

Newspaper of Imperial College London

FELIX

Familiar themes
at Frieze

PAGE 23 ARTS

I spent my morning with the
Chinese President

PAGE 6 COMMENT

PRESIDENT XI COMES TO IMPERIAL

The General Secretary of the Communist Party of China met with students and scientists while on a state visit

On Wednesday, Chinese President Xi Jinping stopped off at Imperial to celebrate collaboration between Chinese institutions and the College.

Imperial proudly repeated the statistic that since 2003, the number of UK papers published in Nature with a co-author in China had jumped from 3% to 22%.

President Jinping, affectionately nicknamed Xi Dada by his fans, was given a drawing of Queen's Tower and two 3D printed models of the Great Wall of China, one the width of a human hair.

Accompanied by the Chancellor of the Exchequer, George Osborne, and Imperial regular Prince Andrew, Xi met President of Imperial College Alice Gast and several students during his visit.

Xi held an umbrella as Professor Gast walked him across Dalby Court from the business school to the Hamlyn Centre. Some Chinese news agencies misreported that she was merely a "tour guide", rather than a woman earning over £400,000 a year to lead Imperial.

Xi's wife, Peng Liyuan, a famous...
continued on page 3



FELIX EDITORIAL



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Contents

News	3
Comment	4
Science	7
Film	8
Music	10
Games	13
Clubs & Societies	19
Features	20
Arts	21
Food	26
Business	27
Welfare	28
Hangman	29
Puzzles	31
Sports	32

A word from the Editor



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Hello, and welcome to this, another issue of your beloved FELIX. I can't quite believe you're reading my editorial when there's so much smashing content this week. It's very sweet of you. Ooh I feel warm and fuzzy now.

You might've noticed, but we've only had the ruddy president of China in this week. He swung by with Prince Andrew (again – he can't keep away) and heir to the tory throne, George Osborne. Not a great gang if you're into human rights or tax credits for the disabled. We watched the Panorama episode on President Xi, we asked Chinese students what they thought and we saw the crowds that gathered to greet him and his A-list wife (who in real life is a stone-cold fox by the way; I accidentally bumped into her coming out of RSM on the way to college caf for a Muller corner).

Basically, he's a really flaming popular leader. He's adorable, looks like Winnie the Pooh and for fans outside the business school on a rainy Wednesday morning, this was comparable to the Queen visiting,

rather than David Cameron.

Although I regretted not shouting FREE TIBET or STOP EXECUTING PEOPLE or something at Peng Liyuan when I bumped into her on Thursday, the reality is that nothing negative is getting reported by the Chinese media anyway.

Should we, as a university, be associating, even if on a business level, with someone who condones the kinds of civil rights abuses we see in China? Yes, financial contributions to research as a result of President's visit appeared even before he did. And yes, this money goes to super useful causes. We have thousands of students who adore this man and enjoyed his visit. For those reasons, I think it was right that he came here.

But when we have the world stage with a President of a country whose practices on something as fundamental as human rights, we so adamantly disagree with, should we be showering them with gifts?

I'm not saying we should've thrown red paint at the man, PETA-style, but maybe a Corbyn-esque level of



polite discussion, rather than full on celebration would've been more appropriate. To be honest, if college want to collaborate with Chinese institutions and companies, for academic and most likely financial reasons, it has to court President Xi. So I do kind of get it.

But I don't know guys, maybe I was just bitter 'cause I wasn't allowed to shake his hand. That would've been an awkward one to explain though. 'What do you do?' 'I'm a member of the free press.' Oh dear.

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Hey you. Wanna copy edit?

If you h8 speling misteks and want to get involved in FELIX, this is a good way to start.

Come to the FELIX office (West Basement of Beit) at midday on Monday 26th and hang out. And send us an email at felix@imperial.ac.uk. Let us know, we're needy.



Imperial medics fight contract changes

A strike ballot follows the demonstration on Whitehall that saw 20,000 flock to parliament

Cecily Johnson
News Editor

Over 20,000 people took part in a protest march in London against proposed government changes to junior doctors' contracts last Saturday. Protests also took place in Belfast, Nottingham and Dundee.

Medical students, NHS workers and members of the public joined the crowds of junior doctors who marched on Westminster in objection to the planned changes, which are due to be introduced next August.

The proposed terms of the new contract include a pay cut of up to 30% for those in some specialties

and the reclassification of 'normal working hours' to include Saturdays and later evening finishes, moving from 7pm to 10pm.

Protesters have argued that the extended hours would negatively affect the quality of patient care, as "overworked" junior doctors would be expected to work up to 90 hours

They would be expected to work up to 90 hours each week



!! C! S! M! is not what these protestors were shouting. Photo Credit: Grace Rahman

each week.

Jennie Watson, ICU Deputy President (Welfare), who is also a medical student, said it was good to see "so many of my fellow medics out fighting for the future of the NHS, the patients and our profession".

The British Medical Association (BMA) has announced that a strike ballot will take place next month.

This would be only the second time in 40 years that doctors have taken industrial action, the last time being a strike over a pension dispute in 2012.

The decision to ballot BMA members had not been "taken lightly", said junior doctors' leader Dr Johann Malawana. "The government's refusal to work with

us through genuine negotiations and their threat to impose new contracts that we believe are unsafe for patients and unfair for doctors, leaves us with few options".

On the topic of industrial action, Jennie said, "I'm sure there will be plenty of ICSM students and alumni on the picket lines if there is a strike".

The reddest red carpet for this president

Grace Rahman
Editor-in-Chief

continued from front page

...folk singer in her own right, also came along. She was given a cape by the Data Science Institute, whose scientists had analysed 700 photos of her to get accurate measurements and design ideas for the item. A UK based Chinese designer then made the piece.

The *MailOnline* reported that Peng "dissolved in laughter" at the gift, making this, we think, the first sidebar of shame click-bait article to come out of Imperial College. On Thursday, the first lady returned to South Kensington to visit the Royal College of Music. She was seen emerging from the building with our very own Professor of Science and Society, the broadcaster Lord Robert Winston.

While his extensive tax credit cuts were being discussed at Prime Minister's Questions, George Osborne was waltzing about the

business school foyer. At one point Alice Gast made a speech directly addressing the unpopular politician.

"Chancellor, you have said that you aim to make the UK 'China's best partner in the west'. Imperial College London strives to be just that."

Xi and his wife have been staying at Buckingham Palace during their

We think this is the first sidebar of shame *MailOnline* article to come out of Imperial

four day visit.

This trip paid off for Imperial quicker than you might have imagined possible. Before President Xi even arrived, a plaque was unveiled to celebrate a £3 million donation from a Chinese financial services company. The Hamlyn Centre for medical robotics and the Data Science Institute will benefit from the perfectly timed gift.

Just in time for the visit, Imperial's Associate Provost of Academic Partnerships, Professor Maggie Dallman described the Chinese student body in sweeping terms in an article for *China Daily*.

"Almost every day I meet brilliant Chinese students," she said, adding that the Chinese community at Imperial "are no shrinking violets."

According to college, there are 2000 Chinese students currently studying at Imperial.

One such student, Hongze Zou, told FELIX he thought the trip was "a good opportunity for Chinese students and the school". Several others commented on how exciting



Xi Dada drew quite a crowd. Photo Credit: Thomas Angus / Imperial College

it was to see their home country's leader in their university town.

"[His] visit and Britain's hospitality show that both countries are willing to resolve current issues," said Xinyang Yuan.

A popular leader back home, Xi's father held important roles within Chairman Mao's government, before being imprisoned during the cultural revolution.

Although commonly referred to as 'president' for western appetites, Xi's official title is General Secretary of the Communist Party of China. He's spoken openly about his aims to end corruption at the highest

levels. However, his visit has been met with some criticism. Pockets of protesters lined Pall Mall as Xi made a journey down the road to Buckingham Palace in a carriage. The BBC's political editor, Laura Kuenssberg, asked Mr Xi why the British public would want to do business with a country with such a "deeply troubling attitude to human rights". The British steel industry is also unhappy over the visit, as it coincides with parts of a large steel corporation here going into administration, which many say is down to the influx of a cheaper Chinese product.

FELIX COMMENT



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What is a “working royal” anyway?

Are the royal family still relevant in a democratic society?



Eamonn Postlethwaite
Columnist

The Duke of York was at Imperial last week to host the Pitch@Palace Bootcamp to find finalists for Pitch@Palace4.0, an event where bright young entrepreneurs get to pitch to industry experts, CEOs and people with lots and lots of money. Since stepping down as the UK's special representative for trade and investment in 2011 after concerns about the company he keeps, Prince Andrew has championed this kind of start-up, supporting hackspacey vibes around the country at various university campuses and techspots. In fact, previous finalists of the Pitch@Palace series were Imperial's very own YOYO app.

While I am broadly supportive of these kinds of schemes, it got me thinking about the painfully euphemistic sounding “working royal” designation that gets used regularly to describe members of the royal family.

How many working royals are there? Almost certainly more than you think. For example, the Duke of Kent and the Princess Alexandra (34th and 49th in line to the throne, as of May 2015) are considered working royals and receive a 24 hour security detail from the Metropolitan Police.

Since 2013, the royalty have been removed from the Civil List (of people kept by the State) and instead get a single payment from the Sovereign Support Grant, which is around 15% of the financial takings of the two Royal Duchies (the Queen and Prince Charles) plus other royal holdings, on which no tax is paid.

As symbolic as the royal family may be, they should be deposable



The Duke of York looks at a low-cost incubator at the Pitch@Palace Bootcamp.
Photo Credit: Layton Thompson / Imperial College London

Controversially, should the financial situations of the Duchies worsen, the amount paid per annum through the Sovereign Support Grant is protected and can only rise over time.

While the introduction of the Sovereign Support Grant has removed the issue (to some extent) of categorising which royals are considered to be “working” and therefore are on the Civil List, it also appears to have allowed the Keeper of the Privy Purse (in charge of the financial management of the royalty) to take part in some quite shameless spin.

For example, the figure paid through the Sovereign Support Grant for 2015-2016 will be around £40 million, which one could argue is a relatively small price to pay for the tourism money, soft power, and warm fuzzy glow of patriotism we all occasionally (yes, even me) feel when we think of our long-established monarchy. It allows very positive comparisons to other states with intact monarchies and even to a handful of states with an elected head (see Italy). However, this figure pales in comparison to even a conservative estimate of the full cost of maintaining our monarchy.

For example, regardless of the reform of the Civil List system, many minor and even obscure members of the royal family receive

their tax exemption and legal privileges that would make any true believer in a free market and/or democracy wince, add to the feeling that all might not be quite as good value for money as the Privy Purse makes it seem.

Many more issues spring to mind, once the question is asked. Prince Charles' little spiders make it clear he hasn't the restraint of his mother when it comes to the separation of politics and the monarchy. Prince Harry makes you wonder whether the monarchy might always be such well respected ambassadors around the world for these blessed lands, as unlikely it is that he'll ever be crowned.

Indeed I am not bothered that the Queen has such political clout, but I feel that if the head of state of my country embarrasses, misrepresents or stands opposed to my view of the world (and a sufficiently sized group of others'), as symbolic as the royal family may be, they should be deposable.

How long before the monarchy stops being seen as a beautiful and respected remainder of a bygone age and starts being laughed at as an anachronism in a world slowly moving towards democracy? Kudos to Prince Andrew for doing good work, but I'd much rather you were just an ordinary bloke.

Their tax exemption and legal privileges would make any believer in the free market wince

police protection at the expense of the London Metropolitan Police. The budget (as obfuscated as it is, it seems that revealing the cost of royal security is in itself a security breach) puts the most comprehensive estimate of the cost of protection for all royals who receive it has been put at £100 million, a figure that already dwarfs the Sovereign Support Grant.

When all the ancient and obscure, modern and hidden, and otherwise generally unknown costs of the royal family are added up, the pressure group Republic (which may be biased, but the report is very well made) estimates the true cost to the British Tax Payer (including revenues from the treasury and those that would otherwise be collected by the treasury) as £334 million.

There was a popular figure of £500 million said to be brought in by the royal family through tourism that was produced by VisitBritain. This, if true, would more than allay the financial arguments above. However the reader might be interested to note that this is simply a quarter of the figure they judged was due to “British Culture and History attracting tourists”. I don't really want to start on why such an estimate is flawed.

Added to this, the bizarre legal entities that are the Duchies, with

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Hating on Graduation is hard

Graduation only disappoints by being difficult to find its flaws



The Angry Grad
Columnist

Graduation day. Supposed to be a milestone, right? One of the happiest days of your lives, some people (morons) say. Well, not if I, the Angry Grad, have anything to do with it.

I was proper excited for it to be a 'mare, and my God did the day start off that way. I got stuck in traffic, locked in toilets and stripped of my gown (who the FUCK designed them to attach by Velcro? I couldn't even swing my cape around like Hazza P without some sort of gown-related disaster).

I was all set to miss frolicking across the stage, and that really would have made a fantastic rant. But, alas, I made it and was ready to pinpoint and critique all the flaws of G-DAY.

Whilst, yes, if we were in the USA, I would major in moaning, there's no way I can fault the venue. It pains me to praise, but it's gotta be said: it doesn't get much better than the Royal Albert Hall.

The grandiosity of the venue really does drive home the fact that you can now put those three little letters after your name, and at the end of the day, I did achieve something pretty special and unique – just like the other 800+ people I graduated with.

The RAH, as British as it may be, cannot balance out the guju community of ICL. I salute you, Shahs, Patels and Chowdrys, for making my face crack a smile. Y'all just kept appearing, like food at your grandmother's house, and my God do I love you for it.

Moreover, instead of us Asians sticking out like sore thumbs with our names, which debatably were invented on scrabble boards, the Robinsons and Smiths amongst the crowd were the ones that shocked us.

We may have finished the ceremony with God Save the Queen, but that didn't stop us from playing Where's Wally with the white people before, during and

after.

