THE HARROVIAN

VOL. CXXXIV NO.5

October 9, 2021

SCIENTIFIC SOCIETY

Jonathan Barley, The Grove, 'Determinism in Physics: Quantum Mechanics', 27 September

Jonathan Barley, *The Grove*, graced the Scientific Society with his lecture titled 'Determinism in Physics: Quantum Mechanics'. This was the second of his two-part series on 'Determinism in Physics'. To open, Barley began by explaining the importance of being able to predict outcomes based on static information. The 'two-slit experiment', designed by Thomas Young in 1803, seems to be a simple practical with an obvious outcome. As you may have gathered from this article's tone, it is not. The experiment consists of a source of photons that are shot at two walls, one behind the other. In the 'front wall', there are two slits equidistant from each end. Destructive and constructive interference creates a pattern on the wall: not two lines, but a denser pattern of light. But why? This simple experiment proves the foolishness of presuming simple outcomes.

Barley followed this by detailing a second experiment that projected individual particles to prove that they had been naturally diverging from the expected array. Again, this uncertain principle was proven true. Barley then described the experiment as if the particles were two-dimensional 'balls' within a correspondingly flat bucket. When visualising it in such a way, we can observe that when you square the wave function, it yields the probability value of said particle's position at a certain point at a given time. Since we don't know the exact location, we cannot precisely describe what will happen, thereby bypassing the curiously named Laplace's Demon.

Never one to leave a good particle physics lecture unfinished, Barley then touched upon that bane of Lower Sixth Autumnterm chemists: the Heisenberg uncertainty principle. It states that you can never simultaneously know the exact position and exact speed of an object. The exact speed and exact position of an object, accordingly, have no meaning in quantum mechanics. However, through understanding the wave function, a particle's movements become more understandable. By the nature of the wave function being a complex function and not a regular number, it only yields a statistical suggestion of the location of a particle at any momentary instance. Two electrons with the same wave function could, in fact, be hundreds of kilometers apart. Barley then, to audience delight, used the example of the remote control he was wielding, proving that the particles were all entangled. If one particle were to be measured, the whole entanglement would collapse, which explains why we do not see macroscopic instances of superposition. (This is a thoroughly A-level answer to the grandest question in quantum mechanics; hence, we do not take it as universal gospel.)

Barley then referenced an oft-quoted (and oft misunderstood) quantum phenomenon: Schrodinger's cat. An accordant situation can be established by setting up a box containing a cat and a grenade containing unstable gunpowder. 50% of the time, the gunpowder is expected to ignite, and the other half of the time, it is expected to lie dormant. Due to quantum mechanics, scientists must consider the cat both dead and alive before opening the box and observing the result. Barley then proceeded to explain that seeing the result of an experiment can determine the course it takes. Precluding religion from this question, we can remark upon the perhaps terrifying profundity of this result; perhaps there is no certainty, no destiny, no fundamental understanding of how nature works and who we are. Regardless, we can all still revel in the delights that the pursuit of scientific truth can bring us.

PIGOU SOCIETY

Theo Tomlinson, Moretons, 'The Economics of Formula One', OMS, 22 September

On Wednesday 22 September, the Pigou Society welcomed Theo Tomlinson, *Moretons*, who gave an insightful lecture on the economics of Formula One.

Beginning his talk with the thought-provoking statement "Formula One is an inspiring blend of speed, engineering, innovation and strategic prowess", Tomlinson then presented some facts that struck all in attendance as unbelievable: just entering a competition costs \$5.5 million and the average amount that teams spend on the development of their cars is \$175 million. However, he then explained how this price is justified and how they manage to afford it. Liberty Media puts out \$1 billion in prize money, which is quickly used up on next season's developments and on salaries of not only the drivers but also the 50,000 employees. For teams with the most notable drivers, the cost of salaries is \$40 million (for Max Verstappen) and \$50 million (for Lewis Hamilton). But this still raises the question of where the rest of the money is made? With so much being invested by teams and brands despite the fact that no profit is made (even if you are consistently winning like Mercedes), what's the point?

The owners of Formula One, Liberty Media, bought it in 2016 and allowed Sky and ESPN to provide full coverage of a race weekend for their 435 million viewers. Sky alone pays a whopping \$255 million in order to dedicate a whole channel to it. To gain a better idea of how much this is, LaLiga charges \$175 million a season, in which there are far more games. But this TV money only provides a third of the total revenue for F1.

Another way of funding is through the tracks. These tracks have to pay a large fee for the privilege of hosting a race. The tracks don't get any cut of the race sponsors or TV rights, so they have to rely solely on ticket sales and sometimes the government, as is often the case in Arab nations. However, this is not the case for Silverstone, which is totally reliant on ticket sales to cover the \$23 million hosting fee each year. This means that the race organisers have made a regular loss for the past few years. The capacity of 150,000, or two Old Traffords, cannot cover the fees without extortionate ticket prices, and even then sometimes fails to do so. Some governments, such as those in Bahrain and Abu Dhabi, cover these costs to secure mass tourism and international exposure to the country. These tracks are littered with huge sponsors, pouring millions in order to get the exposure they are after. Saudi Aramco, Heineken, Petronas and the iconic Rolex clocks everywhere provide 20% of Liberty's revenue. This allows Liberty to rake in \$2 billion of revenue per year, half of which goes to the teams as prize money. This prize money is then set up into the wider sport.

The fastest cars start at the front, which creates more attention for the sponsors and more prize money as they cross the 1st line. This allows a faster car to be built and so on. This can lead to domination, which Tomlinson believes the sport has suffered from in the past, as show in the cases of Schumacher and Ferrari, Vettel and Red Bull and Hamilton and Mercedes.

In 2019, Mercedes won both the constructors and drivers championships to earn them a total of \$187 million in prize money. The second-placed Ferrari team accrued \$205 million, more than double the amount that Bayern Munich, Champions League winners, received in the same year when they won the ultimate prize in world football. To maintain an equal playing field, all teams receive regular annual payments of \$35 million for taking part in more than two seasons, which already surpasses the upfront cost. Williams, too, benefits in a similar way to Ferrari. With Williams being the only independent team, they received seventh largest amount of money from Liberty despite finishing tenth to ensure its longevity and success in the sport.

There is also another option for teams falling foul, which is to recruit drivers in pursuit of financial stability. While these drivers are often not champion material, they bring huge family wealth or sponsorships to the team, which in turn allows the car to be developed further. If a driver like this can survive at this level, they are likely to be chosen over a more talented one. Current examples are drivers like Nikita Mazepin. However, Formular One is about more than just turning a profit for the team. All of this money that teams spend on their cars is in an effort to get more exposure for the brands they advertise. For example, Alpha Tauri, owned by Red Bull, is actually a clothing brand, and their marketing through drivers' sporting of their products will no doubt give them a stronger footing in the fashion industry.

The talk finished with a Q&A session that covered many interesting things such as Tomlinson's personal opinion on how this coming season will go. All in all, it was a fascinating talk and many thanks go to Tomlinson for delivering the lecture and to DMM for organising the event.

THE TEMPEST

OH Players, Speech Room and Sam Wanamaker Playhouse

To celebrate their 70th anniversary, the Old Harrovian Players presented this year's production of The Tempest at the Sam Wanamaker Playhouse, a candle-lit Jacobean auditorium that is part of the Shakespeare's Globe complex, as well as on the Hill. The project raised funds for the future of the Jeremy Lemmon Project, in which Harrovians work with students from partner schools, under the mentorship of the Globe's practitioners. Here, two Harrovians reflect on different performances of the same production – in the Sam Wanamaker Playhouse and in our own Speech Room respectively.

The Tempest, Speech Room

When I went to see *The Tempest* performed by the Old Harrovian Players last Sunday, it was easy to expect the quality performances from the cast of old boys. However, the notable additions and interesting choice of stage design allowed for it to certainly reach and exceed the high standards they have displayed previously. The play opened with Prospero, played by Adam Shipway, and his powerful voice and confidence. It was impressive to see how either Ariel or Prospero would use different levels, for instance by standing on a table, to show control over the scene. The directorial choices also created a much sterner Prospero by having him regularly overlooking the stage, giving the character a controlling persona.

The often neglected comedic elements of *The Tempest* were also highlighted as the characters of Trinculo, Stephano and Caliban, played by Alex Allin, Tom Cleeve and Tom Inman respectively, worked their charm on the audience. The positive reaction was clear. It was especially interesting to see the cast interact with the audience in an attempt to create a more immersive production. This allowed for a wide mix of different talents, making the performance feel consistently fresh each time a new character arrived onstage.



Credit must also be given to the live musical accompaniment, which heightened the emotions of the production across the board and was certainly a welcome addition, picking up where the actors showed slack. It would often accent the movements of the characters to either increase the dramatic tension or heighten dramatic comedy. To be able to enjoy live music that complemented the overall enjoyment of the performance was one of the highlights of the performance and all credit goes to Annabelle Brown for composing and directing the audio accompaniment, as well as all the excellent musicians who delivered it on the day. This would often come under lines that posed a challenge to the actors throughout the performance; yet the persistence was clear, and the recovery prevented the performance from slipping further. These issues, were understandable, as the original script was performed with minimal cuts. It was interesting to see the full play, which gave each character much more content to make them distinct as individuals.

The stage for the production was adaptable, meaning no time was used up modifying the set during scenes. This culminated in a snappy performance that kept the production at a consistently high pace. These excellent technical choices are due to the careful consideration of director Tobias Deacon, *Newlands 2000³*, and his work has allowed for a gripping retelling of a Shakespeare classic.

