



Felix

The Student Newspaper of Imperial College London



EDITORIAL

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

Registered Newspaper
ISSN 1040-0711

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This week's *Felix* is not thicc

Today marks the first day in my run as Editor that I've managed to get this part written on time - only because this week's edition was compiled on a Wednesday. A bit early, I know, but it was either this or some of you went without your weekly crosswords (and all the other high quality articles we write over here).

Now some of you might be wondering - why is this edition of *Felix* a bit light? A wise man once said, "size doesn't matter". Sometimes the best things in life come in small packages.

As I'm writing this, Halloween ACC rages on upstairs. Surprisingly not as rowdy as I was expecting. Not that I'm complaining, though if there were a massive fight that'd give me one more article to fill up this issue.

"A wise man once said: size doesn't matter"



Andy Djaba - Felix Editor

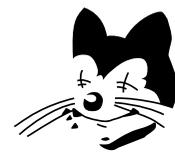
Halloween is a good point to look back at how settled into the new year we are. Personally I'm not for the whole thing, but I can respect the time and effort people take into fashioning each costume.

So far in these six issues I've overseen as Editor, I've taken a completely new perspective of the Union than I had as a student. It's a bit mad - it goes from being that place you go to after your last exam or when your room booking falls through to this whole almost-political system you have to navigate. In light of the many different articles I've had to write on it

(since I do get paid to do this), I thought it'd be wise to give my hot take on its general direction.

I must admit, it's a bit nice to get away from writing about facts for once and just giving my opinion this week - you'd think being a newspaper editor, you'd get to fill 32 pages with whatever you're thinking: not the case unfortunately (bear this in mind if any of you are thinking of running for Felix Editor in the future). Even more exciting is gearing up to write for my old section once again (Music fztw); keep a look out for that in next week's edition.

I can't end this without thanking my incredible *Felix* team: every single one of the contributors who've helped get this paper out even with one day less to work with - can't say that I ever approached my degree with this level of dedication but I'm glad you're here to help out! This week the paper is shorter and is being sent to print on a Wednesday because tomorrow I will be at my friend Lauren's funeral. The support from everyone around me in this tough time has been touching and overwhelming and I can't thank you all enough.



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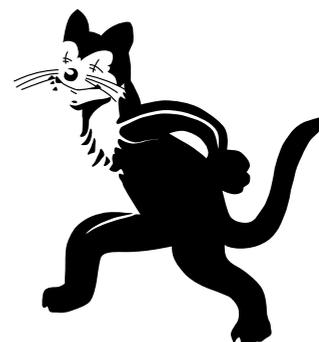
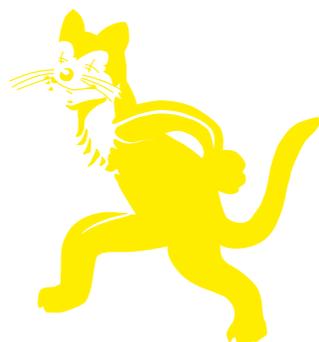
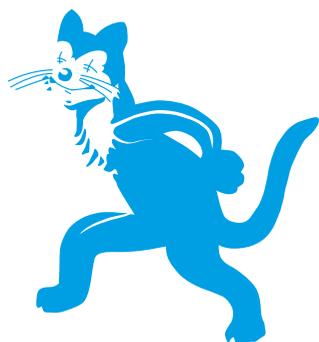
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NEWS

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Unrest Over New Union Staff Food & Drink Policy

NEWS

Andy Djaba
Editor-in-Chief

Several Beit bars student staff have voiced concerns over the new policy, which came into effect on 1st November

Imperial College Union's new "Staff Food & Drink Policy" has come under heavy criticism by multiple members of Union bar staff.

Staff were made aware of the new policy, which was drawn up by Julia Mattingley, the Head of Commercial Services, on Monday 29th October. The new policy, which came into effect on 1st November and details a number of changes to the rules surrounding the staff's entitlements to breaks and to discounted food and drink during their shifts, has proven widely unpopular amongst the Beit bars student staff. The aggrieved staff have pointed out multiple flaws in the new policy.

"Everybody hates this policy!"

Key features of the policy include a 15% discount off the full item retail price, which will subsequently see student staff hit with a significant price increase, while full time Union staff will see a decrease in the price of their food. An anonymous Beit Bars student staff member had the following to say:

"They're claiming that the policy is generous. The discounts are 15% so, on a £5.50 burger which we normally would have got for £3, we now get it for the price it was before they increased the prices last year."

Changes to staff break entitlements were also outlined in the policy. The policy states:

"All staff (agency, permanent and student) are entitled to a discounted staff meal whilst working a shift of at least 6 hours."

This immediately raised concerns given that a standard morning shift runs from 11:15 am to 5:00 pm, which falls 15 minutes under the 6 hour threshold and, thus, leaves staff with no break and no food following a shift. Several staff members voiced further concerns about what they perceive as unfair treatment, lamenting the fact that they are no longer entitled to a free drink during these morning shifts "even though they have to do a 3 hour delivery, which is a lot of heavy lifting and it takes up a lot of time and is very intense." An anonymous Beit bars student staff member added, "so they do a lot in these morning shifts but, because it's under 6 hours, it's not considered hard work." In reality, a stipulation of this policy is that staff will no longer be able to eat unless they work an evening shift, which will then pass midnight.

"The entire attitude of the Union is wrong!"

The harsh and aggressive wording of the



FiveSixEight // Imperial College London

policy has also been criticised. The policy states that workers will be considered guilty of theft or gross misconduct if they breach the policy. One Beit bars student staff member explained:

"On particularly busy shifts, kitchen will make surplus curly fries because obviously everyone is coming in and ordering curly fries and burgers, which come with curly fries. At the end of the shifts, sometimes there's a box or two, not even a ridiculous amount, and they're saying that the kitchen aren't allowed to give that to staff; they have to throw it in the bin. Even if the kitchen is closed. You can't take it, it would be stealing. It's theft if there's surplus chips and you want to eat them... all food that isn't eaten will have to be thrown away."

"They don't care about us!"

One of the Union's alleged justifications for this is that "the kitchen made a 40% profit margin instead of 60%- that's not an acceptable difference and, because of that, we need to toughen up on it".

It has also allegedly been claimed that the reason for the lack of margin is because "staff are basically not following the rules with food". The Union allegedly further justifies this policy by claiming "it obeys the Working Time Directive". One Beit bars student staff member commented: "It sets the minimum possible break time you can set under the Working Time Directive. The reality is, on a 13 or 14 hour Sports night, I'll get a half hour break, if that! Which is the minimum amount they can give... the fact that the Union, which is notionally an organisation that cares about welfare, is going for the bare minimum it can offer its staff in terms of a break is dubious." It should also be noted that

the Union has violated the Working Time Directive for years, since the directive requires a minimum of 11 hours between the end of one shift and the start of the next. The anonymous member of staff added: "if the Union is going to go 'the Working Time Directive is really important', they should actually follow the Working Time Directive and not just the bits that benefit them for profit."

A concerned student told *Felix*: "It underscores some of the hypocrisy of discussions around the bar... should the Union have to be dragged into treating its staff fairly?"

In staff welfare meetings, there has been "general unrest". A member of staff commented:

"There are very limited benefits and the staff generally feel unheard and underappreciated. A big thing is that the people who are upstairs in the Union and on this board

that make these kinds of policies don't discuss it with any of the student staff. They don't discuss it with the casual staff or the supervisors or the managers and so these changes just get implemented without thinking about how it's going to impact us at all. No input whatsoever. There's been a lot of upset and this is just going to be a massive kick in the teeth."

The growing unrest comes amongst claims of alleged manipulative abuse, emotional manipulation and work place bullying within the Beit bars staff and following a dispute surrounding paying Beit bars student staff the London Living Wage, which is afforded to student bar staff at every other London university. Last year, Ella Rice (one of the student bar managers), started a petition on this which got 900 signatures. Staff have even allegedly discussed taking strike action.

NEWS

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College declares support for increased pension contributions to settle long-running dispute

NEWS

Joanna Wormald

Deputy Editor

Imperial's response to a pensions consultation says the College is prepared to pay more into staff pensions

Imperial has stated it is willing to increase its pension contributions as a consultation over a long-running dispute closes.

Proposed changes to the University Superannuation Scheme (USS) – the pension plan to which most lecturers in the UK belong – sparked strikes earlier this year. The suggested move would have linked the value of pensions to the performance of the stock market. Analysis suggested that the move could cost members up to 60% of their pension value. Following an agreement between the University and College Union (UCU) and Universities UK (UUK) a panel was set up to review the valuation process that incorrectly judged the USS to have a £7.5 million deficit.

Released last month, the report of the Joint Expert Panel (JEP) set out five adjustments to be considered in future valuations. Chief among these is a “fuller consideration of the employers’ ability and willingness to bear risk”.

Responding to a consultation on the JEP’s findings, a College statement said: “The College is supportive of retaining the current... USS if this is sustainable from a financial and

regulatory perspective. We are willing to increase our employer contributions...to support the scheme.”

Last November, the then-provost Professor James Stirling said the planned changes were “necessary” as the USS was “not likely to be sustainable”. UCU representatives told *Felix* at the time that the College had acknowledged it could afford to continue with the USS but had chosen not to.

According to one UCU member, the reaction to the report has been “broadly positive”.

“We’ve said all along the valuation is flawed and finally someone is agreeing with us,” they said. However, they added: “The only snag is making sure the recommendations

“The College is supportive of the USS if it is sustainable from a financial and regulatory perspective”

of the JEP are implemented, which is not guaranteed at present.”

Last week, the *Financial Times* reported that 39 finance experts had urged the USS to reject the JEP’s proposals or face “pernicious consequences”. The JEP defended its recommendations, saying they were “practical and reflect the unique, underlying strength and longevity of the USS”.



UCU members are optimistic about the recommendations but will they be implemented? // Joseph O'Connell-Danes

Analysis: How will the future of the USS be funded?

Any suggestions that Imperial cannot afford to support its staff border on risible given the College’s spending habits.

Continuing with the current USS plan would cost Imperial no more than 10% of its operating surplus, which 2016-17 figures put at almost £120 million. In the year prior, the College paid £80 million into pensions funds. Its profit over the same period was £78 million.

Since then, staff expenditure (i.e. the amount spent on salaries and pensions) has fallen from 55% to 53% of total expenditure. Failure to keep up with the rate of inflation has seen the average salary at Imperial fall 1.1% each year since 2005 and London living

costs have risen twice as quickly as pay. Senior staff however are the most highly paid of any Russell Group university, averaging salaries of £280,000 each.

Imperial is rapidly expanding its property portfolio (already one of the largest in London) and the College’s fixed

“Any suggestions that Imperial cannot afford to support its staff border on risible given College's spending habits”

assets total more than £1.5 billion. Other investments include £3.5 million in the tobacco industry, £9 million in fossil fuels, £3.1 million in the arms industry, and £16 million in pharmaceuticals.

The College also benefits from controversial donors such as the Sackler Trust – linked to the US opioid crisis – and the Atomic Weapons Establishment.

Imperial has withheld at least £280,000 from striking staff. Deductions across all Russell Group universities totaled over 10 million. More than 5,000 students, represented by legal firm Asserson, joined a class action lawsuit calling for partial tuition fee refunds as compensation for missed teaching time. Over 3,000 Imperial students signed a petition to the same effect. The UCU estimates that students missed almost

“We said all along the valuation is flawed; finally someone is agreeing with us”

600,000 hours of teaching. While many universities ringfenced the withheld money for student support services or hardship funds, Imperial is diverting the money to the departments of those involved in the strikes. There have been no guarantees that this will be used to benefit students.

COMMENT

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The State of the Union

Editor-in-Chief, Andy Djaba, gives his take on the state of the Union and the problematic culture at Imperial

COMMENT

Andy Djaba
Editor-in-Chief

A few weeks ago, I wrote a News article about a concerning image that emerged showing Jarlath O'Hara, the Managing Director of Imperial College London, pictured beside a man dressed in blackface. I was first made aware of the image on 27th September. If I'm honest, my initial reaction to the picture was to laugh. Not because I found anything particularly funny or didn't appreciate the seriousness of the situation but because, unfortunately, this sort of problematic behaviour from people that should know better has become all too prevalent a feature in our daily lives. I often feel so helpless that all I can do is laugh. I was present at the 5th October meeting between Jarlath, Rob Tomkies, the Union President, and concerned students who had seen the image; six of whom are BME students. At this meeting, Jarlath was repeatedly urged by almost everyone present to extend the apology made to those present to the wider student body through the release of a public statement/ acknowledgement. However, Jarlath declined to do so and, subsequently, there was a general air of dissatisfaction following the meeting.