While I did moan about socialising in my last column? Raving it up with my homies at the reception was pretty darn fun. I smashed my fair share of champagne, had one too many a photo shoot, and generally just jammed like the baller I am with my coursemates.

It was quite cathartic really, seeing as we'll probably never all be together again – they'll be finding cures to cancer across the globe while I still can't perfect rolling a round chapatti – so we did just savour the moment. I'm not sure how to describe it, as it is an emotion I am unfamiliar with, but I believe the common folk call it 'being content'. Even my tutor pointed out that I came across as overwhelmed, which made an amusing change to my usually underwhelmed state. For those of you yet to graduate: you have a lot to look forward to.

I'm gonna sign off – I'm heaving and need a chunder because this article is sickeningly sweet. I tried to

hate on graduation, but I couldn't, so now I hate myself.

I didn't fall
on stage
... and I did
indeed look
peng

P.S. WTF was that weird drum bell thing on stage? Someone enlighten me via the Editor please.

P.P.S. To those who read my last column: I didn't fall on stage (unfortunately, no one did), and I did indeed look peng. DOUBLE WIN.

The modern-day hypocrite



Jennifer Eden
Writer

The inner hypocrite has been lurking within you for some time. Occasionally it appears in its most obvious form, whereby said hypocrite exclaims, "I don't watch trash TV," and then binge watches 20 episodes of Keeping up with the Kardashians. Of course, "I only watched it to see what all the fuss was about". Sadly, not fooling anyone. However, generally speaking a hypocrite can take many forms.

There's the environmentalist who recently saved a tree in Bolivia from being chopped down. How did they do that? They travelled 6000 miles in a fuel guzzling jet; hacked away a path in the rainforest to get to the tree; then set up camp, only to realize that the tent has flattened a rare species of ant.

They proceed to piss off the locals who need the land to grow soya beans, which make the soya milk that you consume because it's supposedly better for the

environment! But no matter, the tree lives to see another day. That's until the environmentalist flies home one week later (after let's face it, a bit of a jolly), and the locals stop hiding the flame throwers.

The next species of hypocrite, and one whose cause seems to have been reignited recently, is the anti-capitalist. The person who preaches how much better the world would be if it weren't being strangled by big bad businesses and our consumerist ways. Of course, they vent their frustrations on capitalism via their Apple smartphone, on a profiteering social media site, while sipping a can of Coke, most probably wearing clothing from Topshop or Primark.

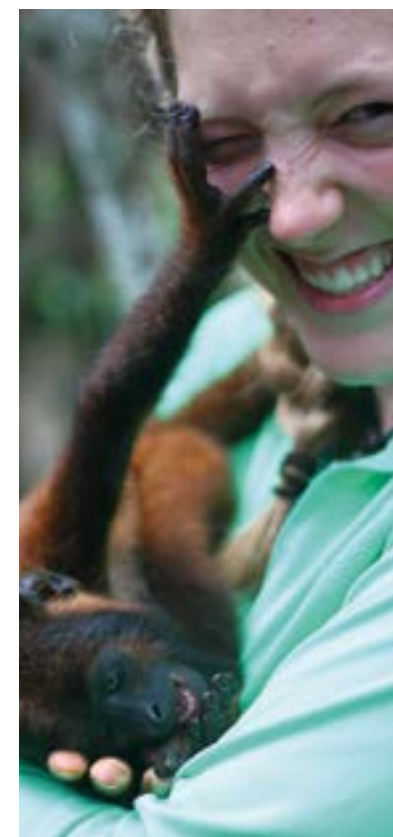
Russell Brand is a glaring example: with a net worth of £15 million and a new book being launched each week, need I say much more about the hypocrisy of this socialist champion. What's scary is that his followers/fans/minions actually soak up the mouth farts he's churning out, making a whole section of UK

society his good little hypocrites (or revolutionaries, should I say).

There's not enough time in the day to list every common way in which people say one thing and do another. I think in many ways, we're all guilty of it. We form strong opinions on crises we see on the news, yet when it comes to acting on those views, perhaps by giving money to a good cause, many are reluctant.

Even something like celebrating Christmas every year when not believing in God could be seen as hypocritical. Without trying to get too deep, we're all hypocrites each and every day. The key is to not be so obvious about it.

Stop showing everyone that piece of bark you picked up in the Bolivian rainforest (now a soya bean plantation), and the photos of you tickling a monkey's armpit. And please, please stop following that curly haired moron because you have nothing better to do than rant about a system that, so far, is the best we've bloody got.



Put down the monkey.. Photo Credit:
Ian Markham/faunaforever

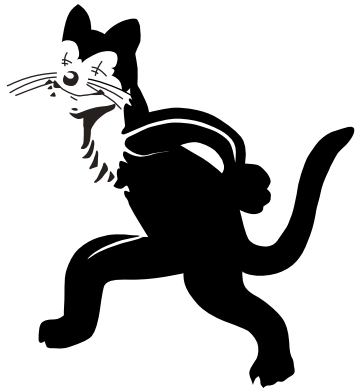
FELIX COMMENT



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My morning with the President of China

I showed Xi Jinping what it's like to be a student at Imperial



Eleanor Johnstone
Writer

On Wednesday, Imperial was honoured to welcome President Xi Jinping of the People's Republic of China. The trip to the College was part of a four day visit to the UK, which was the first state visit by a Chinese leader in ten years. In addition to visiting Imperial, the President also met with Prime Minister, David Cameron in an extremely important meeting regarding the building of a new power plant at Hinkley Point, Somerset. Whilst in the UK he is a guest of the Queen, residing at Buckingham Palace.

Imperial and China have very strong connections, which is why the President and the Chinese Embassy were so keen for the visit to happen. In addition to the amazing Chinese student population at Imperial, there are also many Chinese researchers working in the College, and

Imperial collaborates with Chinese partners working on cutting edge research. The key focus of the visit was the announcement of a series of new Imperial-China education and research collaborations, which will benefit both Chinese students wanting to come to Imperial who will now have access to more scholarships, and the research community in terms of funding for Imperial PhD students to study in China and research grants.

The President and the First Lady, Madam Peng, were greeted upon their arrival to the College by His Royal Highness the Duke of York, who then introduced them to Imperial's President Alice Gast, Provost James Stirling, and Chancellor of the Exchequer George Osborne. They were also presented with flowers by Union President Lucinda Sandom-Allum, and GSU President Luicheng Guo.

Alice Gast then welcomed the President and the First Lady to Imperial with a short speech, highlighting strong links between Imperial and China, and the benefits to both parties. She hoped Imperial could become "China's best academic partner in the West".

It was
a huge
honour
to shake
hands
with the
President!

Following the speech, the President and the rest of the delegation were given a tour of

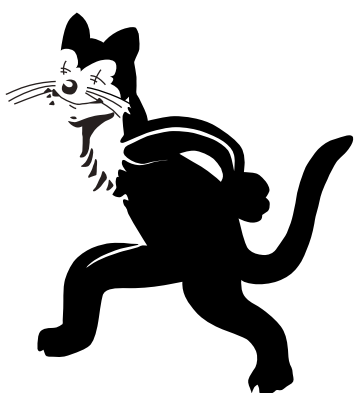
some of the research that really highlights the College's relationship with China. Firstly, he visited the Data Science Institute, which is directed by Professor Yike Guo, and the Hamlyn Institute, directed by Professor Guang-Zhong Yang. Both of these institutes will benefit from a new £3 million grant by the China UCF group to fund research. On the tour he was presented with examples of research from both institutions, including a data-driven analysis of the political and social impact of China's "One Belt, One Road" policy, and technological innovations in medical robotics that have revolutionised healthcare.

Finally, President Xi met some students of the College, and exchanged a few words with each of them. This gave him the opportunity to ask what life was like at Imperial, both in terms of academics and activities outside the classroom, including College funded expeditions and heading the Student Union.

It was a huge honour to shake hands with the President!

Can we ignore human rights abuses in China?

Are we supporting suffering by allying ourselves academically?



Simran Kukran
Writer

According to the College website, we are the UK's number one research partner with China. In a speech welcoming Xi Jinping, Professor Alice Gast, president of the university, said "brilliant students and academic collaborations are making both the UK and China stronger, more prosperous and ready to deal with the challenges of this century". Surely these challenges of the century should include opposing inequality, imprisonment without trial and the persecution of ethnic minorities?

Google 'Chinese President' and before long you'll be greeted with a whole host of human rights abuses. Amnesty International has said that the authorities "severely restrict freedom of expression", and have criticised China for harassing, detaining and torturing activists and their families. For example, since president Xi Jinping has come to power, eleven women's rights activists have been imprisoned,

despite the president hosting the UN World Conference on Women just three weeks ago.

George Osborne, the Chancellor of the Exchequer, accompanied the



Xi Jinping is in the UK as a guest of the Queen. Photo Credit: AOL

president on his visit. He has been praised by Chinese state media for "not stressing human rights" and focussing instead on business potential. He's said he wants the UK to "stick together [with China] and make a golden decade for both our countries". Although economic growth in China has slowed, it still accounts for about 25% of all global growth, which is why he wants China to be the UK's second biggest trading partner by 2020. As China's economy transitions, there is an opportunity for British firms to provide financial services which the UK specialises in exporting.

The benefits for the country (and university) in collaborating with China are clear. It was announced this week that more of the best Chinese students will be given state scholarships to study here, and support will be given to Imperial's PhD students to study at Chinese Universities. I am honoured to be part of a diverse student body and the idea of more people having

access to the world-class education available here is something that makes me feel proud. It is wonderful that Imperial students will be given the opportunity to study in China. I just hope that this does not mean we benefit from an alliance where our partner is responsible for stifling free speech and disrespecting its citizens.

Imperial experts and their Chinese partners are working together on cutting-edge research in fields including nanotechnology, bioengineering, computing, advanced materials, environmental engineering and public health. Research in these fields will have already made a difference – improving the quality of life for people worldwide. Does turning a blind eye to the state of affairs in the country we are allied with mean we that are inadvertently fuelling the abuse suffered by so many? Can we divorce ourselves from this state of affairs and just focus on the science? A girl can dream.



Women are needed to increase productivity

Madeleine Webb
Writer

Last month the United Nations adopted a new manifesto to change the world. Sounds dramatic, but the Global Goals for Sustainable Development are the new benchmark to measure our progress as a species for the next 15 years; and it turns out the scientific community may be the key to unlocking such high ambitions.

While some goals are explicitly linked to research – climate change, sustainable energy and clean water – two targets could find less obvious common ground in STEM circles. Those being Goal 2: Zero Hunger and Goal 5: Gender Equality.

Although the relationship between STEM and feminism throughout history has been complicated, to put it kindly, new data shows that the pay gap is narrowing, even if progress is admittedly slow. The key problem is now seen to be encouraging women into STEM careers. It's a common

observation, even sort of a running joke, that Imperial “has no girls”, a statement that all too often extends into the wider world of research. Women in the UK fill only 9% of non-medical STEM posts and this is a problem, not just for equality but for science itself.

These issues have been thrust back into the spotlight over the weekend due to the Borlaug Dialogue conference, which focuses on food security in the developing world. The Borlaug convention created waves this year when the central message emerging from the discussions had an unexpected emphasis on the need for female researchers.

The convention wasn't all talk when it came to including women either, with 3 key heavyweight female speakers including Chelsea Clinton the Vice Chairwoman of the Clinton Foundation and Florence Chenoweth, the Minister of Agriculture for Liberia. This wasn't framed as an issue of political correctness but instead a matter vital to achieving the “Zero Hunger” goal set for 2030, perhaps one of the most ambitious targets on the list.

The UN's Food and Agriculture Organization (FAO) have collected

data showing that disadvantages for women in agriculture also include a lack of opportunities that drag down the efficiency of the whole system. As the FAO's official statement explained, “if women had the same access to productive resources as

countries, where an estimated 13% of the population goes hungry, would benefit the most from such measures.

So the question remains: if an increased female presence is what's needed how do we achieve that? The solution presented by the director of African Women in Agricultural Research and Development, Dr. Wanjiru Kamau-Rutenberg, is a difficult one: change the culture of scientific research. She stated the goal is “as much about institutional transformation as it is about investing in individuals”.

A problem this complex needs to be addressed on multiple levels if meaningful change is to happen. A wide range of measures to improve conditions of maternity leave, equal pay and encouraging interest from a young age are essential for success.

Scientific culture does have at least one thing going for it though; science likes to aim high. In all likelihood not all the Global Goals will be met by 2030, but by continuing these discussions the research community can make more of an impact on more sources of inequality than they could have ever predicted.

It is as much about institutional transformation as it is about investing in individuals

men, they could increase yields on their farms by 20-30%”.

According to World Food Programme, if there were equal opportunities for farmers the number of undernourished people in the world would decrease by 150 million people. Developing



The UN Assembly Hall, where the magic happens Photo Credit: Wikipedia

Money is green? Bank of England in awe

Jane Courtneil
Science Editor

Reports dooming the Earth as we know it are not novel concepts. For all the much needed scaremongering in the media, climate change as a threat sits on a pedestal. It's a threat that respects no boundaries, operating across all borders. However it's only recently that the financial repercussions of such a crisis have started stepping into the mainstream.

Companies and investors are realising that any inconvenient expenditures to reduce the effects of climate change now will provide financial benefits in the future. Science and our economy should not be considered as separate entities but as two parts of a dynamic system.

This was stressed by Mark Carney, governor for the Bank of England,

at the Lloyds leading insurers gathering earlier this year.

Carney emphasised how a potential economic crash poses a huge threat as insurers invest heavily in fossil fuel assets, likely to be rendered worthless under the effects of climate change. A fourfold increase in losses related to extreme weather events in the last thirty years has already been recorded.

At present it is considered too expensive for companies using oil, coal and gas to invest in alternative energy sources. Infrastructure to extract fossil fuels is already there, the investment has already been made. It is a huge risk for companies to disregard these current assets when the future of renewable energy sources and their economic success is unknown.

However, as more money is poured into these technologies, the price will decline. Competition between companies will result in demand to

produce renewable energy at a lower price. The only thing needed is that initial investment, to kick-start the renewables industry.