The Tempest, Sam Wanamaker Playhouse

Despite the many events on a typical Sunday at Harrow, I managed to make my way across London to the Sam Wanamaker Playhouse to experience the latest OH Players production: *The Tempest*, directed by Tobias Deacon. The excitement was palpable as I tried to sit somewhat comfortably on the unagreeable upper-gallery bench. Soon enough, a bearded mage by the name of Prospero (Adam Shipway) rushed onto stage under the candle-lit microcosm of the playhouse's stage to commence the much-anticipated production.

The Tempest is one of Shakespeare's most flamboyant works in terms of production, due to its recurrent use of the supernatural and grandiose scenes, such as a banquet suddenly disappearing or the opening of a grand shipwreck. However, the OH Players largely went for a minimalist approach. As the cast exclaimed their utter fear of death by sea, they synchronised into this fantastic swaying motion that made the playhouse seem frighteningly shaky. This effect of disaster was further boosted by the impressive work of the musicians above the stage, directed by Annabelle Brown. They used a vast array of instruments, from violins to period pieces, which produced an effect of eerie vibration, heavily used throughout the devious acts of the spirit Ariel. In the opening storm scene, with only the human form and the vibrations of music, I was utterly immersed into a world of intense anxiety and panic.

The group of thespians continued to stretch their resources to the full, as they used every crevice of the theatre. Frequently, we saw Ariel's band of spirits enter and exit through the auditorium doors. I almost jumped from my seat as an actor dressed in black started to bark in the aisle right next to me. Even the main characters used this space, breaking the fourth wall, making the experience enthralling. Moreover, I cannot write about this play without mentioning the purely majestic Ariel. Dressed in white rage, the actor (Charlie Cameron) was entrancing as she conjured her spirits and her magic. She perfectly juxstaposed Prospero's upright and ordered portrayal.

Despite the play toying with themes of hierarchy, death and slavery, there was some fantastic comic relief made possible by the actors playing Stephano (Tom Cleeve), Trinculo (Alex Allin) and Caliban (Tom Inman). One delightfully funny scene saw Caliban hide under Stephano's coat, which petrified Trinculo into thinking he has stumbled upon a fish-like creature. The (at points) drunken trio filled the playhouse with laughter and grinning faces.

All in all, it was an afternoon filled with music and magic, making two and a half hours seem like mere minutes. The cast was energetic, and the music, both vocal and instrumental, was simultaneously enchanting and unearthly. As Caliban puts it, there were 'Sounds, and sweet airs, that give delight and hurt not'. The OH Players served their 70th anniversary most gracefully, and I look forward to their next annual Shakespearean masterpiece.

SOMERVELL SOCIETY Charlie de Labilliere, The Grove, 'Corporate Law', NS 10, 21 September

On Tuesday September, Charlie de Labilliere, The Grove, delivered a fascinating lecture to the Somervell Society on the basics of corporate law, its importance, and how it influences today's society. De Labilliere opened his talk with defining corporate law. When you look at companies, there are four factors that are of most interest to the law: firstly, the legal personalities of the corporation, referring specifically to the contracts that are passed and received; secondly, the limited liability of the shareholders, whereby the percentage stake of an individual in a company, and thus the influence they can have over the company, is of most interest and the point at which the majority of legal conflicts occur; the third factor refers to the shares themselves and the trading of them, yet this trend is only relevant to public companies that trade shares on a stock exchange. The last factor is the executive management and board structure of companies. The purpose of corporate law is not extremely complicated. The end goal of corporate law is to maintain the fairness of the markets and the general economic environment to allow new businesses to enter, and to maintain competition in new and existing industries. So that this can be achieved, corporate law must prevent the monopolisation of markets to the greatest extent possible. It is a common misconception that corporate law is an excuse for firms and the government to profit from the multi-million and billion-pound transactions that occur, when in fact the very existence of corporate law is vital to maintain stability in our financial markets.

De Labilliere then moved on to talk about some of the history of corporation and company law. In 1720, the Bubble Act prevented the formation of joint stock companies unless approved by royal charter; the first two members of the Bubble Act were the Royal Exchange and the London Assurance Corporation. This primitive piece of legislation was seen to be the first intervention by the government in corporate affairs. In 1844, the Joint Stock Companies Act was introduced, by which companies were obliged to formally register. Eleven years later, the Limited Liability Act was enacted to protect shareholders from the risk of corporate bankruptcy. In 1856, the codification of major corporate legislation was created under a revised Joint Stock Companies Act. Today, you can find the primary source of UK corporate law in the Companies Act of 2006. The last significant development was the case of Salomon v Salomon & Co. in 1897.

De Labilliere went on to talk about the mergers and acquisitions, which form the majority of business for corporate law firms. The major difference between merger and acquisition is that in merging you merge two entities into one, whereas an acquisition occurs when one entirely takes ownership of the stock, equity and assets of another. M&A refers to the transactions in which the ownership of companies in transferred or consolidated with other corporate entities. Though M&A are primarily and conceptually the same, two companies moving into one, the greatest distinction between the two types of transaction is that a deal legally structured as a merger may provide an opportunity for the shareholders of both companies to take partial control over the combined enterprise, where, ideally, both CEOs agree that the merger will benefit both sides. In contrast, a transaction legally structured as an acquisition places one of the entities under the ownership of the shareholders of another. The role of corporate lawyers in these transactions is to put together the purchasing agreement itself, to do the due diligence confirming the legitimacy of the deal, and to give advice to both buyers and sellers on how to structure the deal and the accompanying liabilities and risks.

Lastly, De Labilliere described well-known examples of mergers: that of Dixons and Carphone Warehouse in 2014, which was worth £3.8 billion, with the new firm being called Dixons Carphone Warehouse, and Currys and PC World. One of the major risks of the merger was that if the product category in which they specialise were to decline, or if they were to be caught out by technological change, the cost of pursuing such a large merger would be critically damaging to the company. This concluded a fascinating lecture. Many thanks to De Labilliere for presenting it to a very pleased and now more informed Somervell Society.

YOU LONDON

The School hosted the YOU London Conference, at which the Harrow Rifle Corps welcomed a large number of young people from across London and from a range of organisations including Police, Fire, Army, Air and Navy Cadets, St John's Ambulance and the Boy's Brigade. The London Conference is a leadership development conference with practical activities, which included fire fighting on Bill Yard, dealing with road traffic accidents on the Farm track, and use of the endurance course and climbing wall. There were also talks from the Fleet Commander, Metropolitan Police Commissioner and Parliamentary Commissioner for Standards. Some Harrow cadets took part and we would like to take this opportunity to commend Archie Powell, The Grove, Greg Morgan and Graham Lambert, both, Lyon's, for their work in setting up and planning the conference Jake Ramus, Lyon's, for his help over the weekend, and, in particular, PSL for masterminding co-ordination with external groups and our own resources.

DEBATING SOCIETY

Away at St Mary's Ascot, 23 September

On Thursday, 16 Harrovians made the bus journey to St Mary's Ascot for an afternoon of debating and dinner. While this writeup is likely to largely focus on the exploits of our first pair in facing the girls, we hope that it also ends up being true about the majority of our brave participants.



Having disembarked from the bus in Ascot, we were faced with the first motion: 'This house would incentivise vegetarianism'. Opening the batting order was the second pair from St Mary's Ascot. Aurora and Louisa explained why vegetarianism was a good thing both for people's health and the planet, bringing with them well-researched statistics about the importance of vegetarianism in those settings. Biting back was Harrow's second pair, which comprised of Edward Blunt, *Elmfield*, and Aakash Aggarwal, *Lyon's*. They countered the opening proposition in typically imperious style, offering their trademark quality rebuttal.

In the second half of the debate, William Wauchope, The Knoll, oozing class and charm, gave what could be one of the strongest speeches in history, mechanising an argument which converted our highly carnivorous external judge into an animal sympathiser. He explained how animals have sentience and thus rights was a strong pull on the heartstrings of any person. St Mary's Ascot's first pair explained why the key stakeholder in this debate was people in poverty and how vegetarian options didn't need incentivising because they were already affordable through veggie burgers at places like McDonald's. Finally, for the School was Dylan Winward, Lyon's, who explained why his side had won the debate. Although he initially sat down convinced that he had completed a job well done, he was ultimately in for a surprise. The St Mary's Ascot whip speaker, Camilla, in the second tour de force speech of the debate, explained why every opposition speaker, much like a drunk man attempting to play pin the tail on the donkey, had missed the point. Rather than being about vegetarianism, this debate was actually about whether or not incentives would work. She concluded they did not and ultimately won that debate for her trouble.

In the second debate, Alexander Newman, *Druries*, and Vincent Song, *The Head Master's*, were faced with the difficult challenge of proposing the motion that 'This house Would criminalise the payment of ransom". Unfortunately, it was clear that they had not done their homework. In the adjudicatory hotseat, SWB initially described Newman's speech as "showboat", before crossing out "boat" and replacing it instead with "raft". After having done so, he reminded Song of the difficulty of "illegalising" something, given that it is not actually a word. This concluded something of a drubbing in the opening half, with St Mary's Ascot's first pair tidying them up with time to spare.

However, the second half of the debate allowed the School to regain some pride. Winward and Wauchope returned to form by discussing how the criminalisation of ransom would largely impact the main stakeholders in this debate: businesses. Criminalising the payment of ransom would be effective in stopping the bulk of ransom transactions. This allowed them to blitzkrieg St Mary's Ascot's 4th pair, bringing them at least some dignity. Although SWB's feedback continued to roast the Harrow pairs, one could not help but wonder if he was putting on a show for our hosts. At any rate, if a vacancy in the Theology & Philosophy Department is mysteriously filled at short notice in Ascot, that would be no great surprise.

To conclude, we must thank SWB and SMK for kindly taking us for this friendly match. Moreover, thanks must go to St Mary's Ascot for so generously hosting us at their school. After a very sociable dinner, we returned home with useful information on how to debate substituent motions in policy debates. We look forward to returning the favour early next year.