I have no qualms with Jarlath's refusal to issue a public apology; he is well within his rights to deal with the situation



The Union faces a crucial period // Imperial College London

as he sees fit. However, I thought the official response of the Union and the Board of Trustees to the emergence of the image was particularly interesting. Jill Finney, the Head of the Board of Trustees, began her statement on behalf of the Board of Trustees by saying: "It is deeply unfortunate that Jarlath found himself photographed in these circumstances over 12 years ago. Compromising historical images are increasingly a feature of our daily lives and it is incumbent upon all of us to ensure we do not participate or fall victim to them."

I would argue that this response was inadequate and even bordered on tone deaf. I think it's particularly telling that Jarlath is being painted as a victim

in this situation. Although it is an unfortunate situation that Jarlath has found himself in and it could be argued that there is a conversation to be had about compromising historical images, this should not be the Union's primary focus. It screams to me that the Union is missing the point.

However, I can't say I'm surprised. From my experience, the Union often misses the point. My opinions of the Union have primarily been formed by the four years I spent here as an undergraduate student, as opposed to the few months I've spent as an employee of the Union. Although I would say my opinions are changing, I've generally had a quite negative view of the Union, especially when it comes to issues of ine-

quality and, in particular, race.

The statement from the Board of Trustees ended with, "the Board... have satisfied themselves that Jarlath has no racist intent whatsoever". I'm actually keen to move the conversation away from Jarlath because I feel that, when discussing issues of race, too much energy is focused on the individuals involved rather than the wider issue at hand. This is what I feel the Union has done with their response here and it should be noted that the Union is not in the best position to judge "racist intent". Racism is not binary. As we have seen here, having "no racist intent" and even committing yourself to equality does not preclude you from being part of or being complicit in a racist

act.

In the past, College and the Union have benefited from having a somewhat apolitical student body and, as a result, problematic behaviour seems to repeatedly go unchecked or is excused away as being "tradition." Whether it be the Rugby team's "fiesta dash" fiasco, the fact that, as recently as 2016, the Royal School of Mines held fresher "slave auctions" or the fact that "The 15s", the Women's Tie Club, is so-called because it was founded in 2015 (in contrast, "The 22s", a male Tie Club, was founded in 1922), there are far too many examples from recent memory of times at which the Union has aligned itself with frankly unacceptable behaviour. I think it is telling that, following the public

fallout from the "fiesta dash" event, ICURFC felt aggrieved enough to appeal the ensuing punishment. It says to me that they felt somehow "hard done by" and that this punishment was too harsh. I'm not suggesting that the punishment was too lenient but, if I were them, I would be counting my lucky stars that the punishment wasn't more severe. That, and the fact that so little of the conversation was geared towards the racist aspect of the incident, is indicative of a culture of acceptance of problematic behaviour that is festering in the Union.

However, it's not all doom and gloom! College and the Union are launching multiple initiatives to tackle the problems with the culture at Imperial, including the Race Equality Charter and the Equality, Diversity and Inclusion Act. However these initiatives require difficult and often uncomfortable conversations and open discourse about inequality and attitudes at Imperial. With Black History Month drawing to a close, now is as good a time as ever to have these conversations and to address exactly why so many BME Imperial students feel disillusioned and disenfranchised with the Union.

In the next phase of the Union's development we have to consider the future. Otherwise the Union runs the risk of perpetuating a culture of indifference which is counterproductive to their ideals of inclusivity.

POLITICS

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POLITICS

Gritty
Left Forum Chair

Gritty's Field Guide to the American Midterm Elections: It's Gonna Be Rough, Folks

Left Forum's last surviving committee member and chief lockpicker gives his views on the inevitable travesty that will be the outcome of the American midterms.

Welcome one and all to the continuing shitshow saga that is the American political spectacle. When you last tuned in in 2016, the Ur-fascist narrowly beat out the neoliberal cancellation of the future, and we've been on a wild ride for the last two years as Republican majorities in Congress and a stacked SCOTUS run rampant.

In this piece, Felix picks apart the whys and whens; candidates and races to watch, forecasting and polling, and what this all means down the line.

Firstly - where do we get this stuff, anyways? The Cook Political Report in very high regard, as with Sabato's Crystal Ball and, obligatorily, FiveThirtyEight (and if you're a fan of satire, good ol' *Chapo Trap House*). Felix only gets one issue a week, folks; best hunting for up-to-date info elsewhere.

First up: I'm endorsing a straight-Dem ballot. They're practically Tories anyways - at least the bad ones (i.e. most of them). Don't @ me, have you seen the news lately?

As always, send all angry correspondence to comment editor Charlie Titmuss, please (and, while you're at it, get a life).

So what's happening anyways?

Congressional and gubernatorial elections.



Kick the assholes out 2018. // Wikimedia

Governors in a handful of states are up for election, as are some locals (town selectman, or whatever - nobody cares). These folks often turn into presidential candidates, but there's not much interesting (at least since Cynthia Nixon lost her bid in the primaries to Andrew Cuomo in NY).

The really spicy races are for the House. 35 Senate seats are up, but they're mostly held by Dems, and hence there's not much chance at all to break the majority (538: 1 in 7 chance as of writing). However, Democrats are projected to take the House (538: 6 in 7).

How's it been going?

Interestingly. Candidates like Beto O'Rourke have given candidates like Ted Cruz (R-TX) runs for their money - literally. O'Rourke raised lots of dosh, and Republicans ended up spending more in the state than they anticipated (remember,

two years ago Cruz was thought to be presidential material, or at least by degenerates). The race is a toss-up. Others, like Andrew Janz (v. incumbent Devin Nunes, R-CA-22) have run fairly competitive races (though Nunes's real opponent is the *Fresno Bee*). Unfortunately, Janz doesn't see to be able to pull off the balance - the district is currently forecast as likely R.

The Republicans are their same loathsome selves. "DON'T INTERRUPT ME, JASON!" Cruz snapped at a debate moderator asking him about civility in politics. They're dog-whistling racists and are more decidedly pro-Trump than ever. I guess this is how a cult of personality is established?

More macro-view plz.

Okay; Democrats need to pick up 23 seats for a majority in the House.

"538 is calling a +39 seat gain for Democrats [in the House] on average, with an 80% chance of picking up anywhere between 19 and 59 seats."

The NY Times estimates (among races in districts not dyed in the wool) 15 seats that lean Dem, held mostly by Republicans, and about 30 tossups - all Republicans. There are another 29 lean-R seats that are already R; the Dems should then have the mileage they need to pick up the majority. FiveThirtyEight is calling a +39 seat gain for the

Democrats on average, with an 80% chance of picking up anywhere between 19 and 59 seats. This will get us there.

Republicans, on the other hand, are expected to pick up a seat or two in the Senate. This is somewhat unfortunate - slim margins are always better when whipping votes isn't really a thing - but as long as the gain is small, it's manageable, especially with control of the House.

Will the blue wave actually come about?

There's the regular ol' opposition surge (folks content with the status quo are not as motivated to vote as those who don't like what's going on). Couple this with anti-Trump sentiment and you have a storm on your hands.

Remember: this is a president who hit historically-low approval ratings (he's hovering at

"Send all angry letters to comment editor Charlie Titmuss, please"

around 40% now - higher than usual, but most of the people pulling that lever foam at the mouth, so take it with a grain of salt). His administration is objectively the worst in American history. We're living a nightmare that never seems to end (has it really been near two years already?).

Consequently, there has been a massive surge in early voting. Early voting among young people is up 500% in Georgia, with historic highs hit around the country; turnout is projected to be up 150% over the 2014 midterms (mirroring the 2016 elections, 50% of the 18-to-29 demographic voted, as opposed to the pitiful 19.9% turnout in the 2014 midterms) - a good bell-weather for turnout here, considering anti-Trump sentiment is concentrated in young voters.

Another factor is the prevalence of identity politics in the current political climate - with just cause, considering the present administration. For example, trans rights do not matter in the slightest to the current administration. Coupled with fiery rhetoric, the current political climate is experienced as an existential threat to trans people.

Extend that - do you guys remember Mike Pence as the guy who wanted to *electroshock gay people*

POLITICS

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into *being straight* with funding taken from AIDS treatment? Maybe we could bring back lynching, just this one time.

People are still sensitive to the id-pol case against Trump; it's a valid argument worth listening to, and it's gonna move voters to the polls.

Then again, there are some not-so-good features of the election that definitely don't work in the Dems's favor. For example, voting machines in Texas have been changing Beto votes to Ted Cruz (and somewhat vice versa, though most of the reports I've heard suggest it's going majority towards Ted). Election machines are ludicrously compromised; Georgian infrastructure isn't even supported by the vendor any more. Gerrymandering also affects House races, providing a systemic disadvantage to Democrat voters (to the extent that they need ~55% of the popular vote to take the House).

And there's the usual voter suppression efforts...

What's this about voter suppression?

Voter fraud is not a big deal. There were four cases of voter fraud in the 2016 elections. Unfortunately, this does not stop Fox News from adopting the concept into their rhetoric. This is a pretext to carry out broad voter-suppression efforts - in the form of stringent and surprisingly-early voter registration deadlines, ludicrous voter ID laws, and closing ballot boxes in cities with majority-minority individuals (e.g. Dodge City, Kansas - a town with 30,000 Latino folks and not one single polling place).

Obviously, these efforts are kept somewhat hush-hush (nobody wants to be known to act anti-democratically, after all), but the idea is to give an edge in marginal cases. If you're working two full-time jobs to make

"The point is that we're looking at a very different political landscape [...] but if [the Dems] make the same mistake as in 2016, they are bound to lose in 2020."

rent, do you have the time or energy to drive an hour to the next city over just to pick up your special voter ID (in some states, not even your driver's license is sufficient). This brings about a disproportionate turnout - the few percentage points needed, in many cases, to eke an election (or at least to improve your odds).

Take the race for governor of Georgia - Democrat Stacey Abrams is subject to the rules set by secretary of state Brian Kemp. Her opponent? Brian Kemp. One bus full of black seniors heading towards the polls was intercepted by the police. One "exact match" ID law he passed threatens to suppress 50,000 voters. Jimmy fucking Carter stepped out of retirement to tell Kemp to resign.

Kemp's response has been to dogwhistle about "outside agitators" - familiar to anyone who studied the Civil Rights Movement, because this is how leaders would speak about black people without really speaking about black people. So much so, in fact, that the term has its own fucking Wikipedia article.

How is Trump reacting?

Well, Trump's new thing is promising to

cancel the 14th amendment - jus soli, or citizenship from birth in the country. This has been well-established (and well-tested) law since the 1890s and has its roots in being one of the ones passed because of the whole slavery thing. Obviously Trump doesn't like the position - so, he thinks he can write an executive order to trample the Constitution (hahaha - it doesn't work like that).

There's also the bullshit caravan story. It's better as a jazz standard, IMO. God, I hope this gasbag implodes.

And the rest of the Republicans?

