion group Weather Report, or his expressive fretless playing on Joni Mitchell's *Hejira*. If you scroll through his discography on Wikipedia, as I did the other day, you may recognise some other names: Herbie Hancock, Pat Metheny, Little Beaver (??), but one curious title caught my eye. In 1984, Pastorius recorded bass for 2 tracks on Randy Bernsen's debut album: *Music for Planets, People & Washing Machines*.

Even odder is the album art. A low resolution stock illustration of the solar system, with the Milky Way splattered in the middle of it, surrounded by MS Paint quality lines depicting a television, I presume. Under it, 3 white stick figures, and Randy's name printed diagonally in all caps. This album truly asks you not to judge a book by its cover. Nonetheless, press play.

'*Sir Yellow Bird*' kicks off with a sweet synthesizer run played by Bernsen, which is promptly 'woooo'd by Mike Couzzi (credited as doing 'noises' in the album tracklist). After some chords, Bernsen enters a long, spacey funk solo over some tight drums with a possibly

regrettable jagged synth patch. The track is mercifully saved by a smoother Rhodes solo, only for Bernsen's synth to make a reprise at the end to see the 7 minute track off. '*Conehead Bop*' follows a similar trajectory,



though a lot easier on the ears, particularly the vocals interjecting with 'conehead bop' during the solos, making for a charming listen. Later on, a reggae version of the jazz standard '*My Funny Valentine*', with a very much non-jazz guitar solo attached, because why not.

Perhaps I have been too harsh. These compositions are strong, each track having an undeniable drive to them, infectious rhythms and impeccably performed rhythm sections. A return to the album cover reveals the other immense talents behind this project, such as

the aforementioned jazz legend Herbie Hancock and Weather Report's drummer Peter Erskine. In fact, it is in track 3, '*Olde Hats*', that Erskine and Pastorius first feature, and it was at this moment that I was convinced of this album's brilliance. Reminiscent of Pastorius' own work with his big band (particularly of *Liberty City*), with its steel drums and Jaco's characteristic muted bass accents and double stops, accompanied with confident horns, this likely would be the most immediate track for newcomers. I will also admit that this is the only 'normal' track the album has to offer.

I do think this album is worth your time. The musicianship is excellent, even if it is in service of, admittedly, very 'out-there' compositions. Whether you choose to listen for Pastorius, Hancock, or whatever the hell the vocals are doing on '*Windsong*', this album will at the very least entertain if slightly confuse. But I won't blame you if you choose to not give the record a second spin. I'm already kind of sick of listening to it for this review.

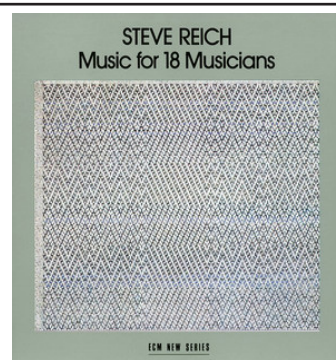


My Semester in Music

Gio Franca's album review diary for the first semester of 2022

Written by [Gio Franca](#) Music Writer

This semester I took a break from writing articles – but I did not stop listening to music. Here is a compilation of everything I listened to in this time period, with all the mini reviews I post on my Twitter account. (Go give it a follow @gbsfranca!)



Steve Reich and Musicians – *Music for 18 Musicians* (1978)

Genre: Minimalism



This hour-long composition explores harmonies with the characteristic repetition of minimalism. Great music for studying.

Favourite Section: '*III A*'

MUSIC



★★★★★

Titãs – *Cabeça Dinossauro* (1986)
Genre: Punk Rock

A BRock landmark, this eclectic and bold album adopts influences from overseas punk, however preserving the unique Brazilian sound.

Favourite Track: 'Igreja'



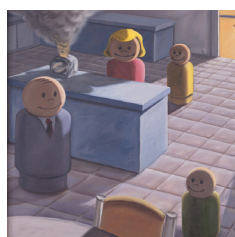
★★★★★

Aphex Twin – *Selected Ambient Works 85-92* (1992)

Genre: Ambient Techno

Although it might seem dull at a first listen, this essential album is a collection of hypnotic, introspective and versatile music.

Favourite Track: 'Green Calx'



★★★★★

Sunny Day Real Estate – *Diary* (1994)
Genre: Midwest Emo

Quintessential emo album. It excels at delivering emotion in a very raw manner, bridging the gap between post-hardcore and emo.

Favourite Track: 'In Circles'



★★★★★

DJ Shadow – *Endtroducing....* (1996)
Genre: Instrumental Hip Hop

A deeply atmospheric album that displays how powerful sampling can be.

Favourite Track: 'What Does Your Soul Look Like (Part 4)'



★★★★★

Andrew W.K. – *I Get Wet* (2001)
Genre: Pop Metal

This project is a unique mix of metal, rock, and pop. The raw energy of the music coupled with the bubblegum party lyrics are something only Andrew W.K. is capable of pulling off.

Favourite Track: 'I Get Wet'



★★★★★

Fresno – *Ciano* (2006)
Genre: Emo

Transitioning from the classic emo sound to mainstream emo-pop, Ciano contributed to the boom of the genre in Brazil, with its melodrama and catchiness.

Favourite Track: 'O Que Hoje Você Vê'



★★★★★

Skream – *Skream!* (2006)
Genre: Dubstep

Absolute classic of an album, which marked the start of an era in the UK electronic music scene. It will absorb you with its atmospheric, minimalistic production – but it might get repetitive.

Favourite Track: 'Midnight Request Line'

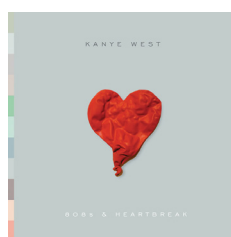


★★★★★

Alcest – *Souvenirs d'un autre monde* (2007)
Genre: Post-Metal

With their first album, Alcest achieves a rather unique style, that manages to transform metal into something quite ethereal and soothing.

Favourite Track: 'Les iris'



★★★★★

Kanye West – *808s and Heartbreak* (2008)
Genre: Electropop

Although this is a step-down from the trilogy started with *The College Dropout*, Kanye steps out of his comfort zone, showing to a mainstream audience that a rapper can make a pop album.

Favourite Track: 'Paranoid'

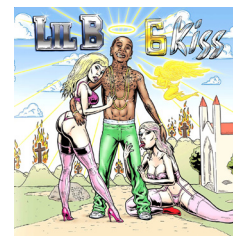


★★★★★

Lady Gaga – *The Fame Monster* (2009)
Genre: Dance-Pop

Two great songs followed by some filler. 'Telephone' is alright. A lot of poor production choices that did not age well.

Favourite Track: 'Alejandro'

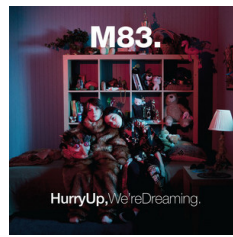


★★★★★

Lil B – *6 Kiss* (2009)
Genre: Cloud Rap

The genesis of cloud rap. And Lil B's alter ego, The BasedGod. A lot of these songs sound relevant to the modern scene – which is weird, since the many duds in the mixtape sound the opposite.