GREENPOWER

Over the course of last year, a team of seven Removes (now Fifth Form) worked on building and racing a Formula 24 electric car. Team Silver Arrow comprised Dylan Kainth (captain), *Bradbys*, Alex Anikin, *The Park*, Joe Gethin, *Rendalls*, Enhe Hu, *The Knoll*, Max Leof, *Bradbys*, Veeraj Puri, *The Park*, and Leo Waschkuhn, *Lyon's*. Despite absences due to the pandemic, the team was able to produce an exciting car, ready for the track.



On 12 September 2021, with weather perfect for racing, the team visited the Top Gear test track at Dunsford Aerodrome as one of 40 teams participating on the day. The Harrovians arrived at 7.30am in high spirits, immediately beginning to set up and make a few final adjustments to the car. At 9am, race officials visited the team paddock, conducting scrutineering and safety checks. The team was given unfortunate news during this, as two of our drivers were too tall, making it unsafe for them to drive. After the checks were passed, the team was ready for the first practice laps at 9.30am. The practice proved vital for the team, as they were able to gather crucial data, suggesting the car was having trouble with its tracking. After constructive discussion, the team was able to resolve the issues, making important adjustments that significantly improved the performance of the car. This was proven by the car being much smoother, and easier to drive in the second practice session from 11.30am.

After a brief lunch break, the Silver Arrow team got ready for the race. The objective of the competition was to complete as many laps as possible, in four 20-minute races, comparing the overall distance covered by each team. As such, the strategy was to conserve our limited battery life, while still trying to push the car to its fastest. The car proved to have one of the fastest acceleration speeds on the grid, overtaking almost all of the cars from the back of the lineup. However, once the car reached its top speed, it was quickly overtaken by faster cars. Nonetheless, with an excellent effort from the drivers, the car was able to overtake many cars and put on an impressive performance for a team fairly new to the sport. Puri had the fastest lap time for Harrow, reaching 21 miles per hour.

The team concluded the day, feeling grateful simply for the experience of being out on the track, awaiting the results that were to follow. A week later, they were ecstatic to discover that their performance in the round at Dunsford Aerodrome had earned them a place in the finals, which will be held at Goodwood Motor Circuit on 10 October. The team is working on improving the car and placing themselves in a competitive position to challenge for a race victory in their category.

ALEXANDER SOCIETY

Shaan Nagra, The Grove, 'The unanticipated Japanese triumph in the Russo-Japanese War', Vaughan Library, 21 September

The Alexander Society was delighted to host Shaan Nagra, *The Grove*, on 21 September. Nagra's talk entitled 'The unanticipated Japanese triumph in the Russo-Japanese War', showed off a key piece of history which has never really had any light shed onto it.

Before the war between the Russians and the Japanese commenced, the Japanese had just fought a war called the Sino-Japanese war (1 August 1894-17 April 1895). This, however, led to the humiliation of the Japanese when China sued the Japanese for £17 million in war indemnities as well as Taiwan, Pescadores, parts of Manchuria and four treaty ports.

At the time, the Russians were ruled by Czar Alexander II, who underestimated the Japanese. The Japanese were governed by an Emperor with absolute power, which allowed for rapid development. This was needed after another humiliation during the 1850s when President Milliand Filmore sent over Matthew Perry with 60 men with pistols. For many Japanese people, this was the first time they had seen these kind of machines and, realising how far behind they were compared to the rest of Europe, they started to redesign their army to be like the that of Prussia. So, thanks to the Emperor, Japan was able to catch up with Western Europe and build up a new army just in time for the Russo-Japanese War.

The war began in 1904 over who should own parts of Manchuria and Korea. Dubbed recently as World War Zero due to the investments from Britain, the USA, Germany and France, it was fair to say this was more than just a petty war. While the USA, Britain and Germany backed the Japanese with funds, the French decided to back the Russians with investment. The Japanese had invested much of their income in defence, while the Russians only invested 10% in theirs. Furthermore, the Russian soldiers lacked adequate training and had low morale, meaning the conflict could only go really one direction.

After the Russians failed to negotiate any kind of peace treaty with the Japanese, the Japanese said that they would only go to war if northern Korea was touched and Japanese sovereignty was threatened. Furthermore, the British promised that they would help the Japanese if a power allied with Russia also declared war. Due to this, the people of Japan felt confident in going to war with the Russians.

Therefore, on 8 February 1904, a declaration of war was sent to the Russians. However, three hours before it was received by the Russians, the war fleets of Japan attacked the Russian fleet at Port Arthur. This showed the Russians that the Japanese were there to conquer and that they would not just let the Russians dictate the terms of the war. After the battle of Port Arthur, there were two main battles that impacted the course of this war.

The Battle of the Yellow Sea was fought on 10 August 1904 after the battle ships commanded by Rear Admiral Vitgeft tried to escape from Port Arthur and join up with the rest of the Russian fleet in the Pacific. Although the ships initially managed to escape due to Heihachiro's failure in organising his ships, they were pursued into the Yellow Sea and forced to return Port Arthur, eventually surrendering to the Japanese in January 1905.

Another major confrontation was the Battle of Mukden, which was fought between 20 February and 10 March 1905. This was the largest land battle before the First World War and the most crucial battle in the Russo-Japanese war. with around 600,000 combatamts. The Japanese won the fight by flanking round the Russian line and encircling them. With no hope left for the Russians, General Kuropatkin gave the order to retreat to the north at 6.45pm on 9 March. The Russian withdrawal was complicated by General Nozu's breach of Russian rear lines over the Hun River, and the Russian retreat turned into a disorganised rout. The panicked Russian forces abandoned their wounded, weapons and supplies in their flight north towards Tiehling. At 10am on 10 March, Japanese forces occupied Mukden. After they occupied Mukden, the Japanese continued thei pursuit of the Russians, but were hampered when Oyama knew that his army's supply lines were stretching too thin; however, he continued the pursuit of the enemy, though in a slower manner. The pursuit was stopped 20km short of Mukden, but the Russians were already fleeing farther north from Tiehling towards the Sino-Russian border at a fast pace, and the battle was over with the Japanese as the victor.

Finally, after a year of fighting, the Treaty of Portsmouth was signed with Witte leading the Russian delegation and Komura leading the Japanese delegation. The Russians signed over the 25-year leasehold rights to Port Arthur and the southern half of Sakhalin Island to Japan. However, the Soviet Union would take Sakhalin back after World War II. The Russians then evacuated Manchuria and let Japan have Korea. However, many felt that the treaty was unfair on the Japanese and Theodore Roosevelt, who was mediating, skewed the proceedings towards the Russians and did not allow Japan evverything it claimed.

Nagra finished this fascinating talk with the number casualties one each side. Although not fully known, there weee around 90,000 Japanese casualties, while the Russians suffered about 75,000 casualties with around 75,000 men being captured.

At the end of the talk, Nagra answered all questions that came his way and showed off his extensive knowledge of the subject. Yet another great talk to start the year off for the Alexander Society and many thanks to DF for organizing this superb talk.

MATHEMATICAL SOCIETY

Hadrian Ho, The Head Master's, 'Chaos Theory: The Butterfly Effect', MS 2, 22 September

On Wednesday night in a fully packed MS2, the members of the Mathematical Society were treated to a most informative and inspirational talk on Chaos Theory by Hadrian Ho, *The Head Master's*. While everyone in the room had heard of the butterfly effect, it was fair to say that many perhaps did not quite grasp the beauty of the topic before.

If one of our audience members was feeling rather drowsy on that busy Wednesday night, then he would certainly have been woken up by Ho's striking first question, which he directed towards the floor. Ho's question was, much like the audience in attendance, a vast one: "why are you here?" He expressed the idea that the presence of the various members in Maths Schools that night was not a coincidence: they were all influenced by minute details in their life that ultimately pushed them into coming. Indeed, this chain of influence does not even begin at birth, but stretches further back in time, from the decisions made by our ancestors in caves to our parents' decision to send us to Harrow and not some random place in Windsor. It is this idea that all things influence and are influenced in some way, no matter the size, that form the basis of the idea of Chaos Theory.

Ho then delved into the history of this theory. It all began in 1961 when Edward Lorenz was working on numerical weather prediction and tried to simulate weather patterns by modelling 12 variables. He realised that when initial conditions were changed only slightly, the results diverged dramatically. When the results are plotted on a three-dimensional graph, the trajectory seems to loosely follow a particular shape despite never revisiting the exact state again. This graph resembles a butterfly's wings, which gives Chaos Theory its most iconic name. Lorenz therefore concluded that a small change in one state of a deterministic nonlinear system can result in large differences in a later state.

Ho then gave us some examples of chaotic systems that exist within our lives, namely the solar system, ocean turbulence and the three-body problem. He then emphasised the extreme sensitivity of the initial conditions that could cause totally different results, meaning that it is practically impossible to predict results with 100% accuracy. Ho used examples such as crypto currency and elections to demonstrate this idea. And thus, since we cannot predict anything accurately and nothing in the world is exact, Ho asked us, "why stress about life?" This is perhaps rather ironic to older boys who had around three preps due the next day...

The lecture then took an interesting turn and became similar to a spiritual awakening, where all in the room were uplifted and inspired by a series of most motivational quotes, all from the wisdoms of Hadrian Ho, such as: "You are always the first to do something", "You are always best at doing something" and "You are the best at what you can be right now at this moment". Indeed, Ho concluded that since we can never be exactly sure of an outcome, then the world's possibilities are endless and that as parts of this chaotic system, we can easily influence others without realising. He finished with the message that we should all "Be kind, be forgiving and be happy."

So, if you are reading this right now, why don't you widen your horizons with the endless possibilities that this world provides? Indeed, remember that you could become 'the butterfly that flapped its wings'...