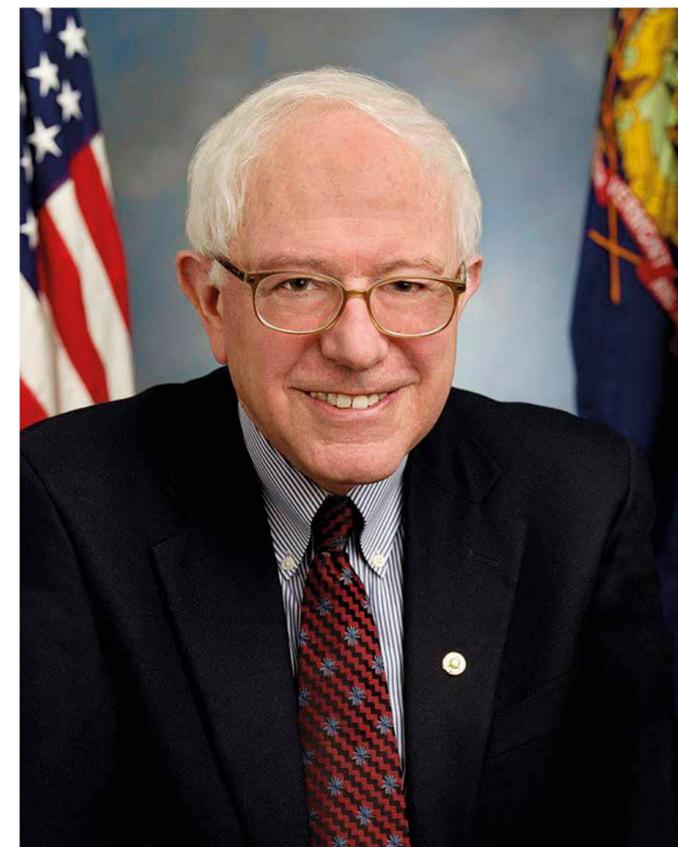
Cowardly. Absolutely cowardly. Apparently they've been begging the Democrats not to do any digging, because they know in their hearts the Dems will pick the House back up, and it'll be a bad time for Rohrabacher (R-CA) and anyone like him. They have skeletons in the closet and that closet will be pried open.

What's next?

The Republicans will take the Senate.

Besides the obvious maintained control over every branch of government, a Republican House would be a nightmare; it will be read as tacit approval of the status quo, and McConnell, Trump, & Co. will be more emboldened than ever, and give even more license to those working in bad faith to prevent meaningful investigation into the wrongdoings of the present administration. Current forecasts say this eventuality is unlikely, but the prospect alone is rather bleak. Additionally, the success of voter suppression tactics remains to be seen - the Abrams-Kemp race, for example, is currently in a dead heat.

If the Dems take Congress, though - all of a sudden, committee control will be passed to



Sanders cheering the wrecking of the neolib. Blessed image. // Wikimedia

the blues, and it becomes much more difficult for Republicans to impede investigations (into, for example, emoluments clause violations - of which Trump is very, very guilty).

In terms of the Democrats - bellweather primaries in MA and NY showed that the progressive wing of the party is gradually picking up steam; as the districts are dyed-blue, we will greet a small but growing cohort of millennial candidates - who even describe themselves as socialists! While the libs on top (Pelosi, Schumer, et al) want to maintain their neoliberal hegemony, the narrative is shifting, as it must; running another centrist neoliberal in 2020 would be suicide. Candidates are beginning to posture for the race already; Sanders is the clear frontrunner, with others (Biden, Bloomberg, Booker) lining up.

The Dems will oppose Trump; that much is certain. Whether or not they'll split like bad mayo is another. We're in for a raucous few years, folks.

What's this about the Dems?

Obviously the centrist position has hit the bumpers. Nobody takes id-pol rhetoric without support for socio-economic programs and projects such as nationalized infrastructure banking, Medicare for all, expanded Social Security, and free/cheaper university tuition. Without these programs, individuals are left living precarious lives; they become isolated, atomized - they begin to believe that there is no coherent policy option to rectify their woes, as none are seriously discussed in the upper echelons of the political establishment. This is the standard

critique of neoliberalism. This is not to say the cultural positions are bad; this is only to say that the political basis is incomplete, and the cancellation of debate on these issues forces individuals to seek alternatives - like Trump. Trump's nomination was a perfect storm; the election could've been had if Clinton had put forth better ideological projects, as opposed to her bullshit appeal to realpolitik. Not *exactly* inspirational.

The point is that we're looking at a very different political landscape in the next few months, one where the Dems will have much more ground for critiquing Trump, and much more power to enforce it. But if they make the same mistake as in 2016, they are bound to lose in 2020.

Any parting words?

This is bullshit.

SCIENCE

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The Trolley Problem: What Would You Choose?

Would you kill one person to save five people? With the increasing popularity of self-driving cars, the famous 'trolley problem' has turned from a philosophical riddle into a real issue awaiting a solution.

SCIENCE

Paula Rowińska

Science Writer

Researchers from the MIT Media Lab's Scalable Cooperation group have surveyed over 2 million citizens from over 200 countries about morally difficult decisions that autonomous vehicles might have to make. Participants played 'Moral Machine', an

online game designed by the researchers. In a series of potential situations on the road (mostly sudden break failures), they had to choose the lesser of two evils: for example, if it is morally more acceptable to kill a man in the car or a woman with a child crossing the street.

As well as about 40 million recorded choices, scientists gathered a lot of demographic data such as the age, gender, or education level of the

participants. However, the only patterns in moral decision making they found were geographical and cultural. For example, citizens of "eastern" countries (a term defined by the researchers, referring broadly to Asia) were less likely to save young people over the elderly than participants from elsewhere.

"The most emphatic global preferences in the survey are for sparing the lives of humans over the

lives of other animals; sparing the lives of many people rather than a few; and preserving the lives of the young, rather than older people," is how Edmond Awad, the lead author of the paper published in *Nature*, summarised the results.

The researchers might use the data gathered in the 'Moral Machine' project to help engineers program self-driving cars to operate according to particular societal

norms in an emergency. Moreover, public en-

"Preferences are for sparing humans over animals, the lives of many over few, and the young over the old."

agement is the key to building up the public's trust in the new technology – a necessary condition to adopt autonomous vehicles on a large scale. So far "public interest in the platform surpassed our wildest expectations," reported Iyad Rahwan, the leader of MIT Media Lab's Scalable Cooperation group. If you also would like to browse or even create possible road situations, visit <http://moralmachine.mit.edu/>.

Store Glacier: storing water?

Recent research from Stanford University has shed light on a phenomenon: liquid water stored in pockets within solid ice. This discovery has important implications for predicting sea level rises under climate change – rises that will impact the lives of billions of people.

SCIENCE

Photini Knoyle

Science Writer

By now, many of us are aware of the 5th

Intergovernmental Panel on Climate Change (IPCC) report, which has attracted a storm of media attention since its publication last month. The report considers the environmental consequences of many possible climatic scenarios. These consequences include global warming-induced sea level rises, a product of the thermal expansion of sea water and melting land-ice running into the seas. However, there is much discourse over the extent and rate of future rises, partly due to insufficient knowledge of the mechanisms underlying



An aerial view of the Store Glacier in Northwest Greenland // Lawrence Hislop, <http://www.grida.no/resources/1947>

melting land-ice. Recent research from Stanford University provides insight into a possible

complexity with land-ice melting: the phenomenon of liquid water trapped within glaciers. This

mechanism has not been previously studied, and should be considered in future models to help us

more accurately predict how melting land-ice will impact our planet.

The researchers from Stanford used ice-penetrating radar to identify density variations within the Store Glacier in West Greenland. Regions of higher density indicated trapped water, and higher density regions correlated with glacial areas that had recently been melting. From this correlation, the researchers inferred that meltwater had trickled into, and become trapped within fractures in the ice. Meltwater is known to impact glacial movement by flowing to the base where it contributes to basal lubrication and a subsequent increase in glacial sliding. The siphoning-off of meltwater into pockets within the ice may modify this process, by either delaying or entirely preventing the

meltwater from reaching the base. How the ice melts and where the meltwater flows will contribute to how a glacier responds to future climatic conditions, which will impact the predicted timeline for future sea level rises.

Previous research has focused on surface changes to glacial landscapes, whilst the Stanford study offers insight into more diverse glacial melt mechanisms. With around 40% of the global human population living within 100km of coasts, the need for accurate sea level predictions has never been greater. The Stanford study demonstrates that a more in-depth approach to studying and modelling land-ice melting will be required for climate scientists to make better predictions of future sea level rises, and help us prepare for what the future brings.

SCIENCE

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Bombs dropped during WWII had effects even at the “edge of space”

SCIENCE

Marie Jones

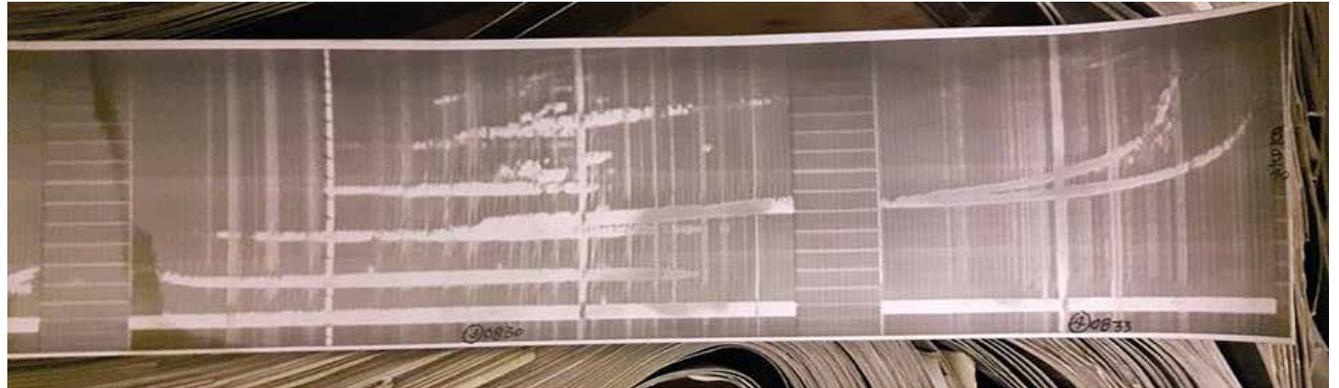
Science Writer

World War II is widely known to be the most devastating and deadly war in the history of mankind. However, the study of its impacts beyond Earth is very recent and could play a major role in improving modern technologies. In a study published last month, professor of astrophysics Chris Scott and historian Patrick Major from the University of Reading reveal that the shockwaves produced by Allied bombs dropped on European cities during WWII reached the edge of space, and temporarily weakened the ionosphere.

The ionosphere is a thick band in the outer atmosphere situated

between 80km and 580km above the surface of Earth. It is formed due to atmospheric absorption of X-rays and ultraviolet light from the sun, and is very sensitive to solar activity such as the emission of particles carrying energy, high-speed solar winds and coronal mass ejection. These events can cause variances in the concentration of ions and electrons in the ionosphere, and thus cause it to become electrified. The study shows that the bombing raids were powerful enough to periodically decrease the concentration of electrons in the ionosphere, which could have interfered with the radio communications at low frequencies during the conflict.

The researchers compared daily measurements of the ionosphere collected between 1943 and 1945 by the Radio



An ionogram recorded in Slough at 8.30am, the morning after the Blitz began // UK Solar System Data Centre

Research Centre in the UK city of Slough, to the time and dates of 152 important Allied bombing raids over France and Germany during the same period. They found that changes in the ionosphere were occurring after these raids, which were meticulously recorded by the German authorities and in the Royal Air Force mission logbooks. Its “critical frequency,” or in other words the frequency of the radio waves reflected by the ionosphere’s

constituent particles, decreased – which lead to a drop in the concentration of electrons. To describe the process mechanistically, energy released by the shockwaves heated the ionosphere, which then enabled the electrons to gain enough kinetic energy to escape from the ionosphere.

Although temporary reductions in the concentration of electrons is usually due to the sun, or are caused by natural phenomena on Earth such as earthquakes, volcanic eruptions and lightning, “it is astonishing to see how the ripples caused by man-made explosions can affect also the edge of space,” say the authors. The paper reminds us that over the course of the war, the Allied air forces dropped more than 2.75 million tons of TNT – the equivalent of 185 Hiroshima H-bombs – and that “each raid released the energy of at least 300 lightning strikes.”

One may wonder why the study didn’t focus on German bombing raids which occurred closer to Slough, where the measurements were taken, such as the well-known “London Blitz” which took place between September 1940 and May 1941. As C. Scott explains, “this bombing was more or less continuous, making it difficult

to separate the impact of wartime raids from those of natural seasonal variability.” Furthermore,

“Over the course of the war, Allied forces dropped more than 2.75 million tons of TNT, equivalent to 185 Hiroshima H-bombs.”

the Allied four-engine planes could carry bombs four times heavier than the two-engine German planes, which caused greater disruption and produced a clearer signal.

