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EDITOR'S NOTE

WRITTEN BY DIYA MANJU 13X

It is Sunday evening and I have officially managed to put this term's edition of The Mark together in a little less than seven days. A feat. If I do say so myself. (it is no longer Sunday, but will leave this for The Effect)

Despite my affinity for writing, I dread the moment I must sit down and write the editor's note, mostly because I don't believe anything I write here could compare to the depth and perception of each article of this magazine. You'll see that some of the articles in this edition are ... long, to say the least, and while reading 2000-word long articles on topics I know little about has been strenuous, I can happily proclaim that every one of them has given me nothing but new knowledge and a broader perspective of our world.

Choosing a favourite this time is impossible and so I will not try to narrow it down. But I feel *Who to believe?* (Current Affairs) to be imperative reading as we all begin to develop and understand our own political standpoints while encompassed and drowned in subjective media.

You might notice the covert collaboration between Film & Tv, Music, and Science & Math in this issue, as they all briefly focus in on Christopher Nolan's *Oppenheimer*. Having seen *Oppenheimer* twice, once at the great BFI IMAX cinema, I can highly recommend reading each of those sections, as the writers focus in on three different technical and historical aspects that work together to form such art. I also recommend the film, of course.

The start of the academic year is the perfect time to explore new strands of art and begin or continue to admire and critique the world of knowledge around us.

The writers of The Mark write to share their opinions with you, which hopefully allows you to begin formulating your own. If *Alien* is not your cup of tea (although I am unsure as to how this could be the case), you know nothing about Formula 1 (I certainly do not), or you think film is actually more important to music (despite The Mark On Music making a passionate 800-word case for the inverse), then I encourage you to share these thoughts with those around you, or even write about them!

Next term, I am excited to revive part of the original format and invite you all to write for The Mark! You are free to write anything that pertains to each category of The Mark, in any way! Remember, there are a plethora of ways to write effectively, you do not have to stick to an article or short story form. I look forward to seeing your pieces and including them in the next issue.

Happy reading (and writing)!!

Diya M 12X

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**THERE IS NO GREATER AGONY
THAN BEARING AN UNTOLD
STORY INSIDE YOU
MAYA ANGELOU**

BLACK HISTORY MONTH

WRITTEN BY DIYA MANJU 13X

As we approach Black History Month, Mrs Hart has asked me to write in its name, highlighting its significance and pertinence to our widespread society and microcosmic one, here at Rainham Mark.

Celebrating and acknowledging Black History Month in itself, is vital in ensuring our world remains focused on the issues of inclusion, diversity, and equality. Honing in on black culture, and honouring its roots and development allows us to, collectively and almost subconsciously, become more understanding of the importance of talking freely about the past, in order to better the future. Knowledge is power, and by ameliorating our perception of the differences that have made up our world, we will be able to begin the journey of equality. Indulging in the culture, expertise, and beauty of black history, and ethnicities that differ from our own, is our individual duty to build a more inclusive perspective of the people we live and work with.

While October has become the assigned 'Black History' month, this isn't to say this can come to a quiet end on the 1st of November. History and heritage months are imperative in simply reminding us of our duty to educate, protest, and talk, whilst providing us with a specific month-long focus to centre our celebrations.

Over the years, our school has recognised the importance of Black History Month, and supported its students in celebrating their culture and teaching others of its power and relevance in our world. This year, however, the school is aiming to strengthen and deepen the celebrations through a series

of assemblies led excitingly by Year 7-9 students, an incorporation of various cultural foods in the menu throughout the month, and black history focused content during lessons. Following last year's Culture Day, it is the school's intention to establish a precedent for integrating education on inclusion and diversity into our daily lives here.

It is easy to believe that inclusion has become a futile conversation, as it is not uncommon to think you are already knowledgeable on the subjects. However, education is not linear nor transient, and educating yourself on the history of our world will inevitably strengthen your ability to emotionally connect and understand those around us.

As we reach adulthood, the responsibility of promoting the importance of belonging is placed into our hands, making it our duty to speak out and fight against the notion of injustice within inclusion. Having conversation void of subjectivity and unnecessary complexity is a simple but crucial step in diminishing the taboo nature of the subject, and giving it a place in everyday conversation. By challenging social norms that indulge in covert expressions of injustice, we can begin to identify and simplify the nuances, making this movement feel like it is winning against its opposition. Which it is. This letter is the proof.

CURRENT AFFAIRS

WRITTEN BY MARCO CAPOLUPO 13X

REFLECTION OF THE SUMMER (UK POLITICS)

It was late August when the **Department for Education (DfE)** announced that more than **100 schools would have to close due to fears over the suitability of its structures and the risk of collapse for rooves and walls**. The 'toll' has now increased with several hospitals, prisons, government buildings and even two major airports (London Gatwick and Heathrow) containing within their structures evidence of **reinforced autoclaved aerated concrete (RAAC)**, a less durable, bubbly, more lightweight form of concrete widely used between the 1950s-1990s. With a lifespan of 30 years, the material is now long expired and after a primary school in Kent partly collapsed in 2018, the government has launched investigations and warnings over the material. Since then, several unions, the National Audit Office (NAO) and the Labour opposition have pressured the government into realising new figures and measures to cope with the emergency now deemed "critical". **100,000 students in 147 schools** across England have been affected, with nearly a **third of them (30,000) in Essex alone**. As new evidence continues to emerge, the political sphere has taken centre stage with Education Secretary Gillian Keegan criticised over shaky reassurances and use of foul language, and PM Rishi Sunak's decision to fund only 50 out of the 400 schools the DfE signalled as needing repairs when he was Chancellor.

Birmingham City Council declared itself in "dire financial strain" after issuing a section 114 notice which has been commonly labelled as "**effective bankruptcy**". The notice is a formal way to signal that a local authority doesn't have enough resources to operate efficiently. Covering an area of 26,000 acres and spending **£3.2bn a year**, the UK's largest local authority, Labour-run since May 2012, said on Wednesday 6th September that it had an **£87 million**



gap in their budget. The blame was placed on new £760 million equal pay claims, problems over the installation of a new IT system and government cuts totalling £1bn over the last 10 years, mixed with rising inflation and high demand for services within the current 'cost-of-living' crisis. The notice effectively means that all new spending must cease including maintenance on roads, parks, local infrastructure etc. The government has rejected a bail-out for the council with many Tory politicians blaming poor management by Labour councillors. Birmingham is the **7th** Local authority to issue a section 114 notice since 2020 with Woking being the most recent in June. A rise in council tax as well as potential selling of some of the many assets owned by the council, seem to be the likely 'solutions' to the problem.

REFLECTION OF THE SUMMER (INTERNATIONAL POLITICS)

On Friday 8th September at 11:13 pm, a powerful **magnitude 6.8 earthquake** hit the Moroccan High Atlas Mountains destroying areas of the Old City of **Marrakech** and nearby provinces and killing over **2,900** in the deadliest earthquake since 1903 to hit the country. The epicentre was near Ighil, a rural town 44 miles south of Marrakesh, spreading from there to hit nearby villages, some of which were almost



entirely destroyed and the **UNESCO Marrakech Medina**, which saw significant damage to older buildings sparing however, the famous Koutoubiya Mosque. As rescue teams continue to search for survivors, and foreign aid from Britain, Spain, UAE, and Qatar flies into the country, questions are being raised regarding pending offers of aid from **France and Turkey** amongst others, not yet accepted by Moroccan authorities. Critique has also been placed on **King Mohammed VI** after he flew in from France, where he is reported to govern from his many private residences (including a mansion near the Eiffel Tower) to visit Marrakech but still hasn't been to the worst-hit province of Al Haouz. As a developing country and aspiring to become a big player for Europe-North African relations, some believe Morocco is trying to show it can deal with the disaster alone especially due to the strained relations between Rabat and Paris following **44 years of French colonial rule** between 1912 and 1956.



The annual **G20 summit** was held in **New Delhi, India** between the 9th – 10th September. World leaders from the 20 largest economies met in the Indian capital, welcomed by **Prime Minister Narendra Modi**, and prepared for a weekend worth of political discussions, drafting of resolutions, and visiting important sites. As with every G20, the event was the perfect opportunity for the host country to showcase itself and its leadership to the rest of the world – Modi was certainly no different as he presented India as

the “voice of the global south”. The meeting, however, saw two missing world leaders (Russian President Vladimir Putin and Chinese President Xi Jinping). Ukraine was also not invited and as the leaders reached a final, generalised statement on the war, it seems as if Modi's willingness to remain neutral in the matter and Biden's priorities in containing Chinese influence ahead of the 2024 elections, have led to the war falling down the list of priorities for most member countries. Arguably, the only real success of the summit was the invitation to the **African Union** to become a permanent member of the group, as the summit heads to **Brazil in 2024**.