Favourite Track: 'I'm God'



★★★★★

M83 – *Hurry Up, We're Dreaming* (2011)
Genre: Dream Pop

Great production, but overall very sleepy songs. It tries hard to be nostalgic and evoke those "deep" feelings, however it comes out as uninspired and ordinary.

Favourite Track: 'Midnight City'



★★★★★

A\$AP Rocky – *LIVE. LOVE.A\$AP* (2011)
Genre: Cloud Rap

With high highs and low lows, this mixtape is a definitive moment for cloud rap. The real gems are in the tracks produced by the then up-and-coming Clams Casino.

Favourite Track: 'Wassup'

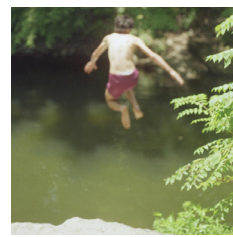


★★★★★

Jon Hopkins – *Immunity* (2013)
Genre: Microhouse

With a house A-side, and ambient B-side, this album is an IDM classic that keeps you hooked from start to finish.

Favourite Track: 'Open Eye Signal'

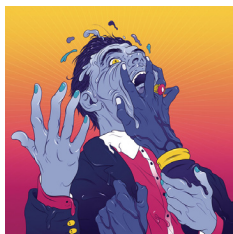


★★★★★

The World Is a Beautiful Place & I Am No Longer Afraid to Die – *Whenever, If Ever* (2013)
Genre: Midwest Emo

An effective project that simply follows the Midwest Emo idiosyncrasies already laid out by other bands – successfully evoking all those nostalgic and melancholic feelings.

Favourite Track: 'Gig Life'



★★★★★

Everything Everything
– *Get To Heaven* (2015)
Genre: Art Pop

A brilliant popoptimistic manifesto. Very thoughtful songwriting and pristine production. Higgs' falsetto delivery is at the same time thorough, beautiful and energetic.

Favourite Track: *'The Wheel (Is Turning Now)'*



★★★★★

Odesza – *A Moment Apart* (2017)
Genre: Chillwave

For an album trying so hard to sound introspective, it uses way too many standard pop tropes. It only succeeds at catching its ideal atmosphere in the title track and *'Late Night'*.

Favourite Track: *'Late Night'*

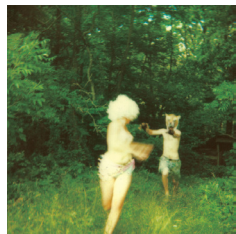


★★★★★

Leggs – *Doomsayers* (2020)
Genre: Post-Punk

The snarky lyricism and the sharp vocal performance shine bright. While the EP is consistent, it struggles to translate the raw energy present in Leggs' live sets.

Favourite Track: *'Local God'*



★★★★★

The World Is a Beautiful Place & I Am No Longer Afraid to Die – *Harmlessness* (2015)
Genre: Midwest Emo

A different beast to *Whenever, If Ever*. Different vocalist, different songwriting, but that same music that feels like a warm hug, with grandiose atmospheres brought from post-rock.

Favourite Track: *'Rage Against the Dying of the Light'*

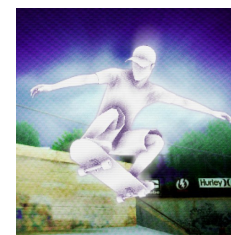


★★★★★

Jeff Rosenstock – *POST-* (2018)
Genre: Power Pop

After *WORRY.*, a quite personal album, Rosenstock decides to go for a slight shift in theme, evoking more and more revolutionary ideas, without sacrificing the catchiness he is known for.

Favourite Track: *'Yr Throat'*

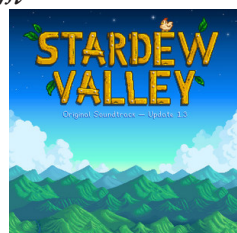


★★★★★

Anthony1 – *!!!* (2021)
Genre: HexD

Sticking to the successful formula of ???, but trimming down track lengths, Anthony1 creates crushed, bite-sized trances with a big emphasis on melody.

Favourite Track: *'Rinselooks'*

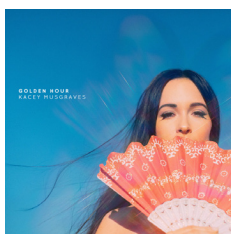


★★★★★

ConcernedApe – *Stardew Valley* (2016)
Genre: Sequencer & Tracker

A soundtrack that fits the game's vibe to its core but is also able to stand out by itself. The compositions are straightforward, although constantly bringing something new to the table.

Favourite Track: *'Winter (The Wind Can Be Still)'*



★★★★★

Kacey Musgraves – *Golden Hour* (2018)
Genre: Country Pop

Kacey makes country a very palatable experience for new audiences using a lot of pop coupled with top notch production.

Favourite Track: *'Love is a Wild Thing'*



★★★★★

Five Pebbles – *forgetmenot* (2021)
Genre: Noise Pop

Very, very noisy EP, which shines with its beautiful chord progressions and catchy riffs. It takes a while to "get into it", but once you do, it is a rewarding experience.

Favourite Track: *'cat's tongue'*

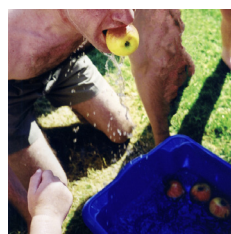


★★★★★

Blowout – *No Beer, No Dad* (2016)
Genre: Midwest Emo

This album is like if Midwest emo and pop punk had a baby, but it actually turned out as a fully functioning adult.

Favourite Track: *'Indiana'*



★★★★★

Leggs - *Writhing Comedy* (2019)
Genre: Post-Punk

A solid first EP by one of the newcomers at the Windmill scene. Captivating narratives and alright instrumentals, but a little "something" is still missing.

Favourite Track: *'Writhing Comedy'*



★★★★★

The Weeknd – *Dawn FM* (2022)
Genre: Synthpop

Sticking to the synthpop formula, Abel does it again – with an album on the same level as *After Hours*. The radio-ready tracks are held together by a light concept and continuous storytelling.

Favourite Track: *'Less Than Zero'*



★★★★★

M.O.O.N. – *Clinically Blasé* (2017)
Genre: Tech House

A house album that thrives with simple melodies and structures, but is a bit clumsy in creating a narrative.

Favourite Track: *'The Fens'*

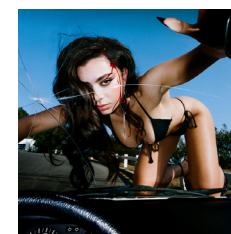


★★★★★

Brakence – *punk2* (2020)
Genre: Emo Rap

The best production you will find in emo rap. The artist brings innovative takes to a subgenre that many deemed dead after its explosion in popularity.