Governmental bodies have this kick-starting ability. With the EU targeting to limit global warming at 2 degrees from pre-industrial levels, it is counter-intuitive for the UK government to cut funding

for renewable energies. Lacking support, it is not surprising that the “evil” oil companies are doing little to change their main energy source.

However, small steps are being taken. Shell has predicted that by 2050 oil and gas will still play a central role, but this will plateau by 2100. As a company, it aims to meet the 2 degree target and is

slowly investing more to have a future that works with nature for a sustainable energy supply. All that's needed is other companies, such as Exxon, to be convinced that a greener approach will benefit the company economically in the future.

Although there is no silver bullet solution, a lack of funding by governmental bodies is a limiting factor to the growth of renewables. Without public demand, it is unlikely that governments will aspire to invest in such bodies, and such demand is in turn unlikely to present itself, when the result will probably be tax increases.

It is ultimately a vicious cycle, controlled by profit and power. The public does not care enough to invest, thus the politicians similarly lack interest. The public will not care until the effects are immediate and this lack of immediacy ultimately fuels our complacency towards climate change.



Mark Carney: Big money, big... ego Photo Credit: Wikipedia



Crimson Peak is an education in terror

An exploration of the nature of fear from gothic master Guillermo del Toro

Tom Stephens
Writer

Crimson Peak



★★★★★

Dir: Guillermo del Toro. Script: Guillermo del Toro, Matthew Robbins. Starring: Mia Wasikowska, Jessica Chastain, Tom Hiddleston, Charlie Hunnam. 119 minutes.

I'm not sure whether seeing too many movies has left me bored of most of the emotions they usually elicit, or if there's just something a bit wrong with me, but when I plan to watch a film that classes itself as a horror I've begun to want to come out of the cinema not just scared, but disturbed. I've believed for a while now that the true measure of a horror movie is not whether it makes you jump, but if it instead makes you stare emptily into space for days after seeing it, start bringing up matters of existential despair in friendly conversation, and lose hour after hour of sleep because of fears of what's lurking in your cupboard. Sensory shocks like jump scares are all very well for transient adrenaline bursts, but a film that says something truly horrifying about the human condition delivers a psychological shakedown that sticks with you forever.

So when I saw the first trailer for Guillermo del Toro's latest film *Crimson Peak* – all unfinished-looking CGI, random audio silence for suspense, and that classic cheap scare of a loud bang-scream sound quite a few too many times – I became a bit nervous. Furthermore, although his previous film, *Pacific Rim*, displayed del Toro's strong sense of craftsmanship, it was nonetheless bundles of simple and thoroughly commercialised fun. That heart-sinking trailer moment was now about five months ago – to have its release coincide with the approaching Halloween season, del Toro kept this new finished film under wraps for quite some time – and thinking back, it's a relief to know how much it differed from the finished product. The wobbly CGI is fixed and then some, and while there are still somewhat irritating



Jessica Chastain as Lucille Sharp in Guillermo del Toro's *Crimson Peak* Photo Credit: Universal Pictures

jump scares here and there, *Crimson Peak* is one of those rare horror movies that is not just a horror movie; it is much more.

Edith Cushing (Mia Wasikowska), a young writer in late 19th century Buffalo, New York, is struggling to kick-start her career; perhaps because she lacks the talent, but more likely because she is a woman. Enter Sir Thomas Sharpe (Tom

Guillermo
del Toro
understands
the real root
of drama
and horror

Hiddleston), an English aristocrat seeking financial help for a mining invention from Edith's father Carter (Jim Beaver). At a party thrown by Edith's childhood friend Dr Alan McMichael (Charlie Hunnam), Edith meets Sharpe's sister Lucille (Jessica Chastain), a serious woman with a chilling stillness about her. Sharpe draws Edith's attention, and then her affection, with his mysteriously charming air (essentially his Tom Hiddleston-ness), but also riles the suspicions of Carter and McMichael. Carter decides to take action, and the resulting events lead to Edith being whisked away to the Sharpe family home Allerdale Hall, an ancient, decaying mansion literally being swallowed by the English countryside surrounding it, with crimson-coloured clay seeping through the floorboards.

It is within this house that the true action of the story begins: with this change of setting the plot shifts from an intriguing romance story to a nebulous gothic mystery, punctuated by bursts of startling, blood-soaked imagery, and moments of shocking

violence that allow the movie to remain unmistakably a horror. Del Toro shows that he hasn't lost a jot of his production design skill that made *Pacific Rim* so pleasing to the eye. The film is simply gorgeous from beginning to end; the sweeping, Victorian-era backdrop of crumbling Gothic architecture juxtaposed with the clanking machinery of mining equipment make for the vivid atmosphere of a twisted period drama with a hint of steampunk. Each shot has a path or position that feels perfectly planned and – evidently polished after the making of the trailer – the CGI has an impressively physical, tangible feel to it – the ghosts that haunt the mansion have a look that appears (typically of del Toro's work) simultaneously hypnotising and horrifying.

What's most impressive about the film, however, is that the characters and the drama itself take centre stage, not the ghosts. Del Toro has said of his approach to filmmaking that he interprets "the good and bad in our lives through monsters and fables" that help him "grasp

who we are". With this statement and the film he shows that he understands the real root of drama and horror: it doesn't lie in monsters and ghosts, but in real people. The actors all rise to the situation, including a charming Charlie Hunnam, an understatedly fiery Mia Wasikowska, and an excellent Tom Hiddleston. None, however, deliver a better performance than Jessica Chastain as the terrifying Lucille – her character represents the best things about psychological horror, as she turns out to be in fact the most terrifying monster in the movie. It all builds to a nail-bitingly gripping climax with surprising amounts of genuine emotional heft. It's not a perfect movie – there's the occasional cheap jump scare or off line of dialogue, and it's slow to start – but del Toro has managed to recreate the melding of stunning production design and narrative depth that made films like the fantastical *Pan's Labyrinth* so good, and has shown that when the horror genre, although so often done wrong, can be truly stunning at its best.

FELIX FILM



film.felix@imperial.ac.uk

The Program



★★★★

Dir: Stephen Frears. Script: John Hodge. Starring: Ben Foster, Chris O'Down, Guillaume Canet, Jesse Plemons. *103 minutes.*

There's not too much I remember vividly from the first decade of my life: trips to north-east London's Walthamstow Marshes, the layout of my primary school playground, and the occasional awesome sleepover. But there remains from those days an image in my head of a bright yellow strip of rubber that I'd pulled onto my wrist, with a word engraved into it that filled me with a kind of warmth that I'd never really understood at the time, but I recognise now to be some form of pride. The word was "Livestrong", the name of the cancer-based charity that Lance Armstrong, big-time cycling champion, philanthropist and all-round incredible guy, had established. I barely knew anything about the exact scale of Armstrong's apparent achievement (which, as it turns out, was massive), but to me, he was quite simply a hero; I had seen him on TV, he won stuff, and he helped people, what else could you possibly need to be one? But what's worrying today is that there's a good chance I would have thought exactly the same thing had I not been a child at the time of his reign over the cycling world, because clearly he

fooled far too many people.

The subject matter of a false idol turns out to be the best thing about Stephen Frears' new film *The Program* – the idea of the world and media championing people who are not all they seem is a relevant one at almost all times in this age, and makes for an important story, one that is told compellingly by the film. There is a certainly a debate to be had on the ethics of doping in sport – should it be considered cheating if everyone does it and you physically

Ben Foster gives a magnetic performance as Armstrong

can't win without it? – and *The Program* deals well with both sides of the issue.

It documents the rise of Armstrong from not-so-humble beginnings to seven-time winner of the Tour de France, and his fall from an honest, ambitious (if obnoxious) cyclist to a sociopathic megalomaniac. Ben Foster gives a magnetic performance as the man – his early earnestness is perhaps the only reason that one could

sympathise with the character of Armstrong for around the first third of the movie, and as he becomes increasingly entangled in the web of his own deception, a venom seeps into the performance so deep that you can almost feel flecks flying off his tongue onto your face.

But a good story and a great lead performance, however, does not a good film make, and *The Program's* flaws often lie in the little details. Frears does a fine job with individual scenes, camera movements, and conversations, but never fully delivers a sense of the cinematic, and the film can sometimes feel as if it were made for TV – there's no really breathtaking moment or setpiece, whether in the sporting or the human drama. The script too is thoroughly uneven: Chris O'Dowd does well as David Walsh, the sports journalist on a mission to expose Armstrong, when he's involved in actual dialogue, but many of his lines and those of the people he speaks to are riddled with awkward exposition. The only other cast member who comes across well is Jesse Plemons as Floyd Landis, the cyclist who got caught doping and decided to bring Armstrong down with him; pretty much all other characters are badly written, badly acted or both. This is especially true in the case of Guillaume Canet's performance as Armstrong's manager Michele Ferrari – several times I found myself thinking, "Did he really direct him to say it like that?"

While there is also a problem

with some of the editing choices – headlines documenting his wins and names of random new characters flash onto the screen in such silly pop-art style that it looks like it was pieced together on an old laptop – other pieces of editing work well, such as cuts between Armstrong's motivational speeches and scenes of the team injecting syringe after syringe of dope. Scenes like these remind you of just how ridiculous the scam became – and of why this movie is an important one: it reminds us to question our idols, and to not believe great stories simply because they're great. It's just a shame the execution of it makes it sometimes feel a bit damp.

TOM STEPHENS

Red Army



★★★★

Dir: Gabe Polsky. Script: Gabe Polsky. Starring: Slava Fetisov, Vladislav Tretiak, Scotty Bowman, Vladimir Pozner. *84 minutes.*

In my experience, when watching a documentary, it helps to have at least a slight interest in the subject. It's a lesson I learnt myself when I went to see Asif Kapadia's 2010 film *Senna*, despite having nothing short of complete antipathy towards the entire industry of Formula One. Needless to say I did not enjoy it. And so the thought of sitting down to see *Red Army*, a film that centres around the sport of ice hockey – a topic about which I know essentially nothing – did not fill me with joy. How I was mistaken.

Director Gabe Polsky, himself a keen hockey player, takes the classic approach of using a singular example as a metaphor for something greater; in this example, the Soviet Union ice hockey team – who completely dominated the field from 1954, the year after Stalin's death, up until the dissolution of the USSR in 1991 – take the metaphorical weight of the Cold War upon their broad, well-built shoulders. Told largely through the eyes of Russian legend Slava Fetisov, *Red Army* is a story almost too unbelievable to be true; with the international reputation of the USSR, and with it socialism itself, based on how the players would perform, the stakes were nerve-rackingly high, elevating an already-dramatic sport to Dostoyevskian levels.

Of course, every story needs a

villain, and *Red Army's* is provided by Viktor Tikhonov, the ruthless coach who – while driving the team to victory – ruined any chance the players had at a normal life; in one memorable anecdote, a player recalls that they were trained so hard that members of the team began to urinate blood. Through sketching in Tikhonov as the arch-enemy, *Red Army* gains dramatic clout, but this is tempered by the niggling feeling that the explanation is too simplistic: sure, Tikhonov seemed heartless, and probably was, but the wider context of what factors in the USSR would lead to such an appointment are never really explored. After all, not all evil actions are performed by bad people, a statement reinforced at the end of this film, when it is revealed that Fetisov, held up as a skating hero, was personally invited to become Minister for Sport by Vladimir Putin – a leader who is perhaps the greatest threat to European human rights.

But brevity is the soul of wit, and omitting a thorough historical analysis allows Polsky to focus on the heroes of the story – the Russian Five, the quintet who led the team to victory time and time again. Aided by snazzy graphics – all Cyrillic lettering and socialist-realist cartoons of overjoyed peasant women – the film weaves together nearly half a century of skating history into a rich tapestry, one that manages to combine high drama with touches of humour. Indeed, the film is threaded with numerous moments of levity, from an ex-KGB agent speaking to his granddaughter to muddled Russian idioms that clearly have no English equivalent, a feature that lifts some of the gravitas such a complex topic can bring.

His first documentary feature, *Red Army* marks an incredibly strong debut from Polsky. While he has a habit of making himself very 'present' in the film – including the frequently-muddled questions he asks his sitters, zooming out to reveal parts of the recording equipment, panning across someone who is speaking; he's certainly no Frederick Wiseman – these don't interfere with the overall effect of the film. *Red Army* may document the position ice hockey held in Soviet life – a fast, brutal sport in a ruthless regime – but, like the team itself, Polsky handles the material with a lightness of touch, and true finesse.

FRED FYLES



Ben Foster as Lance Armstrong in Stephen Frears' *The Program* Photo Credit: StudioCanal



Protomartyr's return holds no surprises

Henry Eshbaugh
Writer

Golly gee, am I an angsty emo. The only clothing I own is black. Black like my soul – my heart, which screams constantly in

When I'm really moody, I walk to the park and let black mascara be washed down my face by my own salty tears

writhing agony about the horrors of the human condition and the bleakness and depravity of our dismal existence. Sometimes, when

I'm really moody, I walk to the park and let black mascara be washed down my face by my own salty tears, as I talk to a withered oak tree – “the only thing that understands my suffering.”

And what is an angsty emo without angsty emo music? This week, to free my inner 14-year-old who nobody understands, I listened to *The Agent Intellect*, the third album from the Detroit-based post-punk project **Protomartyr**.

At first, these guys ticked all the boxes on the ‘forgettable and generic’ checklist: weird name, faux-intellectual album title, and cover art “with an, um, grim aesthetic that... uh, like totally reminds us of the cyclical nature of history or something, man,” their producer reminds them while sucking down the third doob this hour (seriously, how does he afford all that weed? Broke students want budgeting advice).

Then I sat down and listened to it. And again. And again. Oh, shit, it's good.

Greg Ahee spins slow guitar lines, favouring single notes over chords. The normally-thin sound is overdriven and smeared out by a cranked-up reverb pedal. The result is an ominous wall of swirling sound that fits in elegantly over the drum and bass.

