

THE DOZEN

CULTURAL MAGAZINE

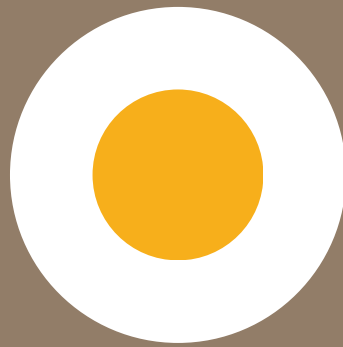


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01

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Our Shifting World

Issue 1 2025 September

About the Dozen

Welcome to the DOZEN, a monthly issue magazine by the student body, for the student body. We were tired of of reading the same magazines and newspapers, regurgitating the same information with little to no change so we thought that we would give it a go! Enclosed you will discover a range of articles covering both culture, current events and academic coverage, ensuring that there is at least something here for you.

This month's edition is on the passage of time and our shifting world. More often than not, our trends find them selves winding back to eras far gone; the return of Y2K fashion and digital media being particularly of note. With time and technology charging ahead, is it time to stop and contemplate whether thing really were better in the good old days? Happy reading, and enjoy.

Daniel Nenguke, Editor in Chief

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01 Reading Festival – is it still the same rite of passage?

TOM CARROLL

This year, Reading Festival had a lot to live up to with the lineup meeting a generally unfriendly reception. With Hozier, Chappell Roan, Travis Scott and Limp Bizkit as headliners, a large spread of genres was covered, but people were still unhappy. Why was this year initially branded by many as the worst lineup in Reading and Leeds Festival history?

I started by looking at the posters from previous years. 10 years ago, they had 250 separate acts across Friday, Saturday and Sunday. This year they managed 155. That doesn't mean fewer tiny, unheard-of indie bands play at Reading – they used to have 3 headliners each day instead of just 2. These types of festivals are where smaller artists get to break onto the big stage, Stormzy and Loyle Carner played at Reading in 2015 when nobody knew who they were – look where they are now. As I was watching the Kooks on the Main Stage, I heard several people around me saying that they wanted to hear more from the first album (released in 2006, their most successful album).

When you think of Reading Festival, you think of contemporary artists who have just become mainstream, instead of acts riding on a wave of fame from 20 years ago. Their set was still great though, with actress Rebel Wilson making an appearance and singing Gangsta's Paradise, rumoured to be appearing in a movie soon!

Yes, the Kooks might be past their peak of fame, and their crowd might have been full of people in pink cowboy hats who wanted a good spot for Chappell's show after, but they still managed to capture that festival magic.

Limp Bizkit also peaked in the 2000s, but the crowd loved them, even inviting a fan onstage to sing Full Nelson with them. They felt more like an act for millennials who grew up with them rather than a modern act, but they still definitely impressed, as did Bring Me The Horizon. Metal and Nu-Metal fans were so lucky that they got to see both in one day! The question is, will we be seeing more older bands in the future, or was this year a one-off? Who knows?

That being said, this year had many new and rising artists, like Hozier, Wallows, Conan Gray, The Linda Lindas (their drummer is only 15 and their bassist is 17, which left me feeling like I've wasted my life!) – even the 2024 VMAs Best New Artist was headlining, and her stage presence was unmatched. Chappell Roan practically had a movie set on stage that looked like it was straight out of *Wicked*. Her setlist went down incredibly well with the fans, who managed to outsing her at times, and her gothic vampire outfit really amplified the vibe she was going for.

What about the smaller bands? Most people go to festivals for the big names, but there are at least a couple of smaller artists worth seeing as well! I managed to see Jasmine.4.t, a relatively new queerpop artist, who has collaborated with Phoebe Bridgers. My favourite has to be Been Stellar, an indie band who absolutely rocked the Festival Republic stage. Me and my friend were lucky enough to be at the very front and ended up getting the setlist from their bassist! SNAYX were... certainly different. They were a cross between punk rock and Dizzee Rascal, with their singer coming down from stage and creating a moshpit with everyone running and shoving each other like it was a primary school playground, kicking up enough dust for a sandstorm. The energy levels were through the roof! Smaller artists were in circus tents which really help the atmosphere despite "only" having about 1000 people. It's an experience I would definitely recommend.

I can't talk about this year without mentioning Travis Scott. It might seem stupid to just shout "FEIN" over and over again, but it's infectious, especially with everyone around you. It was so good he played it twice. There was a chance you could hear it from your house. Reading Festival's changing, and it's definitely not dead.