Favourite Track: *'rosier/punk2'*



★★★★★

Charli XCX – *CRASH* (2022)
Genre: Dance-Pop

Moving away from the hyperpop sound she experimented with for the last two albums, Charli returns to the dance-pop sound that she made her name with. Solid album.

Favourite Track: *'Move Me'*

BOOKS

Edited by: ZANNA BUCKLAND

Book Review

The Power Broker: Robert Moses and the Fall of New York

An exploration of real-world politics through the life of one deeply flawed man.

Tanuj Dhir Books Writer

This is a book about a man you've never heard of; a city you don't live in; and politics that happened before you were born. But even though *The Power Broker* came out almost 50 years ago, it remains unmissable for anyone interested in the inner workings of politics and corruption.

The Power Broker is usually described as a biography of Robert Moses, New York public official. While this is true, the word 'biography' fails to do justice to the book's sheer scale. From the intricacies of civil service reform to the various promises and threats that can be (and were!) used to pass legislation, the book is a deep dive into the way politics works in the real world, and how Robert Moses used and abused its systems during his four decades in power.

The book has received praise from many modern politicians, with a testimonial from Barack Obama featuring prominently on the back cover, and even had a brief stint during the pandemic as a Zoom background status symbol.

As you would expect from a biography, it follows Robert Moses' life chronologically, but from the very start, author Robert Caro's attention to detail is clear. He starts even before Moses' birth, with a history of his grandparents and his mother. This level of context – memorably brought to life using storytelling techniques from the world of fiction – is a hallmark

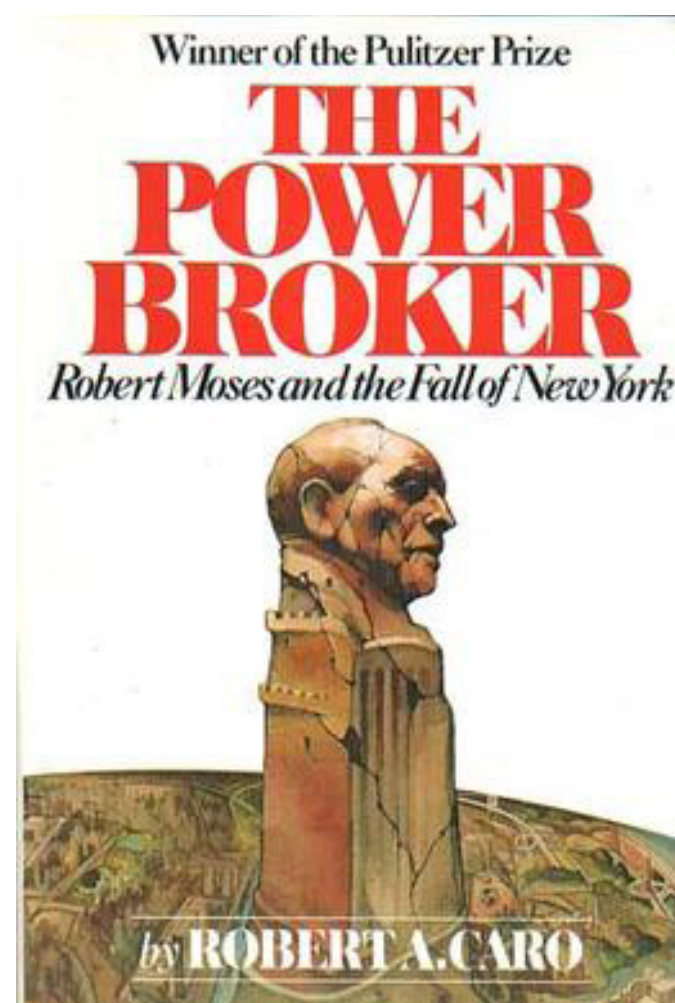
of Caro's work. Throughout the book, he devotes enormous amounts of time to explaining the systems - city government, parks, the New Deal, public authorities, urban renewal – that Moses worked with and held power over.

All this detail makes the book extremely long. At 600,000 words, it's a real doorstopper. However, it's also incredibly gripping. *The Power Broker* is a page-turner that often feels like a political drama novel, but with the gravity of being a true story. The main character is clearly not a good man – one can simply look at his contempt for poor people and people of colour – but after reading about his unparalleled feats of political achievement, it's impossible not to have a sense of awe for his skill at playing the political game.

Indeed, Caro is clear in his presentation of the incredible competence and intelligence of Moses. One standout moment occurs in 1946, when he was involved in bringing the UN headquarters to New York. 'Without reference to a single law book', he dictated a memorandum with the details of the city's surrender of East River bulkheads - which would have taken teams of lawyers days to research.

They later found the memorandum to be correct down to the last comma. When Moses was brought in, there were four days until decision day and the UN had looked certain to be located in Philadelphia. Four days later, everything had changed.

This doorstopper of a book is more than Zoom window dressing. It's more than a biography of a New York public official. *The Power Broker* is nothing less than an essential insight into power, politics, and democracy.



“**‘BIOGRAPHY’ FAILS TO DO JUSTICE TO THE BOOK’S SHEER SCALE**”

Book Review

The Emigrants: Distant Voices, Still Lives

Hahyun Lee Environment Editor

WG Sebald's style of prose, despite being quaint and even accessible on a sentence-by-sentence basis, is wholly unique. His novels often consist of a series of seemingly unconnected narratives framed through the recollections of the narrator. However, once these novels are finished, the precision and delib-

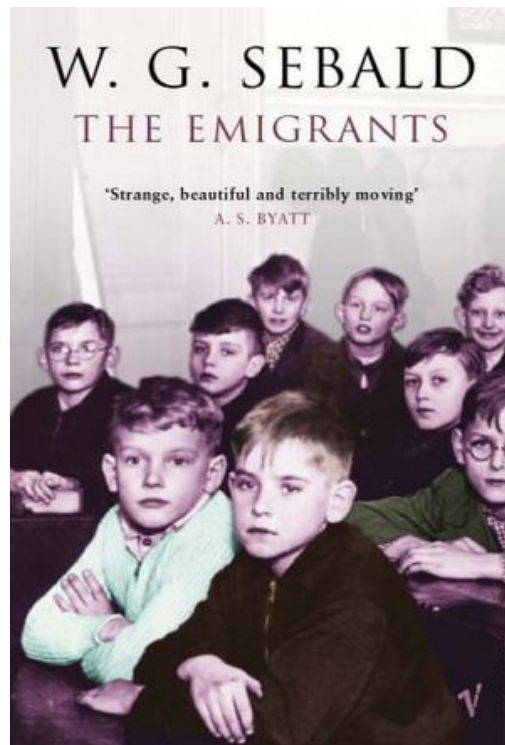
eration with which he structures these narratives becomes more than apparent to the reader. Often dealing with themes of decay, memory, nostalgia, and the event of the Holocaust, a profound melancholy seeps in ever so slowly throughout the texts. The cumulative effect of this - almost unnoticeable at first due to Sebald's steady, restrained flow of prose, eventually produces moments of pathos, though not through the typical methods of

plot or punchline.