This research may also have a significant impact on solving present-day scientific problems. Understanding the effect of manmade atmospheric disturbances could improve communications and global positioning systems (GPS) technology, which rely on the ionosphere. For example, airplanes had to come back to their base in October 2003 due to GPS inaccuracies, which were caused by disruptions in the ionosphere after an

intense storm on the sun. More accurate knowledge of the ionosphere and the effects of disturbances could thus help develop prediction models useful for our modern technologies.

While the effects of the bombing raids on the ionosphere resulted in no long-term consequences for the atmosphere, the destruction they caused on the surface of Earth remain indelible marks in the world’s landscapes, towns, and also in the memory of survivors. The historian involved with the study, Patrick Major, reminds us of some of their experiences, such as “aircrew involved in the raids reporting having their aircraft damaged by the bomb shockwaves, despite being above the recommended height” or “residents under the bombs routinely recalling being thrown through the air by the pressure waves of air mines exploding, and window casements and doors would be blown off their hinges.”

Studying the past to understand the present is one message to take from this pioneering work. We should never forget “the images of neighbourhoods across Europe reduced to rubble due to wartime air raids, lasting reminder of the destruction that can be caused by man-made explosions”.



The bombing of Le Havre, France, on 10th September 1944 // British National Archives

Welcoming the most powerful iPad Pro yet

With its all-screen design, Face ID, second generation Apple Pen and more, this is said to be the most advanced version of the iPad Pro

TECH

Krithika Balaji

Tech Editor

Another iPad was introduced this week - the iPad Pro. It isn't, however, just another iPad as this is said to have the biggest changes ever and will push the functionality of these devices farther than ever before.

This model has a 11-inch and 12.9-inch Liquid Retina displays to the edges of iPad Pro. It also has an "A12X Bionic chip with next-generation Neural Engine in iPad Pro", which outperforms most PC laptops. It offers a new "USB-C connector, Gigabit-class LTE, and up to 1TB of storage to enable powerful new mobile workflows".

Remember how you had to charge the Apple Pencil with the charging

cord and you sometimes weren't sure whether it was charging or not? Well, the second-generation Apple Pencil attaches to the iPad Pro magnetically and charges wirelessly while doing so. Now, you can also tap with the pencil more easily than before thanks to a new touch sensor built into it. There is also a new Smart Keyboard Folio with a streamlined design that's adjustable for increased versatility.

"The new iPad Pro is a huge step forward for powerful, creative, mobile computing... There has never been a mobile device anything like the new iPad Pro; it has a gorgeous edge-to-edge Liquid Retina display that curves into the corners... and more, all packed into a thinner device that has all-day battery life and is 25 percent smaller in volume."

"The second-generation Apple Pencil attaches to the iPad Pro magnetically and charges wirelessly while doing so."

The new Liquid Retina display in iPad Pro is made of precision-milled glass, advanced pixel masking, new backlight design and sub-pixel antialiasing. This makes it the brightest and most color accurate iPad display, with wide color support, True Tone and anti-reflective coating for a natural, accurate



The new iPad pro // wccfttech

viewing experience.

Face ID, which is thought to be the "most secure facial authentication system in any tablet or computer", has been installed in the new iPad Pro for the first first time. It is designed to work in any orientation, no

matter if you are sitting or standing while using the iPad. This is because it takes advantage of the TrueDepth camera system to accurately map and recognize the face. It also can be used for Apple Pay, to gain access to secure apps and enable Animoji

and Memoji.

The iPad Pro, Apple Pencil and Smart Keyboard Folio are available to order starting from the 30th of October and are set to hit the stores from Wednesday, November 7th.

Artificial Intelligence for Social Good

Google.org, the charitable arm of tech giant Google, has launched a call for ideas to bring impact out of Artificial Intelligence

TECH

Haaris Asghar

Tech Editor

Google.org is an arm of Google that aims to support non-profits through grants and contributing employee volunteer hours. The \$25 million pool announced recently aims to support any ideas of situations where AI could be realistically applied. Winning

organisations would not only receive funding, but also support in implementing their ideas. This support would be tailored to the organisation and could include coaching from Google employees with expertise or experience in AI, and credit and consulting from Google Cloud.

A wave of ethical ambiguity has recently swept over Silicon Valley, as Google and other tech giants have been faced

with scenarios where it is difficult to tell how research in AI may be used in the future. For example, the military have shown interest in artificial intelligence for autonomous weapons, in initiatives such as Project Maven. Facial and image recognition powered by AI may have applications in surveillance.

While these topics are relatively controversial from their very nature, AI has its doubters in other

applications as well where human judgement plays an important role. This is because of the nature of AI as a black box that does something the user doesn't necessarily understand. Biases within the training datasets used may lead to implications in the outputs, and this makes use of AI in law or medicine, for example, worrying to many experts and organisations.

Publishing data and algorithms involved goes

a certain distance in addressing this concern, but with recent more powerful machine learning techniques, the inner workings can tend to be spun into a more opaque web that would be impossible to decipher even with transparent data. New methods are being tested and developed for giving some kind of an insight to end users on the workings of these systems.

The AI for Social Good program, announced on

Monday, would hope to address these concerns, while not compromising on Google's commitment to the advancement in use of AI, which it sees itself as having an important role in. As Jeff Dean, the head of Google's Brain AI division said, "It's really important for us to show what the potential for AI and machine learning can be, and to lead by example."

MUSIC

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Pieces of a Man is introspective, indulgent, and inaccessible

Despite lavish production, the latest effort by Mick Jenkins never really gets off the ground. Loosely narrating the fragments and facets of a person's life, Jenkins' jigsaw seems to be missing a piece.

MUSIC

PIECES OF A MAN



Artist: Mick Jenkins. **Label:** Cinematic. **Top Tracks:** Soft Porn; Barcelona; Plain Clothes; Smoking Song. **For Fans Of:** Joey Bada\$\$; J Cole; Chance The Rapper. *53 minutes*

Alex Large
Music Writer

Two years after his ambitious but inconsistent and occasionally preachy release *The Healing Component*, Mick Jenkins has dropped a new album, *Pieces of a Man*. Four singles were released prior to the album's unveiling, but the best two of these were inexplicably not included on it. This is frustrating, as these ('Bruce Banner', 'What Am I To Do') are far more compelling than any song that actually made the cut.

Mick is known for intricate wordplay and smooth, jazzy production, which *Pieces of a Man* has in spades, along with a more organic and laid-back sonic palette than found on any of his previous work. However, what is missing from this album, which was an important component of what made his previous works great, is compelling song structures and catchy, memorable hooks. What is presented on this new album is a set of fourteen tracks (and three supposedly profound skits that seem unfocused and fail to combine into a

coherent message), which are, compared to his previous effort, extremely linear and uneventful. Thirty seconds into most songs, you will have heard everything the instrumental is going to do; there are no interesting beat switches or compelling choruses.

"53 minutes of songs that all have the same tone really drag"

This is the primary issue with *Pieces*, and the reason it feels even longer than its 53 minute runtime: a lack of compelling song structure. Mick still brings incredibly precise, honed flows and smart lyricism, but the songs bore you. Halfway through the album I felt exhausted and in desperate need of a standout moment that, sadly, never came. This is in stark contrast to his last album, where songs like 'Drowning' and 'The Healing Component' featured layered and climactic structures, and gave the album a sense of unpredictability and variety.

Whilst his previous album had a few bad songs, which *Pieces* avoids by having a consistent quality, its highs outstripped anything offered here. There are no standouts. 'Plain Clothes' offers a change of pace from the linear beats as Mick swaps his rapping for soulful singing, but it

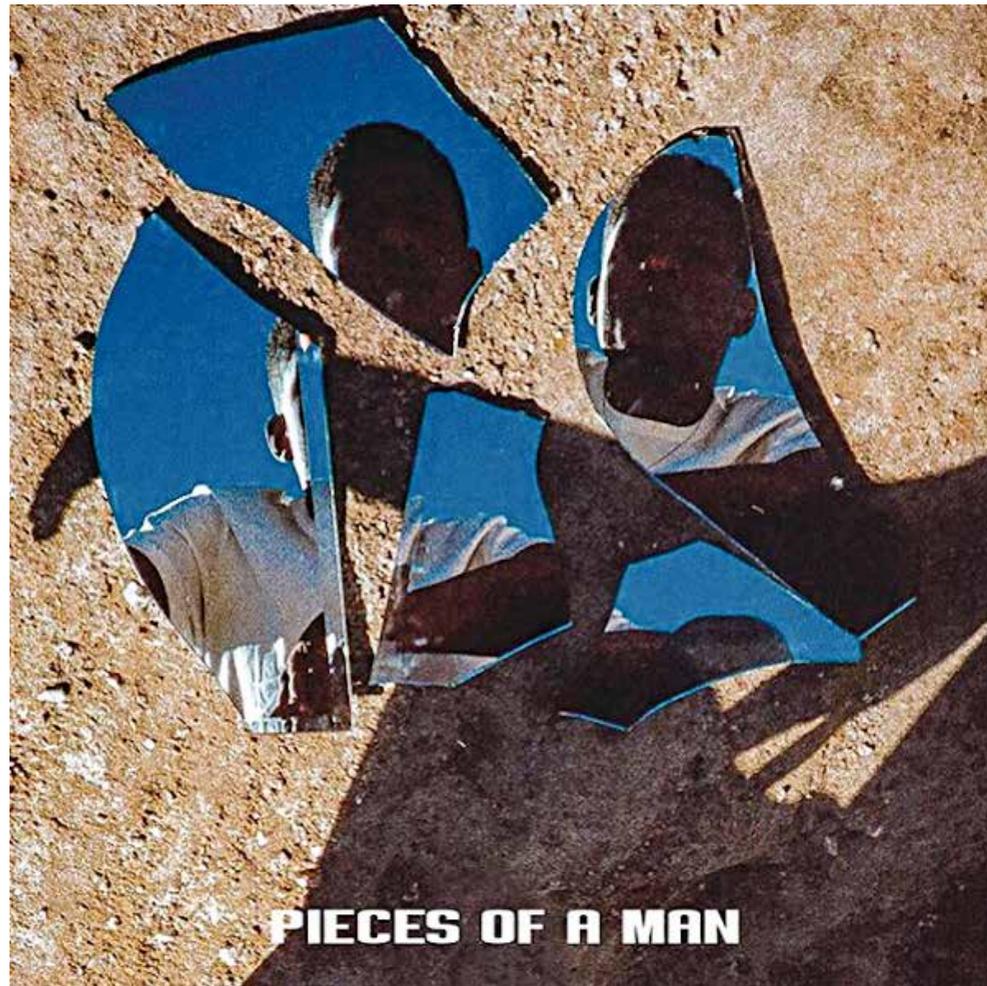
is nowhere near as good as his best sung tracks (see: 'Drowning', 'Spread Love').

Adding to the tedium created by a lack of choruses or beat switch-ups, every rapped song adopts a very similar tone and tempo. Unlike on his breakout mixtape *The Water[s]*, which had tracks where Mick spanned various emotions and levels of intensity, here every song adopts a laid back, quietly braggadocious style, as if he has nothing to prove. Whilst this fits the smooth jazz rap production and makes this album relaxing to have on in the background, 53 minutes of songs that all have the same tone really drag if you're paying attention.

Perhaps most disappointing of all is the lack of interesting topics and motifs. It's hinted at occasionally that the central theme is that you only ever see pieces of a person (which is intuitive

"It really can't be overstated just how linear and repetitive these songs are"

and not particularly profound), but there is no song where Mick dives into this deeply, despite the album title. In fact, most songs centre around Mick a) bragging about how real he is (compared to all the fakers around



That's seven years bad luck // Cinematic

him), b) how he brings the truth, or c) how hard he works on his writing. But in no song does this hard work and truth-bringing seem evident; despite his brags about educating us, I can find no solid or profound messages in any of these songs. This is in stark contrast to his last album, where songs like 'Spread Love' delivered a sincere and brave message (sentimentality not being something you often find in modern hip-hop), or 'What Am I To Do', a single released before this album which addressed police brutality and is far more hard-hitting and thought-provoking than any song that was actually included here.