Many thanks to Ho for such a fantastic lecture and PDR for supervising.

INTER-HOUSE JUNIOR DEBATING COMPETITION Round 2, OH room, 28 September

On Tuesday 28 September, in a jam-packed Old Harrovian Room, boys and beaks gathered to hear the second heat of the Inter-House Junior Debating Competition. Lyon's and The Park proposed the motion that 'This house backs motorwayblocking environmental protests'. The motion was opposed by Rendalls and Moretons.

To open the batting, Saarvin Cambatta-Mistry, *Lyon's*, defined the motion with the authoritative flair that we have only come to expect from him after a strong debut season in the Debating Society last year. Emphasising the busyness of the modern-day man, he explained how it is necessary to be disruptive when protesting in order to command the attention of the people and the government. With the underlying message that where non-disruptive protests don't work, disruptive ones do, Cambatta-Mistry put the proposition off to a good start.

However, this was countered very ably by Arturo Saville-Mascioni, *Rendalls*. With his talk of how this motion "like literally hurts people" and his *Vogue* magazine white sneakers, it seemed as though he was attempting to bring the debating society firmly into the hashtag age, whether LAM likes it or not. More powerfully, he argued that this motion hurts people and hurts the movement by antagonising the people. Although he was perhaps the best speaker of the day in terms of expression and delivery, there were still lingering doubts about how he continued to hold the title of King of the Unsubstantiated Claim.

Speaking second for the proposition was Jamie Jevons, *Lyon's*. Although initially in danger of falling into a shaking fit, Jevons summoned the Churchillian spirit that haunted the War Memorial Building to create a case that will be remembered for a long time. He explained how the climate crisis was something that we had to deal with now, and in a collective manner. This completed a one-two punch with his partner that threatened an early knockout. Although dealt a difficult point of information, he recovered so well that ultimately, through his speaking, Jevons crossed that sacred line that separates the functional from the formidable.

Next for the opposition was Archie Young, *Rendalls*. He argued that this motion was dangerous and counterproductive and would make the protestors seem like "entitled hooligans". Not only that but it undermines the government and leads to more car crashes on what can already be dangerous stretches of the British road network. Heavily armed with a never-seenbefore process for deciding what lends a protest legitimacy, Young's calmed more monotone style brought the debate back from the stratosphere into more familiar presentational territory.

Opening the second half of the debate was Jack Meredith, *The Park*. Although he started in a questionable style by claiming to redefine the motion without making any significant changes, Meredith presented with a rhythm usually found only in the best of Ted Talks. Although this delivery proved extremely effective, it was difficult for the speaker to grapple with being nearly as derivative as a straight line from an x squared curve, and as a result, had to resort to desperate measures. However, in spite of being notably short on rebuttal, it was an extremely promising debut from a boy who we're sure the Debating Society will be seeing a lot more of in the future.

In contrast, Aaron Sohal, *Moretons*, did not fail to bring new material into the debate by any stretch of the imagination. Armed with an argument worthy of a Sixth Form armchair economist, he explained how the M25 protests led to people losing their jobs, money and livelihood. According to Sohal, this made them "vexed". Unfortunately, although he was extremely adept at proving the magnitude of the economic impacts of this proposition, a weaker area was perhaps proving why it was important. He then said that these economic impacts could lead to riots, a notion which was questioned heavily in the floor speeches later on.

Finally, for the proposition was Veeraj Puri, *The Park.* Fresh from the confidence of making his external debate against St Mary's Ascot the week before, he refried the not-quite-yet-stale points that had been made down the proposition bench. While disavowing "borderline terrorism", he asked whether "we wanted to be responsible for our own demise". Although it was not immediately clear whether he was referring to the climate or the fact that he had just delivered a speech with all the charisma of a 43rd-floor accountant, it was nonetheless a fitting end to a strong proposition case.

Wrapping up for Moretons was Nick Arnison. Powerfully, he included a number of concessions in his speech in order to appear like the voice of reason. Perhaps less powerfully, he blasphemed in front of our devoutly Catholic adjudicator before ironically telling the audience that "those people who protest are stupidity". While some English Literature A level students might argue that this was an intentional artistic decision, it is certainly one that raised a few eyebrows in the audience. After a lively floor debate, LAM concluded the debate by counting the floor vote. In the event, the motion carried with a fairly sizable majority. Thanks must go to SPS and LAM for helping to facilitate such a fantastic evening of intellectual jousting.

SENIOR GEOGRAPHY SOCIETY

Will Howitt, Lyon's, 'Is the Physical Geography of Russia a Limit on Geopolitical Power?', OMS, 28 September

On Tuesday 28 September, Will Howitt, *Lyon's*, delivered a fascinating lecture to the Senior Geography Society on whether Russia's physical geography plays a role in their limit of power. The lecture began with a simple answer to the lecture title: yes, physical geography certainly does limit Russia's geopolitical influence and power.

After an introduction with the definition of the term 'geopolitics' (essentially the study of how politics is influenced by geographical factors), the focus shifted to European Russia. This is the part west of the Ural Mountains, where 77% of the population (roughly 100 million people) is situated, mostly in the major cities of Moscow and St Petersburg.

The first main problem of Russia's physical geography is its coastline and lack of warm-water ports. Before 2014, Russia had no warm-water ports, which are any deep-water ports that do not freeze over the winter months. Warm-water ports are important for two main reasons. Firstly, and most obviously, the ability to trade through ships is lost. Secondly, it means the Russians are unable to place the navy and its ships in the port, which makes the coastline more vulnerable to attack. However, since 1971 Russia has had a presence in Tartus, Syria, which is a warm-water port, making it the only naval base Russia currently has outside the former Soviet Union. The port acts as a gateway into the Mediterranean Sea, which proves to be important later on. On 14 March 2016, Putin announced the closure of military operations in Syria. Nevertheless, he stated that Tartus would remain in 'routine mode', with troops stationed to monitor the situation in the country. Today, a garrison of Russian troops is still deployed there to protect this Russian asset, and to operate the refuelling and resupply of ships returning to Russia.

Another campaign for Russia's pursuit of a warm-water port can be seen in the annexation of Crimea. In 2013, Putin offered Yanukovych, former president of Ukraine, a pact too lucrative to turn down. After violent fighting in Crimea, there were many civilian casualties, but ultimately Russia took control of Crimea and most importantly, the port of Sevastopol, making it Russia's only warm-water port to this day. However, multiple issues surround Russia's access into the Mediterranean. For example, Turkey, a NATO country, did not allow Russian ships to pass in the event of war. Moreover, a gateway to the Atlantic through Norway or Denmark and routes linking to the Indian Ocean via the Suez Canal are all under NATO control. And so, if a war were to take place, Russia would not be able to mobilise its navy.

However, Russia's physical geography also has positives that help them economically: this is the large supply of natural resources, mainly coal and natural gas. These fossil fuels are exported mostly into Eastern European countries for relatively low prices, in exchange for loyalty to Russia, expanding the country's sphere of influence into Europe. Much of this supply comes from Siberia, in gas fields such as Kovyktinkoye, holding 1.2 trillion cubic metres of gas, and Chayandinskoye, holding 1.5 trillion cubic metres. Russia is estimated to have 24% of the world's natural gas reserves. 144 billion barrels of oil are still underground in the large petroleum basin in Siberia as well. The true reliance on these resources of their economy is reflected through the fact that 60% of Russia's exports are oil and gas, providing over 30% of the country's GDP. Without Siberia, the country would not only be much poorer, but would also fail to exert influence over NATO countries in Eastern Europe with its extensive natural gas supply lines.

Russia's stance on climate change was presented officially through Putin in March 2020, when he showed a strategy to try and reduce greenhouse gas emissions by 2050. However, this may have been used to influence many countries in Eastern Europe to take similar stances, prolonging Russia's political influence over these countries. Interestingly, as average global temperatures increase, many of the cold-water ports may start to change into warm-water ports, which may prompt the Russian government to take fewer steps to reduce greenhouse gas emissions.

2000 miles of Russia's plains are exposed to attack from Europe. Although this may render Moscow vulnerable, Russia has never successfully been invaded in this manner. Most famously, it has been attempted twice, once by Napoleon in 1812 and once by Hitler in 1941. Both invasions failed for the same reason: once the armed forces of these empires had breached into Russia, their supply lines were far too long to be sustained.

The lecture concluded with Russia's fear of buffer countries, such as Czech Republic, Hungary, and Poland, joining NATO. Russia's worry lies in the idea that one attack on a NATO country means an attack on all NATO countries. This shows how an invasion such as the annexation of Crimea would prove to be a lot more challenging, since it automatically means Russia has declared war on over 25 countries, including the USA. This concluded what was an extremely gripping and engaging lecture to the Senior Geography Society. Many thanks to Howitt for his outstanding talk.

FIELD WEEKEND



As part of the CCF Field Weekend, nine Fifth Formers taking part in Conservation with NSK engaged in a set of activities on the Hill. On Friday, we were able to go down to the Farm where we encountered the cattle and donkeys being reared on the School grounds. We learnt about the wildlife on the Hill and the various types of trees, hedges and other flora prominent around the School. Our first task was to free young trees from being smothered by grass and weeds. This was quite challenging as it required a keen eye to distinguish between a tree and other hard-stemmed weeds that may have looked like wood. Fortunately, without too many tree-casualties, we successfully freed the young trees, which should grow into a new hedgerow in the coming years. After a short break, we returned to the Biology Schools, where we learnt to set up live mammal traps. We set these traps using grass, oats and small pieces of apple to lure in voles or woodmice lurking around the Rifle Range Field. After strategically placing our traps, we called an end to the day, waiting to see our captives in the morning.