The Emigrants starts off with our narrator, having just arrived in Norwich, searching for a place to live with his wife. The Norwich of 1970 that is presented here appears deserted, with empty marketplaces, graveyards overgrown with foliage, and his house-to-be being hidden behind a wall of laurel. 'In silence we gazed at this view, which drew the eye into the distance as it

fell and rose in stages, and we looked for a long time, supposing ourselves quite alone, till we noticed a motionless figure lying in the shade cast on the lawn by a lofty cedar in the southwest corner of the garden.'

And so, we are introduced to the first of our four protagonists: Dr Henry Selwyn, a Jewish veteran of the Great War who is now living in England, estranged from his wife. Through the various encounters our narrator has with Selwyn, we find him to be a man disillusioned and withdrawn. He no longer plays tennis, his great passion, he says, as the court has fallen into disrepair. His kitchen gardens are similarly dilapidated, as are the Victorian greenhouses, tumbled down and overgrown



with fruit trees. 'More and more, he said, he sensed that Nature itself was groaning and collapsing beneath the burden we placed upon it.' Later, we learn that Selwyn had emigrated from Lithuania at the age of seven. As he reminisces about 'the high seas, the trail of smoke, the distant greyness, the lifting and falling of the ship, the fear and hope within us, all of it', the source of Selwyn's malaise makes itself evident.

As we move on from Selwyn, the narrator recalls the lives of his other protagonists; a teacher from his childhood, an aviator's companion, and a German-Jewish painter sent to Manchester by his parents before the Second World War. The final story, focusing on the painter - Max Ferber - shares the elegiac tone of the others, depicting post-war Manchester to be in bleak,

terminal decline. Ferber, whom the narrator encounters twice, two decades apart, shows that same stagnation, as he is unable to finish his own paintings, repeatedly scratching off and reapplying paint. In the latter stages of the section, the narrator is handed a letter that Ferber's mother had written to him before sending him off. It contains a depiction of an idyllic Bavarian life, that his mother must

have led in her own youth. Though initially acting as a quiet form of respite from the enveloping moroseness, it is the context of the letter and knowledge of what is to come for its characters that exposes the true themes and emotional core of the novel, that is, the trauma afflicted to those dislocated by the World Wars, and their consequent feelings of alienation and disembodied nostalgia.

Summer Reading BINGO

Your Books Editor has compiled a selection of fiction and non-fiction (*) reads to fill any free time this summer. To Felix regulars, some titles will look familiar, coming from featured reviews throughout the year. Others are classics, must-reads, or simply have a summery theme. Let us know next term if you manage to score a bingo, or just gain some inspiration for your own reading list. See you next year!

<i>The Appeal</i> Janice Hallett	<i>East of Eden</i> John Steinbeck	<i>Where Rainbows End</i> Cecelia Ahern	<i>Treasure Island</i> Robert Louis Stevenson	<i>How to Save Our Planet*</i> Prof. Mark Maslin
<i>Great Circle</i> Maggie Shipstead	<i>The Amur River*</i> Colin Thubron	<i>Dune</i> Frank Herbert	<i>The Girl with the Louding Voice</i> Abi Daré	<i>Stone's Fall</i> Iain Pears
<i>H is for Hawk*</i> Helen MacDonald	<i>Murder by the Seaside</i> Cecily Gayford	<i>Lessons in Chemistry</i> Bonnie Garmus	<i>Around the World in 80 Plants*</i> Jonathan Drori	<i>The Island of Missing Trees</i> Elif Shafak
<i>Liquid Rules*</i> Mark Miodownik	<i>A Brief History of the Earth*</i> Andrew H. Knoll	<i>Kafka on the Shore</i> Haruki Murakami	<i>How to Kidnap the Rich</i> Rahul Raina	<i>Ariadne</i> Jennifer Saint
<i>Open Water</i> Caleb Azumah Nelson	<i>Klara and the Sun</i> Kazuo Ishiguro	<i>Tipping Point*</i> Malcolm Gladwell	<i>Piranesi</i> Susanna Clarke	<i>To Kill a Mockingbird</i> Harper Lee

GAMES

Tuble - I can't Stanmore of these Wordle clones

► *You would be Barking mad not to play this game*

Hahyun Lee Environment Editor

An Imperial Computing graduate has recently released a web game that has been a real railway success. Morden a derivative of the smash-hit *Wordle*, *Tuble* gives you 6 tries to guess the correct London Underground station. Playable daily, you are told how many stops and zones you are away from the station, with the illustrious prize of the 'party popper' emoji if you guess correctly, which you can share with your Boroughs and Seven Sisters.

I interviewed the creator behind *Tuble* recently. According to him, the game was Hol-born from a chat with a friend: "they were quite into Yeardle and Globle for the history and world geography, and were searching for something really London-specific". He created the game mostly at night - very much in the Zone 2-am: "I was really [Havering] a good time, I hadn't spent so much time on a project like this in a long [Epping] while".

The game was not an immediate Underground success. After being featured in publications including *TimeOut London*, the *Evening Standard* and *Mashable*, the game gained steam and took off, with over 10,000 players a day getting in on the Acton. The game also works offline, so you can Bank on it for a morning commute to South Kensington.

When asked what the future holds, District-ly speaking, he said that he

hopes the game's success will open Moorgates for him in the future. With his growing Arsenal of programming experience, who knows where this Mile End? Maybe we will get a Monument of him soon. One final question.

Q: What's your favourite Tube station name?

A: Theydon Bois

You can find the game at tuble.co.uk.

Tombi! (PS1) Review: Jurassic Pork

► *Don't take this game for granted*

Chris Stone Games Writer

In 1996, Tokuro Fujiwara, involved in such classics as *Mega Man*, *Street Fighter* and *Ghosts n' Goblins*, ended his Capcom tenure of 14 years to found his own studio, *WhooPeeCamp*. If this name is unfamiliar to you, that's because they only made two games on the original PlayStation, neither of which sold particularly well despite critical acclaim: *Tombi!* and *Tombi! 2 - The Evil Swine Return*.

At first glance, it may appear as a bright, colourful mascot platformer, perhaps amusing and nostalgic, but a relic of a bygone era. Upon any closer inspection, however, it reveals itself to be a unique best-of-both-worlds blend of *Metroidvania* and RPG, with approachable but constantly evolving mechanics. If you choose to play it, this will be only the first of many an enjoyable discovery.