It really can't be overstated just how linear and repetitive these songs are, and how the complete lack of standout moments makes the album feel

"Smooth and undemanding background music"

like a slog. Whilst every song is technically well performed and produced, there isn't a single one that I would pick out and play on its own; they all blend together, creating smooth and undemanding background music – but

this isn't what I look for from Mick. I want songs that make me stop and think, interesting and left-field production, and choruses that I can sing in the shower. *The Healing Component* was a slight step down from *The Water[s]*, but still contained some excellent tracks, whereas there isn't a single cut on this album that could stand shoulder-to-shoulder with Mick's best. Whilst undeniably well produced and performed, the lack of a coherent theme, engaging song topics or catchy melodies leaves the album feeling hollow and ultimately forgettable.

IC Skate Soc



ARTS

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Company

Sondheim's classic gets a facelift - and it's absolutely beautiful.

ARTS



Where? Gielgud Theatre
When? Till 30 Mar 2019
How Much? From £14.75

Ozbil Ege Dumenci
Arts Writer

As I walked to my seat in Gielgud Theatre, the main worry I had was whether swapping the genders in this classic musical would be anything more than an audience-grabbing gimmick.

Well, it did work. I was there, praying that it would add more than advertising value to the show.

The play explores different stages of marriages from Bobbie's perspective through a series of vignettes. It's Bobbie's (Bobby in Sondheim's original play) 35th birthday, and her friends, her "married friends", as Bobbie (Rosalie Craig) likes to put it, throw a surprise party to celebrate the occasion. All her friends want to know the same thing, though. When is Bobbie going to get married?

Thanks to the reversal of genders, there is more at stake than just peer-pressure; female Bobbie's biological clock is also racing throughout the play. This is no longer a show about a man with commitment issues. It is so much more. Just this alone makes this change worthwhile. It is not a ground-breaking change, but it makes the play feel fresh.

Bobbie is not the only character whose gender has been changed. Amy has now become Jamie,

introducing a gay couple into the play. This works wonderfully, as it makes the play beautifully inclusive without feeling forced. Bobbie's three love interests are also gender-swapped, paving the way for interesting yet valuable commentary about dating, and the different dating behaviour that is (but should not be) expected from men and women. The couple of David and Jenny is role-flipped, portraying the image of a bread-winning wife and a stay-at-home dad, once again, complicating the previously stereotypical picture of the roles of men and women in marriages.

Company is credited to be one of the first "concept musicals". Despite not

"Thanks to the reversal of genders, this is no longer a show about a man with commitment issues"

having a linear plot, not only is it easy to follow, the different vignettes connect together nicely to feel like a cohesive piece. This is greatly helped by Sondheim's timeless compositions, which are, at times, absolutely genius.

'Ladies Who Lunch', performed masterfully by the iconic Patti LuPone is just the right degree of resentful and bitter,



What do you want to get married for? // Brinkhoff Mogenburg

yet absolutely tasteful. LuPone, who previously undertook the role in the 2011 New York Philharmonic Concert, nails the role of Joanne and delivers a multi-faceted performance.

'Getting Married Today', a monster of a song to perform, and a definite highlight of the show, is performed skilfully by Jonathan Bailey who is pitch perfect, both vocally and with his acting. Originally written for a female character, it is refreshing to watch a male character get cold feet before a wedding. The lyrics are hilarious, but Bailey's performance truly elevates the song. However, it is worth noting that, at times, the number relies heavily on gimmicks, which make the number even funnier, but rather distracting. Rosalie Craig makes

a great Bobbie, whose subtle performance makes it clear that the show isn't about Bobbie, but about love and life through her eyes. She is relatable, and not for one second does she seem greedy or unsatisfied.

The overall cast is also great. Mel Giedroyc and Gavin Spokes, who have amazing comedic timing and brilliant chemistry, carry the roles of Sarah and Harry perfectly.

The play is directed skilfully by Marianne Elliott (*Angels in America*, *War Horse*, *The Curious Incident of the Dog in the Night-Time*), who transforms the play from being simply through Bobbie's eyes, to being in her mind as she explores, examines and compares her current life to what could be if she was married.

One particular scene is worth mentioning here; a

dream sequence, where Bobbie sees flashes of what her life would be as a married woman. A Bobbie who's pregnant. A Bobbie who's just given birth. Several Bobbies-of-what-could-be fill the stage. This is both intimidating and wonderful to see, as it gives the most clear glimpse into Bobbie's head than anything else in the play.

It is also important to point out that the play looks incredible. The impact of developing technology is clear, and it makes a fifty year old play feel fresh as if it was

"a fifty year old play ... fresh as if it was written yesterday"

written yesterday.

The staging matches the colourful posters that adorn all of the walls, with moving giant set pieces forming rooms for the action to take place. They also make way for some visual illusionism with clear *Alice In Wonderland* references, driving home the point that it's all, in fact, in Bobbie's head. Speaking of which, Bobbie clearly stands out in her red dress, reinforcing how different she is, and how different she feels from all her friends. Her married friends.

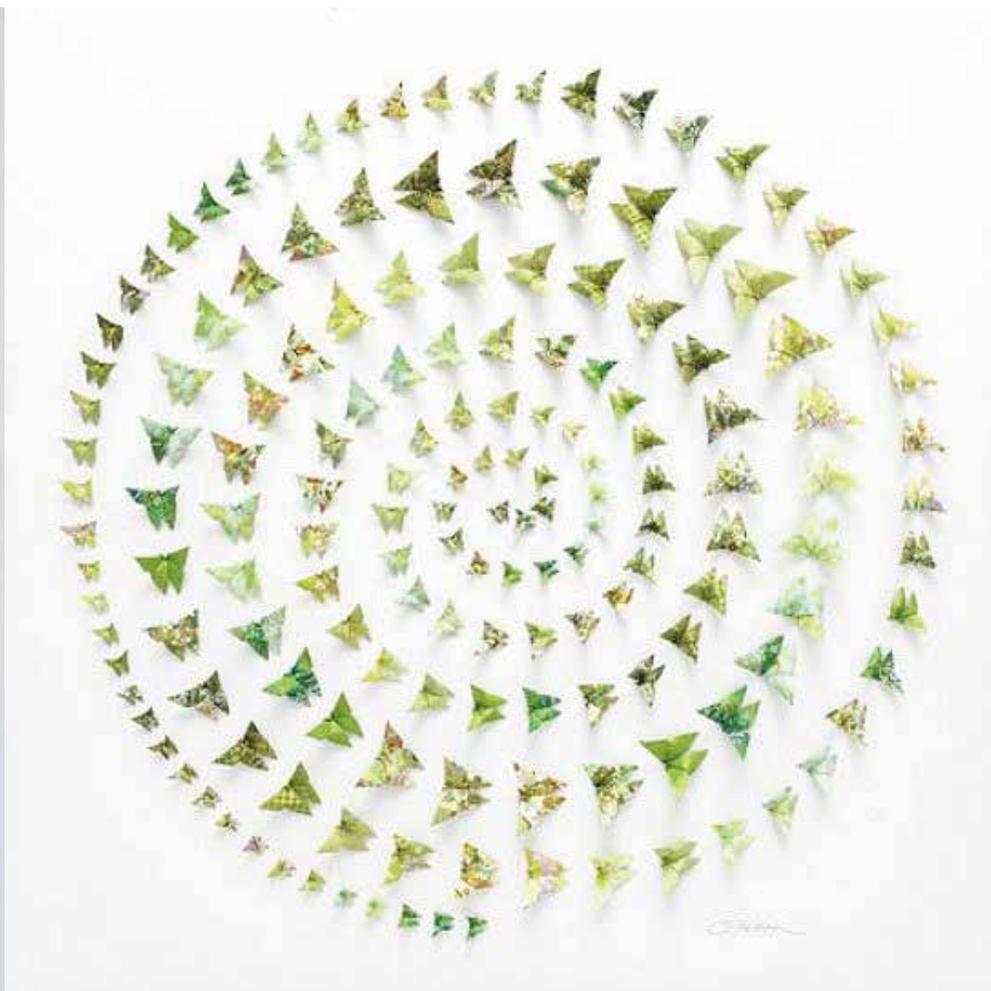
In summary, *Company* not only matches the expectations, but, for the most part, massively exceeds them. It is both entertaining and heart breaking, with music to die for. Pretty darn close to being perfect, *Company* promises to be a wonderful trip to the theatre.

ARTS

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Hypnotic circles...?// Paolo Ceribelli



Look into our paintings... you will love art // Caroline Preston

En vogue: The Least Pretentious Art Fair in London

Landscapes, cityscapes and concentric circles are all the rage this autumn at the Affordable Art Fair in Battersea.

ARTS

Gautam

Kambhampati

Arts Writer

The Affordable Art Fair is a showcase of all of the best new artwork available to be bought by your average Imperial-student-turned-banker that takes place twice a year in Battersea Park. Although its use of the word ‘affordable’ is about as apt as the word’s application to the £400,000 studio flats which overlook the park, it remains one of the best events in London for viewing a much broader range of contemporary art than you might find hanging in the Tate or the Saatchi Gallery.

Over a hundred delegations from across the UK and from further afield are present at the fair, representing artists from

the likes of Damien Hirst all the way through to fresh graduates from the country’s top art schools. As is often the case with something that has such a broad remit, it is really a fair in two halves: that of the landscapes, cityscapes, riverscapes, beachscapes, and seascapes that you might want to hang in your affordable flat once you land that sweet consulting gig at BCG; and that of the en vogue, avant-garde, ‘proper art’ which you might alternately scoff at or try to seem interested by in an attempt to impress that

“Landscapes, cityscapes, riverscapes, beachscapes, and seascapes”

SOAS student you fancy.

Stand out artists from the first group this year include Jim Farrant and David Axtell’s nostalgic portrayals of seaside escapes (particularly good for that affordable Cornish beach house you’ll be owning), Guillaume Cornet’s quirky and colourful isometric cityscapes (think Habbo Hotel crossed with classic Sim City), Paul Powis’s vibrant, pop-art, impressionist landscapes (perfect for a cozy kitchen complete with a nice affordable Aga), and John Hammond’s fantastic portrayals of London, both indoors and out, that do well to capture the atmosphere and bustle of the city.

Firmly within the remit of the second group are all those many and varied interpretations of what seemed to be this autumn’s key theme of circles. We

“In general, some more diversity in both subject matter and provenance would have been appreciated”

had concentric circles (Paolo Ceribelli and Chris Wood), origami circles (Caroline Preston), folded concentric circles (Peter Monaghan), slightly off-centric circles (Geoff Catlow), a sculpture of concentric circles on a sphere (Dee Stanford), and even a collection of coloured circles from Damien himself.

Your author isn’t entirely sure why the

theme of circles is so strong this year but is convinced it’s possible to somehow link it to Brexit and leaves this as an exercise for the reader. Other themes from this year included lone trees, cartoonish cities, and various combinations of all of the above.

It probably hasn’t escaped your attention that all of the artists mentioned so far have been white and Western. In general, across the fair, as in art in general, some more diversity in both the subject matter and the provenance of the art would have been appreciated; particularly when staring at the 10,000th cityscape of New York, Paris, or London.

It was refreshing to arrive at the stall of ArtBlue Studio from Singapore, one of the few galleries from outside the Western world,

which featured such eye candy as Bui Van Hoan’s poignant monochrome Vietnamese riverscapes and Lieu Nguyen Huong Duong’s breathtakingly pretty cherry blossoms.

All in all, the AAF remains an excellent way to spend a Saturday afternoon; particularly if you want to learn more about art beyond the somewhat pretentious headline pieces that win the Turner Prize (second group plus-plus).

The evolution of the art at fairs such as this is always much more rapid than at static galleries and so it’s also a good way to keep up to date with the cutting edge. Entry was £11 (student advance), glasses of champagne to celebrate your affordable purchase were £9.50, and the fair will be back in Battersea next spring.

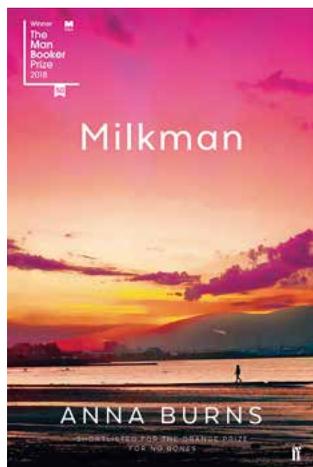
BOOKS

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No names and no setting – Anna Burn’s Booker prize-winning *Milkman* is a “challenging” read // *The Economist*

Man Booker Prize winner: *Milkman* a “challenging” read

Anna Burns is the first Northern Irish writer to win the prestigious award for her Troubles-era novel Milkman.