The next morning we returned to the Rifle Range Field to check our traps where, unfortunately, for the first time in Conservation history, we had no success! With no luck for any of our traps we returned to the form room, where we learnt about the mammals that we were hoping to capture. We learnt about different types of voles such as the field vole and bank vole and how to distinguish between them. After a lunch break, we returned to the fields, looking to forage as much as we could. We collected seeds and fruits such as haws, hips, sloes, acorns, conkers, hornbeam seeds and late blackberries from all over the School grounds. However, interestingly, there were no acorns this year - it is not a 'mast year' for oaks as it was in 2020. With all our collected seeds and berries, we were welcomed to the Gayton garden, where we hand-picked Bramley apples, to make an apple crumble. With a great team effort using outdoor equipment we prepared our berry-filled apple crumble and put it in to bake. While we waited for the crumble, we all participated in a Conker Tournament. Despite great attempts from everyone, our participation was in vain, with a clean sweep victory for NSK, as he managed to obliterate anyone's conker that would challenge him. We ended the weekend by eating our delicious apple and berries crumble, which tasted even better knowing we enjoyed it 'farm to table'

OPINION

HERE AND THERE

Hanno Sie, *Newlands*, competed in the Under-19 Hertfordshire country squash championships over the weekend. He finished in third place.

CORRESPONDENCE Letters to the Editors

In response to Dylan Winward's letter in last week's edition, it would seem a timely reminder to lay out the philosophy and contributing factors which lay behind the foundation of the sport programme at Harrow, particularly in relation to the first-term sport choice for Shells.

We are truly fortunate as a school to be able to lay on such a varied and effective sport programme, with outstanding coaching, excellent facilities and superb performances from the boys in training and matches every week. External validation in the form of international and national recognition, boys pursuing their sports professionally after Harrow and, of course, the excellent results we achieve as a school week in, week out, are also things Harrovians and the beaks can be proud of. However, the shining light of the Harrow sport programme is not the results or the international accolades, but the whole-School participation in sport of some form.

Rugby is the School's major game in the first term and we pride ourselves on the number of boys who play rugby throughout the School; our depth is almost unmatched throughout the country and, as an example, against Dulwich, we were able to provide competitive fixtures for over 350 Harrovians, many representing their new school with their new friends for the first time. We feel, and this is with the backing of House Masters, that in the first term it is vitally important for the new Shell boys to

experience the camaraderie that you laud in your letter and to be part of a collective Harrow squad; the level and form of rugby is adapted for all boys to fit their level of competency, the full-contact game, which many boys love, all the way to the non-contact rugby group for boys who are new to the game and who can focus on ball skills, movement, creative problem-solving and having fun with a new and diverse range of friends from different Houses. We employ a range of expert external rugby coaches, who include professional players and ex-international-level coaches, who ensure that all sessions are active, purposeful, enjoyable and safe and not simply consisting of boys 'being thrown to the floor'. As boys move through the School, they are given more freedom to make their own sport choices and many opt to move away from rugby; yet, the continued growth of the rugby club suggests that a strong proportion of boys are voting with their feet to continue playing.

There are, of course, myriad other logistical issues that would be presented with free sport choice for Shells, such as how to manage staffing, facilities and finding competitive play should suddenly 120 Shell boys opt to play badminton, want to use the climbing wall or descend on the fencing salle in the same time slot. However, the core of the issue is more to do with our genuine belief that the boys' induction into Harrow through their first term is greatly aided by their ability to play mass participation sport, to represent their school as a collective on the rugby field and to find their way as new Harrovians meeting new friends, trying new experiences and challenging themselves with a new skill in a new context for them. This social connection is vital in the introductory years at Harrow. Training within rugby enables boys to safely play within House competitions and develops the foundation of the House camaraderie, which is so impressive and important to us all.

From a medical perspective, rugby is a sport that has its risks, as all sports do, but doctors have stated, when coached and played in the right way, these can be minimised and the positives of the game can then be the focus. The benefits of the game have a lasting effect on boys in their time at Harrow and in later life. It develops social skills and an understanding of how to work effectively as a team. It develops respect and teaches boys how to communicate clearly in competitive or challenging situations, often strengthening friendships. Finally it offers boys an opportunity to lead in a group environment, developing confidence and self-esteem, improving our mental well being.

Of course, then, when 4.30pm comes along every Tuesday or Thursday, all boys are encouraged to try something different and play another sport in the second sport slot; furthermore, priority on Thursday afternoons is given to non-rugby fixtures and thus the ability to play in a rugby squad, while also playing and representing the School in squash, fives or any of Harrow's 26 sports, is an option for all boys, Shell or otherwise. We would argue that our sporting provision is outstanding and unrivalled, our performances on a national scale, our range of offering, our quality of coaching and the sheer numbers of Harrovians engaging with sport across the School; we always welcome the discussion on how we can further improve our sport provision for all boys but we stand behind our belief in the core principles discussed above.

> Best wishes, RAJF, JM, JLM, SB & DH

GAFFE AND GOWN

Quips from Around the Hill

"Mate, I'm such a player. You know that Japanese chap who got arrested for fraud after dating 35 women at once to get more birthday presents? He's is intimidated by me." "Speaking to a girl is just like taking a block test." "You fail at that as well."

SUDOKU Persevera per se vera

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

IN FAVOUR OF PRIVATISING THE NHS

By Daniel Sidhom, The Knoll

Many people regard the National Health Service to be leading the world in terms of equity of healthcare access and ensuring people do not suffer financial hardship when they are ill. The NHS was founded by Aneurin Bevan, a Welsh Labour Party politician, in the year of 1948 following the Second World War. Despite opposition from both his own and opposition parties as well as the British Medical Association, the National Health Service Act was passed, nationalising more than 2,500 hospitals within the United Kingdom. However, as Margaret Thatcher once accurately stated, "Socialist governments traditionally do make a financial mess. They always run out of other people's money". By this, Thatcher was implying that socialist ideologies lead to slow economic growth, less entrepreneurial opportunity and competition, and a lack of motivation by individuals due to lesser rewards. With this in mind, I would like to explain why I believe the NHS should be privatised.



Firstly, a private healthcare system gives people greater choice of treatment. While the NHS is mostly seen as a "onesize-fits-all system", in the private healthcare system you often have more flexibility in choosing a doctor as well as medical facility. Additionally, many patients form a strong bond of trust with a certain doctor, and may feel uncomfortable with being referred to other consultants constantly; that is certainly the case for the NHS. Therefore, being able to choose the same doctor every time is a very important advantage of the private healthcare system. Likewise, the NHS is notorious for long waiting times for patient treatments, especially since the onset of the COVID-19 pandemic. In fact, according to The Health Foundation, 94% of all NHS hospitals in the UK are experiencing the worst performance against waiting times targets since the targets were set. This includes the highest proportion of people waiting more than four hours in A&E departments since 2004, and the highest proportion of people waiting over 18 weeks for non-urgent (but essential) hospital treatment since 2008. In 2016 alone, more than 45,000 people were waiting more than a year for hospital treatment. The target for treating cancer patients within 62 days of urgent GP referral has not been met for over five years, and more people are experiencing lengthening delays in getting GP appointments. However, with the private healthcare system in place, patients will often have much shorter waiting times, because the medical facility is less busy and the firms themselves have efficiency incentives to provide better services than the NHS. In private care, patients are seen within a week of their GP's referral request, and necessary treatment procedures, whether curative, palliative or preventative, are arranged within a few days.

Secondly, with an ageing population and increased range of treatments in the UK, demand for healthcare is rising faster than economic growth. This means that the government is having to spend a higher percentage of government spending on healthcare, but are still inevitably struggling to keep up with expectations. I do not blame the Tory Party for this; in fact, I greatly support the view of Jacob Rees-Mogg, that a greater role for the private sector enables healthcare providers to keep up and reduce the burden on government spending, enabling lower tax rates. According to the Daily Mail, an investigation by Good Health has identified more than £7.6 billion being wasted by the NHS every year: £1.23 billion on compensation and legal fees paid out in 15,000 cases of negligence, £1 billion on doctors ignoring NICE guidelines on treatments shown to work, £1 billion for unjustified price hikes for medicines, £2 billion on over-payment for basics such as soap and paper towels, £1 billion on over-payment for hospital running costs such as cleaning and electricity, £300 million on unnecessary hospital admin, £100 million on unnecessary legal bills in cases NHS conceded and a further £970 million combined on medication that patients do not need and management consultants. With so much money being poured down the drain, there is no shock to why the Tories cannot afford to invest more money into the NHS. Not only do private healthcare firms enable lower tax rates, but they are also not limited by a public budget which may limit access to expensive treatments. Moreover, as a result of the NHS being limited by a public budget, it does not have access to as much funds as the private healthcare systems. This means that public hospitals and health care facilities are often overcrowded, and lack certain comfort amenities. Private health care facilities, on the other hand, are usually well maintained, with private wards, private bathrooms, phones and better tasting food for all of the patients.

Thirdly, government services can often become bureaucratic and experience diseconomies of scale. It is with no doubt that the NHS is over-staffed and filled with too many administrators. Indeed, we have just seen above how £432 million is spent on management consultants alone, with an added £100 million on management consultants for the latest NHS reorganisation in 2020 (according to the Daily Mail). Private healthcare can avoid these tendencies to bureaucratic inefficiency.

In conclusion, I strongly believe that private health insurance is far more efficient and effective than state run health care systems. My main problem with the NHS, is that when people say it's affordable, this is something that is affordable to the person that is receiving treatment in the NHS hospital, but it is not affordable to the country. This has already led to a supply side issue with the NHS, resulting in the devastating shortage of doctors we have today. According to Sky News, as of 13 September 2021, the NHS is short of around 50,000 doctors ahead of what is expected to be one of the worst winters on record. The British Medical Association said the number of doctors in England has fallen to 2.8 doctors per 1,000 people, which is lower than the EU average of 3.7. This ultimately decreases the quality of care available. In my opinion, healthcare is not a right for both moral and practical reasons, and it is better for it to be treated as a good instead. That way, you get a market process that leads to lower prices and better care over time.