WHO TO BELIEVE?

In 1948, forty-eight countries voted in favour of the Universal Declaration of Human Rights (UDHR), proclaiming in a single document composed of 30 articles, the fundamental rights of each human being. Article 19 of the Declaration states the right to “*freedom of opinion and expression*” which includes “*freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers*” establishing therefore two principles: **freedom of speech** and **freedom of the press**. Due to its continuous mention in a wide range of settings from international politics to everyday domestic life, we may be very familiar with the first one of these, however, sometimes forget the second, a grave mistake considering how interdependent the two are (as demonstrated by their presence in the same article).



Due to its continuous mention in a wide range of settings from international politics to everyday domestic life, we may be very familiar with the first one of these, however, sometimes forget the second, a grave mistake considering how interdependent the two are (as demonstrated by their presence in the same article).

What freedom of the press essentially means, is that journalists, reporters, and all those involved with the delivery of international, national, and local news, should be free to report whatever they desire and liberally express their opinions.

It also implies, that states should not interfere with this process and should provide access to a wide range of public information to their citizens, excluding sensitive information regarding national security (subject in the UK by the Freedom of Information Act 2000).

This therefore enhances the individual citizen's fundamental human right of “*opinion and expression*” but also that of “*thought, conscience and religion*” both of which are protected under articles 18 and 19 of the UDHR. The two articles follow each other because they are closely related; to truly maintain “*freedom of thought*” the individual must be given the right and opportunity to discover a vast range of different opinions so that they too can effectively formulate their own.

Examples of this can be found everywhere but let's take a familiar setting for all of us and explore this concept more:

At RMGS, students have the opportunity to study 22 different subjects between Year 7 and Year 13. We have over 1,600 students at our school and, (un)surprisingly, each one retains their own opinion regarding those subjects. Some may find Geography incredibly exciting because it teaches about the world around them, whilst others may find it incredibly tedious because they are simply not that interested in rocks! Music may be hailed by some as the most fun lesson of them all, whilst others regard P.E. as simply the only top-tier subject to partake in. Of course, we cannot forget the English-Maths rift, especially amongst the upper years as they meticulously search for faults in the rival subject in the hope of elevating their favoured one.

Amongst all of this, **each student continues to be able to freely express their own opinion and be influenced by that of others, developing their perception of each subject as they (hopefully) continue to efficiently learn and study for each one.** Despite knowing that students have differing opinions regarding each subject – some negative whilst others positive – **teachers do not intervene focusing instead on teaching the objective content of their respective subjects.**

Let's now imagine an oppressive Physics Department beginning to listen in to students' conversations, and consequently censor some of them due to their professed opinions regarding Physics. Some students begin to disappear, others talk much less than they used to whilst each Physics teacher begins to impose the superiority of their subject over all others in each lesson. Suddenly, every student that studies Physics praises it as the 'best subject of all' and since it retains the 'core subject' label, a large majority of RMGS students support it, saying all sorts of incredible things about it.



To an exterior viewer, let's say a visitor coming into school, Physics truly does seem so incredibly amazing as suggested by the large number of students they see, so unbelievably euphoric about it. Yet, what they don't know is that those students have little choice: they must support the subject because if they don't, they risk serious, undesirable punishments.

With time, more and more visitors will believe in the carefully constructed tale of Physics being the best of all subjects at RMGS. The information they receive and on which they will base their opinion is, in fact, fake and has been manipulated to reflect what the department wants everyone to believe.

Despite the banality of the example, this is unfortunately the reality in many countries including, to an extent, our own. **The UK has been classified 'Satisfactory' by Reporters without Borders in their World Press Freedom Index (WFPI) which implies that a majority of information we see hasn't been manipulated or imposed upon us.** However, we must always look out for so-called 'fake news' and be cautious in what we believe, where we place our trust and how we formulate our own opinions. **Don't let yourself become a naive Physics vulgariser!**

(quick editor's note to clarify that we have no problem with physics here, purely an example!)

DEBATE QUESTIONS

What challenges does the world face and how to overcome national differences to deal with them collectively?

Should there be executive, international bodies to deal with certain worldwide issues (such as natural disasters and climate change) that would legislate for all member countries, bypassing therefore, each country's respective legislature, for the benefit of all? ~ *an executive UN, G20 or BRICS for example*

FILM & TV: THE DIRECTOR'S CUT

WRITTEN BY JACOB MEINERTZHAGEN-WILSON 13X

FILM & MUSIC

Film plays a key role in **understanding music better**, helping viewers by creating a clearer representation of the characters, the themes, and the film in general. Christopher Nolan's newest film *Oppenheimer* is a prime example of this. Using "Can You Hear the Music" as a specific example, it is abundantly clear how influential the film is to the music. By listening to the score alone, the listener creates their own ideas about what it could mean, creating unique images in their head. **Listening to the score with the actual film, however, produces an entirely different side to the music.** It allows the viewer an insight into Oppenheimer's mind; the score starts with a playful, optimistic violin, which is heard during Oppenheimer's studies through school. Alongside the visuals from the film, it demonstrates his evolving curiosity, how he looks on in awe with wide, gaping eyes at the building blocks of the universe. As the score develops, it crescendos and becomes quicker, increasing the tension as

FILM OF THE TERM: FERRIS BUELLER'S DAY OFF

TV SHOW OF THE TERM: ONE PIECE

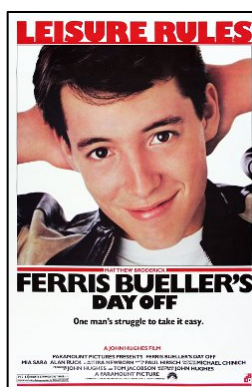
ACTOR OF THE TERM: IÑAKI GODOY

ACTRESS OF THE TERM: SOPHIE WILDE

DIRECTOR OF THE TERM: RIDLEY SCOTT

IF YOU WISH TO WATCH ANY FILM OR TV SHOW MENTIONED IN THIS ARTICLE, PLEASE TAKE NOTE OF THE AGE RATING PROVIDED WITH EACH TO ENSURE IT IS SUITABLE FOR YOU

Oppenheimer's research and thoughts become dangerous. This idea is once again centred around the film itself – **dangerous sparks, nuclear fission, explosions, shattering glass, and blinding lights illuminate the screen.** The music of a film sets the foundations, and the film itself grows upon it, developing ideas and visualising the emotions portrayed within the music. Both go hand in hand, and **neither would work as effectively without the other.**



EXAMPLES OF SONGS IMPACTED BY FILM

'Don't You (Forget About Me)' *THE BREAKFAST CLUB*

'Eye of the Tiger'
ROCKY

'Where is my Mind?'
FIGHT CLUB

'Sweet Dreams (Are Made of This)'
X-MEN: APOCALYPSE

44 YEARS AGO..... ALIEN WAS RELEASED

This month, 44 years ago, Ridley Scott created the masterpiece 'Alien', making history not only by revolutionizing both the horror and sci-fi genres but also by completely transforming the role of women within cinema.



ALIEN

"In space, no one can hear you scream." This iconic tagline for 'Alien' immediately grabbed the attention of sci-fi fans worldwide – at the time 'Alien' was made, the only other sci-fi films were the likes of 'Star Wars' and 'Star Trek'. Both of these were associated with the exciting prospect of space and the freedom that came along with it – travelling to vibrant new planets like the scorching sands of Tatooine, or meeting unique new species, such as the hyper-intelligent Vulcans. 'Alien', however, completely disregards all of the space stereotypes, and shows the extreme opposite side of the spectrum. It shows the true nature of space: the characters are completely and utterly alone, trapped on a claustrophobic spaceship with no one to help them, and nowhere to go. This feeling of complete and utter isolation plays a big part as to why 'Alien' was such a big hit - it subverts the view of space from a new frontier teeming with life, and ready to be explored, to a threat of unimaginable scale: **how empty space truly is, and the fear of what could be lurking within it.**



IAN HOLM IN ALIEN

'Alien' also helped to revolutionise the way women were seen within mainstream cinema. Ridley Scott was one of the first directors to not only include strong female characters within his movies but also make them lead protagonists. Ellen Ripley, the protagonist of 'Alien', is arguably the first, and the most popular "Female Action Hero" in film history, **breaking gender stereotypes** at the time by presenting Ripley as a **strong female lead** that isn't hypersexualized, a very rare case for the time. Because of 'Alien' Scott was able to lay the groundwork for all strong female characters to come, from Katniss Everdeen in 'The Hunger Games' to Jyn Erso in 'Rogue One'; **Scott's impact on the way that women are seen in popular film is unprecedented, and it all started with 'Alien'.**



SIGOURNEY WEAVER IN
ALIEN

WHAT'S NEW?

