

THE COLUMNS

by pupils; for pupils

HSD's Newsletter: Issue 86

Well done for making it through week two! While this year may have many challenges, from the current week long closure of Brodies to starting your new subjects, its important to always take a breath. Mental and physical health is important, and vital in ensuring a seamless return to school. If you need help, remember to reach out to PCS teachers, your parents or friends. Another great stress reliever is engaging in the great range of co-curricular activities offered by the school community. To get more information on the options available, make sure to check out the co-curricular fair in Trinity on Wednesday. From Chess club to Hockey and The Columns there is always a fantastic range of activities to enrich your experience at the High School of Dundee. Whether you're in Form One, or Form Six the options offered can appeal to everyone. Finally, an obligatory reminder that house choir is this coming Tuesday. Show support for your house, and remember to turn up!



Editor, Ruby

FUZZY SOCKS

Sophia Kapelyukh

I think we can all agree that socks have something more to them. Receiving them as a gift - at least to me - feels like receiving a hundred pounds. The feeling of putting on fresh, frizzy, unimaginably fluffy socks is just something a keyboard nor pen can ever describe. This article is actually about crochet - more specifically the history of crochet. I love crocheting probably just as much as I love socks, which is why I have chosen to write about these two subjects which I believe fit so well together.

I promise the sock talk was not random; Ancient Egyptian socks are actually the oldest surviving socks archaeologists have found, and where our history of crochet begins. The Egyptian socks were fascinating, because they were specifically shaped to separate your big toe away from your other four toes so you could comfortably and stylishly wear your Egyptian sandals (though I know many hate the idea of wearing socks with sandals). The sock - that was found in a land fill during an excavation of Antinopolis in Egypt - was studied by scientists of the British Museum, and they found that the sock had actually been woven with several natural dyes - meaning stripy socks have been trending since 300AD. The technique used to make the sock was called nålbinding, a single needle looping technique, and though not directly related to crochet, this form is considered to be the ancestor of crochet.



As well as socks being a popular choice for a crocheter's projects, dolls and toys are almost guaranteed in every 'How to Crochet, Beginner's Book'. The first crocheted doll was actually discovered in China, from around 1600BC. This art spread into Japan, and Japan now have their own name for it: Amigurumi, or the art of making small toys. Amigurumi boomed in the Western industry beginning in 2003, and was reported as the most popular item on Etsy in 2006. So COVID isn't the only thing making a comeback; to think that people are still making and buying forms of art that originated since BC times is astonishing!

Coming closer to our time, we have Irish crochet. This is very important due to its help for many Irish people surviving the potato famine in 1845. Irish people would crochet very intricate, detailed, and beautiful pieces that they would sell to earn money. For some, this was their only way of making an income and they depended on it to survive. Their method of crocheting became known as Irish Crocheting and is now a popular pattern for wedding dresses.

During the Second World War, crochet was actually a source of comfort. Many women crocheted pieces for soldiers, to bring them some feeling of home and safety. And, perhaps surprisingly, the thing they crocheted was socks! In fact, so many socks were suddenly being crocheted and knitted, that comedic cartoons were being produced, mocking novice attempts to crochet socks, and stories of soldiers using their wonderfully woven socks to clean their rifles. The newspapers called this the 'Mania of Crocheting' during the start of the war. There was even a Lord in the army who requested specific items, such as mufflers and fingerless gloves be knitted for soldiers by locals.

Let's talk about crochet now. Thanks to technology and social media, the world is so much more connected than ever before - and we are all able to make fluffy, stripy socks! But one of my favourite modern crochet art forms is 'yarn bombing'. This is actually considered a form of graffiti, where people cover or decorate something in public with crochet or knitting projects. This can include covering a tree with a blanket of granny squares or, as some nice granny did to my local park during lockdown, hang cute little rainbow coloured bobbles on the branches. People can get creative and cover the world with cute, cosy patterns to brighten everybody's days. One of the most famous examples being when people had completely covered a tank in vibrantly covered squares outside the Military museum in Duneier, Germany.

I hope you learned a little bit more about crochet and knitting, and found out some cool facts about how it started; helped people survive; and encouraged comfort through the worst of times. Even if now of this was new to you, I hope at least you can appreciate fluffy socks just a little bit more.



RAAC Causes Mass School Disruption.