METROPOLITAN

BEAKS OF THE HILL

Beaks of the Hill continues with Mr Siew-Chiang Lim (not Dr Siew-Chang Lim, as is erroneously indicated by the Bill Book), the new Head of Maths. SCL is fresh from another British allboys boarding school, Sherborne School in Dorset, where he was also head of Maths. He has, in fact, had a long history of teaching at similar schools. Before his five years at Sherborne, he had taught at Framlingham College, and before that taught at a boarding school in Borneo for 17 years.

Having taught at boarding schools for decades (and having been a housemaster at one point), SCL is used to the rhythms of a school like Harrow. Here, he is a West Acre Tutor (he described his Fifth Form tutees as a 'nice nightmare' when assembling for a Pizza Express outing) and helps out with squash. He had also formerly coached basketball - perhaps he will make an appearance on the court.

SCL was born in a small village in Malacca state, on the southwest of the tip of the Malay peninsula – that long arm of land that reaches southwards from Myanmar and Thailand in Southeast Asia. His father pulled rickshaws and his mother washed clothes (he has fond memories of his mother's Hokkienstyle cooking, recommending Eastern Fire, just down the Hill, for the authentic experience). Though no NP, SCL is a pretty accomplished linguist; he can speak Malay and Mandarin (and of course English, his third language) and is acquainted with Teochew, Hokkien, and Hakka Chinese as well as Cantonese.

Being the Head of Maths, it would have been unforgivable to give no mention of SCL's interest in the subject. His favourite topic in maths is group theory. Groups are fundamental abstract concepts, which better-known concepts like vector spaces are examples of. Particularly fascinating is how group theory extends concepts like an identity or inverse (similar to the roles of identity and inverse matrices, for example) to more general abstract entities. SCL also pointed out the drive and love for mathematics of some of the great mathematicians, giving Newton as an example. During the Great Plague of 1665-66, Newton left disease-ridden Cambridge for his family home, Woolsthorpe Manor. There, in a lockdown of sorts during a national pandemic, he did not binge-watch Netflix, but instead made a series of groundbreaking mathematical and scientific discoveries; for instance, it was in that time that he generalised the binomial theorem beyond the positive integers: an inspiring anecdote on pandemic productivity, which SCL's students will surely have quickly memorised off by heart.

SCL gave one final point on the differences between maths and the sciences. Unlike the sciences, high-level or even postsecondary mathematical research is often very difficult to frame to the humble layman, leading to the subject falling somewhat to the wayside. Unlike in biology, where one can grasp the importance and significance of, say, the recently announced Nobel Prize in Medicine, having a grasp of what exactly the 2018 Fields Medal was for (i.e. Akshay Venkatesh's "synthesis of analytic number theory, homogeneous dynamics, topology, and representation theory, which has resolved long-standing problems in areas such as the equidistribution of arithmetic objects") is more difficult. Though this is the case, it's still all the same thing – MATHS – and what draws you to maths now will keep you hooked if you carry it on.

In all, we hope that SCL feels at home on the Hill, and we look forward to seeing the good things he will bring to Maths Schools, the squash courts, and West Acre.



20SavilleMascionA@harrowschool.org.uk



PHOTOGRAPHY CHALLENGE "Street"



1st Joseph Li, The Grove, 'Man with dog'



2nd Miss Emma Pinto, 'African Street'



3rd Rei Ishikawa, Elmfield, 'Temple'



Honourable mention to Rafe Hogben, *Newlands*, 'Woman on bench'

Li's photo was outstanding. The focal point on the man and his dog facing opposite ways and the blurry man dynamically riding by on his bike made for a nice contrastbetween the two. I also absolutely loved the colour grading used here; the slight warmth to it is a very nice touch and makes for a beautiful composition.

Miss Pinto presented a different environment, which was beautifully captured, and I like the leading lines that disappear in the distance, the gravel beige contrasted with the greenery around, perfectly highlights the different nature of street in a different environment.

Similarly, in Ishikawa's photo, I really liked the used of leading lines to draw attention to stunning temple in the background, the approach overall with how this photo was taken to somewhat perfection.

The editing in Hogben's black and white is superb, the quality of the photo is fantastic and the concept behind it is intriguing, and overall made some great progress.

Great work this week, thank you for all the entries and I am eagerly looking forward to seeing more in the future!

HARROW HAIKUS

These haikus describe places around the School. Can you identify them all? If you think you know where they all are, email SMK, and you could win a book token!

The rickety stairs Worn down by history's step A feeling of old

A small lake of seats Walls adorned with headmasters History abound

Where boys called "here, sir" Playful breeze untidies hair By the short brick wall

Monochrome gothic Contrasts the tinted windows Close to the hill's heart

History's wood chairs Grand, red pillars tower high Dripping with great pride

SPORT

FIVES Harrow v Eton, Away, Win 2-1

For the first time in almost two years, Harrow travelled to Eton with the seniors returning victorious.

On a gloriously sunny afternoon, the boys boarded the coach and made the journey over to play the old rivals, Eton College. We were given an extremely warm reception, which set the tone for the afternoon. In the first of two fixtures this term, Harrow performed tremendously. In the seniors, Phoenix Ashworth, The Head Master's, and Jonny Barley, The Grove, dominated the last two sets, having stuttered a little in the first. They played with conviction and confidence particularly at the end. The second pair of Fred Prickett and Nathan Shepard, both The Park (also known as The Park Mafia), got off to a flier in the first set to win it easily 12-1 and battled through the second to win 14-11 having been 11-7 down. A strong third set saw them home. The match of the day, however, went to Will Tate and Edred Clutton, both The Knoll, who narrowly lost in the fifth set decider 10-12. This drew a considerable crowd of Harrovians, Etonians, and masters. It was a stunning effort to nearly produce a clean sweep for Harrow. It is noted that to win at Eton for the seniors is rare occurrence and an extremely satisfying result: proof of the work the boys have put it in so far.



Eight Shells also played. They faced stiff opposition from their opponents, who were a year older. Despite the initial trepidation and the relative size imbalance, the new boys soon found their feet and played some excellent fives. Watch out Eton! Special mention must go to Dominic Hopkins, *Elmfield*, and Jake Turner, *Druries*.

Most important of all though, this fixture was played with enormous sportsmanship and camaraderie on both sides, and Harrow thanks Eton for a fabulously fun fixture (and plentiful cups of tea). We very much look forward to hosting the return leg later this term.

Harrow v Westminster, Home, Juniors, Win 3-0

Harrow hosted Westminster on Thursday, brightening a rather dull day with some brilliant fives. The courts were full of Shells and this much-anticipated fixture drew a large crowd of senior boys and masters, along with a very distinguished former master. Overall, it was a great day for the junior boys, with Charlie Allday, *Moretons*, and Harry Owens, *Rendalls*, winning a tough match 3-0 at first pair, with some excellent returns and cutting. Further down the pairs there were good wins for Dominic Hopkins, *Elmfield*, and Jake Turner, *Druries*, who played up a year, along with Olly Filo, *The Park*, and Tosin Oyegade, *Moretons*, both pairs also winning 3-0. All the Shells made great contributions throughout the afternoon, with some enjoying their very first home fixture. It was also noted that the match teas were very popular! Next week Harrow will be hosting Highgate at home, with play starting at 4:30pm.

Fives National Finals, Under-25 Fives Tournament at Eton, 25 September

Seven Harrovians plus one OH partnering with Fred Prickett set off to take on the elite Under-25s on a gloriously sunny day.

Four groups of four saw Phoenix Ashworth and Jonny Barley qualify into the quarters with some solid fives. They faced some experienced opponents who played intelligently against the boys, and although Barley and Ashworth lost they will have learnt so much for the future.

Prickett and his OH partner Oscar Denby reached a high level of fives and soared quickly into the semis. Prickett's cutting and early volleying were the standouts from their quarter-final match.

They lost a very close match in the first set of the semis and then fell away a little with Denby struggling with cramp.

Caspar Stone, *The Park*, and Shepard improved dramatically after a slightly slow first game to challenge a seeded pair with some brilliant fives. They played the best that I have seen them during a 15-minute spell. They finished the day as finalists in the Plate competition and learnt so much about their game.

Clutton and Tate enjoyed their first few games and triumphed into the semis of the Plate, where they finally succumbed to Stone and Shepard after initially gaining a big lead.

A great day out much enjoyed by all, and great to catch up with OHs Andrew Taylor and Oscar Denby.