FILM

PAST LIVES (MUST WATCH)

12A

"Nora and Hae Sung, two deeply connected childhood friends, are wrest apart after Nora's family emigrates from South Korea. Decades later, they are reunited for one fateful week as they confront destiny, love and the choices that make a life."



BLUE BEETLE

12A

"Jaime Reyes suddenly finds himself in possession of an ancient relic of alien biotechnology called the Scarab. When the Scarab chooses Jaime to be its symbiotic host, he's bestowed with an incredible suit of armour that's capable of extraordinary and unpredictable powers, forever changing his destiny as he becomes the superhero Blue Beetle."



TV

TOP BOY (SEASON 5)

15

"Two seasoned drug dealers return to the gritty streets of London, but their pursuit of money and power is threatened by a young and ruthless hustler."



AHSOKA

12

"After the fall of the Galactic Empire, former Jedi Knight Ahsoka Tano investigates an emerging threat to a vulnerable galaxy."



ONE PIECE

15

"Monkey D. Luffy is a young adventurer who has longed for a life of freedom ever since he can remember. He sets off from his small village on a perilous journey to find the legendary fabled treasure, the ONE PIECE, to become King of the Pirates!"

BARBIE VS. OPPENHEIMER: THE AFTERMATH

21st July 2023: a day that will go down in history as one of the most important dates in film. In the last issue, I went into deep detail about the “battle for the box office” between *Barbie* and *Oppenheimer* – but the question on everyone’s mind is: **who won?**



In terms of the box office, it is clear that *Barbie* has won – it brought in an incredible \$1.38 billion, becoming the **15th biggest film of all time globally**. *Oppenheimer*, on the other hand, only brought in \$853 million globally – although still very impressive, it is clear which film was more successful. This is mainly due to the larger demographic for *Barbie* – *Oppenheimer*’s target demographic was restricted on a gargantuan scale by its 15 rating, meaning it missed out on a large number of viewers, giving *Barbie* a significant advantage.

There’s no doubt that both films are incredible in their own right, with *Oppenheimer* giving us an incredible story about the capacity of human evil and the heinous, monstrous acts we can commit when influenced by greed, with the subsequent harrowing guilt that follows. *Barbie*, on the other hand, has a masterful portrayal of liberal feminism, demonstrating how both patriarchies and matriarchies are incredibly flawed – equality between genders is imperative for society to succeed. Because of this, there is no surprise that both films have been critically acclaimed by fans and critics alike – **undoubtedly the top two films released this year.**

However, in the eyes of the critics, ‘*Oppenheimer*’ edges out ‘*Barbie*’ with a 93% rating over 88% on Rotten Tomatoes, showing that ‘*Oppenheimer*’ chose quality over quantity, **appealing to a smaller demographic but to a more effective extent.** Given both of the films’ excellent quality, it is unbelievably difficult to decide which one is written better – Christopher Nolan and Greta Gerwig, arguably two of the biggest titans in the directing world at the moment, have created incredible films that will no doubt go into history as two of the greatest movies from the 21st century. The themes and lessons shown within both of these films are unquestionably imperative for our society today, with ‘*Oppenheimer*’ showing us that **we will be the cause of our own destruction** if we let ourselves get corrupted by greed, and ‘*Barbie*’ showing us how to be kind to one another, and how **we, as a human race need to work together if we want to succeed.**



This is precisely why I, personally, cannot decide which is better – they both teach such important lessons that neither of them can be overlooked in favour of the other. So, in my opinion, **I think that neither film won** – they work better together, showing us the harsh failures and impressive triumphs that we can achieve as humans and the underestimated impact we have on the world around us.

CURTAIN CALL: EXPLORING THE MAGICAL WORLD OF MUSICALS

WRITTEN BY EVIE THOMPSON 13X

Writing about something as simple and spectacular as musicals and plays can be quite daunting as many do not receive recognition in the media like film or TV so it is harder to get the latest news about new releases of West End of Broadway shows. However, the main question I want to answer throughout this piece is possibly the most important: **Why is theatre so important?**

In a world inundated with screens and digital entertainment, **the timeless allure of live theatre at our grasp continues to captivate us as audiences, not just for its artistic ideas but for its profound emotional impact.** From happiness to sadness, anger to empathy, the theatre has an unparalleled ability to stir our deepest emotions.

By definition, a play or musical is a concept created, like a short film, **with the intention of being viewed by others and generating a response.** While it is created to release emotion there is so much more we can get from a piece of theatre, in particular, **we can get an insight into many backstories and events that have happened over generations which spark inspiration.** Through theatre, we get a view of the actual event as it is performed live getting the atmosphere and overwhelming power and bunch of actors/actresses can create in such a short amount of time. There is an important reason why theatre is so important and why we need that in today's society: **To understand the world we live in and the connectivity we have with some many different people.**

MUSICAL OF THE TERM:
LES MISÉRABLES

ACTOR OF THE TERM:
DOM SIMPSON
ELDER PRICE in *Book of Mormon*

ACTRESS OF THE TERM:
JOCASTA ALMGILL

BETTY RIZZO in *Grease*

DIRECTOR OF THE TERM:
BILL BUCKHURST
Sister Act



WEST END 'LES MISÉRABLES'



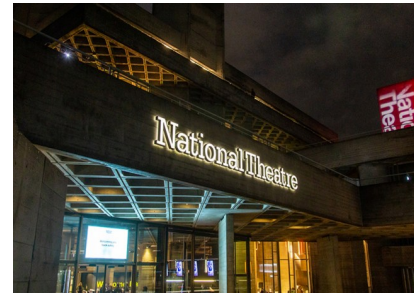
JOCASTA ALMGILL AS BETTY RIZZO
IN GREASE

60 YEARS AGO..... THE NATIONAL THEATRE WAS BORN

On Thursday, 19th October, The National Theatre will launch a special worldwide stream of its five-star production of *Othello*, directed by Clint Dyer. **Celebrating 60 years of the National Theatre with a breath-taking revival, the timeless Shakespearean tragedy *Othello* will be released on streaming, free to audiences across the world.** This production, marked by exceptional performances and innovative direction, pays homage to the enduring relevance of Shakespeare's exploration of jealousy, betrayal, and the destructive forces of manipulation.

The National Theatre stands as a cultural cornerstone, embodying the essence of a nation's artistic spirit. Its significance lies in several vital aspects. It serves as a source of creativity, nurturing the finest talents in acting, directing and stagecraft. These artists, in turn, tell stories that reflect our society, shaping our collective consciousness. The

National Theatre celebrates an anniversary that they would not have been able to do without the love it is shown by society because it fosters a sense of unity, and belonging, bringing diverse communities together to witness shared narratives. **Theatre is a vital mirror to our culture, a unifying force which brings people together minus their stories, it creates a barrier to the outside world and a place where we can forget about negative opinions and views and focus on ourselves.**



THE LION KING'S WEST END MUSICAL OUTFITS: A VISUAL FEAST FOR THEATRE LOVERS

The Lion King's West End production has consistently wowed audiences not only with its captivating storyline and talented cast but also with its visually stunning costumes. From the intricate and colourful animal-themed ensembles to the ornate masks and accessories, the outfits in this musical are a spectacle in themselves. Designed by the legendary **Julie Taymor**, these costumes have played a pivotal role in bringing the animal kingdom of the African savanna to life on the stage. Each outfit is a work of art, meticulously crafted to represent the characters and their personalities. The impact of these outfits goes beyond aesthetics, they transport the audience into the heart of the African wilderness, immersing them in the world of Simba and his journey.

The success and recognition The Lion King received is deserved as beyond storytelling, theatre is an art form that thrives on visual aesthetics. Elaborate sets and crafter costumes, like those in The Lion King, not only transport audiences to different worlds but also enhance the emotional resonance of the performance.



These elements play a crucial role in creating a sensory-rich experience, allowing theatregoers to fully immerse themselves in the narrative. In an age of digital entertainment, where screens dominate, the aspects of theatre like stunning costumes, remind us of the unparalleled magic that live performances can offer. Productions like The Lion King remind us that the synergy between visual elements, storytelling and performance is what elevates theatre from a mere show to a transformative and unforgettable experience.

THE BOOKMARK

WRITTEN BY ANNA WHEELER 13X

NEW RELEASES

THE FRAGILE THREADS OF POWER V.E. SCHWAB

(to be released Sept. 26)

You might know this author for her TikTok famous book *The Invisible Life of Addie LaRue*, but a few years ago I was a fan of V.E. Schwab for her *Villains* series (which I highly recommend), and the complex and ever-changing characters she creates. Her new book, *The Fragile Threads of Power*, combines this masterful characterization with exquisite world-building in an epic fantasy/sci-fi adventure centering around female protagonist Tes.