Jack Mitchell

RAAC (Reinforced Autoclaved Aerated Concrete) is a type of lightweight concrete that was used in mainly public sector buildings from the post-war period to the mid-1990s. The substance only has an official lifespan of thirty years, meaning that even the concrete in buildings constructed towards the end of RAAC's period of use has expired.

In 2018, a roof made using RAAC collapsed at a primary school in Kent. This brought the issue to light, and the government has faced warnings about the material ever since. Yet no action was taken by the government, other than minor announcements in 2021 and last year. On the 31st of August, just days before most English pupils returned to classrooms, the government requested that over 100 schools close due to the presence of RAAC. Other schools have had to close some classrooms but are still operating. Although it has been schools that have brought this story to the headlines, many other public buildings were also built using RAAC. Hundreds of buildings may have to close, including police and fire stations, libraries, prisons, a lot of council buildings and shopping centres. Perhaps even more worrying are the potential closures of some hospitals and other NHS buildings. Over 250 NHS buildings in Scotland alone have been built with RAAC, followed by over twenty hospitals in England, and 3 hospitals in Wales. These numbers are likely to increase as health institutions nationwide receive the results back from the multiple surveyors tasked with finding RAAC.

Already-struggling schools will have their bills for surveying and reconstruction covered by the government, they are expected to pay for any other costs. These may include the rental of premises that are being used as classrooms. The issue as a whole will cost the government hundreds of millions to repair

In Dundee, two schools, Ardler Primary School and St Fergus Primary School, are known to be affected by the material and were recently named in the BBC's list of affected schools. Also, Ninewells Hospital, which was built in the late 1960s and early 1970s, was announced as having RAAC present on site. As well as this, some buildings of the University of Dundee have been confirmed as being constructed using RAAC.

The issue as a whole will cost the government hundreds of millions, with many wondering why something wasn't done sooner. After all, the roof collapse was five years ago. This could just be the start. We could be about to see thousands of public buildings that thousands more rely on, closed for business.



Flight of the Bumblebee

Clara Fraser

One of the most recognisable insects in the UK is the bumblebee. With its fuzzy body and black and yellow stripes, the bumblebee seems like the Charlie Brown of our wildlife. However, the bumblebee is far from a “lovable loser” and as far as aviation is concerned, they are miles beyond the paper kite.

To explain how bees fly requires a basic understanding of bee anatomy and an extensive knowledge of physics (which I do not have) but bear with me. The central section of a bee's body where the wings extend from (and the only one we are concerned with) is called the thorax. Much like the breast of a chicken, this is where movement is generated. Unlike poultry however, bees' (four) wings do not beat up and down, instead they circle. They do this predominantly using two muscles, longitudinal and vertical.

Counterintuitively, these powerful flight muscles are not directly connected to the wings. This is called indirect flight. When the vertical muscles contract, the top of the thorax is pulled down, then, when the longitudinal muscles contract, the sides (front and back) of the thorax are pulled in. This contraction and expansion of the thorax causes the wings to rise and fall respectively. Smaller muscles directly connected to the wings determine their angle and so help to direct the bee's flight. The control of the approximately 200 beats per second that their wings must sustain is not possible using individual nerve impulses, so bumblebees have an 'asynchronous flight muscle' meaning the muscles will contract many times from each nerve impulse.

And now to the physics part. To begin with, even though people talk of bees 'defying the laws of physics' with their disproportionately small wings to their very large bodies, a fairly recent discovery (in terms of the history of science) has deepened our understanding. The wing moves downwards, then turns round and moves back upwards again. The two parts of the rotation (down and up) are generally of equal force, but a more powerful downstroke will help provide upward lift. Vortices – whirling air like a mini tornado – form on top of the wing. This high-speed swirling of air creates an area of low pressure above the wing (due to Bernoulli's Principle, don't even ask me to explain that one), which causes the bee to rise. In addition, the rotating of the wing at the bottom of the stroke also increases the velocity of the air above the wing consequently decreasing the pressure further and providing more lift. Of course it's not that simple! There are forces opposing this upward movement, such as air resistance, but I have deliberately refrained from mentioning them so as not to drag you down.

That concludes my whirlwind tour of how bees fly, however we have one more thing to consider. How does Snoopy's doghouse not fall out of the sky?



I invite you to imagine my surprise when, at 9 PM on a Sunday evening, perusing memes, I find out they've apparently rediscovered silphium.

I imagine that to ninety-nine percent of this paper's audience, the last half of that last sentence makes no sense. To the people it does make sense, the first half is probably nigh-uninterpretable. So: let me explain why I actually jumped out of my seat.