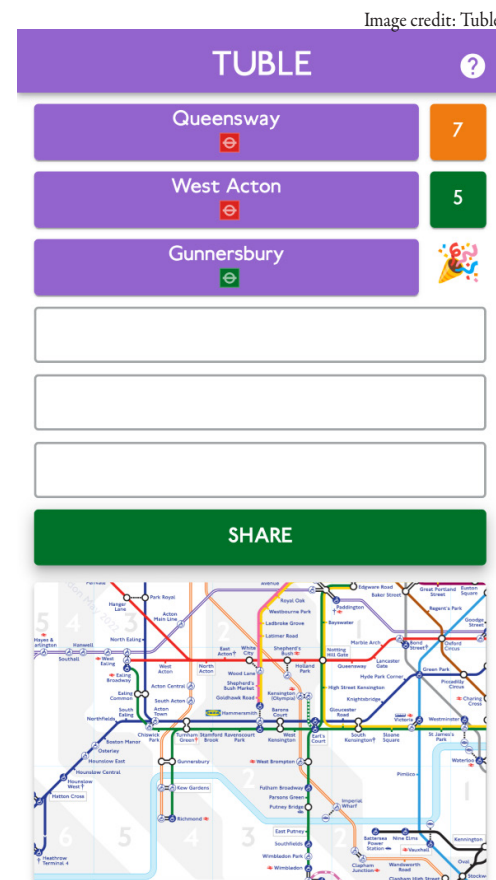
Starring the titular Tombi, a pink-haired boy who stores all manner of things in his stomach, gallops around on all fours, and incidentally is absolutely shredded, this game sees him travelling and unravelling a world populated by dwarves, mouse people, and the evil Komabuta Pigs, who have placed a unique curse on each location, making them perilous to navigate. Tombi

defeats enemies by jumping on them to 'bite' them and throw them across the screen, and can knock them away with one of many ranged weapons. Taking damage subtracts from a segmented health meter a la *Super Mario 64*. The world is substantially sized, but nowhere near being spread too thin, and can be navigated progressively more easily as you discover the many hidden connections between them.

The game utilises many of the idiosyncrasies found in Japanese RPGs, but in the most ingenious and enjoyable ways possible. 'Events' are bitesized objectives or puzzles that are the main means of progression, encountered usually by stumbling upon them, at which point they take their place on a 13-page list. Flicking through and seeing all the gaps representing quests yet to be found will soon have you hooked on exploring the world in a bid to find everything this game has to offer. Relighting the torch in the prison in the Dwarf Village prompts the prisoner to make his escape and you to catch him; eating a crying mushroom helps you convince the dwarf who guards the secret slide to let you have a go on it, which spits you out at the back end of the Mushroom Forest, etc.

By populating this vibrant world with so many little interconnected things to discover and do, *WhooPeeCamp* have simultaneously solved the biggest problems with both the *Metroidvania* and the RPG. Fumbling around to find the singular path forward using the item you just got has been replaced with simply picking an event to complete, or a character to talk to and seeing where it takes you.

For those who are put off by gradual, granular progression, *Tombi!* offers boss fights in the form of the aforementioned Komabuta Pigs, who are hidden behind invisible doors and must be imprisoned in Evil Pig Bags. Each imprisonment lifts the curse that was afflicting the respective area, transforming the world as you play. In addition, Tombi will encounter four progressively older Old Men of Time, who will each grant him a key to open a different type of chest that he will have seen on his journey, blowing the whole game wide open once again. Only a couple of flaws detract from what is otherwise a joyous experience; a couple of areas demand a bit too much of the player given the limited platforming mechanics, and the music tracks, although pleasant, are often too short



due to the limited storage space of the CD. After a while spent in an area they might drive you a bit nuts.

But with how often this game put a smile on my face, and how often I've been coming back to it, these are merely footnotes. The bottom line is that *Tombi!* is a fantastically enjoyable experience for anyone who may choose to play it, regardless of your experience with games or lack thereof, and its imaginative timeless design deserves far more recognition than it has ever received.

Anti-relationship not anti-love

► *Women have long been pressured to find their value in marriage and motherhood, but this puts young women at risk of committing to relationships that do not fulfill their wants and needs in the short and long-term.*

Anonymous



AT THE TIME THAT I READ AND EDITED THIS ARTICLE, I THOUGHT IT WAS REFRESHINGLY HONEST PIECE, BUT I DID NOT APPRECIATE THE MESSAGE FULLY. IT WAS NOT UNTIL I RECENTLY STARTED REFLECTING ON THE RELATIONSHIPS I SAW AMONG MY PEERS, FAMILY, AND FRIENDS THAT I DID. THEN I TOO STARTED TO QUESTION THE STATUS QUO WHEN IT CAME TO RELATIONSHIPS. I BELIEVE THAT THIS ARTICLE IS AN ESSENTIAL READ TO ANYONE WHO IS LEAVING IMPERIAL AND IS EITHER CONCERNED ABOUT STARTING A RELATIONSHIP, OR BEING IN ONE. LIKE THE WRITER ARGUES, I BELIEVE THAT AS A WOMAN ENTERS INTO A NEW STAGE OF ADULTHOOD, IT IS IMPORTANT FOR HER TO RECOGNISE WHAT SHE WANTS FOR HER LIFE. ESPECIALLY IN A WORLD WHERE WE ARE EXPECTED TO SACRIFICE THOSE DREAMS FOR MOTHERHOOD AND MARRIAGE.

THE EMOTIONAL CONTEXT

If I am being honest with myself, I became anti-relationship after a series of failed relationships and situationships - as do most people after having gone through a breakup. In the spirit of a true Imperial student, I turned to books about relationships (I should note mainly books written by feminists), wanting them to convince me further that relationships would not benefit me, and even go as far as to hinder me. It worked. So now I am not only anti-relationship due to heartbreak, but I also have real ammunition behind my personal belief which I have attempted to articulate in this article.

THE NUCLEAR FAMILY AND HAVING A CAREER

After reading 'Why I'm not a Feminist' by Jessa Crispin, I felt so enraged that women were almost condemned to this life of being born, educated, told to get a job, then expected to give all that up to dedicate their lives to raising a family. Just because we have ovaries. I refused to believe that this would be the series of events that describe my life because, as a woman, I am 'innately more maternal'. I would like to quickly mention that I do not see the issue with wanting that life for yourself as a woman. It goes without saying that being a mother is commendable. But what I do not like, was the fact that this was a 'given' in society. It is the expectation of whatever man that I may one day meet, that he will not give up his career to raise my children. Because why would he? He is told that it is in his biology to be the strong, responsible provider in our nuclear family.

I like the idea of the house-husband.