Speaking of the rhythm section, they seem to be straight **Joy Division**. Drummer Alex Leonard has the same plodding rhythm as Stephen Morris, but will occasionally lapse into something

more aggressive and animated. To be frank, there's nothing especially interesting, but he definitely gets the job done.

On first listen, I wasn't particularly taken by Scott Davidson's bass guitar. Lines fit into the background well, but didn't do anything on their own – it seemed. My first impressions don't match up with reality – take ‘Pontiac 87’, where the nifty-sounding descending line serves as an excellent counterpoint

Casey is positively overflowing with existential torment

to the guitar. On ‘Dope Cloud’, the bass felt as if Davidson was literally pulling the rest of the band towards the end of the song – very cool.

The niftiest groove, worthy of special mention, came at the beginning of ‘Uncle Mother’, and featured an excited bassline with splattered drumming and one hell of a guitar hook – it almost felt like they got drunk and forgot they weren't the **Red Hot Chili**



Oi mate, there's something on your head. Photo Credit: Hardly Art

Peppers. Very cool indeed.

The most distinct part of the album is probably Joe Casey's baritone half-singing. Casey is positively overflowing with existential torment and a pent-up rage – opting to sing about topics like Satan as a teenager and specious ideologues in the audience of a papal visit to Michigan in 1987 (witnessed by the frontman himself). Ominous warnings are interspersed – on ‘Dope Cloud’: “You dedicated your life to prayer / That's not gonna save you, man.”

Casey's delivery is one of the most striking sonic elements of the album. The singer's baritone is reminiscent of Ian Curtis – but the delivery differs. Casey's delivery is half-spoken, an understatement that seems to underscore the album's thesis of disaffection.

So, the album is technically alright, but how does it feel? To answer that, one night, when I felt particularly melancholy, I got drunk, hit up a park, and slumped under a tree to listen to it front-to-back. We vibed, Protomartyr and I – I felt the burn of Rust Belt resentment deep in my soul. I wouldn't say it was a spiritual experience, but it definitely took the Angsty Factor to a solid 9.

My biggest gripe with this album, though, is that they don't do anything new. Sonically, **Joy Division's** *Unknown Pleasures* is a perfectly good substitute – or any pretty good album in the genre,

for that matter. Without Casey's lyrics, there's not a lot there that's changing the game – rather than stand on the shoulders of giants, they've opted to hide behind them. However, they definitely have sown seeds of a unique identity – ‘Uncle Mother’ is a standout track in terms of (as Sokal put it in his seminal paper) transgressing the boundaries.

Rather than stand on the shoulders of giants they've opted to hide behind them

Overall, this album is a well-executed continuation of the status quo. I wasn't satisfied. It's not game-changing, but good background music while you and your goth friends get together and scribble in your diaries about how your parents just don't get you.

The Agent Intellect by Protomartyr is out now on Hardly Art



A withered oak tree – the only thing that truly understands you. Photo Credit: Old Oak School of Dao



Beach House's latest is dream-popfection

Cale Tilford
Music Editor

It's rare to see bands produce such consistently great music, and the few that do offer substantial evolution of their sound over time. **Beach House,**

The sort of stuff you'll want to snuggle up to in winter

on the other hand, have released six albums that all sound very similar, each a slight refinement of the one before. *Thank Your*

Lucky Stars is no different in this respect; it's a continuation of their sound that presents the dream-poppers at their best.

Recorded at the same time as *Depression Cherry* (and only released a few months after), their latest album strips out many of the layers of sublime production that Beach House have become known for. Luckily, their music still sounds warm and fuzzy - the sort of stuff you'll want to snuggle up to in winter.

The festive jingle of bells and dream-like keys remain, but there's now a aggressiveness exposed underneath. Although it's name might suggest otherwise, *Depression Cherry* is certainly the less depressing album of the two; *Thank Your Lucky Stars* is the most melancholy they have ever been.

There are times on the album where the band shows their sound is capable of expanding. The unconventional beginning of 'All Your Yeahs', which feels more conversational (by Beach House standards), leads into

an almost anthemic climax, whilst 'Somewhere Tonight' ends with Victoria Legrand's unwavering, ethereal vocals against the swells of an organ.

The most melancholy they have ever been

The rest of the album sounds like any other Beach House record, it's lavish and dreamy with hazy keyboards and drum machines driving it forward.

It was a pleasant surprise when Beach House announced their second album of the year, and whilst



Dolls aren't only for girls - fuck gender stereotypes. Photo Credit: Bella Union

it's certainly more of the same, the darker and increased loudness of the record prove that the duo are still among the royalty of dream-pop. *Thank Your Lucky Stars* by Beach House is out now on Bella Union

Four Tet All Nighter



The dark can be fun and exciting - the Four Tet All Nighter was neither. Photo Credit: Crack Magazine

Cale Tilford
Music Editor

The last time I spent a night at Brixton Academy the air was thick with smelly marijuana and fruity vapour. The fully engaged crowd swayed, bobbed and even lurched

A night bathed in white mediocrity

to the music, all focused on the man in the centre of the stage, walled in by a cube of screens and flashing lights.

Last Friday (and almost half a year later), I returned to see a pitch-black stage lit only by a few lamps. This was **Four Tet's** modern alternative to the last supper, bringing together some of London's best DJ's and

electronic producers.

I expected one of the greatest nights of my life, verging on a religious experience. Instead, it was a night bathed in white mediocrity, devoid of any diversity or variation. The incessant bassy drops and uninspired samples quickly grew tiring. There were few moments where the crowd truly came alive,

and most of these were when Four Tet played some of his more high-profile reworks including his recent remix of **Eric Prydz's** Opus.

To call the all-nighter disappointing would be an understatement; I left disillusioned not only with my love for Four Tet and his musical output, but the state of London's electronic scene.

COMING SOON
TO THE MUSIC
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Friday 30	BPM	20:00 - 02:00	FiveSixEight & Metric
Every Tuesday	Super Quiz	20:00 - 22:00	FiveSixEight
Every Tuesday	Cocktail Night	18:00 - 23:00	Metric
Every Wednesday	CSP Wednesday	19:00 - 01:00	Metric & FiveSixEight
Every Wednesday	Sports Night	19:00 onwards	Reynolds
Every Friday	Double Dip Fridays	16:30 - 21:00	h-bar
Every Friday	Reynolds Cocktail Club	17:30 - 00:00	Reynolds



Fear the Human Resource Machine

Tomorrow Corporation's prophetic puzzler paints a disturbing future for mankind

Cale Tilford
Music Editor

Capitalism has manufactured its own demise in the inevitable future of full automation. As machines and artificial intelligence begin to permeate every possible industry we will soon see a workforce without work; tomorrow's corporation will be a human-free dystopia. It will be faster and more efficient, free from the slow and unsteady hands of man. Society seems blind to this inescapable doom, and the one solution that has been discussed, a universal basic income, is likely to face large opposition.

There is only one logical solution: make man the machine. This is the uncompromising vision that Tomorrow Corporation presents. We, as humans, must play an essential role in the future of automation by becoming fully programmable and allowing machines to dictate our lives, so we can increase our efficiency beyond all previous thresholds of man. Compare this to a universal basic income which – within the context of a post-capitalist society – gives all citizens an unconditional sum of money. Without regular work it's easy to imagine the entire population slowly devolving into a demoralised mass of web-surfing sloths. The creative types among us would be complacent to believe that they might be spared from this potentially endless Netflix and

chill.

The alternative, combining the mass factory work force of the past with the precision and intelligence of modern technology, could lead to at least lead to a society with some illusion of value and purpose.

Luckily, there is actually a game underneath *Human Resource Machine's* warped prediction of the future, and it's pretty great. Having previously developed *Little Inferno*, *World of Goo* and the less well known, but still excellent dual-screen puzzler, *Henry Hatsworth*, Tomorrow Corporation are experts when it comes to designing innovative puzzle mechanics. Whilst *Little Inferno* required the

There is
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the machine

player to repeatedly buy and burn items to progress, their newest puzzler tasks the player with automating the actions of an office worker in order to solve increasingly complex problems.

Best described as a programming puzzle game, a genre which has



Human Resource Machine is a big 'fuck you' to capitalism. Photo Credit: Tomorrow Corporation

increasingly found its way into the mainstream with titles such as *TIS-100* and *Spacechem*, *Human Resource Machine* presents you with a number of simple commands (with more added as the player completes each puzzle) which must be ordered to create basic algorithms. A small worker, whose appearance you choose at the start of the game, proceeds to run around the room following each command in the player's solution. Two conveyor belts, IN and OUT, represent the input and output of a computer, and a small area of tiles on the floor represent its memory. The jump command is essential in allowing players to create loops of computation to be applied to each input. Throughout forty or so levels, the game provides a basic introduction to assembly-like

programming. As a Computing student, the majority of the game provided little challenge, but there were some puzzles later on in the game that momentarily caused me to question my degree choice. So it's easy to imagine that players with little programming experience will find the game frustratingly difficult. There are a number of optional levels (which are substantially harder) and optimisation challenges, offering a greater challenge to more capable players. No matter what your skill level, it's incredibly satisfying to watch as your worker speeds around the screen upon correctly solving a puzzle.

When it's not warning us of our impending doom, *Human Resource Machine* is also a satirical take on the modern workplace. Each level represents a year in the life of your worker as you slowly climb the corporate ladder or in this case, elevator. By the game's end (and about 40 years of work) your worker has visually aged with grey hair and wrinkles, a comment on the millions stuck in the same corporation for their entire life. The level select screen emulates the floor selection panel of a lift with not so frequent coffee breaks indicated between large sets of levels. By revealing more about the world in these short and ambiguous cut-scenes, the developers are able to capture the painful crawl towards the next moment of respite in the lives of office workers.

All of this is presented in warped cartoonish style; workers

with oversized heads contrast the backdrops constructed from distorted monochrome photographs. It will be instantly familiar to those who have played any of Tomorrow Corporation's previous games, although this time

A satirical
take
on the
modern
workplace

they have gone for a slightly darker palette – a mixture of dreary greys and greens that perfectly match the game's bleak outlook. The music from **Kyle Gabler** is surprisingly upbeat, taking inspiration from the modern electronica scene. Sonically, it's similar to his previous work on *World of Goo*, easily one of 2008's most memorable soundtracks.

If for a moment you ignore its deep and prophetic themes, the enjoyment a player gets out of *Human Resource Machine* will ultimately depend on their familiarity (or lack of) with assembly programming. It's as unwelcoming to non-programmers as the future is to those who aren't made from metal.

Out now on Steam



Who knew programming could be this cute. Photo Credit: Tomorrow Corporation



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Comedy Society cracks up campus

Our very own Imperial comedians are bringing LOLs to Metric

Peter Munton
Writer

Those of you who weren't drinking your sorrows away during fresher's week at Tiger Tiger or the RCSU pub crawl, may have found yourself wandering into the darker depths of Imperial's social facilities. Creeping into Metric on the first Monday of term you would have been pleasantly surprised. Instead of the bass and sweat combo usually found in the infamous nightclub one would have found a delightful and civilised stand up comedy night entertaining freshers and (brave) returning students.

Okay I was joking, it wasn't civilised at all. Comedy, guys! The night kicked off with some observational comedy from Carl Donnelly, gently warming up the audience with his natural story telling ability. After the interval,

He reduced the audience to boyish giggles (you know who you are) as he made his way through a collection of meticulous sex poetry

Okay I was joking, it wasn't civilised at all

the audience returned to their seats with apparent eagerness, maybe because Imperial's own comedian and president of Imperial Comedy, Arran Hobson-Sayers, was about to take centre stage. Or maybe it was because of the beer.

Arran welcomed the freshers in true Imperial style by giving them advice on the wild nights that they would surely experience under the Union's rigorous social calendar. However, Arran later warned about the consequences of such drunken adventures, stating "...it's all good until you wake up and Mary Berry is in the bed beside you".

If you ask me, that just makes it better. After the thunderous applause died down, the next comedian made his way to the stage. Andrew Watts electrified the audience pouring out emotional mid-life crisis stories. Of course, being students, none of us could relate. But what the hell, we laughed anyway. Anticipation was then rife for the arrival of Hasan Al-Habib, perhaps Imperial's most famed comedian. He comically described his long and arduous journey, fighting against all odds to escape Birmingham to the salvation that is Imperial College London.

The headliner for the evening was 'French' comedian Marcel Lucont, who decided to teach the students in the room a thing or two about life in the wider world. Dryly delivering bawdy wit he reduced the audience to boyish giggles (you know who you are) as he made his way through a collection of meticulous sex poetry. And so, the first comedy night of the year came to a close. But it would not be too long before another venue opened its doors to the unique humour of Imperial Comedy.

The dimly lit basement known to



The most fun you'll see people having in Metric any time soon Photo Credit: Imperial College Union

most as h-bar welcomed another host of comedians this time to entertain the postgraduates, who we all know like to spend their free moments listening to stand up comedy and not working. Not wasting any of the postgrads' precious time, the first set was delivered by comedian Matthew Osborn, keeping his comic timing on point. Up next was yours truly (I won't go into detail here).

Losing his stand up virginity Akash Jyoti then took to the stage, apprehension was present in the room. Akash then unfurled a kooky and eccentric performance bringing unconventional energy to the bar. The audience laughed throughout a first performance worthy of note.

Following on from Imperial Comedy was Shazia Mirza, who dispatched brusque one-liners, one after the other. Particularly engaging the (few) female postgrads in the room she whipped everyone up into an outburst of laughter.

The last spot saw comedian and sex symbol Earl Okin headline the show. Hugely musically talented on guitar, he erotically made his way through an assortment of songs with heavy sexual innuendoes throughout. Probably the most action anyone in the room would get all year.

Imperial Comedy performances can be seen every month down in the union bar; from writing and performing stand up to sketches, Imperial Comedy does it all. Also

responsible for fun social nights out to comedy clubs throughout London, it's a society where anyone and everyone is welcome.