Silphium (sometimes spelled "silphion") is a botanical mystery. It's mentioned in numerous Classical texts, ranging from recipe books to medical guides, and is even depicted on ancient coins from the city of Cyrene in Northern Africa, where it was an essential part of their economy. Silphium was a so-called wonder-plant - used in a variety of dishes, and having numerous described medical properties, the most significant of which being its effectiveness as a chemical contraceptive in women. That's brilliant! It predates artificial birth control by almost two thousand years - in fact, silphium was the only chemical contraceptive until the invention of the pill in the 1960s.

It was too good to be true. The Romans, ruiners of fun for ancient Europe (and the future), found silphium so magnificent that they ate it. All of it. Into extinction! Apocryphally, the last found specimen was presented to the Emperor Nero, meaning the extinction of silphium is yet another thing we can blame on him, along with the story that he burnt down Rome (he probably didn't). In fact, the most probable contributors to the extinction of silphium were desertification, in combination with overharvesting and overgrazing. But for two thousand years, all we were left with of silphium was a handful of Cyrenian coins and a bunch of old recipes we'd never get to taste.

Until the 2020s! For centuries, classicists, botanists and archaeologists had all had their speculations about what plant exactly the Romans were so infatuated with, and whether they had really eaten it off the face of the planet. Was it just some really good spice, like asafoetida? Some particularly pungent fennel? (Not sure on that last one, fennel's gross - it tastes like liquorice). In 2021, archaeobotanist (plant archaeologist) Mahmut Miski emerged with a study he'd been working on since 1983, hypothesising that *Ferula Drudeana*, a critically-endangered plant native to a small region of South-Western Turkey, might be the elusive silphium. The basis of his hypothesis suggests that silphium seeds were illicitly smuggled across the Mediterranean to Turkey (pretty plausible - Cyrene and Turkey were both a part of the Roman Empire, and spices would have been a popular commodity) before the last population in Cyrene was eaten, leaving the illegally-transported specimens the last remaining silphium. This would have looked extremely suspicious if anyone knew, so they quietly planted it in Southern Turkey, before forgetting about it. *Ferula Drudeana* is nearly identical to the plants depicted on Cyrenian coins, right down to the position of the seeds and the shape of the leaves, and contains chemicals with similar properties to the written

As I began researching the actual science behind this plant-based mystery, I discovered a veritable jungle of details, diatribes and debunked hypotheses. For one, *Ferula Drudeana* isn't the only plant scientists speculate to be silphium. Other species of *Ferula*, including *Ferula Narthex* and *Tingitana*, are also potential candidates, as well as the plants *Gummifera* and *Garganica* from the genus *Thapsia*. In fact, *Ferula Tingitana* is considered the next-best guess for silphium, as it has the exact same chemical properties, which have been tested and proven extensively. Another cause of argument among the Classical archaeobotany community (a hotbed for aggression, I'm sure) is whether, just maybe, it's an existing spice that people still eat? The most popular option for speculation is *asafoetida*, a spice commonly used in South-East Asian food, and is also a variant of *Ferula*.

The mystery behind silphium still eludes historians and scientists, even thousands of years later. Whether it's an existing plant, an extinct species, or a cross between two plants, we'll never know, thanks to an irritating lack of genetic matter to test and compare. Regrettably, the meme that started this whole tirade has been lost (I forgot to save it on Instagram). Just like silphium, it's gone.

Coldplay Concerts

India Simpson

How sustainable is music? Theoretically, very. Or, rather, it should be. Recent studies have shown the celebrity with the largest carbon footprint to be Taylor Swift, at 8,293.5 tonnes of carbon emissions in 2022 from flight emissions alone. There is an argument that some of the flights were other people borrowing her private jet - but nevertheless that is a massive carbon footprint. Don't get me wrong, I love Taylor Swift's music, but the statistics are hard to ignore.

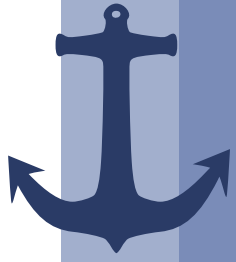
However, if any part of the music industry would have an understandable carbon footprint - it would be the massive concerts. Fortunately, Coldplay has recently proven that untrue. They have recently strived to make their concerts more sustainable, and the figures have been astounding.