02

The Unlikely Resurrection: Why Vinyl Records Are Spinning Again

RICHARD WU

In an age of digital streaming and invisible music libraries, a curious countertrend is thriving. Vinyl has been increasing in popularity and although it has made its resurgence, it is being seen in a different light by our generation than previously before.

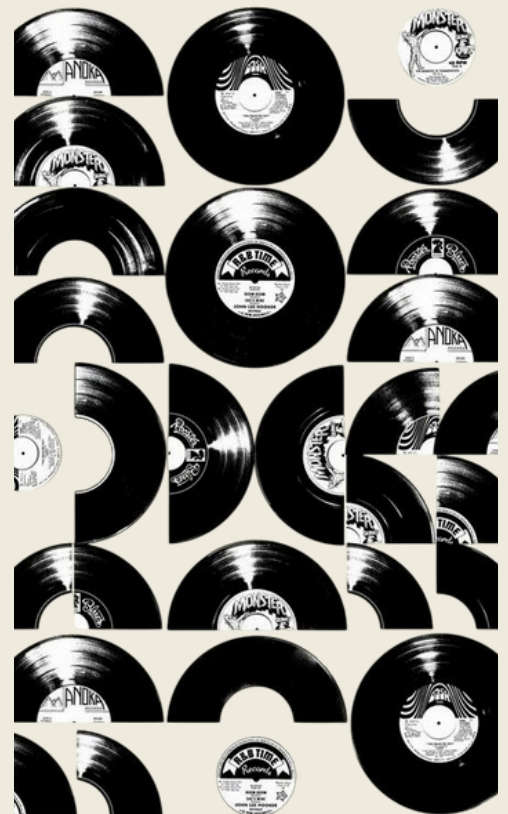


Despite previously being overshadowed by CDs and digital media, vinyl has seen a remarkable comeback in popularity over the last 20 years. This isn't just a minor blip; it's a full-blown resurrection. In the past, the creation of vinyl was an incredible technology which allowed for more convenient listening and recording and was the most advanced at the time, so was viewed as a means to an end. As technology improved and CDs were invented and popularised, vinyl decreased in popularity because it was, 1, no longer the easiest way of playing music, 2, more expensive than CDs, and 3, out of fashion.

However, for us, the new generation of collectors, vinyl represents something special that streaming cannot replicate: a physical, tangible connection to the music. By buying vinyls, we can feel that we comfortably 'own' a piece of music compared to simply downloading it – the sensation of holding and displaying a vinyl is paramount to that feeling of ownership and pride. Importantly, using vinyl requires a vinyl player and for you to set the needle to the track you want which must be a key part of the experience.

When music has become so easy to listen to and enjoy, we have begun to take it for granted, causing us to lose the vital spark that makes the act of listening to music so amazing. The over-convenience of music can be seen through how Spotify (and other music providers) makes pre-made playlists and queues song after song for you, so all you have to do is put your earphones in and click play. It does allow you to discover countless artists you would have never heard of otherwise and broaden your musical taste if you do find other music you enjoy but unfortunately, can lead to passive listening and sometimes music devolving into distraction.

Vinyl, on the other hand, transforms listening from background noise into an active, immersive experience through physical touch, a sense of ownership, and the ritual needed to play music, leading to its rebirth among our generation as an escape from the digital world and a way to enjoy music by itself – with no distractions and definitely no ads.





Over the past decade, fast fashion has become increasingly prominent as a talking point in the fashion forum. With consumerism on the rise globally, we have taken a liking to extensive wardrobes with the latest Yeezys, New Balance 530s, or even a pair of bright, neon yellow Onitsuka tigers on deck at any given point in time. At some point over the past decade, we moved away from our dependable and well-worn wardrobes and gave in to the bright, the shiny, and the flashy, and it doesn't help that the media helps foster the image that more is better. Here, there and seemingly everywhere, micro-trends are popping up at the speed of light and disappearing just as quickly as they came. What is fashionable, and what is not, seems to change at the blink of an eye, and keeping up with fashion is proving to be a Herculean feat. Fast fashion is zooming ahead and all it is leaving behind in the dust are landfills filled with clothes no longer loved nor needed. But how did we get there?