Schwab's long-awaited return to the Shades of Magic series weaves a gripping tale of old heroes and new enemies. A captivating new instalment in a dazzling world of thieves, travellers, magical battles, and epic adventures.

WHILE YOU WERE OUT MEG KISSINGER

(released Sept. 5)

I'm especially excited to read this new memoir from Meg Kissinger, who is not an author by trade but a reporter, who has travelled around the US reporting on America's mental healthcare system. Her decades of experience of mental illness, professional and personal, have allowed her to tell her story in a way described as 'deeply moving' yet 'somewhat uplifting'.

SOME OF THE LITERATURE SUGGESTED
MAY CONTAIN SENSITIVE TOPICS

BOOK OF THE TERM:

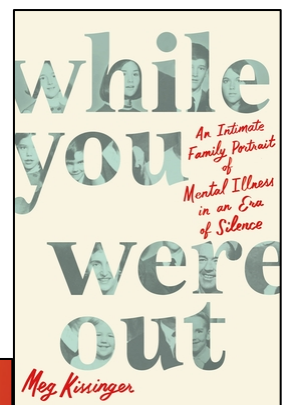
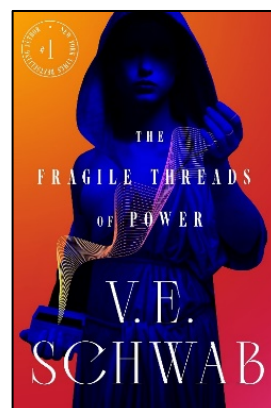
**THE MEURSALT
INVESTIGATION
KAMEL DAOUD**

POEM OF THE TERM:

**DAFFODILS
WILLIAM
WORDSWORTH**

AUTHOR OF THE TERM:

S.F. SAID



THIS MONTH, TEN YEARS AGO...

In September 2013, Donna Tartt, critically acclaimed author of *The Secret History* (another perfect back-to-school read), released a new novel, *The Goldfinch*. At around 800 pages, it's a tough book to get through, but arguably worth it: *The Goldfinch* has been described as 'beautifully written' and topped the bestseller charts for months.

Aged thirteen, Theo Decker, son of a devoted mother and a reckless, largely absent father, survives an accident that otherwise tears his life apart. He is tormented by an unbearable longing for his mother, and down the years clings to the thing that most reminds him of her: a small, strangely captivating painting that ultimately draws him into the criminal underworld. As he grows up, Theo learns to glide between the drawing rooms of the rich and the dusty antiques store where he works. He is alienated and in love - and his talisman, the painting, places him at the centre of a narrowing, ever more dangerous circle.



DONNA TARTT

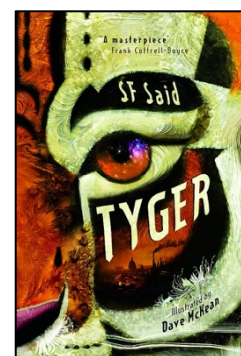
WHAT'S POPULAR NOW?

TYGER S.F. Said (author of the month)

Released about a year ago, this highly anticipated book from acclaimed author S.F. Said (you may know him for his modern children's classic *Varjak Paw*) tells a seemingly simple but beautifully philosophical fantasy/adventure tale.

Set in a deeply disturbing dystopia in which the British Empire and the atrocities it committed never ended, the story follows 12-year-old Adam Alhambra, who, after a terrifying encounter with a man with a knife in a dump, is saved by a Tyger. In this world, tigers have been hunted to extinction, so to Adam and his friend Zadie, their Tyger is a beast of myth. But this Tyger is dying—it is waiting to be saved by Guardians, who will fight alongside it in a war, and it needs Adam's help. But this Tyger helps Adam, too, teaching him the powers of perception, imagination and creation that will help him to fight against the oppression and inequality that he and his family are victims to, and eventually become a Guardian himself. The principal evil in *Tyger* takes the form of Sir Mortimer Maldehyde, an extreme right-wing, white supremacist embodiment of colonial horror, whose alter-ego is Urizen, a devil-like figure from William Blake's poetry, who represents oppression.

This novel manages to simultaneously be an uplifting and enlightening children's story, a critique and examination of British colonial oppression, and an enchanting Blake-inspired fantasy.

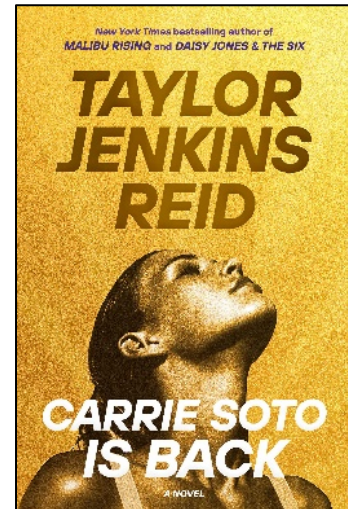


WHAT'S POPULAR NOW?

CARRIE SOTO IS BACK TAYLOR JENKINS REID

You might know Taylor Jenkins Reid for her Tiktok famous *The Seven Husbands of Evelyn Hugo* or *Daisy Jones and the Six*, which was adapted into a TV series which premiered on Amazon Prime this year. In *Carrie Soto Is Back*, a 2022 Goodreads Choice Awards winner in the historical fiction category, we meet a new enigmatic and determined heroine. *Carrie Soto Is Back* both an ode to hard work and perseverance, and a moving story of a positive father-daughter relationship.

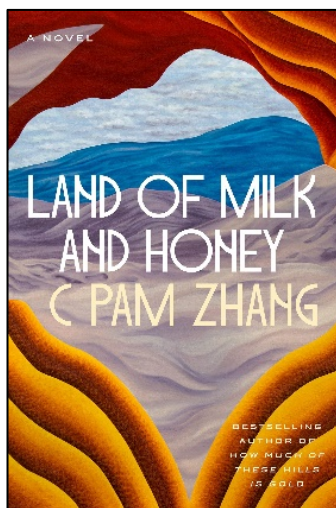
Carrie Soto is the greatest player the world has ever seen.



But six years after her last match, she watches a young British tennis player steal her world record - and Carrie knows she has to go back and reclaim her rightful place at the top. Even if the world doesn't believe in her. Even if it almost breaks her.

This is a story about the cost of greatness and the burden of fame.

The fight for a place in history is about to begin . . .

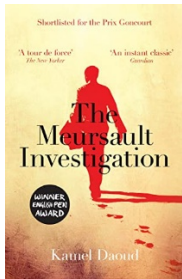


A LAND OF MILK AND HONEY C PAM ZHANG

A smog has spread. Food crops are rapidly disappearing. A chef escapes her dying career in a dreary city to take a job at a decadent mountaintop colony seemingly free of the world's troubles.

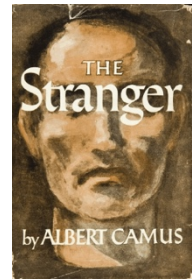
There, the sky is clear again. Rare ingredients abound. Her enigmatic employer and his visionary daughter have built a lush new life for the global elite, one that reawakens the chef to the pleasures of taste, touch, and her own body. In this atmosphere of hidden wonders and cool, seductive violence, the chef's boundaries undergo a thrilling erosion. Soon she is pushed to the center of a startling attempt to reshape the world far beyond the plate.

Sensuous and surprising, joyous, and biting sharp, told in language as alluring as it is original, Land of Milk and Honey lays provocatively bare the ethics of seeking pleasure in a dying world. It is a daringly imaginative exploration of desire and deception, privilege and faith, and the roles we play to survive. Most of all, it is a love letter to food, to wild delight, and to the transformative power of a woman embracing her own appetite.



THE MEURSALT INVESTIGATION

(book of the month)



The Meursault Investigation is a half-retelling, half-sequel to the 1942 French absurdist classic *The Stranger* by Albert Camus. *The Stranger*, set in colonial Algeria and narrated by a Frenchman called Meursault, centres around the narrator's experience of being an outsider and outcast to the country he lives in and life itself. On a hot summer's day in this novel, he commits a murder on a beach, the victim of which is never named, referred to only as "the Arab" by the narrator, who goes on to blame the salt and the sun for his crime. In *The Meursault Investigation*, Kamel Daoud gives this victim a name—Musa—and takes the voice of his little brother, Harun. The novel is written as if the narrator, now an old man, were telling his story to the reader at a bar, and spans across Harun's whole life, set in Algeria both pre-, post- and during the war for independence. Having read both novels, *The Meursault Investigation* did not seem to be an attack on *The Stranger* but more of a postcolonial sequel or reimagining. We follow Harun as he grows up in the shadow of his martyred older brother, his mother's cold, cruel grief, and the French Empire and its ghost. He expresses understandable hatred towards Meursault and the other settlers, yet also a surprising pity. Harun becomes an outsider himself and at points praises Meursault's writing skills (in this reimagining, the writer of the first novel is Meursault, not Camus), and as he ages finds he is not too different to his brother's murderer. Both narrators are outcasts, in their aversion to religion and their existentialist beliefs, and (spoiler!) about halfway through the novel, just after Algerian Independence, Harun commits another murder, but this time moved by the moon, rather than the sun, at 2am, rather than 2pm, and of a Frenchman.