FOOTBALL

Development A XI v Marlborough College Boys Under-18A, Won 5-1, 16 September

Scorers: Elliott Taylor, *West Acre*, x2, Bradley Leong, *The Knoll*, Edward Pagani, *Lyon's*, OG An excellent performance to begin the season, capped off with stunning strikes from Taylor, Leong and Pagani

Development B XI v Marlborough College Boys Under-18B, Won 4-2

Scorers: Max Baygual-Nespatti, *Elmfield*, Dami Olugbodi, *The Park*, Hari Moondi, *The Park*, James Gibbens, *West Acre*,

It was a pure delight to see the boys set-up to play Marlborough on a perfect pitch under perfect conditions. It has been far too long since we have been able to enjoy competitive fixtures and it was clear in the very first few minutes that the Harrow team were relishing the opportunity to play again. Setting up in a 3-4-3 formation, Harrow moved the ball around beautiful in the opening exchanges and it was a full three minutes and eight seconds until Marlborough managed to get a touch on the ball. Max Baygual-Nespatti, Elmfield, and captain James Gibbens, West Acre, were pulling the strings beautifully in the middle of the park with great width and dynamism coming from Zain Ayoub, The Knoll, and Roger Litton, Newlands, down the flanks. It wasn't long until Harrow started to cut open the Marlborough defence with Hari Moondi and Dami Olugbodi, both The Park, going close. It was a touch of class from Baygual-Nespatti that broke the deadlock though, with a fine left-footed strike from the edge of the area. The second arrived shortly after with Good work down the right from Litton and Ayomide Awolesi, The Head Master's, releasing Moondi to cross and Olugbodi to finish. Harrow were in the ascendency, controlling the ball and creating chances until an odd moment with the referee changed the momentum in the tie. Marlborough kept plucking away though and managed to get a foothold in the tie when a long ball wasn't cleared effectively by the Harrow backline and eventually struck the hand of one of the defenders. Starting the second half 2-1 up, Harrow just couldn't get in to a rhythm as Marlborough continued to pump long balls over the back three on a relatively small pitch. The scores levelled up when one of these long diagonals caught out the Harrow keeper, Tom Haworth, The Knoll, who had an impeccable afternoon otherwise. The leveller seemed to kick Harrow into gear though and a change in formation enabled Gibbens and Baygual-Nespatti to gain a grip of the game again. Harrow went ahead again following a fine passing move which enabled Moondi to break free down the right and finish low to the keeper's right. The pace of the game slowed down considerably as a lack of fitness started to set in, and Gibbens took full advantage as he strolled through the middle of the pitch, picked his spot in the top corner and hit a perfect strike from 30 yards out. Harrow ended on top to make the journey home feel all the more pleasurable, it's good to be back!!

Goals: Baygual-Nespatti, Gibbens, Olugbodi, Moondi

Development C XI v Marlborough College Boys Under-18C, Won 3-2

Scorers : Bami Awolesi, The Head Master's; OG; Max Bloomfield, Elmfield

Man of the match : Ollie Mitchell, Rendalls

The CXI started the season with a victory. Having taken a 3-0 lead in the first half, this was ultimately a closer game than it should have been, but there were signs of promising play that bode well for the future. The passing through midfield was at times excellent, with Mitchell industrious and Shiraz Mueller, Moretons, dictating play with crisp distribution. Sam Lussier's, The Knoll, hold-up play up front helped pin the opposition back on a tiny pitch and this enabled Bami Awolesi to profit in scoring the opening goal. The second, an OG, came after a super driving run from Jude Esposito, Newlands, on the left wing, and Max Bloomfield, Elmfield, put the visitors into a seemingly unassailable position with a fine third, struck into the top corner from distance. From that point, however, the game got scrappy and Marlborough started to disrupt the play more successfully. They scored from a mix up in the box after a throw shortly before half-time, and the pattern of the second half was similarly disrupted. The host's second came in the final couple of minutes, causing some panic, but Harrow held on for a deserved win. They will need to tighten up at the back in order to confront some of the harder challenges to come, but this was a good start after a long break from competitive games.

Goals: Bloomfield, Awolesi

Development A XI v Forest School Boys Under-18A, Won 2-0, 18 September

Scorers: Blesk Ekpenyong, Druries, x2

A strong defensive display with outstanding saves from Caspar Baker, *Moretons*, in goal with Ekpenyong the difference maker scoring from 12 yards and 50 yards out.

Development B XI v Forest School Boys Under-18B, Won 3-0 Scorers: H Moondi, *The Park*, x2, K Morishige, *Newlands*

Following a strong performance on Thursday against Marlborough College, Harrow looked to maintain the season's momentum as we travelled away to Forest. The weather was beautiful and the pitch conditions perfect for stylish and fastpaced football that we set out to play. We set up in a 3-4-3 and began to control the game as the front three of Ayomide Awolesi, *The Head Master's*, Dami Olugbodi and Hari Moondi, both *The Park*, put pressure on Forest's backline who had also opted to play three at the back. The only scare came early in the game when a rebound in the midfield fell Forest's way. However, Alonso Fontana, *The Grove*, was able to snub out the chance with a well-timed slide tackle.

Harrow put Forest under pressure with some close chances before Moondi was able to open the scoring after Olugbodi won an admittedly questionable penalty. Harrow continued to turn the screw with Max Baygual-Nespatti, *Elmfield*, and James Gibbens, *West Acre*, controlling the middle of the park, resulting in close chances for Awolesi and Moondi. Moondi was able to extend Harrow's lead in the closing phases of the first half. He received the ball on the right just outside of the box and was able to skilfully dribble to a position where he could challenge the keeper. Putting good pace on the shot the keeper was unable to deny Moondi as he claimed his third of the season leaving Harrow 2-0 up as we entered the break.

Following an insightful half-time talk by DH, Harrow started the second half with the same intensity observed earlier in the fixture and controlled the game comfortably. Unfortunately, the side's talisman Gibbens picked up an injury half way through the half, which unsettled Harrow for ten minutes as we gave the ball away too easily. After gaining our composure and slowing the pace of the game down, Harrow once again controlled the game and were rewarded with a third goal. Kanta Morishige, *Newlands*, was able to capitalise on the rebound of a corner with an excellent finish putting his laces through the ball. Harrow continued to play nice patterns of football and created several chances but were unable to further extend their lead, ending the game with a 3-0 victory.

The quality of football, work ethic and professionalism that the boys have shown has been exemplary and leave this side well positioned to push on for the rest of the term. Next week sees us play John Lyon School as we look to maintain our unbeaten record.

Development C XI v Forest School Boys Under-18C, Lost 1-3 Scorer: Bami Awolesi, *The Head Master's*, Man of the match: Mubarak Tinubu, *The Knoll*,

The CXI put in a fine performance, especially in the first half, before running out of steam and falling to a harsh defeat. Forest started the match quickly, putting on a lot of pressure without making the breakthrough. After this initial ten-minute flurry, however, Harrow came into the match with some fine passing team play. Shiraz Mueller, Moretons, was dominant at the back, and Jude Esposito, Newlands, linked up well with the forward players from his left wing-back berth. The opening goal was a super effort, Bami Awolesi, The Head Master's, heading home at the back post after excellent interplay in midfield and an overlapping run from Mubarak Tinubu, The Knoll, making his first performance of the season. After half-time, Harrow had chances to increase their lead, spurning a couple of one on ones, and this was ultimately costly. With fitness levels and concentration waning, a couple of individual errors put Forest ahead and, with the visitors pushing forward for the equaliser, they were able to nick a third at the death. An unfortunate result, but there was much to commend the CXI's performance. Greater fitness and alertness will help the team exploit their technical qualities more

1st XI ISFA Round 2, Won 3-1

The 1st XI had to dig deep at times, coming back well after going behind early in the first half. They were grateful to some excellent finishing from Kitan Akindele, *Newlands*, who netted two goals and to Luke Walton, *West Acre*, and Josh Marcon, *The Head Masters's*, for anchoring the midfield and gradually putting Harrow back on top in an entertaining but disjointed performance.

CROSS-COUNTRY

Seniors, 1st place, 25 September



The six-man Harrow School cross-country team and RCHA set off to Sedbergh School for the English Schools Fell Running Championship. After having endured a brutal six-hour coach journey, the team set up camp and enjoyed some downtime before travelling to the fell. We met Mr Wells, one of the race organisers, who took us on a tour of the course for the next day. Incredible views and wonderful weather almost made the 468m of elevation and brutal climbs seem worth it. Gradually, the squad made its way to the triangulation point at the summit of Winder Fell, where we stopped briefly for a few team photos. A sluggish uphill was soon forgotten, as the previously weary group were seen flying down the other side of the hill at a worrying pace. The enticing downhill was a trap in parts, leading to some interesting footwork at a near vertical descent close to the finish, particularly in the case of the newfound acrobat George Ferguson, Newlands. With a gentle jog left to go, we returned to a boarding house at the school, who kindly offered to give us dinner on the Saturday night. The rest of the evening consisted of some high-level touch rugby, in which Freddie Taylor, Newlands, shone, and then an early night before the big day.

The sun rose the next morning and we all begrudgingly awoke and went about our morning routines. A 5-star breakfast was welcome to us but perhaps not to the poor farmers after the order for '13 bacon baps' was placed. Tents were packed and spirits were high until the peak loomed into view. For most of the boys, this was their first-ever fell race and expectations were kept under control; however, the whisper of a top-3 nationally got around and the team perked up and began eyeing the silverware. With waterproof jackets in bum bags on our backs and what seemed like 50-inch, studded trail shoes on our feet, we were all set to go as the cloud cover cleared. All competitors went off at a rather brisk pace, clearly eager to not get bottlenecked at the first gate. Eddie Jodrell, Elmfield, was off to a flying start, memories of Sudbury Hill possessing him as he climbed. The other five were in hot pursuit. Towards the top of the climb, Jodrell had pulled clear with Graham Lambert, Lyon's, and Tom Emery, Moretons, a bit back and Taylor, Tom Hobbs, Newlands, and Ferguson working together to fight the mountain. It is worth mentioning that if there was an award for fastest descent, it would have been achieved by no less than four of our six boys. Jodrell held his pace and impressed the Cumbrian crowd with his city speed to finish a hugely impressive sixth. Lambert managed to fly down the hill and overtake no fewer than four competitors on the way down with only a minor fall (in his trusty Columbia shoes he would like to add). This left Emery in his dust after having been ahead at the top, and Lambert and Emery finished 11th

and 13th respectively. The other three came through incredibly strongly, all thanks to the rapid descents from Ferguson and Hobbs, and the sheer perseverance from Taylor, to finish 16th, 17th and 18th overall. Thanks to these performances the team was place first nationally, with all six runners in the top 20. As painful as it is to admit, the questionable overnight camping was clearly the reason for the victory, and I am sure the same procedure will be implemented next year as we aim to defend our newly claimed national senior boys team title.