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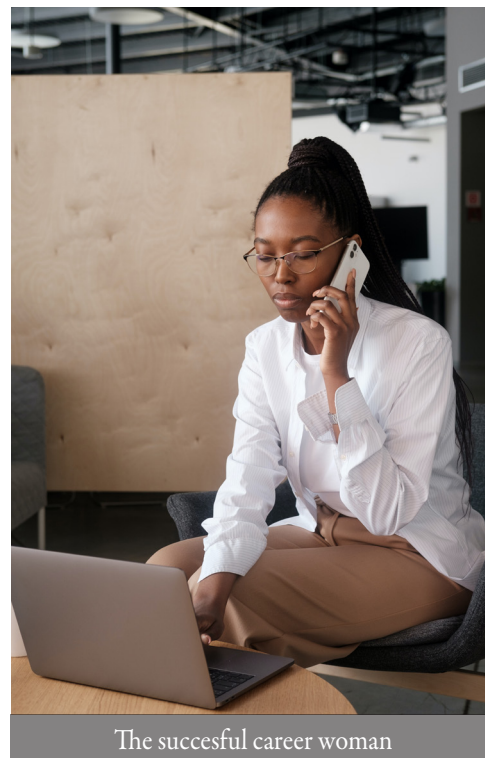


The nuclear family

Women can be the providers, particularly as technology has developed i.e., the contraceptive pill allowing women to prolong having children in order to prioritise their careers. But should the lib-

eration of the working woman be at the expense of her husband who has worked equally hard to get his dream career? Not if he doesn't want to. I cannot understand why anyone, regardless of gender, would willingly sacrifice all they had worked for to have a family. Why must anyone compromise? The formation of nuclear families, based on the argument of human biology, has historically benefited men but even with these developments, it is still oppressive to the parent who must undergo the sacrifice.

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The successful career woman

The next argument is that you can have both. This is the solution concocted to prevent the dissolution of the nuclear family which is the basis for the whole of society. Too much change would be scary so we need to tell the girls something that will stop them from thinking too hard about it. That's it. We will tell them they can be a CEO and then go home to their mansions to their gorgeous, rich husband and kiss their straight A* children goodnight. Maybe this is possible. With money and with help i.e., a nanny for your baby or a private tutor to help your child with their homework. Can



THE PROBLEM IS THE WEIGHTING THAT ROMANTIC LOVE HAS IN THE DECISION-MAKING PROCESS THAT YOUNG WOMEN UNDERTAKE WHEN CRAFTING THE PATHS THAT WILL BE THEIR FUTURE.

the average working woman afford this level of extra care needed for her to have both? In 2021 the average salary for a woman was £28,305. So, let us say that the average successful woman is on a salary of about 20% more than that, so £33600. Full time nursery care in the UK averages at about £14,000 which is 41.7% of her salary. This is not taking into account the quality of the care. Would this be providing the best quality of life for your child? Even if it was, what about emotional care? Is it ethical to have someone else raise your child?

Finally, what about having children in later life? Maybe you are lucky enough to see an early retirement on the horizon. Or you have an established career, and you feel like now is the time to step back. My argument here is that delaying reproduction is detrimental to the

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offspring. The best-known example to support this argument is the prevalence of Down's Syndrome. At 25, the rate of an embryo having Down syndrome at week 10 of pregnancy is 0.09%. At 35, this rises to 0.42% and by 45, the Down syndrome rate increases to 5.3%. It begs the question of, commitment to success or commitment to survival? It is my belief that you cannot have both and do both well.

CHILDREN AND THE ENVIRONMENT

It is almost trendy now to care about the environment. Buying from charity shops is 'cool' and God forbid you buy from Pretty Little Thing. Look how fast Molly Mae gets attacked after benefiting from the capitalist structure which is slowly murdering the planet. These same keyboard warriors that will turn their noses up at you for not going vegan or for shopping at Zara (mostly) do not realise how hypocritical they are. Morgan Stanley analysts believe that having a child is 7-times worse for the climate in annual CO2 emissions than the next 10 mitigants at the individual-level. Overpopulation comes with overconsumption; one child equates to about 58.6 tonnes of carbon each year. We do not consider how our relationships may be impacting the environment when we shame someone for not recycling.

THE BIOLOGY OF MONOGAMY

Jessa Crispin had convinced me that I do not want to sacrifice a career for a family. The next logical step for me was to challenge my perception of romantic relationships. So, I read 'Untrue' by Wednesday Martin for an insight into the alternatives to monogamy.

All of my family are monogamous. I had grown up thinking this is what happens because it works in the best way. However, Martin hinted to me that this might not be the case.

Generally, it is accepted that women are the more monogamous gender. Men can 'spread their seed' and impregnate multiple women at one time whereas women can only fall pregnant by one man at a time. By natural selection, we want the best offspring and so women should be more judicious in their choice of men to better their chances here. Stephen Fry even went as far as to claim that women do not even enjoy sex. He believes they see it as 'the price to pay for

a relationship'.

'Untrue' unveils the truth that this assumption is a lie. Between 2018 and 2019, women were found to cheat 40% more in monogamous relationships than in previous years. A study by Meana concluded that familiarity of spouse decreases the female libido as opposed to males who were likely to report sexual satisfaction from sex with a long-term partner.

I encourage you to pick up the book for more extensive statistics, but I had concluded that women are not necessarily the monogamous beings that I had grown up thinking. Women cheat just as much as men. Women like sex as much as men. But why are we so committed to the idea of a happy ending in a monogamous relationship, if we are going to be disloyal? As a 20-year-old, it is impossible for me to imagine how it feels to be tethered to one other human being for 60 years. I have known my parents for 20 years and that is my longest standing relationship to a human. One can imagine that after 60 years, you may get bored or look outside of your romantic relationship for stimulation, may that be intellectual or sexual. This is where polyamory offers a solution. We have infinite love for multiple friends, parents have infinite love for multiple children. Why do we limit ourselves to just one romantic partner? Polyamory offers a logical solution, yet it is not quite accepted as 'normal' by society.

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The polyamorous 'throuple'

LOVE IS NOT THE PROBLEM

I am not anti-love. Love is amazing and I love many people in my life. The problem is the weighting that romantic love has in the decision-making process that young women undertake when

crafting the paths that will be their future.

You just have to open TikTok or Instagram to see pictures of happy couples with millions of likes. Society values monogamy, not love. It seems that if you are in a relationship, then you must be desirable and therefore you are higher up the food chain. We envy people in happy relationships, but we do not envy ourselves despite having other forms of love in our lives.

On the other side of the coin, there are the female influencers living their 'hot-girl summer'. We love to see empowered, single women and we celebrate them as feminists. But do we seek personal improvement in order to make ourselves more attractive on the romantic market? It is a pessimistic view, but a valid one.

I worry that we place so much emphasis on the importance of romantic relationships that we lose sight of things that matter more.

This is my opinion, but I hope it made you uncomfortable. I hope somewhere, you felt angry that you slightly agreed with me. We are convinced from a young age that this is what we need to do. Enter a monogamous relationship and have a family. Do not think about it too much because you will be unhappy. Well, I am thinking, and I am unhappy. Thinking about it and challenging the expected allows me to make decisions now, while I am in my 20s, that I hope will result in me living a happier and more fulfilled life. If you disagree, please convince me I am wrong. Because that would definitely be an easier fate to accept. It is the default after all.

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Women can find love, happiness, and fulfillment outside of monogamous relationships.