To reduce their carbon footprint on their world tour, Coldplay: used plant-based LED wristbands at their concerts; used kinetic dance floors to generate energy at their concerts; planted one tree for every ticket sold - leading to the planting of 5 billion new trees; reduced waste and plastic usage; used 100% renewable energy for the show's production (including electric vehicles and alternative fuels wherever possible); and donated thousands of unused meals and toiletries from the tour to those in need.

They reduced their CO2 emissions by 47% in comparison to their last tour. After that tour in 2016-2017, they said they wouldn't tour again until they found a way to make it more sustainable - I personally think they've made a great start. Is there still a long way to go? Yes. Of course. But this is a massive step for sustainability - they've proved that it's possible. They were willing to take a risk and try it. They didn't lose anything - if anything it adds to the surreal feel of their concerts. They and their crew should be incredibly proud of the steps they've taken and the example they've shown.

THIS WEEK IN PICTURES





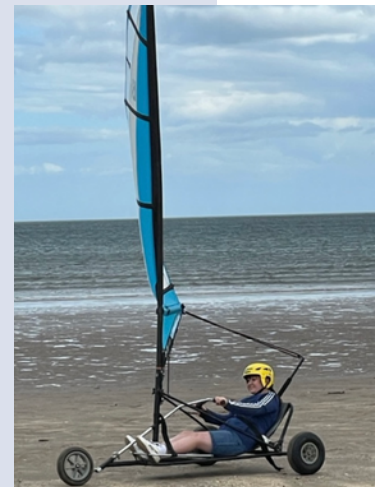
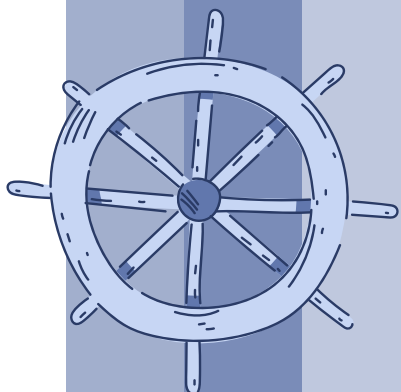
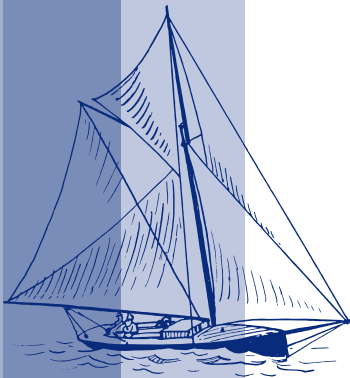
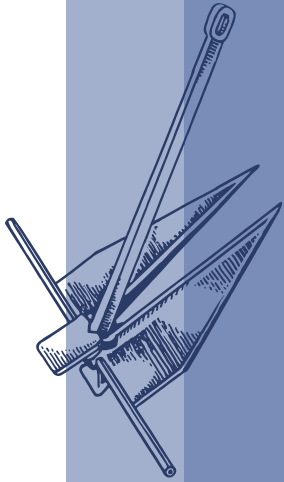
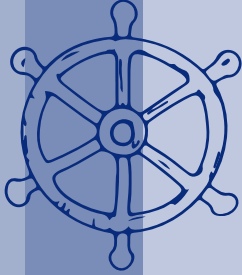
Landyachting

Maisey Lafollette

Has anyone ever heard of this unusual sport that I tried in St. Andrews? Landyachting is an awesome sport where you drive a go-kart with a giant sail that's powered by the wind.

On the beautiful sandy beaches of St. Andrews, on a typical Scottish windy day, I was lucky enough to spend the afternoon learning how to navigate the landyacht. At first, I was awful, as I couldn't figure out the physics of how to steer it and turn the sail with the wind simultaneously. Eventually, after trial and error, and at one point being stuck in the sand and starting to sink, it finally clicked. I suddenly was racing through the sand, managing to avoid crashing into the dog walkers and picnicking families, and into the shallow water, secretly loving how I could splash the muddy sand onto my brother as he drove past!

As the wind died down, our afternoon came to a close, we were all wet and muddy, but with large grins and laughter about our adventure that "blew us away!"



Up to d8 – the Topical Columns Quiz

Are you up to d8?! Answer the following questions correctly and email your answers to dmfinlay@highschoolofdundee.org.uk. First pupil to send in a correct set of answers receives a prize! (Answers in the next issue of The Columns)

Entertainment

1. Which festive event, named after its location in London, took place for its 55th consecutive year in the last week of August?
2. Which streaming record did Taylor Swift break last month?