RACKETS

School v Eton, 30 September

1st v Eton College, Lost

An exciting match where Alonso Fontana, *Druries*, and Tarquin Sotir, *Druries*, showed grit and determination to win the third game having gone 0-2 down. A 1-3 loss against a very strong Eton pair is a good effort from a Lower Sixth pair.

Boys-U1nder-8B Lost

Henry Oelhafen, *Lyon's*, and Sam Owston, *Moretons*, played with great spirit to contest two tight games but were then outplayed in the last game to lose 0-3.

Boys-Under-18C Won

A dominant performance from both Brij Sheopuri, *Lyon's*, and Veer Patel, *The Knoll*, who won 3-0 convincingly. Both boys played with focus and confidence.

Boys-Under-16A, Won

A strong performance underpinned by excellent serving in a 3-1 win for Gus Stanhope, *Moretons*, and Charlie Hope, *Rendalls*.

Boys-Under-16B, Lost

A determined, hard-hitting effort from Jack Scott, *The Park*, and Mostyn Fulford, *The Knoll*, despite a 1-2 loss.

Boys-U16C, Won

Freddie Dinan and Jonny Codrington, both *Rendalls*, played with passion and skill to win a tight match.

BADMINTON

1st v Wellilngton College, Home

With HRC Field Weekend depriving us of our budding Fifth Form players, it was excellent to see faces new and old on board the minibus as we journeyed to Wellington College. Spirits were high on arrival, but concern set in when we discovered that Wellington were using feather shuttles, rather than the nylon we are used to. Nevertheless, after a warm up, the first matches began. In Pair 1, Alex Locke and Marcus Tung, both West Acre, demonstrated synergy on court and supreme aggression in their smashes, pushing Wellington's Pair 2 to 22 points before conceding defeat in the first game. However, between an opponent's mid-game broken strings and frequent stoppages for fresh shuttles, the rhythm broke down and the boys struggled to regain their momentum. It was excellent to see the formidable Aarav Tribhuvan, Moretons, partnering Jarvis Lam, The Park, in Pair 2. After experiencing a forensic attack from Pair 1, the boys came back fighting in their second match, winning one of the three games 21-18. Their ebullient style makes spectating

a real pleasure. Stalwart of the team Chris Liu, The Head Master's, was shepherding Jaden Lim, The Head Masrer's, in his first fixture and their win over Wellington's fourth pair tells a story of a developing partnership. After a 22-20 win in the first game, the boys conceded an 18-21 defeat in the second. What made the difference was thinking about their communication on court and, when this became the focus of their energy, the boys were able to secure a 21-5 win in the third and deciding game of the match. Pair 4 was an excellent alliance of veteran returnee Jon Yuan, The Head Master's, and newcomer Sunny Ye, Rendalls, who attuned themselves to their relative strengths and built excellent momentum over the course of the fixture. They pushed Wellington's third pair to a three game match, and then executed a rapid defeat of the fourth pair 21-18, 21-14. Reserve player Wilfred Leung, Druries, travelled with the team and helped to score the fixture, before boldly challenging Wellington's top seed to a singles match. His dedication and fearlessness are highly commendable and we look forward to seeing him develop over the coming season.

Pair 1 Alex Locke and Marcus Tung, both *The Head Master's*) v Wellington Pair 1 Lost 11-21 and 4-21 v Wellington Pair 2 Lost 20-22 and 12-21

Pair 2 Jarvis Lam, *The Park*, and Aarav Tribhuvan, *Moretons*, v Wellington Pair 1 Lost 9-21 and 9-21

v Wellington Pair 2 Lost 10-21, 21-18, 13-21

Pair 3 Chris Liu and Jaden Lim, both *The Head Master's*) v Wellington Pair 3 Lost 12-21 and 17-21

v Wellington Pair 4 Won 22-20, 18-21, 21-5

Pair 4 Jon Yuan, *The Head Master's*, and Sunny Ye, *Rendalls*, v Wellington Pair 3 Lost 10-21, 21-14, 20-22 v Wellington Pair 4 Won 21-18, 21-14

1st Away, Charterhouse Won, 30 September,

After a patchy start to the season, the team were determined to gain a victory and they certainly did. Charterhouse's team had a stellar first pair, who gave the boys a run for their money in all four matches. However, our boys secured the victory in every single other game (that's 24, to be precise). In pair 1, captain Alex Locke and vice-captain Chris Liu, both The Head Master's, showed the others how it's done, winning their remaining matches seemingly with ease. Aarav Tribhuvan, Moretons, and Jarvis Lam, The Park, played with smiles on their faces and followed suit, winning three further matches. In pair 3, Ashton Kong, The Headmaster's, and JB Yang, The Grove, made Charterhouse work hard but to no avail as they snatched each three wins with light-footed determination. Pair 4s Lam and Jon Yuan, The Head Master's, demonstrated the consistent skill of the badminton team, also winning three matches. The boys played with energy and characteristic sportsmanship. We look forward to challenging Charterhouse again later in the term in our own Sports Centre.

WATER POLO

School away v Charterhouse, Lost 5-8

After much of a year spent training without a ball, Harrow travelled to Charterhouse for the first fixture of the season. Harrow started well, with Maxwell Brooks, *West Acre*, scoring early in the deep end. In a tit-for-tat standoff, the two sides

traded attacks, with Jake Ramus, *Lyon's*, putting the ball in the net. In the face of tough opposition, the visitors were kept in the running by Sam McGougan's, *Bradbys*, hat-trick. Harrow's swimming pedigree shone through, with James Rates and Henry Pearce, both *Newlands*, winning every swim-off, allowing the School to set the tone for each quarter. Sias Bruinette, *Newlands*, should be commended for making his Senior water polo debut in the Remove, and likewise Zac Banton, *Newlands*, Max Wilson, *The Park*, and Anton Shashenkov, *The Knoll*, for strong, but perhaps unsung, defensive performances.

School v John Lyon

Harrow's first home fixture of the season saw a well-fought battle between two equally age-group diverse sides, with both teams featuring boys from the Lower Sixth down to the Remove. Unflustered by some of John Lyon's fastest swimmers (and an Olympic hopeful), Harrow quickly found a defensive groove, which built into unrelenting attack. Jake Phillips, Newlands, opened the scoring for the home side, followed by a beautiful top-corner finish from Tristan Bentsen, Druries. An impact substitute in the second quarter, Henry Emerson, Newlands, made an excellent impression on his debut. John Lyon put up a strong resistance in the middle quarters but Harrow held firm, with strong defensive performances from Anton Shashenkov, The Knoll, and Sias Bruinette, Newlands, the latter also opening his goalscoring account for the School. However, it was the Mourinho-inspired wall building of Jake Ramus, Lyon's, that really was the spectacle of the match. Marking John Lyon's star swimmer out of the fixture, there is no doubt that Ramus played as much a role in the score line as any attacking player. Nonetheless, the attack still had much to offer, with Sam McGougan, Bradbys, adding a statement four goals to his tally.

Tries: Bruinette, Phillips, Bentsen, McGougan(4) MVP(s), Sam McGougan, Jake Ramus

SWIMMING

Harrow School, Away at Dulwich College and Hurstpierpoint College, Won

The swimming team went to Dulwich on Thursday 23 September to face not only the hosts but also a team from Hurstpierpoint College. All the members of the team supported each other with gusto, with particularly strong backing given to the new Shells. Harrow won every race at the event with performances from Nick Finch, *Newlands*, Henry Gray, *Lyon's*, and Adam Wong, *The Park*, standing out in particular. Moreover, these three swimmers, along with Mark Zeng, *Elmfield*, swam in a very impressive manner as part of the Torpid squad, with our coach singling out Zheng as the swimmer of the gala.

Harrow School, Away at London Schools' Swimming Association Team Championships, Won

An excellent, if not unexpected performance from our swimmers with the Harrow A team winning all four events they entered (namely the Intermediate and Senior 4x50m freestyle and medley relays). Strong times, in the main, were set at this relatively early stage in the year and although we must wait for times recorded at other regional events, we fully expect Harrow to be present once again at the English Schools National Team Finals at the London Aquatic Centre on Saturday 20 November.

RUGBY UNION

Junior Colts A, Away, Campion School, Essex, Won 57-0, National Cup – Round 1

The Junior Colts As travelled to Essex to face The Campion and came out as convincing winners by a score of 57-0. Harrow started off well with a great run from Sammy Clayton-Bennet, *Newlands*, finishing with a try under the posts. Harrow didn't stop there with more great lines from James Talamai, *Druries*, meaning that we went into half time 42-0 up. We then came back out with a switched-around forward pack and were ready to play another half of rugby. We were ruthless at the breakdown, and after couple more tries after half-time that were capped-off with conversions from Sam Winters, *Elmfield*, Patrick Keaveny, *Druries*, and Talal Nsouli, *The Knoll*, who had come up from the Yearlings for the game. The game ended 57-0 and Harrow left as convincing winners.

SQUASH

Boys-Under-18A v Aylesbury Grammar School

Aylesbury won 3-2, in a testing and close encounter where, the result notwithstanding, the First V showed improvement in their resilience and combination play. Jat Tse, *Rendalls*, (first seed) won his match 3-0, and Tarquin Sotir, *Druries*, won his 3-1. Tim Yu, *Moretons*, Hanno Sie, *Newlands*, and Ilyas Qureshi, *The Park*, played lengthy matches in a hard-fought afternoon.

Ways to contact *The Harrovian* Articles, opinions and letters are always appreciated. Email the Master-in-Charge <u>smk@harrowschool.org.uk</u>

Read the latest issues of The Harrovian online at harrowschool.org.uk/Harrovian



CELEBRATING OUR PAST REFOUNDING OUR FUTURE