My Thoughts on the Spontaneous Community of Compatriots and Why Reasons behind its Formation Cannot be Ignored

► *A discussion on the reasons behind why some international students tend to stick within their ethnic or national groups.*

Wanqing Chen
Comment Writer



When I was having lunch in the college canteen and I sent a picture of what I was eating to my parents in China via WeChat, the first reply my mom sent to me was, “Chinese cuisine? So are there many Chinese students on campus?”. After I answered, “Yes there’re some”, she appreciated the abundance of Chinese food as well as the number of Chinese students, and encouraged me to make as many Chinese friends as possible to not become lonely, a ‘considerate’ narrative I invariably attempt to escape from.

As a Chinese who was born and raised in Wuhan for over 20 years, I – like many of my compatriots – was nervous about moving to a remote and unfamiliar western country. I felt inclined to make more interactions with international students from mainland China, chose a flat where large numbers of Chinese would stay, joined all of the overseas WeChat groups I could find, searched travel and Covid-19 restriction tips in the Xiaohongshu app (China’s Instagram equivalent). It was only when I was able to double check everything with my Chinese friends that I felt at ease.

However, many people from other countries who speak English as a foreign language seem to prefer living with flatmates of various ethnicities from a range of countries – and tend to adapt well to their new surroundings. This made me ponder why there is a tendency for Chinese people to tacitly form a united and exclusive community of only Chinese, and if there is anything wrong with always drowning in a Chinese-only community in a Western country.

This phenomenon can be carelessly described as a stereotype for Chinese groups – is it because Chinese people are afraid of speaking out? Is it because Chinese people are introverted? Or

is it because Chinese culture is simply incompatible with that of its Western counterparts?

No. I don’t think these are valid explanations for a complex Chinese community nor it should be regarded as normal. ‘Stereotype’, is already a cliché narrative that can effortlessly evade the essence of the issue. Quantities of stereotypes can be seen over conversations, TV shows, films, and novels, etc. and further self-reinforced in Chinese people. Generations have been explaining and resisting stereotypes, but what if this time, we could escape this “stereotype” trap and reflect on the authentic reasons behind it?

First and foremost, there is an indisputable correlation between the establishment of intimate Chinese communities abroad and language barriers. Sometimes, my foreign friends would be curious and ask, “how did you get to be fluent in English given that you grew up in China for years?”. I was surprised by this question initially, as I know I am not the most proficient English speaker among Chinese people who have a similar background to me, and I also wonder if they ask the same question to European-looking people who speak English as a foreign language.

Numerous Chinese people in Europe are both fluent in English and eager to discover more about their new communities through conversation. But sometimes their failure to speak natural English results in being viewed in an odd

light, which only leads to a further loss of confidence about fully integrating into their new environments. A friend told me his imperfect English makes it harder to maintain close relationship with foreigners – he was not bold enough to bother one after the other to explain every word he did not understand in a conversation. It was easier for him to end up not bothering English speakers and to fall back on socialising with Chinese compatriots.

Differences in cultures and political systems between China and other countries, in some cases, are reasons for such solidarity in Chinese groups, but we cannot overlook how the overriding factors of trying to be a model minority and the inability to cope with the awkwardness of language barriers in social settings result in the seemingly Chinese penchant for huddling together.

Like my mom’s perceptions in the beginning, ethnic and national networks morph into unconscious safe zones and inevitably become a key impediment to participating in a diverse culture. I feel the sentiments of many Chinese people who strive to break out of their ethnic communities but are stuck in the natural Chinese huddle. Presumably, these are hidden feelings that few people would express directly but are so critical that they cannot be dismissed with a flippant “it’s just a stereotype”.

Not just the Chinese community, but

many other minorities in the UK might share the same feeling whilst reasons of this struggling have been barely told. I remind myself that such split feelings should never be ignored, and the identity dilemmas should be visible in an explainable way. If all of us, no matter where we are from, can confront the structural reasons behind the ‘stereotype’ of each homogenous group, then enough of us may be able to break through the shackles of identity politics; simply to treat each other with more understanding from a human perspective, and not to use any preconceptions to define any ethnic group anymore.

THIS ARTICLE CONTINUES TO STAND OUT TO ME FOR THE REASON THAT WANQING CHEN SPOKE ON AN EXPERIENCE THAT IS SHARED BY SO MANY IMPERIAL STUDENTS, YET IT IS STILL A POORLY UNDERSTOOD EXPERIENCE BY THOSE WHO DO NOT RELATE. IN FACT, I RECALL THE RELATIVELY RECENT DEBATES ON IMPERIAL SECRETS ABOUT THE ASSIMILATION OF INTERNATIONAL STUDENTS AND IT IS CLEAR TO ME THAT THERE IS STILL A LOT OF DIALOGUE TO BE HAD. AS SOMEONE WHO IS A BRITISH STUDENT, BUT FROM AN IMMIGRANT BACKGROUND – I UNDERSTAND THE PAIN OF LANGUAGE BARRIERS, AND THE FEELING OF BEING HYPER-VISIBLE TO THE POINT WHERE THE EXTENT OF MY ‘ASSIMILATION’ IS ALWAYS OBSERVABLE. THAT SAID, I ALSO APPRECIATE THAT THE INTERNATIONAL STUDENT’S EXPERIENCE IS A UNIQUE ONE AND CHEN’S ARTICLE DOES AN AMAZING JOB AT EXPLAINING HOW THINGS THAT OFTEN SEEM SO MINOR, TO HOME STUDENTS LIKE ME, CAN CREATE SOCIAL BARRIERS. BUT MOST IMPORTANTLY, THROUGH OUR DIFFERENCES WE CAN FIND FAMILIARITY.



GENERATIONS HAVE BEEN EXPLAINING AND RESISTING STEREOTYPES, BUT WHAT IF THIS TIME, WE COULD ESCAPE OUT OF THIS “STEREOTYPE” TRAP AND REFLECT ON THE AUTHENTIC REASONS BEHIND IT?

COMMENT

Philosophy is not dead!

► *To answer the important questions, Imperial needs to embrace philosophy*

Francis Rhys Ward

Writer



“Science without philosophy, facts without perspective and valuation, cannot save us from havoc and despair. Science gives us knowledge, but only philosophy can give us wisdom.”

- Will Durant

What are the most important problems facing humanity today and how should we address them? These are, at heart, philosophical questions: they concern values, and ask how we ought to act. Imperial College London is one of the world's leading universities, and hence, one of the institutions that we can depend on both to ask, and answer, such questions. Yet, Imperial has no philosophy department, in fact, it has no substantial humanities departments at all. When conducting research on science which affects humanity, scientists need to be aware of the long-term implications of this research.