Science and Nature

1. What type of full moon has been illuminating the sky over the last week?
2. What was unusual – and possibly unique – about a giraffe born in Tennessee the other week?

Sport

1. The World Athletics Championships were held in Budapest and the USA topped the medals table. Which country came 2nd?
2. Which South American country will make their debut in the upcoming Rugby World Cup?

Politics

1. Prime Minister Rishi Sunak was accused this week of ignoring what scandal, while he was the Chancellor of the Exchequer, which is now causing huge disruption for young people?
2. What is the name of the female Deputy Leader of the Labour Party who has just been given the role of ‘Shadow Levelling Up Secretary’?



'THE SOUND OF FREEDOM'

'The Sound of Freedom' tells a hero's story but hides a cowardly message.

This writer admits to the crime of commenting on a film without having seen it! What follows is a commentary on articles written about the film and its subject rather than a review of the film itself.

"The Sound of Freedom", directed by Alejandro Monteverde, released this week in the UK after a long delay and huge success in the United States is a film that delves into the disturbing world of human trafficking and child exploitation. On the surface, it seeks to raise awareness of a grave issue using apparently pedestrian, boilerplate, genre film-making techniques but underneath lurks a troubling association with the QAnon conspiracy theory that cannot be ignored.

In case you didn't know, QAnon is a baseless conspiracy theory that alleges a global cabal of Satan-worshipping paedophiles is demonically pulling the strings of Western Society and that former President Donald Trump is a heroic, vigilante figure, determined to bring them down...yes, this is really what these crackpots believe!

The film's plot revolves around the real-life story of Tim Ballard, a former Homeland Security agent who founded the organization Operation Underground Railroad (OUR). OUR claims to be a non-profit group dedicated to rescuing children from sex trafficking. While the film's intentions may seem noble (who, in their right mind, is going to disagree that human trafficking and violence against children is disgusting?) its connection to the QAnon movement casts a dark shadow over its credibility.

Firstly, "The Sound of Freedom" has been promoted and endorsed by key figures within the QAnon community. The film's association with this fringe conspiracy theory is undeniable and concerning; indeed, the film's star, Jim Caviezel has lent his support to barmy theories about child exploitation. Although it is not explicit in the film, the approach to the subject matter and the championing of those involved lends legitimacy to a movement that has been widely discredited and linked to acts of violence. What subject could be more manipulative and cynical than violence against the most vulnerable?

Moreover, the film subtly propagates elements of the QAnon narrative. While it may not explicitly mention QAnon, it taps into the same themes of secret elites engaged in child exploitation. This narrative manipulation can further fuel the delusions of QAnon followers and draw unsuspecting viewers into the conspiracy's web.

"The Sound of Freedom" is accused of failing to provide a balanced and accurate portrayal of the issue it claims to address. While human trafficking is a grave concern, the film sensationalises and oversimplifies it, suggesting that a small group of vigilantes can single-handedly dismantle trafficking networks. This unrealistic portrayal not only misleads the audience but also discredits the dedicated efforts of law enforcement agencies and organisations working on this issue. The subject is too sensitive and complex to dilute into a narrative akin to the kind of 'John Wick' hero fantasies that appeal to the target audience.

The film's association with QAnon also diverts attention from the genuine and complex challenges surrounding human trafficking. It oversimplifies a multifaceted problem, potentially leading viewers to underestimate the scale of the issue and the need for comprehensive, evidence-based solutions.

Additionally, the film's marketing and distribution strategy has catered to QAnon followers, with screenings at QAnon conferences and endorsements from prominent QAnon figures. This strategy is deeply troubling, as it not only reinforces the conspiracy theory but also indicates a cynical exploitation of the QAnon community for financial gain.

"The Sound of Freedom" may claim to be a film addressing human trafficking, but its connections to the QAnon conspiracy theory cannot be overlooked. By associating with and promoting a movement known for spreading false and harmful information, the film undermines its own credibility and muddies the waters surrounding a genuinely serious issue. Viewers should approach this film with caution and scepticism, recognising that it risks further legitimising a dangerous and discredited conspiracy theory. When addressing such sensitive and critical topics, it is essential to rely on evidence-based information and avoid contributing to the dissemination of unfounded beliefs.