This murder serves as some sort of revenge, and he feels somewhat liberated from the burden of Musa. Whilst both novels echo the absurdist outlook on the life of their narrators, *The Stranger* is written with a disturbing coldness, but *The Meursault Investigation* employs a far more impassioned, even mad tone.

The Meursault Investigation was a bold project—it must have taken confidence to take the work of a world-famous author and create an unofficial, mirror-image sequel, and its anti-religious sentiment sparked some extreme backlash in Algeria—but to me, it seemed slightly repetitive and lacking in plot. The unreliable narrator swung from fury and hatred to a strange pity for the Frenchmen, then back again, though I do wonder whether this was simply in rejection of the traditional binary choice between Algerian nationalism and French imperialism. Kamel Daoud instead favours a nuanced presentation of the facts and the beginning of an examination into Algerian postcolonial politics and religion. Overall, *The Meursault Investigation* was a thought-provoking and philosophical retelling of a well-known story, and though I do have my criticisms, it was certainly an engaging read and extremely worthy as a companion novel to *The Stranger*. It's readable even on its own, but I would recommend that if you haven't read *The Stranger*, some background research would be necessary as at points it seemed that the narrator was telling a true story and that *The Stranger* was an actual written account by a murderer (definitely not the case)!

DAFFODILS

WILLIAM WORDSWORTH

WRITTEN BY LUCAS PATTENDEN 13R

For the first edition of the Mark of this year I have chosen 'Daffodils' by William Wordsworth as my poem to analyse. As you will see, it is a joy to read with beautiful imagery and personification of nature to create an aura of sublimity.

This simple poem, one of the loveliest and most famous in the Wordsworth canon, contains the familiar subjects of **nature and memory**, with a particularly simple, musical eloquence. The four six-line stanzas of this poem follow a **quatrain-couplet rhyme scheme: ABABCC**. Each line is metered in **iambic tetrameter**. The plot is extremely simple, depicting the **poet's wandering and his discovery of a field of daffodils by a lake, the memory of which pleases him and comforts him when he is lonely, bored, or restless**.

I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host, of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.

Continuous as the stars that shine
And twinkle on the milky way,
They stretched in never-ending line
Along the margin of a bay:
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.

The waves beside them danced; but they
Out-did the sparkling waves in glee:
A poet could not but be gay,
In such a jocund company:
I gazed—and gazed—but little thought
What wealth the show to me had brought:

For oft, when on my couch I lie
In vacant or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude;
And then my heart with pleasure fills,
And dances with the daffodils.

The characterisation of the sudden occurrence of a memory—the daffodils “flash upon the inward eye / Which is the bliss of solitude”—is **psychologically acute**. However, the poem's main brilliance lies in the **reverse personification of its early stanzas...** The speaker is metaphorically compared to a natural object, a cloud—“I wandered lonely as a cloud / That floats on high...”, and the **daffodils are continually personified as human beings, dancing and “tossing their heads” in “a crowd, a host.”**

This technique implies an **inherent unity between man and nature**, making it one of Wordsworth's most basic and effective methods for instilling in the reader the feeling the poet so often describes himself as experiencing.

The poem suggests that **this togetherness between humanity and nature is something instinctive, and sometimes obvious only in hindsight**. It's clear that the beauty of the daffodils had an instant impact on the speaker—which is why the speaker “gazed and gazed”—but it was only later, when the experience “flashed” again in the speaker's mind, that the speaker realized its full significance. In this quiet moment, the speaker draws on the experience of the daffodils as an avenue to happiness. That is, everything that the daffodils represent joy, playfulness, survival, beauty—“fills” the speaker with “bliss” and “pleasure.” In the speaker's mind, they are again dancing “with the daffodils.” Therefore, the poem is arguing that communion with nature is not just a momentary joy, but something deeper and long-lasting. The reader is left with the distinct impression that, without these types of experiences with nature, the speaker would be left in true loneliness, stressing the importance of a genuine connection with the natural world around us.

THE MARK ON MUSIC

WRITTEN BY EDWARD RHODES 13F

SOME MUSIC SUGGESTED MAY CONTAIN SENSITIVE TOPICS

SONG OF THE TERM: *THE GREAT GIG IN THE SKY* PINK FLOYD

In my opinion, Pink Floyd is **timeless** and is one of my favourite bands to regularly return to. This past summer specifically was one of those times and this track was the one that stuck out to me.

The **airy feeling and light atmospheric piano** leading up to the dramatic drop in which an **unsettling yet energising scream** rings through to the end of the track is what makes this so special.



ALBUM OF THE TERM: *CALL ME IF YOU GET LOST: THE ESTATE SALE*

TYLER, THE CREATOR

This album is the epitome of what summer should be like; **relaxed and indulgent** (within moderation of course). What's interesting about this album is the actual version of the album I am talking about in this issue is in fact the deluxe version of *CMIYGL*. This is unusual for an artist as most deluxe versions of albums are lacklustre and just an attempt to squeeze as much money out of release as possible. However, Tyler's release of this in March was very much a cementing of this album's legacy. I thoroughly enjoyed its initial release in the summer of 2021 and with the addition of 8 more tracks I once again enjoyed it in this past summer.

The original tracks combined with the new ones made a nice balance of **nostalgia and freshness**. This combination allowed me to have several reflective listens which led to a very intimate experience with the record, and hopefully for many more summers to come.

ARTIST OF THE TERM: TEEZO TOUCHDOWN

Teezo Touchdown has been known to me for about 2 years now. My introduction to him was actually on this issue album of the month, *CMIYGL*. He featured on the song *RUNITUP*, which is a standout song on the album and his vocals very much complement the song. Recently he also featured on Travis Scott's long-awaited album *Utopia* with the song *MODERN JAM* which happens to be my favourite of the album. However, I always wondered why he did not have an album to back up these incredible features, until finally, he released his debut album this month titled *How Do You Sleep At Night?*



HOW DO YOU SLEEP AT NIGHT?
ALBUM COVER

I expected some alternative hip-hop (emphasis on the alternative) going into my first listen but wow... I was caught off guard. The first track immediately greeted me with a stuttered electric guitar and abrupt pop-rock lyrics. It threw me head-first out of my comfort zone and my first listen was an uneasy experience. As the album went on the rock eased and the songs became more digestible with even relatable and compassionate lyrics in some songs.

The reason Teezo Touchdown is the artist of the Term despite my dislike for this new album in its entirety is because he is doing something very important in hip-hop which is **challenging the status quo**. He is introducing new styles that previously may not have been even considered. Upon researching further into his song credits I found out that he had an unlabelled feature on Lil Yachty's *Let's Start Here* on the song *The Ride*. I have mentioned this feature specifically as this album by Lil Yachty also challenged the status quo in hip-hop and pushed boundaries. I feel that Teezo Touchdown is leading a change in hip-hop and music by normalising the combination of genres by himself as well as encouraging other artists to make that jump. This is why I think he deserves Artist of the Term as he has already presented himself as a new influential figurehead in music who is showing promising signs of making a greater impact moving forward.

NEW MUSIC THIS MONTH

GUTS
OLIVIA RODRIGO (ALBUM)

PLAYING ROBOTS INTO HEAVEN*
JAMES BLAKE (ALBUM)

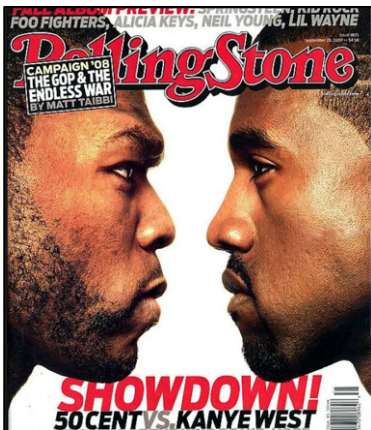
ONLY
SAMPHA (SINGLE)

WUACV*
TKAY MAIDZA (SINGLE)

ANGRY
THE ROLLING STONES
(SINGLE)

16 YEARS AGO... KANYE WEST VS. 50 CENT ALBUM SALES BATTLE

The Kanye West vs. 50 Cent album sales battle. Both albums releasing on the same day wasn't just a coincidence that led to a good sales opportunity. This event was years in the making and these album releases were going to be the democratic vehicle to decide something much more important than what album was better but instead the future of hip-hop (and arguably music as a whole) and what that was going to look like. 50 Cent had dominated the early 2000s and was seen as an unstoppable force in music: this made Kanye the underdog. However, this whole event only happened because of Kanye. He was due to release his album a week after on the 18th of September but upon hearing of 50 Cent releasing his album *Curtis* on the 11th, Kanye decided to move his album, *Graduation*, to the same day.