The university focuses exclusively on science and technology and the culture is one of productively continuing the march of scientific progress. In addition, strong industry connections naturally focus research efforts on concrete applications. What is often lacking is a carefully considered view of what we ought to do with the machinery of science. This is apparent in the day-to-day lives of many of the researchers and students at Imperial. For students, the workloads are heavy, the deadlines numerous and frequent, and the focus is on training to quickly produce practical results. This is good training for a role in industry but there is less time, under this regime, for reflection on what has been learned, and less encouragement to step back and evaluate one's long-term goals, or the goals of the society which these students will help to shape. The case is similar for researchers, many of whom fall prey to the “publish or perish” game. Pressures to pump-out as many papers as possible naturally lead to those papers' focusing on safe, incremental results; again, there is less room for reflecting upon the purpose of research, advancing riskier but more important directions, or covering new ground.

These issues surrounding the culture of Imperial are, at least in part, a consequence of the minimal humanities and a neglect of philosophical thinking. Culture is inherently a product of the individuals who make up a community. Since the individuals who make up Impe-

rial are, in the vast majority, scientists and engineers, the ideas and norms of the community are technocratic and technosolutionistic. If the Imperial community included more social scientists and philosophers, this would expand its diversity of thought and broaden the range of ideas under discussion. In particular, more philosophical thinking would lead to an appreciation of the big picture questions such as “what is our research for?”

This is not to disparage the brilliant scientists working at Imperial, nor their contributions. The latter are of very real value to the world and help improve the lives of many people (e.g., the work done at Imperial on pandemic risk and climate change is evidently important). But the incentives inherent in the culture stifle the abilities of researchers to address the questions that we accept as important and prevent some questions from being asked at all.

However, at Oxford, Cambridge, and other universities around the world, there is an emerging community of researchers who explicitly look to ask and answer the big questions facing humanity. At the Future of Humanity Institute, the Centre for the Study of Existential Risk, the Stanford Existential Risk Initiative, and a few other institutes in major universities, multi-disciplinary teams of academics bring the tools of mathematics, philosophy, and social sciences to bear on big-picture questions about humanity and its long-term prospects.

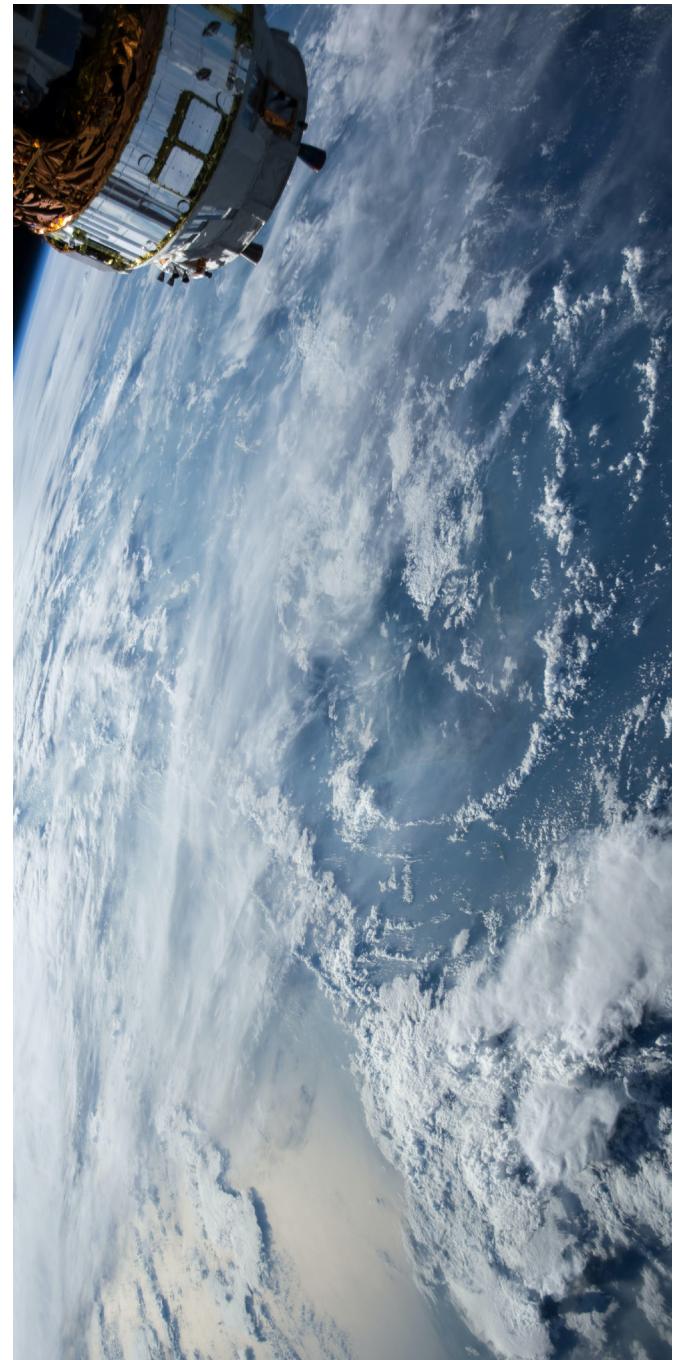
Among these communities there is a growing appreciation for the value of considering humanity's long-term future, and a belief that the present may be one of the most important time-periods in humanity's lifespan. Fuelled by technological progress, we are in a period of unprecedented power over the future. Nuclear missiles, advanced artificial intelligence, and biological weapons are just some of the technologies humanity could use to destroy itself. Yet, our technological progress has not been matched by a corresponding growth in wisdom. We lack the moral and philosophical maturity to protect ourselves, and our future descendants, from irremediable mistakes.

Luckily, it's not too late! Imperial's new initiative “I-X” is a multidisciplinary environment for research across emerging digital technologies which aims to “build a better future”. But it has no philosophers! No social scientists! I-X is an opportunity for Imperial to change its culture, to invite a wider range of voices to the table, and to give genuine philosophical thought to the future of humanity.

THIS WAS THE FIRST COMMENT ARTICLE I EDITED AS COMMENT EDITOR IN THE AUTUMN TERM, AND IT WAS A SUPERB START TO A YEAR FILLED WITH BRILLIANT ARTICLES. FURTHERMORE, FRANCIS RHYNS WARD'S MESSAGE IS PERHAPS ONLY GOING TO BECOME INCREASINGLY RELEVANT IN THE NEXT FEW YEARS AND THIS IS WHY I AM BRINGING THIS ARTICLE BACK. IMPERIAL IS HOME TO SOME OF THE MOST INTELLIGENT AND HARD-WORKING PEOPLE I HAVE EVER MET, BUT I AM OFTEN CONCERNED ABOUT HOW THIS FAST-PACED ACADEMIC ENVIRONMENT DOES NOT FOSTER A CULTURE OF ETHICS. WARD EXPLORES HIS CONCERNS IN THIS ARTICLE TOO, WHICH IS WHY I BELIEVE IT IS A NECESSARY READ.

In short, Imperial College London is undoubtedly one of the best scientific institutes in the world. But it is not enough to continuously turn the wheels of science; without a greater appreciation for philosophical questions of the value and purpose of research, we run the risk of driving an accelerating car without stopping to think about the direction in which we are headed.

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Planet Earth from Space