BOOKS

Gautam Kambhampati
Books Writer

The first thing one notices about Anna Burns’ *Milkman* is the lack of names. The closest thing our protagonist gets to one is “middle sister”, and the setting is only ever referred to obliquely, and its characters by

sobriquet. There is one particularly fantastic early scene in which middle sister’s maybe-boyfriend is accosted on charges of possessing a bit of a car with a flag from “over the water” on it. That was when the penny finally dropped for me, but I might just be slow.

The second thing you notice is the language. The novel is almost entirely middle sister’s inner monologue, and the language is not what one would expect from an 18-year-old girl growing up in working class Belfast during The Troubles. Her thoughts are bizarrely prosaic, and Burns’ style disorientating. Her characters are difficult to distinguish from each other – throughout the dialogue all the characters speak in the same oddly stilted and long-winded manner.

Kwame Anthony Appiah, Chair of the Man Booker Prize panel, called it “challenging in the

way a walk up Snowdon is challenging”, and it is – it truly stretched the limits of my suspension of belief.

However, through this style, Burns has managed to make every word, every paragraph, every page feel overwrought and overthought, which perfectly captures the outstanding tension of her setting. Her attention to detail and the vernacular conveyed a sense of place to an extent that would be unachievable by mere description.

This comes at the cost of making Burns’ novel largely impenetrable. Appiah said that his time spent reading academic papers on philosophy were good preparation. For the reader attempting *Milkman* without such training, it is easy to imagine the book being a tough read. There is more or less no plot for the first two-thirds of the novel, but when the tension es-

calates and things come to a head, Burns handles the narrative deftly.

In the buildup to the action, we are treated to over two hundred pages of tension-building and characterisation. There are, of course, flashes of action (such as the aforementioned scene with maybe-boyfriend’s car bits), but these are more or less glossed over by Burns as she rushes to introduce the next character or drop the next nugget of setting-related exposition.

To some extent, this is also part of the point. Middle sister wants a quiet life: she reads 19th century literature whilst walking to avoid having to interact with people, and would rather not have the ‘future talk’ with maybe-boyfriend. When plot happens to her it is always an inconvenience, and the prose treats it as such.

This wouldn’t matter so much if the tension built to a satisfying pay

off, but it does not. We are, in principle, told what the climax of the novel is on page one: Somebody McSomebody is going to assault middle sister and her IRA stalker, the eponymous Milkman, is going to die. In actuality, the climax of *Milkman*

“It’s certainly worth a read if you’re a fan of seeing the English language used in new ways”

features an assortment of minor side characters; when you finally reach the bit you’re promised at the start, you could easily miss it in that haze of action you’ll almost

certainly be lost in.

There’s probably a way in which this, too, is intentional, but really it just makes the novel feel unsatisfying to me. I think this generally sums up my position on *Milkman*: it’s an incredibly clever novel that is overflowing with literary merit, and certainly enough to justify the Man Booker prize. However, it is also impenetrable and occasionally a touch boring.

It’s certainly worth a read if you’re a fan of seeing the English language used in new ways, and a book on Northern Irish issues getting publicity right now is probably not a bad thing. But probably, for the vast majority of the reading public it’s just not worth sitting through all that build-up for what is an extremely well-written and engaging, but ultimately disappointing, conclusion.

GAMES

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Woody contemplates the dilemma that is having a snake in his boot // Square Enix

Kingdom Hearts 3: A Hands On Review

One of our Felix Editors dove into Andy's Toy Box at MCM Comic Con last weekend.

GAMES

Anthony Onwuli

Games Editor

This 16-year-old franchise has a special place in many gamers' hearts for a variety of reasons. Some, for how convoluted the story has become from the original *Kingdom Hearts*, but many have come to love the franchise due to the crossover between the Final Fantasy and Disney characters, and how they interact with the original characters and settings within the world of Kingdom Hearts.

Now, on the topic of Disney films, who doesn't love a good Disney film? From the films that you've watched growing up, to the films that you still watch now, each film has a special place in everyone's heart. There's just something special about

the Corporate mouse.

And that's why so many of us have been excited about the new franchises that we will get to visit in *Kingdom Hearts 3* which includes Toy Story, Big Hero 6, Monsters Inc. and Frozen.

I managed to get some hands-on time with *Kingdom Hearts 3*'s Toy Box world at the MCM London Comic Con last weekend, and here are my thoughts.

We are opened to the story of the Toy Box world with Woody and Buzz fretting over the disappearance of the other toys and humans, including Andy, by mysterious creatures who have been popping up in their world. Hello Heartless, it's time to be slain (again). Enter Sora, Donald and Goofy (those names can only be said in this order, don't believe me? Then play through any game in the franchise and keep a

counter). Our loveable protagonists have been transformed into toys and are hunting down the organisation and doing their usual job of freeing hearts.

Upon being thrust into this world, it's immediately apparent the developers have fully recreated the look and feel of the *Toy*

"We are opened to the story of the Toy Box world with Woody and Buzz"

Story movie. Andy's room is an exact copy from the films with the drawings of cowboys, his rocket ship bed covers and watch clock making you feel as if you are right there in the Toy Story world.

After the Toy Story gang get acquainted with Sora, Donald and Goofy, we set off to explore why everyone has disappeared.

Gameplay and Mechanics

The core aspect of the combat of *Kingdom Hearts 3* is still relatively the same as the other titles in the series. We still have Sora mixing strong and fast melee Keyblade combos as well as using his magic abilities such as Blizzard and Fira.

An interesting mechanic which has been introduced is that you can now swap between three keyblades whilst in combat without having to go into the menu. With real-time weapon switching, the range of combat options available to you has been expanded immensely.

Introduced in Birth by Sleep, we see the Shotlock mechanic return. The Shotlock feature has two options, one is the familiar magical blasts and the other option is to Shotlock into a flow-motion attack (flow-motion was introduced in Dream Drop Distance). Now back on to the point of keyblade switching; with the ability to change keyblades in real time, you have the option to change your Shotlock command depending on the keyblade.

There are new transformations introduced in this game which change the way Sora moves and fights within the game. The different keyblades have unique transformations which were explored in the Toy Box demo. The Toy Story keyblade transforms into yo-yos and can summon tea cups to attack the heartless with. The Monsters Inc. keyblade

could transform into claws for a range of melee attacks and the Tangled keyblade offered a range of magic-based attacks. The key to drawing out these transformations was to build up a meter above the actions menu. You build up energy quite quickly, so feel free to spam your special moves.

In the final section of the demo, Sora hops into a toy mech and battles other mechs. With a first person camera angle, you feel as if you're in control of an actual mech. This section was amazing just because of how different it was.

Kingdom Hearts 3 is looking to be an amazing game so far.

It will be released on the PS4 and Xbox One, apparently on 29th January 2019 (let's hope that there's no last minute changes/delays).

Union Page



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The Union Shop's little sibling, Shop Extra, is in the process of an upgrade and refresh – all designed to give a better experience to our customers. As well as a new layout, we have expanded the range of Food-to-Go options in Shop Extra, building on our existing range of delicious sandwiches, sushi and salads. This means more choice and more chance of getting what you want.

We will continue to improve the offering from Shop Extra and have lots more exciting improvements planned over the coming terms including even more Food-to-Go options, and a new look.

You can visit Shop Extra Monday to Friday 8:30 – 18:00 on Sheffield Walkway.

Find out more at imperialcollegeunion.org/shop.



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Find out more and sign up at imperial.ac.uk/studentshapers.

FiveSixEight.

BREAKFAST

Grab & Go 8:00 - 11:30	Sit & Graze 10:00 - 11:30
Porridge, yoghurt, vegan and meaty breakfast wraps, Belgian waffles, pancakes, English muffins...	Vegan and meaty English breakfasts, baked tomatoes, eggs Benedict and Florentine, mushrooms, avocado, salmon, sourdough...nom!

IC JAZZ JAM

Tuesday 6 November

19:00 - 23:00 | Metric

Hosted by Live Music Society

2 November, Friday

Common People
Beit Bars | 20:00 - 02:00

PGI Friday
h-bar | 19:00 - 23:00

8 November, Thursday

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

6 November, Tuesday

Super Quiz
FiveSixEight | 19:30

The Quiz
Reynolds | 18:00 - 20:00

IC Jazz Jam
Metric | 19:00 - 23:00

7 November, Wednesday

ACC CSP Wednesday
Beit Bars | 19:00 - 02:00

9 November, Friday

BPM
Beit Bars | 20:00 - 02:00

Wolf Rocks: PGI Friday
h-bar | 19:00 - 23:00

Replay Friday
Reynolds | 19:00 - 23:00

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

For tickets and event details, go to

imperialcollegeunion.org/whats-on



Hangman



UNMASKED! The CGCU's vigilante heroes // Andrew Hill

CGCU Office illuminated by new lamp

HANGMAN

Negafelix
Editor-in-Chief

The CGCU claims back its rightful mascot in addition to the RSMU's 'Davy Lamp' in the first mascot theft of the year

The City and Guilds College Union (CGCU) have stolen the Davy Lamp and a

range of other worthless memorabilia from the Royal School of Mines Union (RSMU) in a raid to retrieve one of the CGCU's most famed mascots, the Bolt.

Last Saturday, the CGCU hosted their Annual Welcome Dinner aimed at freshers and thirsty sharks at the Millennium Gloucester Hotel, proudly displaying their two mascots throughout the night: the 29kg (64lb) solid bronze Spanner and the 31kg

(68lb) Bolt. Several hours after the event concluded, the Bolt was reported missing to members of the CGCU committee by President, Andrew Hill. In a clear show of bravado from the CGCU, the Bolt had been left unattended within the Union building for a substantial period of time. Unsurprisingly, it was then swiped by an RSMU member, despite inviolacy.

After a cryptic message from the RSMU President, Marta Wolinska,

reading "The Bolt is in our office", was decoded by codebreaking Computing students in the rivalling CGCU office, the CGCU carried out raid on the RSMU office shortly after dusk on Monday evening. It is unknown how the intruders gained access to the room, but one concerned Materials lecturer reported seeing a group of shifty students dusting white forensics powder over the door handle. Another spectator remarked that the group

simply "walked straight in". There has been no official communication from the CGCU on the means of entry as of yet.

Later on Monday night, a series of compromising images were "leaked" online by the Memperial Facebook page, continuing their six-month trend of not actually posting any memes. One photograph of the culprits posing as Royal College of Science Union (RCSU) members received criticism from the RCSU's ex-President,

Michael Edwards, who said, "It's blindingly obvious that this was a false flag - the RCSU is completely incapable of stealing mascots". Not long after, a second image was uploaded purporting to show the real perpetrators: a diverse subset of the CGCU committee.

The CGCU is yet to issue an official ransom note including demands which will lead to the safe return of the Davy Lamp. Mascot pundits speculate that the CGCU may ask RSMU members to drop out and take real degrees instead.

HANGMAN

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Spotted @ Imperial... Alice Ghost

HANGMAN

Negafelix
Editor-in-Chief

Ghostbusters called to Halloween ACC

At this time of year, the rare Alice Ghost has been spotted roaming the halls of Imperial. Although famously an elusive creature that will not respond to meeting requests with people that associate with Divest and Left Forum, students report hearing her

moaning the following rhyme:

"Hubble bubble toil and trouble, let my annual salary double."

Although aware that this rhyme does not match the original Shakespeare, which replaces hubble, bubble with double, double, the ghostly apparition felt that quadruple would stretch both the university budget and the English language too far.

Students wishing to avoid the hostile attentions of the Ghost have found the following advice scrawled on the wall in what appeared to be blood: leave out an offering equivalent to your yearly tuition fees in

a currency of your choice, be it gold, internal organs or, most importantly, London property.