The Polyester Problem

One of the main causes of overconsumption is the abundance of cheap materials. Fashion tycoons such as the infamous Shein and Temu favour more affordable materials like polyester when producing clothes, drastically improving profit margins. Although this is favourable to both the manufacturer and the consumer, what bears the brunt of the numerous shortcomings of this arrangement is the environment. Polyester, a fossil fuel-based fibre derived from petroleum contains millions upon millions of tiny shards and fragments of non-biodegradable microplastics. During production, these microfibres and other toxic chemicals, enter our water systems, posing mortal threat to our marine life. In 2022 alone, over 70 million barrels of oil were used to produce polyester; all non-biodegradable, all toxic to the environment.

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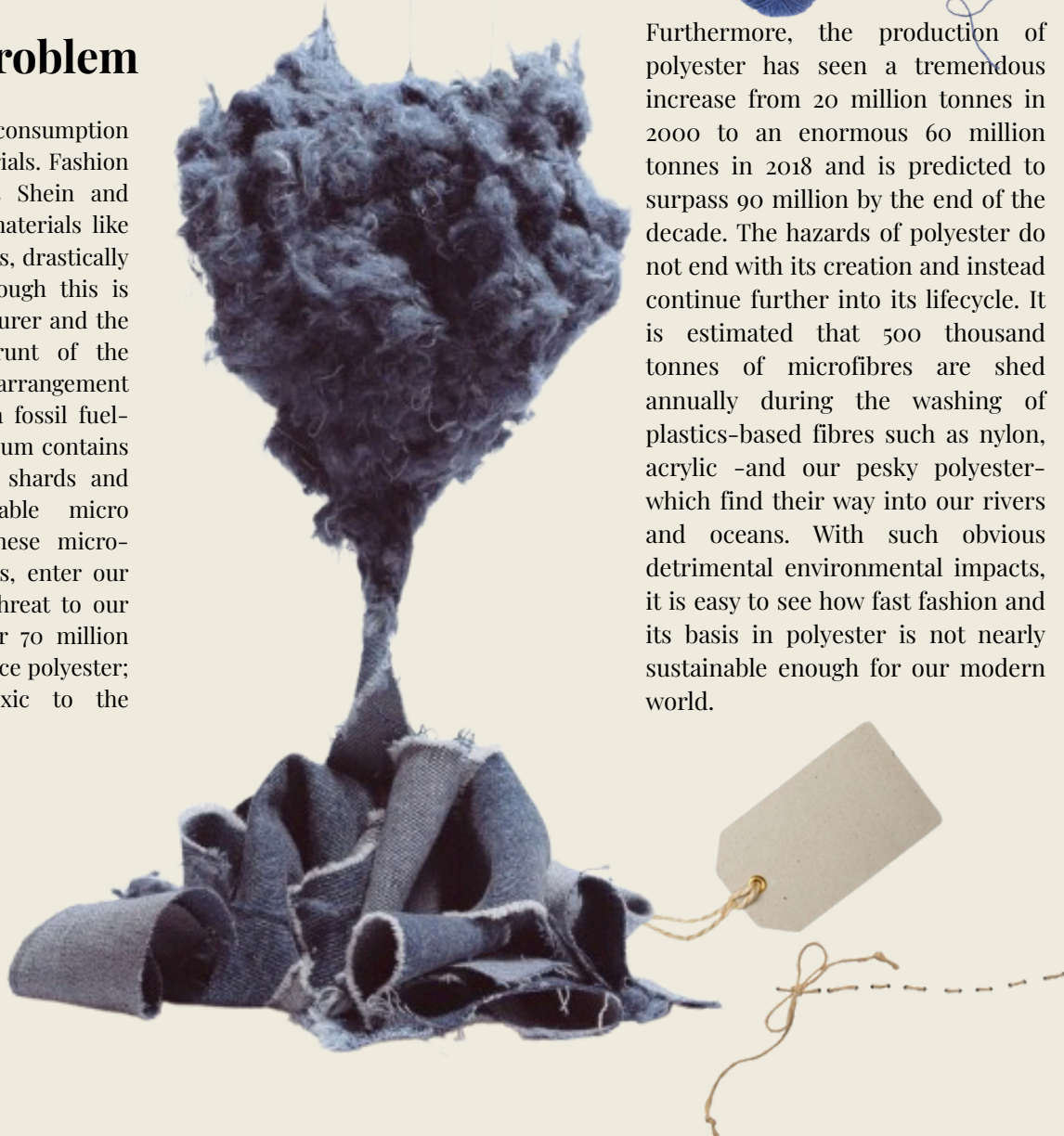
What can we do to get up to speed with fast fashion?