This feud had been going on since 2004, which was Kanye's breakthrough year, and stemmed from both artist's creative differences and approaches to hip-hop. 50 Cent had made gangster rap which was the more traditional sound of hip-hop that had been popularised in the 80s and 90s. Kanye had a more populist approach that included the sampling of other genres, making his music more accessible.

This made the release date seem like a referendum which would decide not only the approach to hip-hop going forward, but music as a whole. 50 Cent was the favourite to win, and he even pledged to never release music again if he did receive more album sales. The results were a landslide... but not in the way people expected. While 50 Cent received an outstanding 691,000 copies, Kanye had done the unthinkable and sold 957,000 copies. Not only did this cement Kanye as an artist who was here to stay but also showed people intrigued to hear more from the sample-based side of hip-hop.



I believe this moment triggered a reaction in music and ultimately influenced many artists and producers in the present day in their creative approach. After the result came in, Kanye and 50 Cent were surprisingly civil about the result and in my eyes, this symbolised a passing of the torch between the two artists and Kanye was now at the wheel of hip hop. Unsurprisingly, 50 Cent did not stick to his pledge of completely ending his music career and released a few more albums after *Curtis* but I think the result of the album battle affected his reputation and confidence in making music. It makes sense why 50 Cent went on to be active in the film world and became a producer of the popular TV show *Power*. Kanye continued to break records and further his image as a challenging force in music, but this expansive popularity was a blessing and a curse as he is now more known through controversy rather than music. Perhaps, 50 Cent's loss was better than him

THE FESTIVAL SEASON: A RECAP

(AND SOME CONCERTS)

WIRELESS FESTIVAL (7TH-9TH JULY)

I was lucky enough to attend Wireless on the 7th and 8th and it did not disappoint. The headliners I saw, Playboi Carti and Travis Scott, were by far the best live music I have ever witnessed and will witness for a long time. Appearances from Destroy Lonely, Lancey Foux and Ken Carson were also some of my favourites.



PHOTO TAKEN BY AUTHOR!

AFTER HOURS TIL DAWN: THE WEEKND



On the 18th of August, The Weeknd performed at Wembley stadium in front of 60,000 people. Back in March I had the opportunity to buy some tickets, but I never ended up following up on the offer, that was one of the biggest mistakes of my life. From some people I know who went I was told that it was the best concert they had ever attended and that they would happily spend more to see it again. From the videos and photos, I saw, they were not wrong. All I know is I will never turn a Weeknd ticket down ever again.

READING LEEDS FESTIVAL (25TH-27TH AUGUST)

Being one of the last festivals of the summer, it must really stand out amongst the crowd. Its line-up was very eclectic this year, which catered for the many diverse tastes amongst the 105,000 daily attendees. It is on my list of festivals to go to, and I will try to go next year if the line-up looks anything like it did this year.

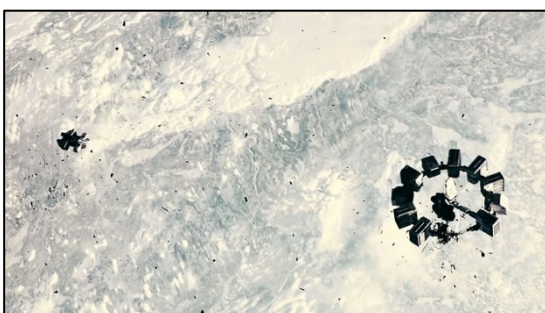


MUSIC & FILM

(A RESPONSE TO FILM & MUSIC)

Sound and music in film are the unsung heroes of cinema. Without it, you would not be able to feel half the emotion of a film. After all there is a reason one of the biggest upgrades of an IMAX screen is the improved speakers and they are, arguably, more integral to the IMAX experience than the larger screen. This makes the soundtrack producer for films as important as the director and the best directors respect this fact.

One noticeable example is Christopher Nolan and his collaborations with notable composers like Hans Zimmer and Ludwig Göransson. Zimmer composed the soundtrack for Nolan's film *Interstellar* which is one of my favourite films of all time and the soundtrack does not disappoint. One scene that sticks out to me is the spinning space station docking scene which is accompanied by Zimmer's *No Time for Caution*. I struggle to not get goosebumps every time I watch that scene and it is down to the bellowing high-intensity orchestra. Without it, sure the visual effects are impressive, and Matthew McConaughey and Anne Hathaway's performances are very cathartic, but I would not be moved to the verge of tears without that orchestra in the background. There is a reason there are screenings ten years after its release that are accompanied by a live orchestra.



VISUAL FROM INTERSTELLAR

More recently this was also demonstrated with the release of his 12th film, *Oppenheimer*. This time Ludwig Göransson oversaw the soundtrack, and he met the bar Zimmer had set. This is a harder example to use as *Oppenheimer*'s visuals are mind-blowing especially since the majority if not all are made organically and without CGI. So, it can be argued that these visuals specifically can suffice without a soundtrack, but I still disagree.



VISUAL FROM OPPENHEIMER

I was lucky enough to see *Oppenheimer* at the BFI IMAX in London which boasts the biggest IMAX screen in the country, meaning it also has the sound quality you would expect for the biggest screen in the country. Hearing Göransson's composition over that film with those speakers blew my mind (literally) and without that, it would have reduced my experience to a series of very bright images being burnt into my eyes every few seconds which sounds like a less enjoyable experience if you ask me. *Can you hear the music* accompanied the best visuals in the entire film and without them, all they would have been is something you can see in an art gallery (which is not necessarily a terrible thing but remember we are watching a film, not taking a stroll around the Tate Modern!).

An important indicator of a film's soundtrack quality is whether it can stand by itself without the visuals from the film and still be enjoyable.

An example of this was from last year's *All Quiet on the Western Front* directed by Edward Berger. Volker Bertelmann produced the soundtrack, and the track *Remains* can be listened to like any other song and still have the same impact as watching the film. The heavily distorted electric guitar-sounding synth breaks through the track in intervals which allows you to imagine what the film visuals may look like and that is a perfect sign of not only the soundtrack's quality, but also how the film would not be as good without it.

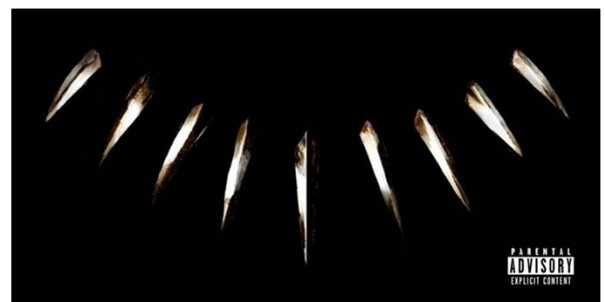
So far, I have only covered scores that do not contain lyrics and were not made for conventional radio. But soundtracks that are also intended for commercial use are equally as, if not more, important. In the last issue, I mentioned a soundtrack like this and that was the *Spider-Man: Across the Spider-Verse* soundtrack produced by Metro Boomin which led to Metro Boomin being the Artist of the Term, showing its high quality. Another Example is *Barbie's* soundtrack which incorporated both songs from characters in the films (e.g., *I'm Just Ken*) and standalone songs from various artists.



ALBUM COVER FOR BARBIE

This was important to *Barbie* as the soundtrack was not just important to the film's quality but also for marketing. Having popular artists perform songs for a film brings a lot of attention to it and the storyline by having relevant lyrics.

This makes the music and soundtrack especially important if it is one of the main ways of attracting viewers, which then makes it the centre of the film's marketing campaign. As I have shown, these soundtracks can stand alone by themselves and be popular without even having to be associated with the film. One of my favourite albums is the *Black Panther* soundtrack from 2018. Its lead producer was Kendrick Lamar, and the album could have easily stood alone by itself as it was as good as any other critically acclaimed album by Kendrick. Once again, like the two previous lyrically based soundtracks I have mentioned, it also was integral to the marketing of the film.



ALBUM COVER FOR BLACK PANTHER

To me, it seems like films cannot survive without music at all. Whether that is complimenting a visually appealing scene or being a marketing tool, music is a powerful force that film will use and if it doesn't? Well, the music will be fine by itself.