YOUTH UNEMPLOYMENT IN CHINA

Ruby McIntee

Amongst the collapse of the Chinese real estate market, starting with Evergrande, until the most recent issues with Country Garden Holdings, China is facing a myriad of pressing economic issues. Chief amongst them is youth unemployment. Once hailed as the greatest economic recovery in modern history, the façade of the 'tiger economy' is quickly fading, revealing the dangerous nature of economic growth in China. In August, the National Bureau of Statistics revealed it would no longer be releasing unemployment data that is 'age-specific'. Why? Either, as the National Bureau puts it, it is to "optimise labour force survey statistics" by limiting the amount of data they produce. Or it is because of the whopping 21.3% youth unemployment rate they reported in June? This means approximately 1 in 5 Chinese youth are unemployed. For context, this is almost double the UK's 12.3% unemployment rate, meaning roughly 1 in 10 lack a job.

Youth unemployment is a significant issue. In the short run, it can lead to issues such as wasting valuable resources, lowered standards of living and a greater burden on the government. In the long run, it significantly reduces the long-term prospects of young people. The lack of employment leaves them with a financial scar. Skillset and cognitive ability are lowered as they are not able to gain the useful skills and opportunities that a job can grant them. Employers are less likely to employ them, as they lack the crucial experience needed and often have gaps in their resumes. It can result in poor mental and physical health. Most interestingly, there is also a change in employment expectations. If you and your friends have never been employed it changes your perspective on the job market, resulting in less confidence and less expectation of gaining employment, exacerbating the problem further.

While China's reliance on the real estate issue is a monumental and systematic issue (as reflected in the currently volatile Hang Seng Index), perhaps China faces more than one pressing economic issue. Case in point: youth unemployment.

The Importane Of Extra Time

Eilidh Acford

EDITORS' NOTE

Extra time is often overlooked in matches due to most feeling like it's an excruciating extension to their team's inevitable loss.

Unbeknownst to most though, extra time can often be the most import and crucial time of a match.

This weekend, Arsenal had a storming success against Manchester United on their home turf at the Emirates. Just 27 minutes into the match Rashford had secured United a 1-0 lead. United were quickly knocked off their pedestal in perhaps one of the most humbling moments in football, with Arsenal's Ødegaard firing a screamer into the new just one short minute later. For the remaining 62 minutes the scored remained even in an uneventful series of attempts, corners and free kicks. However, due to a combination of fouls and substitutions, the Gunners saw themselves presented with a opportunity and they did not miss. In fact, with two phenomenal goals in just 14 short minutes, Arsenal extended their lead in the game, and in the table, swiftly soaring up to 5th and leaving the opponent trailing at 11th. None of this would have been possible, though, without extra time.

Extra time is all well and good in helping a team secure a further point or three, but have there ever been any times where it has totally changed a game around?

Well, interestingly, yes. Several times, in fact. In 2016, France hosted Portugal on their home ground for the Euros final. France were favourites to win, with star striker Ronaldo having to be taken off due to injury after just 25 minutes. Once again extra time struck after a goalless 90 minutes, and both sides braved themselves for another loading of extra time followed by the dreaded penalties, the most simultaneously nerve-wracking and enthralling thing ever.

Nevertheless, despite the seemingly unbreakable draw, out of nowhere game a goal from Portuguese forward Éder in the 109th minute, securing Portugal the victory, and breaking France's first tournament loss on the home soil in 19 games.

So, what can be drawn from extra time? It is often inevitable, as injuries are extremely common, fouls are even more commonplace, and substitutions are also frequently used on the game. Whilst most people find extra time a drag and a waste of time, it can still be the key point in a match, and has the potential to change your life. So next time you think of walking out of a game before the 4th official holds up the board, just remember it may be worth the five extra minutes in your seat.

Reminder to all, house choir is still on! Come along on Tuesday evening from 6-7 for a night of unforgettable performances. Whether you're in Wallace, Airile, Aystree or Lindores the night is bound to be universally entertaining. It is not too late to turn up to practices and get involved! For more information on house events, reach out to your house captains or follow the house instagrams. This week, the columns team would like to thank our consistent writers, Maisie Lafollette, Jack Mitchel and Eilidh Acford, without whom running the columns would be impossible. We also extend our gratitude to our new contributors, and, as always, encourage anyone who wants to write an article to email one of the editors.

Editors Ruby and Izzy

Have a fab weekend!

THE COLUMNS TEAM