If you are interested in joining Imperial Comedy you can email

icu.comedysoc@imperial.ac.uk to find out when the next writing meeting is, or the next social. Alternatively, come along to the next comedy night which will be in the Union Bar on Monday 2nd November.



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FELIX FEATURES



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Free education for all!

FELIX interviews the National Campaign Against Fees and Cuts about their protest

Kieran Ryan
Writer

On the 4th of November there's going to be a big demonstration in London, calling for free education, and Imperial students are going. It's been called by the National Campaign Against Fees and Cuts (NCAFC), a democratically organised group of students in both Further and Higher Education. Their demo last year got a good 10,000 people on the streets.

A group of Imperial students are going to this demonstration as an Imperial bloc – the third this year mobilising our students, after Imperial Medics joined a protest against proposed changes to junior doctors' contracts.

Organised by our Deputy President of Welfare, Jennie Watson, Campaigns Officer Andrew Tranter, and yours truly, the bloc aims to show that there are Imperial students who believe in free education, and are willing to do something about it, but also to spread the word that there are students who are political, are organised, and who make things happen.

If you want to come along, or just find out what it's all about, search 'Imperial goes to the Free Ed National Demo' on Facebook.

To get a flavour of what the demo's objectives are, I sat down with Monty Shield, a member of the National Committee of NCAFC.

FELIX: Could you give a brief overview of the demo, and what it stands for?

M: We're fighting against the government's education cuts and fighting for a better, fully funded, free and democratic education system. The government is attacking

The government is attacking international students

working class students. They've gone on from the raising of tuition fees in 2010 to £9,000 to targeting loads of aspects, in Further Education and in Higher Education as well. As an example: they have completely removed maintenance grants in Higher Education for students starting next year. And a National Union of Students (NUS) survey in July revealed that over a third of students would have chosen not to go to university without the maintenance grant system.

And in Further Education the 24% cut in February was followed by a recent 2.5% cut once the Conservatives won the election. This has directly led to the

ways.

And as if they couldn't stop at that, there is also the PREVENT programme for tackling 'extremism', which tries to force lecturers and university councillors, amongst others, to report students who don't fit in with 'British values'. Which is ridiculous because it means that you could say in a seminar or something that you think we shouldn't have the Queen as head of state, as her involvement in policy and government is undemocratic, and according to the law you could legitimately be reported and monitored by the government for saying that. So it's absurd and an attack on our freedom of speech. It's

beyond just costs.

FELIX: Could you speak a bit about the barriers that exist for international students?

M: The government is heavily attacking international students. One of the biggest things is the reduction in the post-study work visa. It's ridiculous that international students are forced out of the country after finishing their degree. Everyone should have a right to live, work and travel where they want. [The foreign secretary, Theresa May recently announced plans to reduce this to no time at all – students would be forced to leave as soon as they have graduated.]



Imperial students protested last Saturday against planned NHS contract changes. Photo Credit: Grace Rahman

disadvantaging of working class and international students and migrants because it led to massive cuts for the English for Speakers of Other Languages course in FE institutions, which thousands relied on and will now have around 16,000 places cut nationally. There are also plans to freeze the loan repayment earning threshold at £21,000, which will force poorer earners to pay more.

FELIX: That's because of inflation?

M: Yeah, so inflation and the average wage rise over time, but the threshold for repayment stays the same. So over time that £21,000 is worth less and poorer people will have to pay more in relative terms. So as I say, they are attacking working class students in all sorts of

also the case that the government are using this policy as a way of legally targeting, monitoring and discriminating against Muslim students across the country. We really need to fight it.

But then it's not just a negative demonstration, it's not just against the current system; it proposes a vision for a better education system.

FELIX: Cool, what's that vision?

M: So when we say free, partly that means getting rid of tuition fees and supplying universal living grants for everyone, but we also want a fully liberated university system – part of NCAFC's policy is to fight for universities to be run democratically, by a mixture of students, workers, and academic staff. We're fighting to get rid of all the barriers to education that go far

International students are also now forced to pay £150 to use the NHS – a service that should be free for everyone.

On the 17th of November the National Union of Students is organising a walkout in universities across the country to protest against attacks on international students – the idea being that home, EU and non-EU students will all walk out together in solidarity.

FELIX: I've had a couple of international students say to me something along the lines of: "I don't want to start shit in a country where I'm a guest, I could get kicked out". What would you say to those students?

M: The government attacks international students and at the same time threatens them with

When you do nothing you let the dominant forces call the shots

deportation if they resist and protest, so I think there is a very real pressure on international students to not fight against the attacks on them. The only way to stop this and the government changes I mentioned before is if as many people as possible challenge collectively. So while the pressure is there, if you feel you can get involved and come on the demonstration then please do and we can all fight together against these changes.

FELIX: Imperial is pretty apolitical, and apathetic towards politics, and our student elections are very apolitical. However, we have one of the highest turnouts for our elections in the country. Do you have any remarks about apathy among students today?

M: Well, I did about 20 minutes of leafleting for the Demo last week, and the responses from Imperial students were all like "Oh yeah I do believe in free education", and the only thing was that they didn't yet know the demo was happening. So, about apathy: not fighting something like this is not the same as staying neutral towards it. When you do nothing you let the dominant forces call the shots, and in this case that's the government – apathy lets the government in power do what it wants to do unopposed. So really the choice is: let the government continue to attack working class students, let it continue to attack international students and migrants. Or oppose those attacks together. Because as sad as it is, if we don't oppose it together, it will happen. But what is exciting is that our opposition can make a massive difference.

The protest takes place on Wednesday the 3rd of November.



the night begins with sugar

by Natasha Sajé

Salt Lake City
 here in our state of yes and smug
 crystalline over mountains and horizon melt
 such pretty clouds such drifting light
 who is it enough for what kind of person
 lives in this sweetness this clear
 beauty and does not utter a single oh or no
 or even I my hand clapped over my mouth my tongue caught by
 what's left in the right hand the dominant and clenched
 what's right in the left hand easily tossed
 catching instead malaise a coma of indifference
 swirling in our stunning vestibule
 mourning the self just getting by
 in a theocracy of pretense and defense
 here in my state of smog and so what

Photo: Dents du Midi in Clouds by Ferdinand Hodler

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The hilarious world of Ahir Shah

The upcoming young comedian takes on London's top comedy venue in style

Max Falkenberg
Arts Editor

The sharpest, most politically charged comedy I have ever seen – period. Of course what I've seen is somewhat limited, but that changes little; Ahir Shah is exceptional. There are many great comedians who make you laugh, and some who make you cry, but few can make you think and feel like Shah. Distant isn't just another set – everything is funny, but funny with a purpose.

As a well-educated, British born comedian Shah could play on his Indian roots and build a clumsy set on cultural stereotypes, but he doesn't force it. He has an amazing appreciation for his place in society, and he says so much more about his heritage than many others would. Shah knows he's an idealist, but he also knows the hypocrisy of his western views. This isn't just comedy, this is a political lecture about people like him and people like us.



Shah giving his sermon at the Edinburgh Fringe. Photo Credit: Laughing Horse

With a lightning fast delivery and material of mind-boggling detail, Shah's set insists on your full focus, and it gets it. Jumping from smoking, to ISIS, to the environment, Shah covers immense ground, beautifully weaving his words from one topic to the other. You could just call him a

This isn't just comedy, this is a political lecture

comedian, but calling him a preacher might be more appropriate. This is high praise, but it's justified. Shah is a poet with unparalleled vision, and he achieves this at no cost to his side splitting comedy. Many won't get his jokes, and for some it'll be too much to bear, but if you can stomach it, Shah's work is a must see.

Until 24th October at the Soho Theatre... So go tonight!

Hamlet Panopto'd into the Union

Imperial students enjoy Cumberbatch's performance without leaving campus

Peter Munton
Writer

Everyone's had that moment when you wake up and just cannot be bothered to get up, get dressed and make it to your 9am lecture. So instead you decide to stream it live from home via Panopto. When Imperial Cinema decided to take part in National Theatre Live and stream Benedict Cumberbatch's *Hamlet* from the Barbican straight into the Union Concert Hall, it was all these students that thought 'Score! I don't have to travel across central London to watch this, I can just watch it from the union!'

First off it's important to say that Panopto wasn't responsible for the live stream of the show, which

was apparent due to the ease of transmission and lack of buffering. National Theatre Live provided a smooth and intimate experience for the audience. It's rare in theatre to zoom in on actor's faces and

See every heartbreaking emotion expressed

see every heartbreaking emotion expressed. This also meant however, that when something happened on stage and it was not in shot, the cinemagoers became very confused, wondering what the actual audience

were laughing at.

Aside from these minor occurrences, the show was easy to follow, with superb sound and visual quality; the rumbling bass and sharp lighting effects made it feel like you were actually in the room. The level of detail was astounding, something you might not get sitting at the back of a theatre, from the intricate designs of the set to torn up photographs indicating that tragedy is imminent in this famous Shakespearean play.

Cumberbatch's performance as Hamlet filled the air with an excited buzz of an aggravated and disturbed adolescent. What he excellently displays to the audience is the emotional torment of a son who has lost his father, while trying to wrap his head around an enduring puzzle. What is also seen is the



Cumberbatch in zoomed-in glorious HD. Photo Credit: Johan Persson

emotional development of a would-be king struggling to grow up in very different world. Cumberbatch succeeds in drawing the audience in to sympathise with Hamlet, and

to hang on every word of the show with anticipation, perched at the edge of their seats.

For the rest of the NT Live season, check out www.imperialcinema.co.uk



All hail the Frieze?

The commercial bomb is dropped on the latest and greatest in contemporary art

Max Falkenberg
Arts Editor

The dirty side of the art world isn't always obvious, but Frieze London is making every effort to scream it in your face. The fair ranges from the dull to the exceptional – as you would expect from any art fair – but the commercial machine seems to bleed through everything. Located in a giant glorified marquee in Regent's Park, Frieze London in its thirteenth year claims to offer an unrivalled breadth and vision into contemporary art. In many respects it succeeds and given enough patience, the Frieze is quite an experience. Everything is on offer and everyone will be impressed, but the atmosphere is all wrong.

Arriving at the exclusive complex, the word's "Deutsche Bank: Main Sponsor" are splattered left, right and centre. The place is crawling with security and I feel distinctly judged for not wearing a suit or some kind of felt smock. Apart from the odd cluster of art students, the crowd is made up of businessmen and what I assume are art investors. I'm not surprised since a standard

ticket is going for an extortionate £35, rising to over £60 if you include Frieze Masters. Who said the art world isn't accessible? Having cycled over from an early morning lecture, I'm quite keen on dropping my bag in the cloakroom, but with an impressively long queue and charging £5 per item, I think I'll pass. I talk an exceptionally grumpy security guard into letting me skip

Frieze is particularly oppressive; the art dealers don't help

the queue, but only press get that lucky; the commoners can wait.

With over 160 exhibitors from 27 countries, I'm quite taken aback by the scale of the Frieze. I try to work my way through reasonably methodically, trying not to miss too much, but it's not easy. I get that they're trying to put the whole range on show, but everything feels

a little cramped. Thinking of all the great galleries in London, the swarms of people at the Frieze make everything a little claustrophobic. You can enjoy yourself at the Tate and it's hard not to have a good time at the Serpentine. Yes it gets busy everywhere, but the Frieze is particularly oppressive, and the art dealers don't help.

I walk past "Truck" by the German artist Birgit Brenner and overhear the exhibitor arguing with a husband and wife over the price of the work. €85,000 the dealer insists; that's the art world these days he quips. Don't get me wrong, I'm all for art being valued and I don't find €85,000 so unreasonable, but there is a brutality to witnessing such ruthless negotiation in what should be an enjoyable event. It feels so heartless and it seems to go against so much of what art stands for. Of course I'm an idealist in that sense, but I wish it didn't have to be like this – a few make their millions and the rest can't get by.

I've put quite a negative spin on the Frieze and yes the elitist air is rather unpleasant, but I'm here for the art. The bulk of the fair is made up of stands from a selection of well-established galleries including the likes of the Gagosian and the White



We are so ahead of the time – it's a blow up FELIX! Photo Credit: Frieze



Oh look! It's a cardboard truck! Would you like to buy it for €85000?... "Truck" by Birgit Brenner Photo Credit: Frieze

Cube. Their work is unsurprisingly decadent and impressive, but on the whole the display is rather predictable. Walking around, I spot everything from Anish Kapoor to Francis Picabia – contemporary art