There are a multitude of methods we could all employ to distance ourselves from fast fashion culture, one such method could be to make your own clothes.

Although it may be time consuming, making our own clothes allows for greater individuality and customisation of pieces. This then breeds a greater appreciation for apparel and creates a sense of ownership over your creations, promoting longevity of ownership. Not only does producing your own clothes reduce greenhouse emissions and water usage, hand-based techniques such as knitting have also been proven to drastically improve hand-eye coordination in addition to aiding mental health.



Furthermore, the production of polyester has seen a tremendous increase from 20 million tonnes in 2000 to an enormous 60 million tonnes in 2018 and is predicted to surpass 90 million by the end of the decade. The hazards of polyester do not end with its creation and instead continue further into its lifecycle. It is estimated that 500 thousand tonnes of microfibres are shed annually during the washing of plastics-based fibres such as nylon, acrylic -and our pesky polyester- which find their way into our rivers and oceans. With such obvious detrimental environmental impacts, it is easy to see how fast fashion and its basis in polyester is not nearly sustainable enough for our modern world.





Breakthroughs in Legislation

It is completely understandable if you are not one prepared to devote countless hours to craftsmanship, which is why the French Government has taken it upon themselves to provide support in the battle against fast fashion. On the fourteenth of March 2024, France's lower house of parliament unanimously approved a 'kill bill', targeting ultra-fast fashion garments sold by fashion tycoons Shein and Temu. The bill aims to limit the industry's environmental impacts by enforcing a ban on the advertisement of certain corporations. In addition, this bill will see a penalty with annually increasing increments of ten euros per garment by 2030. Furthermore, the bill would require fast fashion retailers to include details of an item's reuse, repair, recycling and environmental impact near the garment's price



Too little too late?

Although it is commendable for French lawmakers to make such an effort to slow down fast fashion, without the support of other European Union member states and other nations globally, fast fashion will only continue to speed up. In order to bring fast fashion to a grinding halt, we must be a united front on all levels: corporations must invest in renewable practices and phase out the uses of polyester for more sustainable textiles; governments must hold these corporations accountable to their environmental obligations and we must better appreciate and care for our clothes. Reduce. Reuse. Reinvent. One man's trash is another man's treasure; if it no longer serves its purpose adjust or donate it. Let's get fast fashion back on track.



When I saw Russell Martin had bounced back into management mere months after leaving Southampton bottom of the Premier League (with one win in 16 games and his side already 9 points from safety, en-route to almost being the worst team ever to grace the history of the league) I can't say I wasn't surprised. What furthered my shock at his appointment was his lack of managerial experience – to date, he has only been managing for 5 years, and to be appointed at a club where not winning the Scottish Premiership (i.e. finishing 2nd to Celtic) is considered a failure, and with a fanbase as vocal in their displeasure as the Ibrox one, he needed to get things rolling, sooner rather than later.

However, this has not been the case. Martin's side immediately drew to lowly Motherwell (a team who finished 8th out of 12 teams last year) in the first game of the season, with Motherwell having an xG (the goals a team would be expected to score given the chances they had) of over 2, compared to Rangers having less than 1, showing how even though the result was poor, the performance was even worse, with the Motherwell wingers seemingly strolling into the box whenever they fancied in the second half, the Rangers defence left stranded all over the place. This 'one-off' result may just have been a blip in Martin's tenure –after all, surely the players would need some time to gel under the new possession-centred style of football? But still, the wins have failed to come for Martin. A 1-1 draw to Dundee in the next league fixture began to anger the passionate and expectant fanbase,

with Martin's side all over the place in defence as 1 pass carved open the backline and centre-back Djiga was embarrassingly sent off for Rangers – still needing a 90th minute (rather dubious) penalty decision to go their way to snatch a point. And so the poor results have continued, with Martin changing his 4-2-3-1 to a 4-3-3 to no effect, with his team still having the same defensive fragilities as before – the perfect example highlighted in their sketchy 4-2 Scottish cup win over Alloa Athletic – a team 2 divisions below who haven't played in the Scottish Premiership since 1923 – where Rice, the young Rangers left-back, gets skinned in an almost comical fashion, before the defence fails to clear the ball on 3 occasions and the eventual shot ends up trickling into the net: in short, Rangers have not only been bad, but terrible.