The student reaction

"Hubble bubble toil and trouble, let my annual salary double"

to this ghostly apparition has mostly been one of pedantry. One student said, "I can't believe that she altered Shakespeare as a crude demand for more money. Just go ask

the DPFS for some petty cash, seeing as they're only spending it on beers that aren't Stella." Another student said, "I just don't know why she wasted all that blood on a creepy message. Doesn't she know that you can get up to \$350 for a bag with the right customer? How does she think I'm paying my tuition fees, SFE dried up last week and I'm 1.5 grand into my overdraft."

The real question now is how to rid the students of this dangerous ghoul? One suggestion from an active member of left-forum was to "increase political engagement of the student body to counter such pay rises." Naturally this was



Who you gonna call? // pngimg

met with hoots of derision and the final conclusion was to sacrifice a fresher

a week until the ghoul left as per rugby policy.



ARIES

This week you see a vampire sucking the blood out of your friend at a Halloween party. Unfortunately, your Active Bystander training didn't quite cover supernatural creatures. Do better, Union.



TAURUS

This week you wake up from a vivid nightmare in cold sweats, only to wake up realising that it's you're still at Imperial.

This some Freddy Krueger bullshit.



GEMINI

This week you remember your parents didn't raise you to be partaking in all this demonic nonsense.

ACC? Not when there's Hallelujah-ween night vigil at chuch instead.



CANCER

This week you're a bloodsucking vampire who preys on poor deprived university students.

Oh wait never mind; you're Alice Gast again.



LEO

This week you think your neighbour's a witch - her black cat is always watching you and you're sure she keeps hexing your heating.

Maybe you should go drop off her Amazon packages from April.



VIRGO

This week it's cold outside - perfect weather for some Netflix and Chill. For some reason your MCM wants to watch 'The Human Centipede'. Nah screw that; pack up and go.



LIBRA

This week your glucose guardian suddenly passes away, without even mentioning your name in his will.

This isn't how you expected to get ghosted.



SCORPIO

This week you're Deputy President (Clubs & Societies). You have to choose between a Ouija board or CSPB. Either way you're opening up a portal to hell. Come through, departed spirit.



SAGITTARIUS

This week you're a Union bouncer during ACC. Bored, you play a game of 'Spot the Offensive Costume'. You soon realise it might be more fun to play that the other way around.



CAPRICORN

This week you drink a Draught of Living Death. The effects are instantaneous.

That's the last time you let your friends mix drinks at pres.



AQUARIUS

This week you see a hoard of zombies queuing in the Library café. Is the apocalypse night?!

Wait no, they're just final year students leaving after an all-nighter.



PISCES

This week you're craving brains. Fortunately, there's part of the new Fusion menu - with complimentary sweet chilli and hot sauce for your seasoning-deficient zombie tastebuds.

INVESTMENT

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Dark Pools: Evil place or a market place?

INVESTMENT

Xerxes Chong
Investment Editor

ICIS Co-editor

Dark pools. The words invoke an atmosphere of secrecy and evil, harkening back to myths of murky waters and ancient terrors that lurk within. Throw in the modern element of trading and most imagine clandestine deals involving dubious characters straight out of *The Godfather*. The reality is less intimidating.

Dark pools refer to non-public stock trading platforms where shares can be traded anonymously, in which details of the transaction and parties involved are not made public. They are only accessible to large institutional investors transacting large volumes of shares, allowing both parties to deal at desirable prices. To understand dark pools better, it is important to understand how the modern stock exchange functions.

From bustling coffee shops in the 17th century, where merchants and brokers haggled, the modern stock exchange has not veered from its main function: matching buyers and sellers. Companies listed on the stock exchange have shares being bought and sold regularly. Buyers and sellers submit orders through a broker and an electronic system matches orders to complete the transaction. Whilst stock exchanges have a minimum order size, known as a lot size, the sheer volume and breadth of participants from large hedge funds to individual investors create a spectrum of order sizes: from eye-watering



Monster-sized transactions exist in dark pools // imgur.com

millions to the lowly tens. It is hard to match orders of the same size and it becomes near impossible as the order size increases. Large orders are broken down into smaller chunks to be matched to sellers, and this happens over days.

For example, a seller submits a sell order of 10,000 shares in Company A. Should there not be a concurrent buy order for 10,000 shares of Company A, but instead ten buy orders to buy 1,000 shares each, the larger sell order will be broken down into ten blocks of 1,000 shares.

An important distinction with a stock exchange is price transparency; the total volume of shares in buy and sell orders are made public along with the bid and ask price (i.e. the highest price the buyers are buying or 'bidding' for a share and the lowest price the sellers are selling or 'asking' for a share are visible)

Price transparency can undermine the profitability of large deals. Participants dealing in large volumes of shares are often institutional investors, whose dealings are closely monitored as an indication of 'smart money' movement. It is assumed the people helming these institutions possess deep knowledge of businesses and valuable insights about future potential, giving them an edge over smaller

investors. Therefore, public knowledge of large transactions can influence the share price of the companies involved as the wider market scrambles to profit alongside the institutions.

For instance, Fund B decides to sell 1,000,000 shares in Company A at \$100.00/share on a regular stock exchange. The sell order is submitted, and the exchange begins to break down the sale into smaller chunks and find matching buyers. Traders and other market participants will notice an increase of sell orders for Company A, arriving at the logical conclusion that the 'smart money' have either; decided to take profit at the current share price or have knowledge of negative developments and are anticipating a drop. They would proceed to sell the stock as well, placing 'pressure' on the share price and causing it to drop further. This creates a ripple effect, as more market participants get wind of price movements and join in the selling. This effect, combined with the large order being broken down, results in orders being filled at ever decreasing prices, resulting in a lower net price for the entire order of 1,000,000 shares. If Fund B gets an average sale price of \$95.00, 5% lower than intended, it represents a loss of \$5,000,000 in potential profits. The effect would

be similar for a Fund C buying 1,000,000 shares at \$100.00/share, as buying pressure drives up share prices, resulting in a higher net price. Here is where a dark pool comes in handy for Funds B and C.

In the dark pool, the electronic system matches buyers to sellers anonymously just like a stock exchange. However, orders are secret, as participants do not know the price and size of transactions happening within. Crucially for public funds, knowledge of the transaction will only be released after the deal has happened, ensuring the ripple effect from the wider market will not affect the transaction. If two non-public companies, such as private equity firms, are involved in the transactions the wider market may never hear of the deal as they are not required to announce it. Trading fees in dark pools are also cheaper than exchanges. It is important to note: dark pools are not illegal, their operators are registered and regulated by financial authorities like a regular stock exchange. Dark pools were initially used by brokerages to ease the processing of large orders and have grown in popularity since the 1980s. Operators include banks such as Credit Suisse, Goldman Sachs, Citi, and Morgan Stanley and

independent brokerages like ITG and LiquidNet. Even the London Stock Exchange operates dark pools: Cboe Europe and Turquoise Plato.

Due to the large orders, exchanges are concerned about the volume of trading being drawn away from regular exchanges, resulting in lesser fees for exchanges and lower activity for the wider market. According to Thomson Reuters, over 45% of daily traded volume in Europe occurs in off-exchange platforms like dark pools. With secretive deals the public is deprived of knowledge and are less empowered to make informed investment decisions, which breaks down the trust of public investors. Subject to less reliable prices and lower liquidity, it seems unfair for institutional investors to profit from a separate platform at the expense of the public.

The days of dark pool trading may be at an end with the introduction of the Mifid II (Markets in financial instruments derivative) regulations by the EU in early 2018. Meant to bring transparency and efficiency back to the European markets, this regulation seeks to drain Europe's dark pools and force transactions back into the light. Under Mifid II, dark pools face a twin cap on the amount of trading that can be done. Just 4% of the total trading

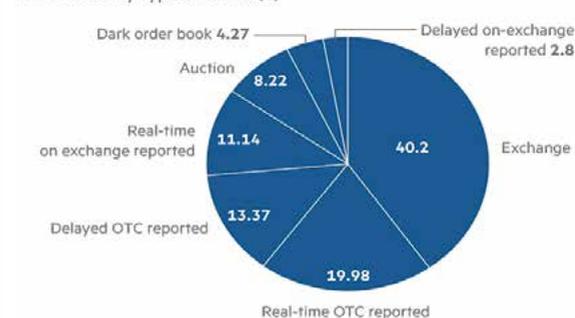
in any stock is allowed in a dark pool over a twelve month period. Simultaneously the trading of an individual stock across all dark pools is limited to 8% of the total volume in that stock. According to the Financial Times, upticks in the market share of some exchanges were noted in the week following the implementation of Mifid II.

However, as with any new rule, firms have found ways around them. An alternative less regulated trading platform sharing numerous features with dark pools, known as systematic internalisers (SI), are gaining popularity. Some 24 institutions have already adopted a SI status, including prominent banks, proprietary trading firms and market makers like Tower Research Capital, Citadel Securities and Virtu Financial.

While policy makers in the EU have made clear their desire to clamp down on dark pools, there is no intention to eliminate them, accepting the need for institutions to transact without shifting the market price. There are exceptions for unlimited trading in dark pools for large orders. SIs with cheaper fees and lower standards for quote sizes and trade reporting will fill gaps not big enough to match the EU's large order exemption rule, but large enough to affect market prices. With the UK set to leave the EU the matter of Mifid's enforcement arises. Policy makers have jumped into the deep end of regulating dark pools.

How Europe's equity market is traded

Breakdown by type of trade (%)

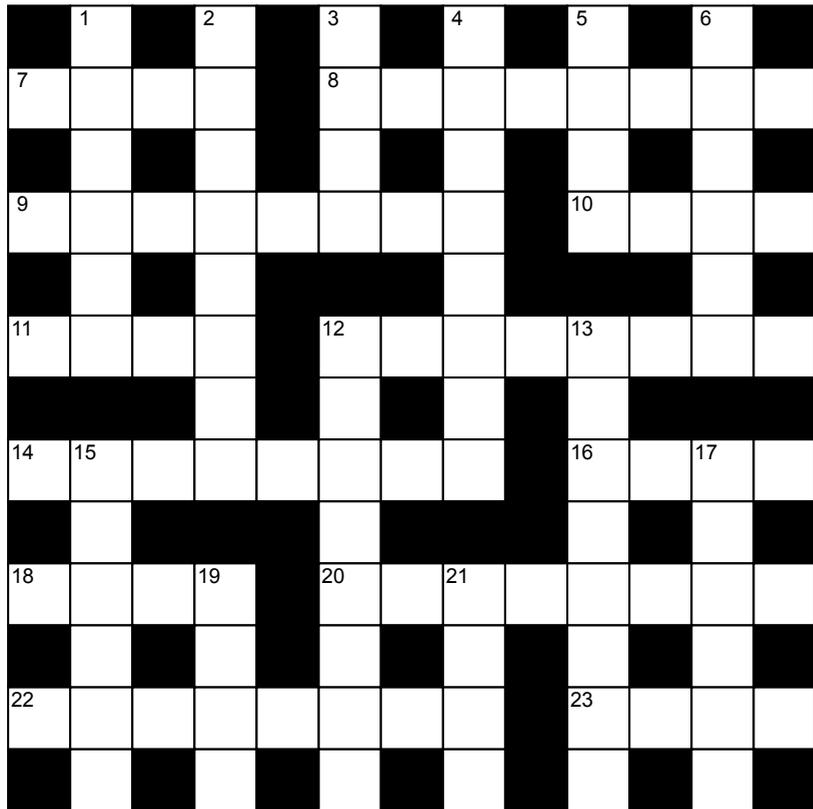


Source: Thomson Reuters © FT

Off-exchange platforms makes 50% of trading // FT

PUZZLES

fsudoku@imperial.ac.uk



CROSSWORD

Across

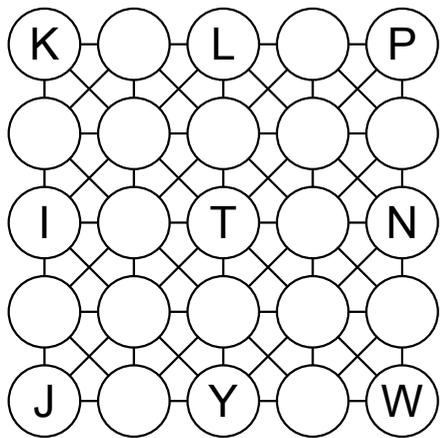
- 7. The tiniest bit (4)
- 8. They doubt e v e r y t h i n g (8)
- 9. Served with cheese (8)
- 10. Breakfast, lunch, or dinner (4)
- 11. Healthy soy-based ingredient, popular in Asia (4)
- 12. 1966 Beatles album (8)
- 14. Shares a border with Spain (8)
- 16. A bird's cradle (4)
- 18. Meat soup (4)
- 20. Not royalty (8)
- 22. God of the Sea (8)
- 23. Ahead of the trend (4)