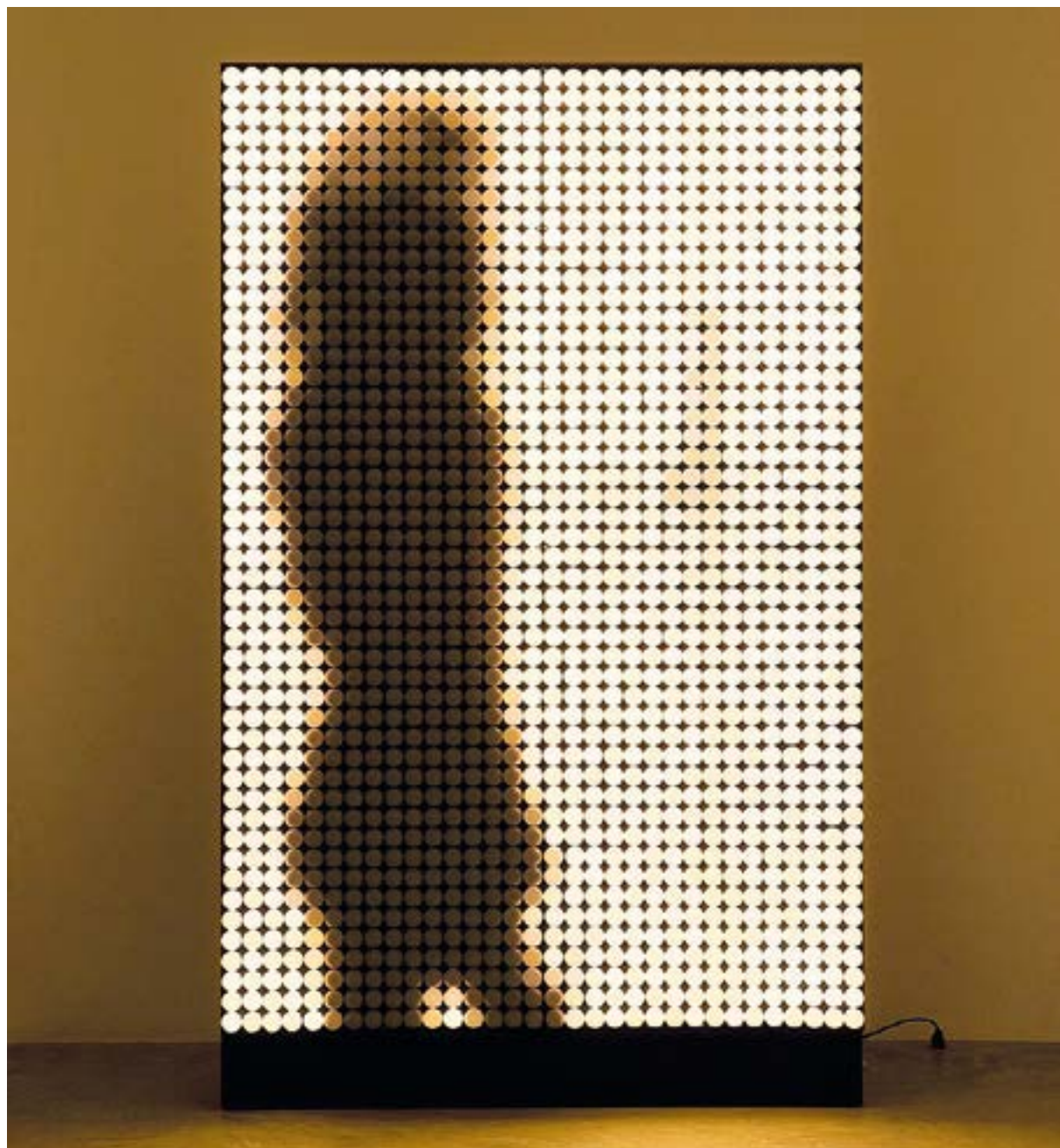
It feels so heartless and it seems to go against so much of what art stands for

yes, but nothing new. A number of live works are on display and the fair has commissioned a series of Frieze projects, but the masses of people and the scale of the fair makes it pretty hard to focus. I guess I'll plan better next year.

The real reason to come to Frieze is for Focus – a selection of thirty or so up-and-coming galleries curated by the Frieze to show the newest, edgiest work. Here the names on the walls aren't familiar, but everyone knows the next few stars are hanging here somewhere. This is the dealer's first destination when they get to the fair and I'm pretty sure everything is already sold by the time I get there on day three. Personal favourites include a series of works by Harold Ancart from the New York based gallery CLEARING, but I'll leave my picks of the Frieze for the next page. Admiring "Waterfall" by Chinese artist Li Jinghu, a staff member from exhibitor Leo Xu Projects can't help but try and sell me the work. It's irritating, but I still admire the quality of what's on show. The reality is that this isn't a gallery but a commercial event. It's super interesting and I will definitely go again (if I don't have to pay £35 for a ticket), but it's a once a year event.

Turn over for my picks of the Frieze!

The great and glorious from this year's Frieze as chosen by the experts – FELIX!



Max Falkenberg
Arts Editor

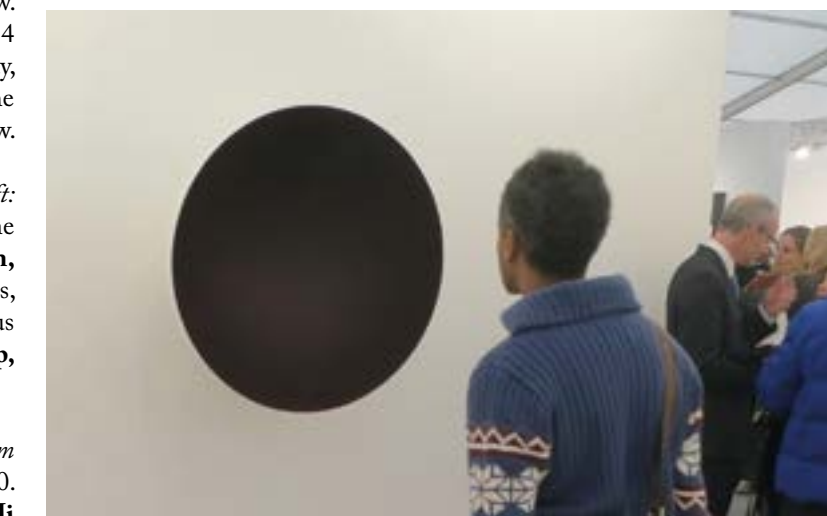
Wenyu/ Zhu Weibing, Wondering where to go, 2012, Li Jinghu, Waterfall, 2015. Anish Kapoor, Untitled, 2014.

Hello and welcome to my completely official selection of the best of the best at the Frieze. It's not what anyone else seems to have chosen, but what do they know. I'm sure I missed half the fair but 4 hours was enough for me. Anyway, in no particular order I present the great and good from this year's show.

Right Page, Middle: Kerstin Brätsch/ Debo Eilers (KAYA), Sprepper_Schnaken Table #1, 2015.

Left Page, Clockwise from top left: Xavier Veilham, <<Light Machine (Music)>>, 2015. Glenn Brown, Mercury Sent to Admonish Aeneas, 2015. Harold Ancart, Various Untitled, 2015. Mitchell Syrop, Live Nude, 1986.

Right Page, Clockwise from bottom left: Urs Fischer, Dr. Nope, 2010. Albert Oehlen, Baum 31, 2015. Ji





How to cook meat

Reverse-searing is the the most impressive way to cook a steak on a student budget

Sanjay Bhattacharya
Writer

The next time you get the family come to London and take you out for a meal, pause for a second before you order the steak. I mean, fine, it's not your credit card, and it's typically the most expensive item on the menu, so surely you're getting your money's worth? You certainly wouldn't pay that much when you go out on a cheeky date to Nando's,

Just like at
the wine
tasting
your friend
at Durham
took you
to

but that's different; this is a time to treat yourself. It's not like you're missing out on anything else on the menu – who really knows what half of it is anyhow? Foams, airs, deconstructions: all are meaningless when you know exactly how juicy, meaty and delicious that steak will be. It's a safe choice. But, ask yourself – what am I really getting that I can't do myself?

Is it the meat? Well, maybe. Kitchens have access to some better quality meat than you might pick up from many of the lower end shelves (and sorry, but Tesco's Finest doesn't really cut it), but lots of the meat counters at many a supermarket now stock some very good meat: dry aged, well marbled, and cut properly. And free range, higher welfare chicken is now standard, along with Welsh lamb and heritage pork. Fine, it's not the cheapest by far, but I'm rooting for quality over quantity.

Is it the accompaniments?

Perhaps the lack of sauce Béarnaise is what's held you back last year, so it's only fair to treat yourself to that, the triple cooked chips, and a token rocket salad.

Or is it actually the skill – the fact that you just get to sit there, idly swirling your Chianti (just like at the wine tasting your friend at Durham took you to) and chatting about the latest batch of freshers, whilst pointedly avoiding all conversation about your own degree, before a steak appears, cooked just the way you like it. Of course, that's medium rare; you have to show yourself off as a real connoisseur in front of your parents, so they see how well you're maturing at uni. Besides, it's how he orders it on *Man vs Food*, so it must be the best way, right?

Let's cut to the chase: you're ordering it because you hate cooking expensive cuts of meat at home. I used to. Spending £10 on a nice steak, only to have a crisis moment when it comes to actually cooking the beast. But let's break it down, and dispel a few myths along the way. This isn't my own investigation – far from it, it comes from the chefs I've worked with, as well as some of the excellent literature available online that explores the world of scientific cooking.

How do you take it?

For a start, what do we mean when we say "medium rare" so proudly to the waiter – as if they insult you for assuming you might have it any other way?! Well, as a scientific institution, we should take an objective stance – medium rare is 57°C. Nothing to do with how it feels compared to the palm of your hand, or anything to do with how long you cooked it for on one side, or even if you brought it out of the fridge an hour before cooking – this is simple fact, temperature determines doneness. So how do you tell?

Well, spend £12 on Amazon, and you can get a digital instant meat thermometer. Basically a metal probe with a thermocouple inside, it takes a reading in seconds, and you get to know exactly when your meat is just so. 53°C for rare, 65°C for medium (for beef at least. All the other temperatures you can find online). Life is so much easier now!



You don't have to serve it on a slate, but it does help. Photo Credit: weeklygravy.com

Is this thing on?

But how do you get to that lovely temperature? Is it all about the white hot coals in a disposable barbecue, or maybe the lovingly passed down cast iron pan from gran? Again, let's have a think.

Unless you're dealing with very cheap steaks, yours should be a nice, thick cut piece of meat, and I'm talking 1 inch at the very least! It's why meat counters tend to be better for them: you can get them cut to size. Cooking for one? Ask for a thick piece from the scrag end, and get a slightly narrower cut. Stay at home date? Share a steak. You just want a nice thick piece of meat in your mouth at the end of the day. I mean, who doesn't?

It's how he
orders it
on *Man vs
Food*, so
it must be
the best
way, right?

But, with the laws of thermodynamics (which, as a Biochemistry student, I'm not going to attempt to understand) in mind, having a flaming hot grill is the worst thing we can do. By the time the heat has spread through the steak, and you've taken your careful temperature reading, the outside will resemble the charcoal you're cooking over – well past the golden brown caramelised sear we want. So you switch to the pan, and again, it's just too hot! There will be a nice grey band of overcooked meat around the edge, with a tinge of pink in the centre. Fine, you can labour over it for hours with a lot of butter, patience and constant (every 30 seconds) flipping, but that's far too much work for a busy student, right?

Naturally, you can do all sorts of things: leaving the meat out to get to room temperature (which actually takes well over 4 hrs, not exactly speedy), only flipping it once (how could that ever help even heating?) and a myriad other supposed tricks to get your meat to cook better, very few of which have any sort of scientific grounding, and even fewer of which work.

Let's get technical

So, let's rewind: how to get something to that perfect temperature? Well, if I was to run an experiment in the lab, I'd use a water bath, which is exactly what many modern chefs have turned to, in the form of sous-vide cooking. But the gadgetry is far too much money –

we're looking to use the minimums supplied in student halls.

Why not instead of using water, using air as your cooking medium? That's how a regular oven works, and so that's the secret: cook your steaks, and all your nice thick cuts of meat, in the oven first. But not too hot – you're going to have the oven set at the lowest it can go (most should do about 100°C, but the lower you can go the better), so that the meat warms up slowly. It can take up to 2 hours for a particularly thick steak, but in that time, you can be doing anything. Just check it after half an hour and watch as the temperature rises. It couldn't be simpler than that!

Sear it up

Now that you've taken your perfectly cooked steak out of the oven, you could just dive in – but it hasn't got any of that beautiful crust. That's ok – fire up that grill or heat a pan on the hob until it smokes when oil is added, and quickly brown the outside of the steak, flipping regularly so you don't burn any spots. Or put it under the hottest grill your oven can manage, and watch it carefully. Now, that's how meat should be. You've just completed your first reverse sear! Named as such because unlike normally, the sear came last.

The above also applies to chops of all kinds, whole and jointed fowl, and large roasts – slow, low heat to bring up to temperature followed by a brief trip to hell to crisp. Take your pick of meat, and enjoy!



Last orders as craft beer steals market share

Will a mega-merger in the brewing industry save big beer?

Alastair Heffernan
Writer

In the UK back in 2006 the majority of pubs served mostly identical lagers on keg; variety was achieved by a changing assortment of warm cask ales that often left younger drinkers wanting. In the US, the situation was similar; bars served a narrow range of indistinguishable beers: Bud Light, Coors Light, Budweiser and the like. Any variety found came in the form of expensive import beers like Guinness.

By 2015 it might appear that nothing has changed: Bud Light is still the USA's most drunk beer, beating its equally bland rival Miller Light by over \$3 billion in sales. Yet the experience of going out for a beer has unquestionably changed. Drinkers are now met with a smorgasbord of choice thanks to the rise of craft beer. These are highly flavourful beers made by small,

It is difficult to realise efficiency gains when breweries are on different continents

independent companies. From dedicated brewpubs like The Craft Beer Co. to curmudgeonly chains like Wetherspoons, almost every pub sells some amount of craft beer.

This visible change in pubs and bars on both sides of the pond is reflected in the numbers: in the US, craft beer volumes were around 5 million barrels through the early noughties before rapidly growing to 22 million today. This double digit growth in production goes against the negligible change in beer consumption over that time: craft breweries are stealing market share from the big players.



The Apprentice did beer once, remember? This is not the same at all. Photo Credit: BBC / Boundless

The biggest of all, AB InBev (producer of Bud Light and Brazilian favourite Skol) is responding to the encroachment of the craft brewers by buying its rival, second largest brewing conglomerate SABMiller (maker of Miller, Peroni and Grolsch). The acquisition, provisionally announced last week, will cost AB InBev some \$104 billion and will produce a global superpower in brewing, responsible for around one in three pints consumed worldwide. Yet, even this industry titan might not be able to save big beer.

That's not to say that AB InBev doesn't have form in the field of billion dollar acquisitions. The company was born out of a deal that saw Belgian based InBev buy US brewer Anheuser-Busch. InBev took a firm with flat lining shares and ruthlessly trimmed the fat, cutting back on everything from free baseball tickets to corporate jets. The new company, AB InBev, saw its share price increase tenfold from its acquisition in 2008 to today, justifying the premium InBev paid for AB. The firm would seem well placed to repeat this story of success with SABMiller.