**FILM MUSIC SHOULD HAVE THE
SAME RELATIONSHIP TO FILM
DRAMA THAT SOMEBODY'S
PIANO PLAYING IN MY LIVING
ROOM HAS ON THE BOOK I AM
READING.**

IGOR STAVINSKY

NOLAN'S SCIENTIFIC INTRICACIES

WRITTEN BY JOSEPH VARGHESE 13X

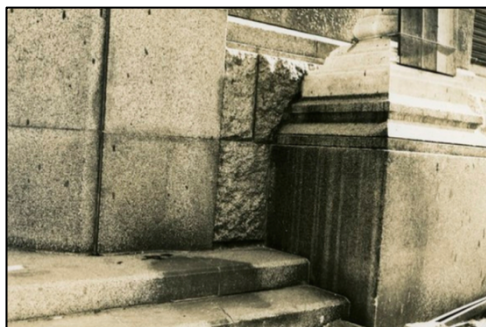
THE SHADOWS OF HIROSHIMA & NAGASAKI

Christopher Nolan's recent biopic 'Oppenheimer' has regained public interest in the vast history behind the nuclear arms race, which could have been said to start with the beginning of the Manhattan Project in December 1941. The movie dwells on J. Robert Oppenheimer's uneasy conscience and his fear of a global nuclear war, and so by having the movie centred around his mental perspective, the movie fails to truly capture the true desolation that the bombs brought on Hiroshima and Nagasaki.

One macabre result of the bombings is twisted black shadows of humans and objects, such as bicycles, being found scattered across sidewalks and buildings of Hiroshima and Nagasaki in the wake of the atomic bomb blast.



EXAMPLE OF A SHADOWED
IMPRINT OF AN OBJECT



EXAMPLE OF A SHADOWED
IMPRINT OF AN OBJECT

It echoes the imprints that the eruption of Mount Vesuvius inflicted on the inhabitants of Pompeii, entrancing hundreds of citizens in thick layers of volcanic ash forming mere casts. It is truly hard to fathom that these shadows, such as the one above on a simple set of stairs in the city centre, encapsulated the last moments of another human being.

You might be wondering; how do these shadows occur? According to a Doctor of Radiology from the University of New Mexico School of Medicine when each bomb exploded the intense light and heat spread out from the point of inclusion. Objects and people in its path shielded objects behind them by absorbing the light and energy, and in the process, essentially casting a shadow behind it.

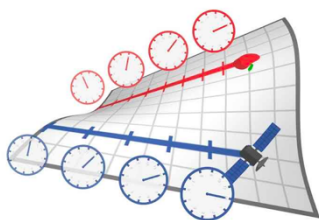
A bleached sidewalk, another relic to immortalise the events that occurred in the cities of Hiroshima and Nagasaki.

NOLAN'S DEPICTION OF TIME DILATION

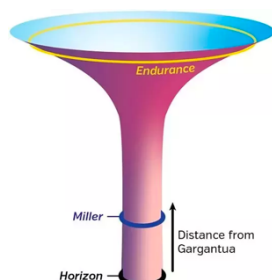
Christopher Nolan's greatest feat when it comes to bringing the beauty of scientific intricacy to film, is through his movie 'Interstellar', especially when it comes to his portrayal of Time Relativity. 'Interstellar' is based on the ideas of theoretical physicist Kip Thorne, specifically the notion that while we observe the universe in three dimensions, there could be at least five dimensions. In certain theories, it is posited that certain forces, in this case, gravity, are able to bleed through dimensions. This means that, based on Newton's Laws, what we perceive as a finite calculation could actually have infinite implications.

THE NEXT SECTION OF THIS ARTICLE CONTAINS SPOILERS FOR THE FILM INTERSTELLAR

The concept is clearly exhibited when the Endurance team visits Miller's planet after passing through a wormhole. In general, it is theorised that time on our side of a wormhole moves faster than time on the uncharted side, but due to the location of Miller's planet of being next to a black hole, Gargantua, time moves incredibly slowly on the planet. During the scenes of the Endurance Team on Miller's planet, a distinctive ticking sound in the musical score is playing throughout the sequence. Each tick, which occurs in 1.25-second intervals, that can be heard represents 1 whole day passing on Earth, with every hour the team spends on the planet, equating to 7 years having passed on Earth.



EFFECTS OF TIME DILATION
ON SPACE TIME



Time dilation itself refers to the idea that time is relative and passes at different rates for different observers due to a variety of factors. One factor, which is used to explain the phenomenon on Miller's planet, is gravitational time dilation due to the heavy curvature of space-time that objects with very large masses, can imprint onto the fabric of space-time. The black hole Gargantua, in the novel, is said to be about 100 million times larger than the size of our Sun, resulting in an inconceivably strong gravitational influence. Due to how the manipulation of space-time can influence time, the closer one approaches a strong gravitational body, such as Gargantua, the more severe the effects of time dilation are.

However, this effect can even be seen on a microscale, such as what we can experiment with the surface of the Earth. From Einstein's theories, we can say that the further you are away from the centre of a large gravitational influence, the faster time will pass. This can be seen by placing two atomic clocks at greatly different altitudes. An experiment that explored this hypothesis found a variation in the times of the clocks (although by nanoseconds), showing that the clock which was on the surface of the Earth, passed at a slower rate to the clock which was at a very high elevation.

THIS TERM'S WOMAN IN STEM

WRITTEN BY COURTNEY MARTIN 13A

Continuing with our section on exploring the lives of influential women in STEM, this term we explore the life of an experimental physicist who over the last two decades, with her team, has revolutionised the field of particle physics. Since 2009, she has been the **Director-General of CERN** and has been given the title of **The First Lady of CERN**. This is **Dr Fabiola Gianotti**.



Doctor Fabiola Gianotti is an Italian Particle Physicist working as Director-General at CERN. From 2009 to 2013, **Dr Gianotti was the spokesperson for the ATLAS experiment which oversaw the first run of the LHC**. On the 4th of July 2012, she presented the results of the **Higgs Boson discovery** through a seminar at CERN. Her role as the spokesperson for the ATLAS experiment meant overseeing detector and software development and data analysis. **CERN, also known as the European Council for Nuclear Research, is a research institute based in Geneva, Switzerland which conducts research into particle physics**. It is also home to the world's largest particle accelerator - the Large Hadron Collider (LHC), which is a 27km ring 100m (about the height of the Statue of Liberty) below ground. This smashes particles together with 1 billion collisions happening each second. In addition, scientists at CERN created the World Wide Web to effectively share information.

Interestingly, Dr. Gianotti went to a high school for humanities where she took classes such as History, Ancient Greek, Art etc. As a result, she learnt little maths and physics. However, it was her physics teacher who helped her develop her passion for physics by explaining difficult concepts. After high school, she decided to pursue an undergraduate degree in physics at the University of Milano, later she earned her Ph.D. in Experimental Particle Physics at the university in 1989.

She decided she wanted to be an experimentalist after reading Carlo Rubbia's work on W and Z bosons, which he received the Nobel Prize for. Before applying to CERN Dr. Fabiola Gianotti had spent most of her life in Milano. It was under her colleague's advice in 1993, that she applied for a fellowship at CERN; which she then received. She spent 2 years in the fellowship position but expected that she would return to Milano as getting a staff position at CERN was difficult as the application process was highly selective and competitive. Interestingly at the time, if you failed the application process, you would be unable to apply again.

Amongst her many accolades, she received the Special Fundamental Physics Prize of the Milner Foundation (2012), the Enrico Fermi Prize of the Italian Physical Society (2013) and the Medal of Honour of the Niels Bohr Institute of Copenhagen (2013). Furthermore, it was **Dr. Gianotti who presented the results of the discovery of the Higgs Boson through a seminar at CERN (4th July 2012), fundamentally changing the world's depiction of particle physics.**

Gianotti went on to make a multitude of highly impactful contributions to the field of experimental and particle physics, having authored/co-authored over 500 publications!

'THE MAGNITUDE OF THE REWARD IS PROPORTIONAL TO THE LEVEL OF DIFFICULTIES YOU HAVE TO SURMOUNT. THE SATISFACTION ONE GETS AFTER SOLVING A VERY DIFFICULT PROBLEM IS REALLY BEYOND COMPARE'

- DR FABIOLA GIANOTTI

BATTING OFF ON A WIN...

WRITTEN BY GEORGE RICHARDS 13X

SPORT OF THE TERM:

STEEPLECHASE ATHLETE OF THE TERM:

SORCHA PAGE

SPORT EVENT OF THE

TERM:

SINGAPORE GRAND PRIX

Sorcha Page, from Thanet, set new personal best times in the **European Aquabike Championship**. Competing in the 45–49-year-old category, Page completed a 1.2-mile swim in 44 minutes, and a 56-mile bike ride in just over 3 hours!