Down

- 1. Essential ingredient in fish and chips (6)
- 2. A really big slingshot (8)
- 3. Capital of Norway (4)
- 4. Belonging to the Dark Ages (8)
- 5. The building block of matter (4)
- 6. A hydrocarbon that powers cars (6)
- 12. The murder of a king (8)
- 13. Lives in the capital (8)
- 15. Choice (6)
- 17. A chair on skis (6)
- 19. Cry (4)
- 21. Repair (4)

GOGEN

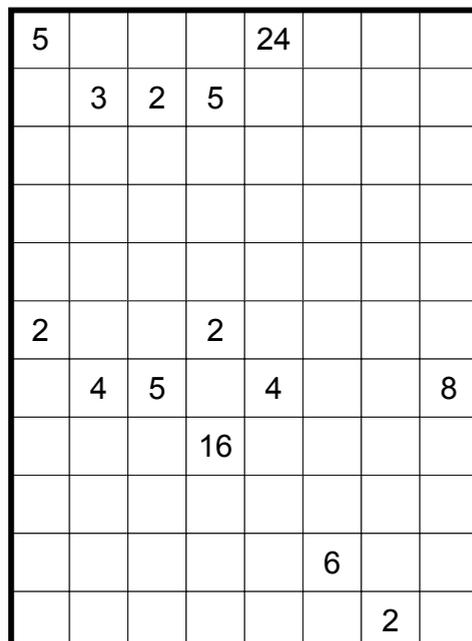
Write letters into each circle to form the listed words. Letters can be linked by moving between adjacent cells horizontally, vertically or diagonally in any direction. You may use each letter in the alphabet only once.



- | | | |
|-----------|--------|-------|
| JUXTAPOSE | PONDER | BLAST |
| QUICK | DRY | GIFTS |
| MATCH | WET | GUTS |
| SHAM | PALM | ZIG |

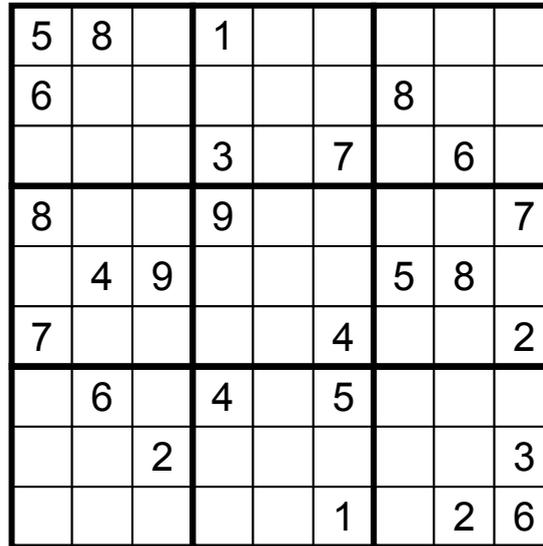
SHIKAKU

Divide the square into rectangles, such that each rectangle contains exactly one number. The numbers given represent the area of the containing rectangle.



SUDOKU

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



FUCWIT

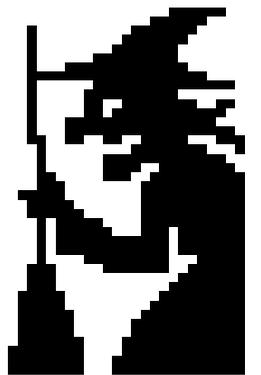
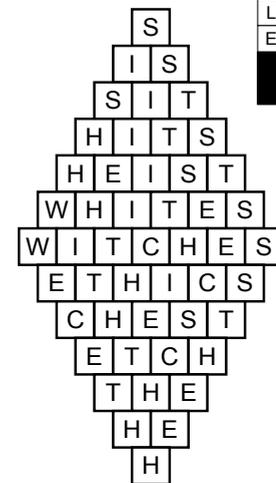
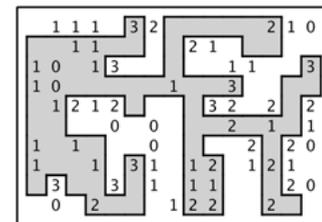
1	Maxiane	72
2	Yeet Infection	61
2	CHZNo.1InMy<3	61
4	Luncheon Pals	58
5	DQ	53
5	HoneybunnySnugglepuff	53
7	Lunar Lunacy	52
8	Sudok-urself	50
9	KBLB	44
10	Cat Ladies	39
11	Soggy Biscuit Society	36
12	The Indoor Sundial	30
22	Crosswordsolver.org	9

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

Points available

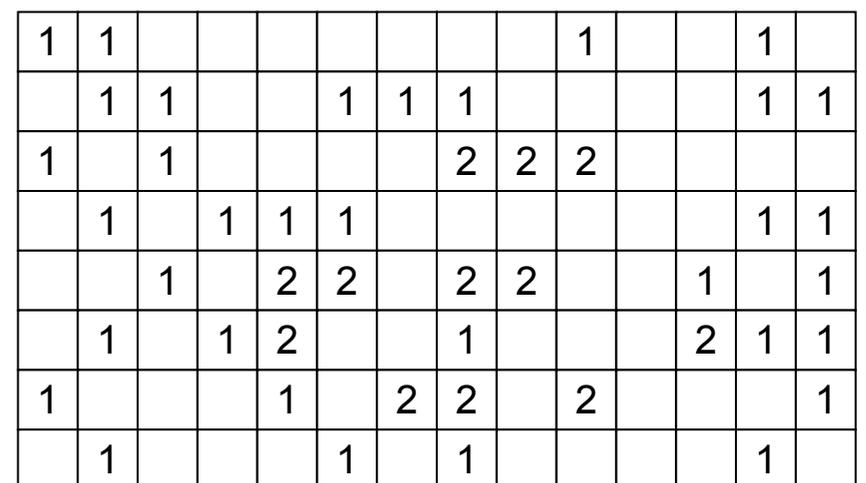
Crossword	6
Gogen	3
Sudoku	3
Minesweeper	4
Shikaku	2
Total	18

Last week's solutions



MINESWEEPER

The number in a cell represents the number of mines adjacent to that square (up/down, left/right, diagonal). Find and mark all of the mines to clear the board.



SPORTS

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ICURFC 2nd XV's winning streak lives on

SPORTS

Gustave RDB

Imperial 2nd XV

20	V	7
Imperial 2 nd XV		UCL 3 rd XV

On Wednesday, freshers discovered the pleasure of taking public transport to Fortress Harlington for our second game of the season. It was nice to

see that the other team actually showed up on time after the 40-minute game last week. After a quick but intense and serious warm-up, strong motivation came for the banned players who wanted a last win with the boys to end their season. This meant Imperial came firing in the first 20 minutes of the game with strong carries and a dominant scrum regularly shoving back UCL's. Yet, it wasn't enough to score due to small handling errors and lack of patience in the opposition 22s. But

quick thinking and true flair on the blind-side from scrum half Valerio meant that 2XV veteran Ifan was over the line unscathed for the first try of the game. Unfortunately, errors in defence lead to a scrappy try by UCL shortly after. The boys kept their heads up because we knew that if we played to system we would end up steam-rolling them with our fitness and flair.

Second try of the game came very handy just before half time as McConkey dove over the try line after a sick inside

ball from Kirrane. Second half began just as the first half did and after a couple phases it was decided to take the 3 points to ensure the victory. After the successful kick on the restart, the ball went wide very quickly, and fresh prop ED (@debesh) believed for a moment that he was Rieko Ioane and tore the defence apart with a filthy step before offering the try to Sochi who ran the perfect support line. The end of the game was very scrappy but Jespersen proved to us once again what he's capable of. After breaking a couple tackles

down the touch line with pure pace and strength,

"after a couple phases it was decided to take the 3 points to ensure the victory"

he went on to forget his captain RDB on the inside for what would have been

a definitive try therefore denying him a meat pie on his last appearance of the year. Thankfully, fines were awarded for this incident. Final score was 20-7 with IC 2s continuing their sublime form despite moving up a league in what should be a very exciting year once again. On a more personal note, I would like to thank all the boys for the unbelievable effort in the past two games, it was a pleasure to lead you guys and I'll be back next year with you for more flair and big Ws.

ICURFC 3rd XV's fresher Ridge builds up an appetite

SPORTS

Will Cox

Imperial 3rd XV

59	V	27
Imperial 3 rd XV		UWL 1 st XV

Wednesday was a big day for the 3s in several aspects. After a tough loss the previous week, some changes to the squad, and only a few substitutes, it was integral that everyone plays to their best form.

On arrival at Fortress Harlington, we eyed up the eager opposition already warming up. It was hard for some of their larger players to not catch our eyes, yet this sight feared no-one. We got into our pristine, matching IC shirts and proceeded to warm up and prepare ourselves for the fixture.

It was our kick-off, and as Marco Violet-Vianello lofted the ball into the air, the pressure from our boys was apparent. Within a couple of minutes, a big hit from James King had sent him into a concussed state. With one less substitute to support the team, the start didn't seem to look too hopeful. Then, lo and behold, some simple hands led the ball to the right-hand side of the pitch giving William Ridge the golden opportunity of an overlap to secure his first try. This try set fear into our opponents, and surely the regret of the big warm up session loomed after they had discovered their cardio fitness was not up to scratch.

Shortly after, with some great pressure and defence, a double takedown tackle from skipper Michael Rudman, and Will Cox, had caused a head collision for Will. After feeling a bit dizzy and allowing the bump on his head to make its ap-

pearance, it was decided that a substitution was required. Some may argue that an alternative reason had caused this substitution, however I beg to differ. With now a less

"His driving technique had surely translated onto the rugby pitch to help him score an 80m try"

experienced pack, as a result of the previous head injuries, it was decided that uncontested scrums were in play.

Next up to put their name onto the scoreboard was none other than our tame racing minibus driver, Arnaud Tournier.

His aggressive and determined driving technique had surely translated onto the rugby pitch to help him score an 80m try, after picking up the ball from an error of our opposition's. With Arnaud's energy high at this point, he managed to "smoke their winger and fullback" in the last 20m, to earn himself his first IC try.

We now had the confidence, and this allowed us to show our skills to the utmost. Tries from the mighty 3s were flooding in by now. Olivier Doustaly managed to use that chemistry with his fellow Frenchman Marco as they executed an S-pattern off of the back of a scrum to gain those last 10m past the try line.

Once again, William Ridge managed to get himself another try, after a dropped ball in our 22. This allowed for the fresher to show his worth by running through, stepping the 15 and getting that ball down

under the sticks.

The opposition utilised our lack of energy after running circles round them to earn themselves a few tries; however, this would not destroy the momentum of the IC boys. More tries came in from Tom Watson, and Jack Martin-Halls with the excellent assistance of Ignacio Manzur.

Marco Violet-Vianello had decided that he wanted to get himself on the scoresheet. A lineout in our favour gave Marco the chance to show his flair by getting past the centres and follow it with a disgraceful dink of the ball towards the try line where we he would meet to secure that try.

William Ridge had decided that he wasn't finished. The greedy fresher didn't like the thought of having a smaller percentage of the total amount of tries. He used an overlap to earn himself the hat-trick. But that still wasn't enough

for him! Mr Ridge had certainly got himself an appetite for tries, so much so that he saw an opportunity to take a try from a cheeky grubber kick of Marco's.

After Marco Violet-Vianello had lost that opportunity to earn that previous try, he decided to piss off the opponents some more. With a few steps, a twirl and some large angry UWL props, Marco was in the try zone.

With a few converted tries from UWL, the score at full time came to 59-21 to IC. A great overall performance from the boys, with our man of the match being Marco Violet-Vianello. A thoroughly deserved W, and I hope that the team can carry this momentum through the training sessions and into the games to make this a good season.

Editor's note: ICU's Rugby club is still under suspension within BUCs, officially all games played were conceded.