The problem is that SABMiller is not Anheuser-Busch. SABMiller has seen solid share price growth since 2004, rising from £5 to over £35 a share in recent weeks. In addition, it has undergone its own cost-cutting programme, projecting savings of \$500 million a year by

2018, and has sold off investments in other assets not essential to brewing. These easy profit-boosting moves have undercut the potential impact AB InBev may have had. Areas where they might have hoped to cut costs, in the arguably bloated South African operations of SABMiller, will meet strong governmental opposition as local politicians seek to safeguard jobs.

If AB InBev will struggle to make radical improvements via cost-cutting then perhaps synergies will justify the acquisition. In the jargon of mergers and acquisitions, synergies refer to the sharing of resources by two firms, thus reducing overheads and increasing profits. A challenge to this is that the two firms operate in different regions; it is difficult to realise efficiency gains when breweries are on different continents.

Where the two firms do share territory such gains might not be

allowed: national antitrust agencies (bodies that watch out for the growth of monopolies) will demand the selling off of assets to prevent the dominance of the new company.

The most obvious goal of AB InBev is, surely, geographical. SABMiller has a foothold in Africa, with a near 90% market share in South Africa and a small presence in the important Nigerian market. AB InBev's CEO, Carlos Brito, claims that the acquisition will allow his firm's brands to be sold in the rapidly growing African market.

Yet this is not as simple as it sounds. Importing brands such as Budweiser would make them prohibitively expensive. Even brewing the beers locally may be tricky; barley is expensive in Africa and local brewers have responded by developing alternatives based on cassava and sorghum. It remains to be seen whether AB InBev's offerings can gain traction in the

region.

Instead of a potentially value-destroying mega-deal, the firms owner's might have been better served by the company improving its prospects at home.

One way it could do this is by dealing with the elephant in the room: craft beer. Instead of reverting to its more monopolistic tendencies of the past decade, such as attempting to limit craft breweries' access to the market by throttling distribution lines, the big brewers could diversify their offering. They could set up beer incubators in the manner of tech start-ups, bankrolling small brewers, advertising their products and helping them to market.

In this way AB InBev would undercut its current products with its own brands. To those that would rather the big beer companies stay out of the craft beer market, the reality is that if AB InBev promotes a California pale ale or sour beer in the future as it does Bud Light today, it would encourage more people to drink better beer, and in doing so, grow the market for better quality brews. A bigger market for craft beer benefits all producers and will ensure that even more pubs are supplied with the good stuff. A world with declining sales of dire lager must be a better one.

As it is, AB InBev has bought a company with an almost identical portfolio of beers as itself. While African growth might sustain it for a while, the new company will continue to face declining sales under the pressure from craft beers. If other markets such as Latin America and Africa ultimately make the move to craft, then perhaps AB InBev will end up wishing it had gambled on quality not quantity.

A \$104 billion dollar whip-round

As most companies don't sit around with over \$100 billion in the bank (Apple being a glaring exception to this rule) AB InBev are looking to finance their deal using debt. They will achieve this by selling a rumoured \$60 billion of bonds. This cash will be used to buy out around 59% of the shareholders of SABMiller for £44 a share (the price is in sterling as SABMiller is listed in London). The remaining 41% of the shares, belonging to two of the major shareholders, are being offered a partial share swap. Instead of buying the remaining shares, AB InBev will offer in the region of half an AB InBev share for every SABMiller one, in addition to a small amount of cash. Based on the current share prices, this amounts to a significant discount to the shareholders getting all cash. The reason the two big shareholders would accept getting a worse offer is that receiving shares instead of a cash windfall will prevent them receiving a massive tax bill.



felix@imperial.ac.uk

Self-care and looking after number one

Noor Mulheron
Welfare Editor

Self-care is a term that refers to anything you choose to do that is a step towards taking care of your physical, mental or emotional health. Practising self-care is a key aspect to keeping yourself productive, motivated and happy while on a busy schedule like the one typically present at uni. Self-care can be as small as trying to accept you needed more sleep when you had that nap rather than being annoyed at yourself for not keeping on working, or as large as deciding to set aside a few hours to make yourself a blanket fort and watch a movie in it. It can be easy to get wrapped up in everything you need to get done, and it is hard to notice or accept when you really need a break. When you are feeling run down, let yourself take some time out to look after yourself, because you deserve it!

Writing down some “recipes” for self-care can help a lot, and can also serve as work-motivators because you can give yourself a target and then a self-care based reward afterwards. To get you started, here are some self-care “recipes” I like to use, ranging from the simple to the lovely-yet-elaborate.

Practising self-care is a key aspect to keeping yourself productive, motivated and happy



This is what the FELIX office looks like. Not. Photo Credit: Pinterest

Relaxing cinnamon and nutmeg drink

1. Take your favourite mug and fill the kettle.
2. Take a small teaspoon of cinnamon powder and a smaller teaspoon of nutmeg powder/mace and put in mug, with a generous squeeze of honey.
3. Fill mug up to halfway with boiled water and stir until the honey, cinnamon and nutmeg are mixed in.

4. Fill up the rest of the mug with milk/milk substitute and stir again.
5. Consume to your heart's content.

The blanket fortress

1. Make a blanket fort using sofas, blankets, quilts, pillows and so on.
2. Furnish blanket fort with soft toys and fairy lights.
3. Make a hot beverage and obtain some snacks e.g.

popcorn, chocolate bars, almonds, crisps.

4. Find some comforting music, a book or a movie you love.
5. If desired, grab a person to cuddle along with your soft-toys (OPTIONAL).
6. Cuddle up in blanket fort with soft toys/person and watch movie or read while drinking your drink and eating your snacks.
7. Continue until you feel slightly less icky.

Movie time

1. Get some popcorn of choice (can be any flavour or type) and a cup of your favourite beverage.
2. If you want to have a meal too, then prepare it (e.g. you could make yourself a hotdog meal to be extravagant, or your favourite pasta bolognese etc).
3. Pick your movie.
4. Turn off the lights and make a comfortable place to sit to watch the movie - if desired, put on some fairy lights for an atmospheric feel.
5. Watch the movie and snack contentedly!



This cute little self-care zine is right up our alley. Photo Credit: Twitter @floreshelby

Mental health helplines and resources

If you are concerned about your own mental health or that of a loved one, there are people out there you can talk to who can give you advice, or will be there to listen.

Helplines and Online Resources

If you are distressed and need someone to talk to:

Samaritans

Phone: 08457 90 90 90
(24 hour helpline)
www.samaritans.org.uk

For issues with anxiety:

Anxiety UK

Phone: 08444 775 774
(Mon-Fri 09:30-17:30)
www.anxietyuk.org.uk

No Panic

Phone: 0808 800 2222
(Daily 10:00-22:00)
www.nopanic.org.uk

For eating disorders:

Beat

Phone: 0845 634 1414
(Mon-Thurs 13:30-16:30)
www.b-eat.co.uk

For addiction:

Alcoholics Anonymous

Phone: 0845 769 7555
(24 hour helpline)
www.alcoholics-anonymous.co.uk

Narcotics Anonymous

Phone: 0300 999 1212
(Daily 10:00-midnight)
www.ukna.org

College Resources

Student Counselling Service

Phone: 020 7594 9637
Email: counselling@ic.ac.uk

Imperial College Health Centre

Phone: 020 7584 6301
Email: healthcentre@ic.ac.uk

You can also go to your academic or personal tutor regarding pastoral issues, especially if you think your mental health might be affecting your academic performance.

FELIX HANGMAN



hangman@imperial.ac.uk

DEMOCRACY IN ACTION

Hangman runs for a position you don't care about

This week, Hangman made the mistake of looking at the Union website, and accidentally got dragged into the orange and blue portal of hell that is the Big Elections. As you're no doubt unaware, there were elections for some majorly important Union positions this week, including the Ethics and Environment Officer.

We told you it was important. Ethics are important, as is the environment (provided you're a filthy hippie).

Unfortunately, Hangman didn't really feel any of the candidates were truly up to our exacting standards, so in the spirit of democracy we're completely ignoring the rules/results and putting ourselves forward for the job. Because shut up, that's why.

[Manifesto begins]

Hello, fellow human! Hangman here. We're running for the position of [somebody check which position this is] because we feel really strongly about [whatever this position is for]. Believe us when we say you'll definitely want to elect us after reading this.

This is the part where we'd put some sappy life story or rubbish about our history and how what we did that one time in Year 7 means we were born for this job, but that stuff requires effort to come up with so you'll just have to imagine it. Maybe imagine something heart-wrenching and movie-worthy. Like the start of Up. Imagine that. Cry a little. Keep reading.

In order to convince you to put a '1' in the box next to Hangman and then immediately forget who you

just voted for or why, we'd like to offer you 3 policies that are entirely legitimate and will definitely be enacted if we get into power.

- 1) Free chocolate or some shit, we don't know.
- 2) Shut up.
- 3) We promise not to ever bother you with this rubbish again.

Unlike that dirty socialist Jeremy Corbyn, we have zero interest in democracy, so you won't have to worry about electing anyone into this job again. Wouldn't that be a load off your mind? No more silly little elections?

[Manifesto ends]

If you have been affected by any of the issues raised in this column (and God help you if you have), then go complain to someone else. Or email Hangman and call us wankers.

Your call.

CAPTION COMPETITION



"Oh God, another bloody immigrant."

HOROSCOPES



ARIES

This week the usual guy is writing the horoscopes so the mediocrity that has been forced upon you will now be marginally improved upon. You wouldn't believe how long these actually take to write. Like at least a full hour. Tough.



TAURUS

This week to celebrate the Chinese President's visit you decide to occupy the Library. You then decide to introduce the death penalty and kill 2700 people, defying any international laws or pressure, and torture any political or religious activists. Oh wait, that's actually China.



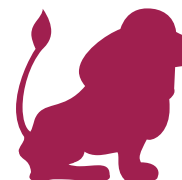
GEMINI

This week after making friends with some medical students you learn that they have all received free iPads, and when you get a chance you have a look to see what educational use they provide; however all that's on your friend's iPad are vibrator apps and *Angry Birds*.



CANCER

This week you discover that your Horizons German course is not all it's cracked up to be as it seems the only other people that applied for it were Chinese Engineering students and the whole lesson is spent learning how to ask for different types of screwdrivers.



LEO

This week you finally realize that Imperial is not the magical place you had built it up to be and is in fact where you will learn to resent the course you do, scientists, your teachers, your lecturers, even the Library Café workers who sell you your sweet, sweet jacket potatoes.



VIRGO

This week whilst looking for internships you stumble across ADLT industries. Being an electronic engineer, you assume that you are going to get some hands on experience with advanced lighting technology. You end up being a mopper on a porn set.



LIBRA

This week you discover that if you have any particular penchant for *The Big Bang Theory*, literally all of your friends will leave you and never speak to you again, rendering you socially lower than that racist kid you met in freshers' week.



SCORPIO

This week you discover that although your biology personal tutor has been very chummy with you, she does not appreciate you referring to her as your 'conservation trap queen' and you have to attend a sensitivity training session.



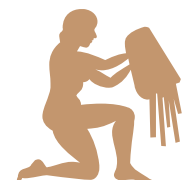
SAGITTARIUS

This week as a School of Medicine student enjoying your free iPad, you learn today that in the contract that you signed for your free iPad it says that you are no longer allowed to complain about anything at Imperial or on your course. Did I mention how I got a free iPad?



CAPRICORN

This week you realize that the amazing mate you had in first year who you always got drunk with may not actually be a reliable housemate. Unfortunately you learn this after he violently expels waste from both ends in your room after a night out.



AQUARIUS

This week you discover that making a reference to the fact that the events of *Back to the Future 2* took place on Wednesday is not an interesting character trait and if you really have to use that in real conversation then you should probably piss off.



PISCES

This week you decide to try milk for the first time. You wake up disembowelled at the bottom of the Mariana Trench. Pint?

[This was sent to Hangman. Hangman doesn't understand it. Maybe you do? If not, send a better one to hangman@imperial.ac.uk]



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Encourage
Motivate

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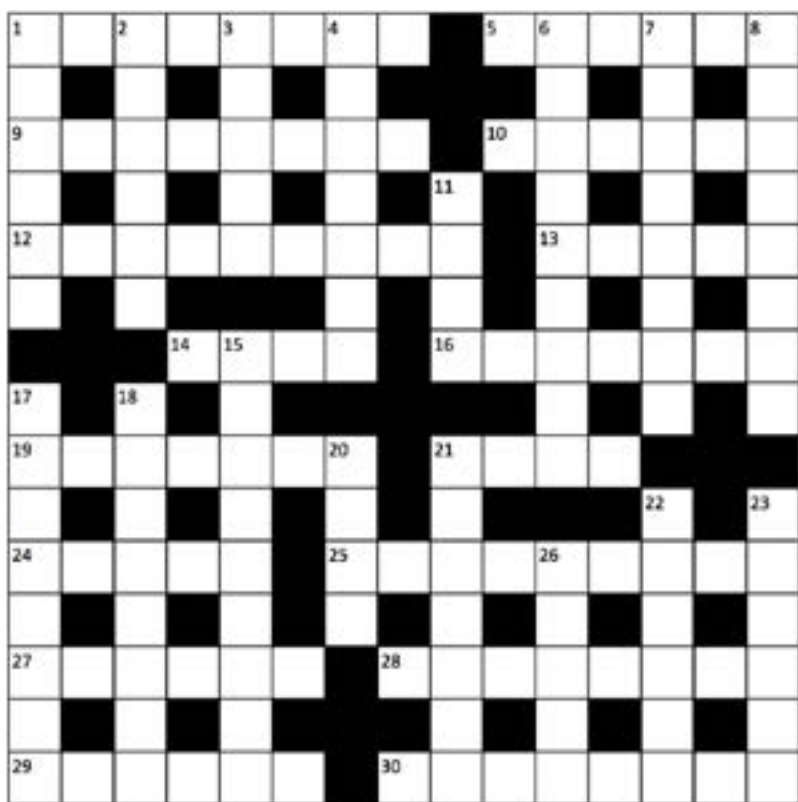