2023 MEN'S RUGBY WORLD CUP

This month, the Men's World Rugby Cup has kicked off to a ferocious start, with the first match on the 8th September being France vs. New Zealand. England so far have played well, beating Argentina 27-10 and victory with Japan on the 17th with a score of 34-12. The question is now... what will happen next?



MATCH SCHEDULE



WHO WAS ETHELDA BLEIBTREY?

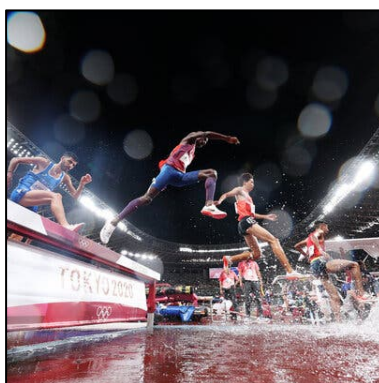
Born in 1902 in New York, Bleibtrey was an American swimmer and three-time gold-medal winner at the Olympics. She originally began swimming as physical therapy, after contracting polio, but found her love for swimming and competing. Before becoming an Olympian, she also made headlines for being arrested for "nude swimming", having removed her stockings at a public pool. Yet, her fight and perseverance make her continuously admirable, and she went on to win three gold medals in the space of 4 days in the 1920 Olympics, setting a world record for the women's 100m freestyle of 1 minute 13 seconds, and becoming the first US female champion, and going on to inspire thousands more female athletes and encouraging people to enter the sport.

A REVIEW OF THE TOUR DE FRANCE

Following on from my article last month, I feel it's very apt to review the results and key moments of the Tour de France. Starting on the 1st of July in Bilbao, Spain, the cyclists covered a remarkable total of 3,404 kilometres over 23 days. **Who won? 26-year-old Danish cyclist, Jonas Vingegaard won the race for the second year in a row, sprinting to victory down the Champs-Élysées in Paris, and winning by less than a tyre's width.** Within the last few stages, you can feel the tension building up, as the athletes prepare to break from the peloton; arguably, or perhaps not, the final stages are the best parts of the race. In the photo, you may realise that Vingegaard is wearing the yellow jersey, awarded to the cyclist that achieves the lowest time at the end of each day.



WHAT IS STEEPLECHASE?



As many of you may know, the **World Athletics Championships** ran across the summer in Budapest. One of the sports I was intrigued by was the **3000m Steeplechase**. What's Steeplechase I hear you ask? By strict definition, it is **"a running race in which runners must clear hurdles and water jumps"**. Having never heard of this sport before, I was fascinated by the creativity, as opposed to a typical sprint, and also impressed by the speed at which these athletes complete a challenging race. During the 3000m race, athletes hurdle over 28 barriers (of which are 91cm tall for men and 76cm tall for women), including a jump over water which is 70cm at its deepest! For the men's, **Getnet Wale** from **Ethiopia** finished in a remarkable **8.19.99** (minutes, if it isn't clear!), and for the women's, **Winfred Mutile Yavi** from **Bahrain** finished in **8.54.29**! Although it's not a sport many of us, including myself, know much about, I felt it was an incredible athletics event and wanted to share it with you all.

RED BULLS DOMINANCE FINALLY UNRAVELLED

WRITTEN BY SAMUEL BESWICK 13X

As I was thinking about an important sporting event this month nothing really came to mind. Until I was sat yesterday watching classic Formula 1 racing unfold in front of me and I thought what better to talk about than the final foiling of the most dominant streak in F1 history. **14 straight wins for Red Bull is an all-time record but during the chaos that unfolded this weekend, it has finally ended.** In terms of significant events, I would argue this has to be up there.



After 14 races of pure dominance for all of those involved in the Red Bull racing team so far this season the Formula 1 circus made its way to the sprawling streets of Singapore for one of the most physically gruelling Grand Prix's of the season. **The Marina Bay circuit promises to be a race clouded in uncertainty due to the nature of the tight track, the extremely close walls, and the lack of margin for error.** Unsurprisingly it did not disappoint.

From the start of the weekend, it was obvious that there had been a shift in pace. The dominant Red Bulls who have not lost a race the season being driven by both Max Verstappen and Sergio Perez seemed to be struggling out on track.



MAX VERSTAPPEN & SERGIO PEREZ

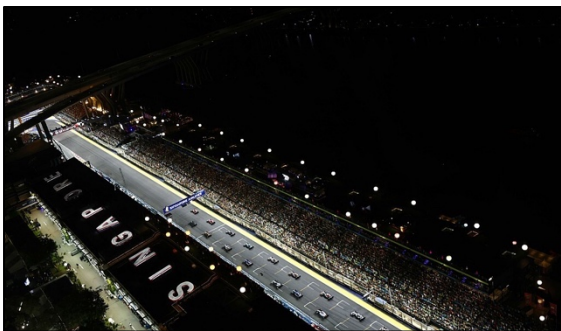
Not topping any of the three practice sessions leading up to qualifying there was great anticipation all over F1 social media as people began to speculate the downfall of Red Bull. However, I don't think anyone would have predicted the results that followed in qualifying. After a manic first qualifying session seeing Lance Stroll crash out coming around the final corner bringing the red flag out to end the session early the first five drivers had been eliminated. It was a very standard affair in terms of drivers being knocked out besides the unfortunate loss of Oscar Piastri in 17th.

However, as the second session began it became clear that the two Red Bull cars simply did not have the pace. The first set of laps came in and the prancing bulls were on the edge of dropping out of the session which would happen if they could not break into the top 10. As the final laps of the session came it was clear that Verstappen was struggling as his first sector time was too slow. He picked up time in the second and third sector putting him in a provisional 10th place, good enough for now. During his lap, his teammate, and the driver currently sitting second in the championship, spun his Red Bull round on the first corner ruining his lap and leaving him a lowly 13th.

It looked as if Verstappen had done enough to get himself into the top ten shootout when all of a sudden Liam Lawson in the Alpha Tauri (Red Bulls junior team) came flying across the line to push Max down to 11th place making it the first time this season there would be no Red Bull in the final Qualifying session.

Q3 played out resulting in a top three of Sainz (Ferrari) then Russel (Mercedes) and then Leclerc (Ferrari) to round out the top three but no one could believe the lack of a Red Bull car near the front of the grid. So much so that when interviewing Red Bull team principle Christian Horner, Martin Brundle jokingly offered him a map to make his way to the grid as the team had not been this far down all year.

The race gave all F1 fans a glimpse into what racing would be like without such a dominant force and it was most certainly entertaining. When Carlos Sainz finally crossed the line after 62 hard-fought laps only a single second separated the top three drivers.



SINGAPORE GRAND PRIX TRACK

Acknowledging just how tough the race was, Sainz said after the race "We had to fight for it, we had to be strategic, we had to nail everything and commit to our plans. We managed to bring home a win that was never easy but that feels incredible."

The pure intensity of the fight could not have been better depicted by the devastating crash that cost Russel a potential podium on the final lap of the race.

After an intelligent strategy call, just 17 laps from the end both the Mercedes, driven by Hamilton and Russell, were on new tyres and were chasing the leading group. On the tail of fellow countryman Lando Norris, Russel clipped an outside wall sending him careering out of the race. This did allow Hamilton into the top three, but it was a truly heartbreaking incident for Russel who had shown an incredible level of skill and precision all race. Russell spoke after the race and was visibly upset. "I have no words," he said. "Such a long race, a physical race, we were half a car's length from winning if I had just gotten past Lando."

Speaking of the plucky Brit in the McLaren. Norris had a brilliant race showing real maturity in his driving especially in the final few laps as he joined forces with eventual winner and ex-teammate Sainz in order to keep the Merc pair behind. A mix of incredible defensive driving combined with a perfect use of the DRS he gained from Sainz meant that he was able to keep the much faster Mercedes drivers behind him.

Behind this incredible fight, Verstappen in the Red Bull had been improving on his miserable qualifying. After an alternate and awkward strategy, the Dutchman showed the sparkle that we have seen all year and managed to make his way all the way up to 5th place losing out by 0.3 seconds to Leclerc in front of him. His teammate Perez had a more torrid time only finishing P8 but not before making contact with Alex Albon in the Williams on the final race causing the Thai driver to fall out of the points down to 11th.

Despite the early laps being a tactical battle of making sure the cars were able to operate at the correct temperature therefore a lack of overtakes, no one can deny that F1's plan for closer racing at the front of the grid looked to be nailed on in Singapore. Maybe we can all look forward to seeing this sort of racing in the rest of the races this season.