Imperial College
London

FELIX PUZZLES



fsudoku@imperial.ac.uk



FUCWIT

Solo Efforts

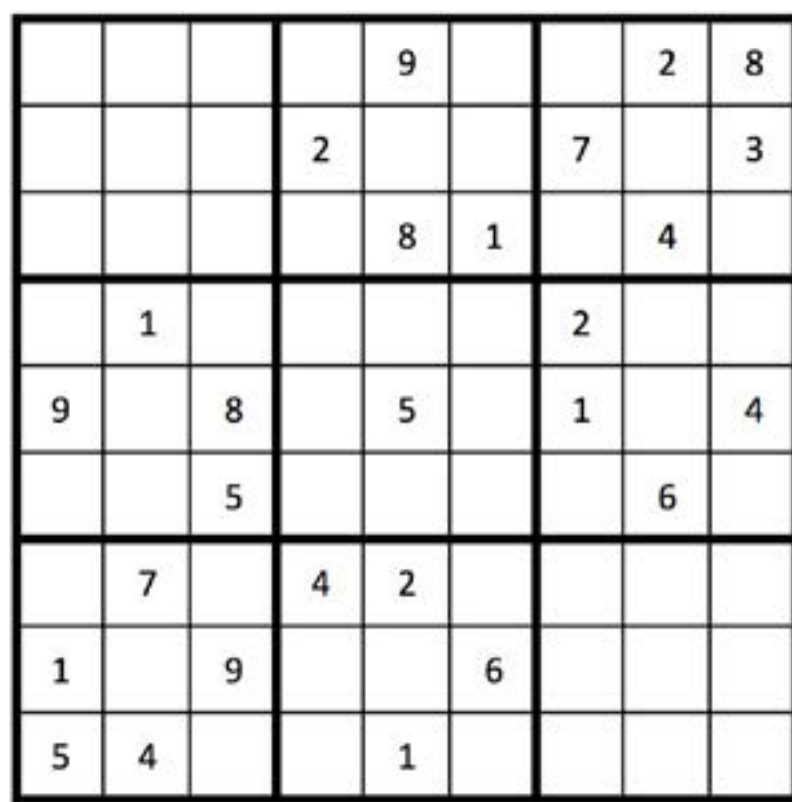
- 1st Cherry Kwok 11
- 2nd Harry Secrett 10
- 3rd Nicholas Sim 9
- 4th Ho Chin 7.5
- 5th Sach Patel 6
- =6th Grace Chin 3
- =6th Jeremy Ong 3

Groups

- 1st Parmesan 9.5
- 2nd Gap Yahhhh 6.5

Points available 12

- Slitherlink 1
- Rectangles 2
- Crossword 4
- Sudoku 5



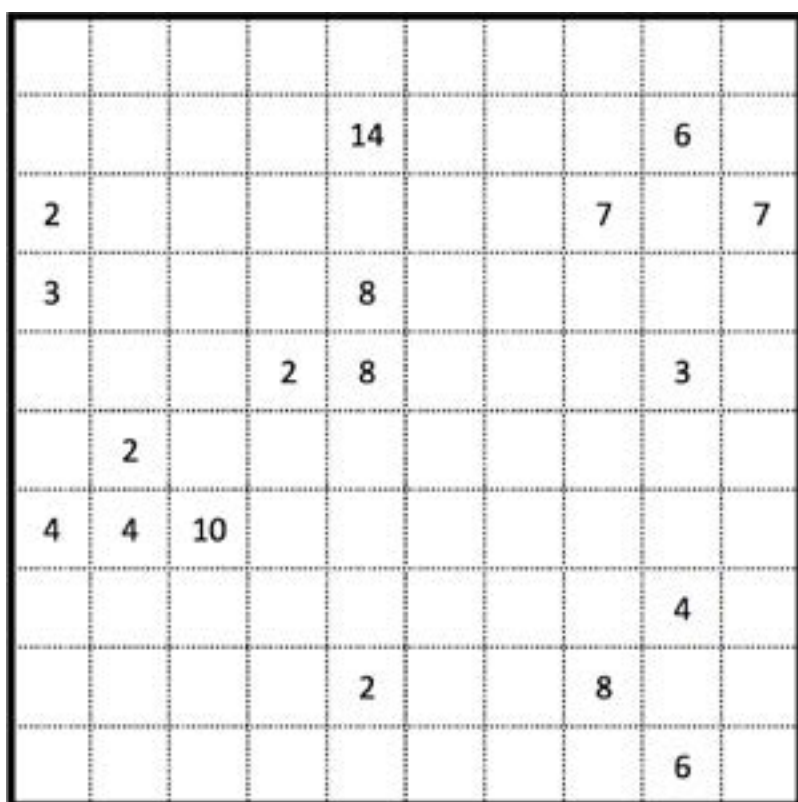
Across

- 1. Assign
- 5. City district
- 9. Misting up
- 10. Layout
- 12. Wild youths
- 13. Corn bundle
- 14. Tinted
- 16. Contented
- 19. Leaves workforce
- 21. All of two
- 24. Images of gods
- 25. Enticement
- 27. Redox mnemonic (3,3)
- 28. Sea floor
- 29. Swimming style
- 30. Estimates (damages)

Down

- 1. Resources
- 2. Manoeuvring space

- 3. Punctuation mark
- 4. Union drinking vessel
- 6. Most apprehensive
- 7. Cosmos
- 8. Genuine (4,4)
- 11. Immediately (1,1,1,1)
- 15. Measuring rod
- 17. Betrayers
- 18. Baby buggy
- 20. Frame for glass
- 21. Dress tops
- 22. Short-haul plane
- 23. Positive electrodes
- 26. Long for

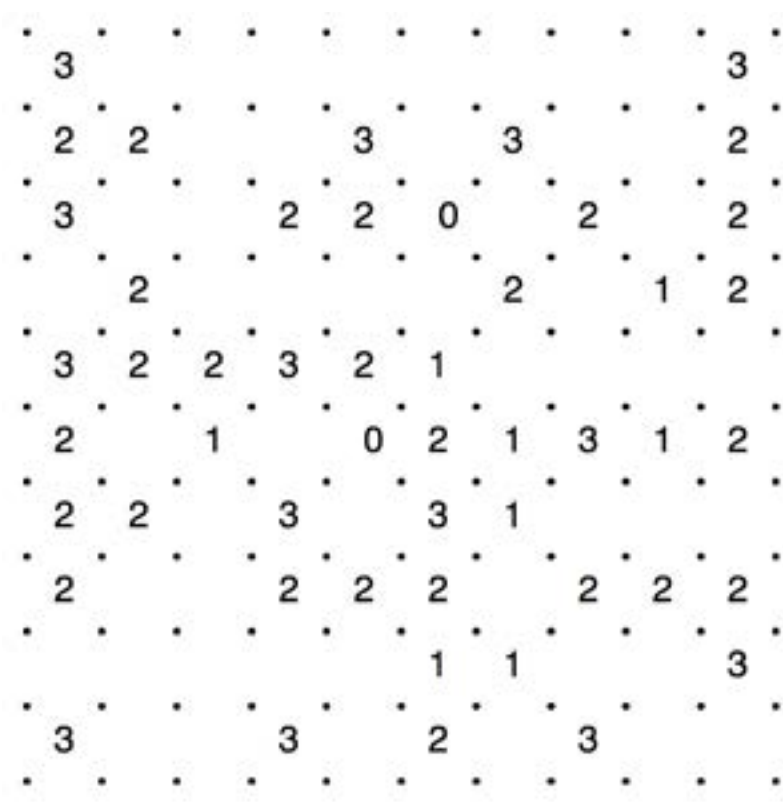


Rectangles

Divide the grid into rectangles or squares each containing a single number which corresponds to the number of cells in that piece.

Slitherlink

Join dots to make a single continuous loop. The number in each cell indicates the number of lines surrounding it.

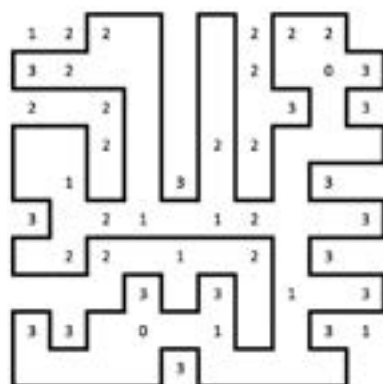
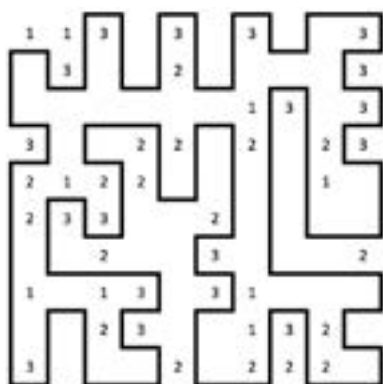


Solutions

MegaNonoGram

Last week it was a picture of a baby or a doll.

Email your solutions to fsudoku@imperial.ac.uk, before midday on Wednesday!





Throwing Joubert under the bus

A statement from the governing body undermines some of rugby's greatest qualities

Jonny Pratt
Writer

Last weekend the quarter-finals of the Rugby World Cup took place, with the Southern Hemisphere teams winning all four matches. The final game, between Scotland and Australia, turned into one of the most fascinating games of the tournament, with a controversial 78th minute penalty kick ultimately proving the difference between the two sides.

Take a look at the byline on World Rugby's website: "Building character since 1886". With that in mind, I don't know what "character" the match official selection committee is trying to build with its statement on the controversial final call in that game. For those of you who haven't read it, the statement reads that "the appropriate decision, therefore, should have been a scrum to Australia for the original knock-on" and not the penalty which ultimately proved the difference between the two sides. I cannot help but feel that World Rugby has thrown Craig Joubert under the bus with this statement.

What is the point of this statement? Is it for aspiring referees to remember at some point in their future? If so, their various regional and national associations can pass this down to them. Is this a pseudo-apology to the Scottish players and management? If so, speak to them privately about the matter. The only purpose I can see is to shift the blame on to Craig Joubert for the decision. If this is the route we are now going down, I invite World Rugby to provide us with an opinion on every penalty given (and not given) during a game. Perhaps at the end of the tournament we would then have a lovely table of could haves and would haves. Yes the link between this last minute penalty and the final result is obviously clearer, but in reality it counted no more or less than any of the preceding points.

As will have been drilled into every rugby player from the moment they picked up the ball, the referee is always right, even when they are wrong. This is a part of the beauty of this sport, seeing a 20 stone front

row forward jogging backwards ten metres with a "Yes sir" after conceding a scrum penalty that nine times out of ten they won't agree with. It does not matter whether it should have been a scrum or a penalty. The referee gave a penalty, so it's a penalty, drop ten metres and

The referee is always right, even when they are wrong

prepare to go again. The statement released by World Rugby only serves to undermine this approach.

Indeed, the entire basis of World Rugby's statement hinges upon whether you consider that Australia's Nick Phipps "intentionally plays the ball" according to Law 11.3(c). Even with the benefit of the multiple angles that we have had access to, I am yet to be convinced either way on this point. The referee has to make this call in real time, and as I was watching live I immediately thought that it was a penalty. There will be many who argue that the referee should have been able to refer to the Television Match Official (TMO) on this call. How many decisions are we going to refer if this becomes the norm? Is it any penalty decisions with 5 minutes left on the clock, with 10 minutes? Indeed, what about all the penalties that aren't given? In many rucks there are moments where some referees would call holding on, while others would give a split second longer. Should the TMO be watching for all of these in the last few minutes? It simply does not produce a workable game if we go down the route of assessing these kinds of penalty decisions.

For any fans holding a grudge, the wrong call was made at the lineout. Execute your set piece correctly and take the referee out of the equation. The reality is that Scotland were one successful lineout from a World Cup Semi Final. Ultimately, for the game

to thrive we need referees. Being hung out to dry on the biggest stage by World Rugby is not the right way to be treating those at the top of their profession. Craig Joubert is an excellent referee. The manner in which he sprinted off the pitch at the end of the game is unacceptable and should be addressed, but I hope that he continues to have a long and successful career.

To those of you who feel that this witch-hunt has been appropriate, I implore you to go out, take a refereeing course and take charge of a few games yourself. After hearing the comments from the Back-of-Beyond 4th XV fans, imagine how amplified this would have been in Twickenham on Sunday.



Craig Joubert sprints off the field at the end of a thrilling, but controversial, game at Twickenham on Sunday. Photo Credit: Matt Dunham/AP

Home fixtures: Wednesday 28th October

BADMINTON

MENS 1ST
vs CARDIFF

WOMENS 1ST
vs BATH

MENS 2ND
vs SURREY

MENS 4TH (MEDICS)
vs ST GEORGE'S

BASKETBALL

MENS 2ND
vs KINGSTON

FENCING

MENS 3RD
vs UNIVERSITY OF
LONDON

WOMENS 2ND
vs BRUNEL

FOOTBALL

MENS 1ST
vs MIDDLESEX

MENS 2ND
vs WESTMINSTER

HOCKEY

WOMENS 4TH (MEDICS)
vs HERTFORDSHIRE

MENS 3RD
vs PORTSMOUTH

MENS 6TH
vs READING

WOMENS 5TH (MEDICS)
vs KCL

WOMENS 2ND
vs KINGSTON

LACROSSE

MENS 1ST
vs PORTSMOUTH

WOMENS 1ST
vs SURREY

NETBALL

WOMENS 3RD (MEDICS)
vs BRUNEL

WOMENS 8TH (MEDICS)
vs READING

RUGBY LEAGUE

MENS 1ST
vs ST MARY'S

RUGBY UNION

MENS 1ST
vs KCL (GKT)

MENS 5TH (MEDICS)
vs SURREY

MENS 3RD
vs ESSEX

TENNIS

WOMENS 1ST
vs NOTTINGHAM

MENS 3RD
vs ROEHAMPTON

VOLLEYBALL

MENS 1ST
vs BRUNEL

Fixtures are subject to change