And this is where things have gone from bad to worse – after 4 games, Rangers already sit 6 points behind perennial rivals Celtic (as last season Celtic beat Rangers by 17 points to win the league, Rangers only having won the title once in the last 14 years – with Celtic winning the other 13 – such a disgraceful start is unlikely to have been tolerated by the fans).

Martin's torrid form has also continued in European fixtures as well – in the Champions League play-off round, where a win would have qualified them for the League Stage of the competition, offering the chance to play teams such as Real Madrid and PSG – they were thumped 9-1 across two legs by Club Brugge of Belgium, being 5-0 down at half time away from home and the Rangers defenders apparently forgetting how to defend, gifting goals to the opponents on a whim.

Martin failed to change his formation and his substitutions came to late in the game to make an impact, ultimately meaning Rangers lost out on even more credibility, as well as the £12 million bonus which they would've been entitled to had they won the tie and qualified, further damaging the name of the club.

In short, not only has Martin's football failed to gain the results the fans believe they are entitled to, but the style of football and overall work rate and calibre of the team is beginning to let down not only the club itself but the fans as well, leading to only one possible solution – Martin has to go.



05 Why Summer Messes up your sleep schedule (and what you can do about it)

ABDUL AHMAD AND JADEN LE

It's midnight, your curtains are illuminated by the streetlights, and your brain is wandering instead of falling asleep. Summer, at first, might feel perfect, but the long evenings and warm nights can turn bedtime into a battle. Don't forget the endless scrolling, and suddenly the "best time of the year" is also the hardest time to sleep. For teens, biology makes it an even bigger struggle.

The main part of your brain affecting your summer sleep schedule is the Suprachiasmatic Nucleus (SCN), located in the hypothalamus, which is responsible for the regulation of the circadian rhythm, your body's natural clock. It regulates this through the hormone melatonin, which you may know from melatonin gummies, a common sleeping aid. Research has linked a damaged SCN to conditions like depression, Alzheimer's and insomnia.

The SCN is light sensitive and is directly connected to your optic nerve, meaning that the detection of light, especially blue light, causes the SCN to start reducing melatonin, causing you to wake up. There are other factors reducing the sleep of students during the summer.



Tips for better sleep:

1. Morning sun: open your windows as soon as you wake up to reset your circadian clock
2. Cool your body: a small fan, light sheets, a warm shower (counter-intuitive, but after the initial rise in body temperature the body aims to lose heat).
3. Block light: blackout curtains, eye masks.
4. Artificial dusk: turn off screens (eye comfort shield settings work too) and dim light 2 hours before bed.
5. Bed=sleep: the aim is to create a link in your brain between getting in bed and sleeping. Any activities in bed can negatively affect this link. This includes using your phone, reading a book or even lying in bed doing nothing as this makes your brain correlate your bed with discomfort and struggle. Instead get out of bed and do something that will make you tired.

Longer days contribute to the SCN's photo-receptivity while scrolling on your phone before bed, which many teenagers (including us) do, contributes to the degrading of the circadian rhythm, which is why you hear advice about reducing blue light before sleep.

This "glitch" with the SCN impacts everyone so why are teens more susceptible? In summer, adults go to bed about 11 minutes later according to sleep.com. Children can shift by 1.5 hours (IJBNPA). "Teens experience a natural shift in circadian rhythm" says sleep expert Laura Sterni. For teens, this shift can reach 2 hours compared to natural circadian bedtime before puberty. This change is caused by teens producing melatonin later.

Although not certain, scientists theorise this sleep phase delay had evolutionary advantages. In prehistoric times, there may have been an advantage for fit teens and young adults to stay away late to protect sleeping kids and adults from nocturnal predators. This staggered sleep would protect a tribe. Other theories include teenage years being a period of social interaction and exploration. With teens being the only ones awake late, it allowed them to interact with peers and learn skills away from parents.

Your summer sleep schedule isn't laziness – it's built into your brain and the season. Next summer, when you're wide awake at 2am and groggy at 12pm, remember that it's not just you: it's science.

Research shows core body temperature needs to fall by ~1C to sleep. According to Bed Advice UK, the ideal bedroom temperature for sleep is 16–18C. Warm, sticky summer nights only make sleep more difficult. A study published by One Earth showed that in 2010, 44 hours of sleep were lost per person annually on average due to heat. This is expected to rise to 58 hours by 2099 due to climate change.

The most concerning part of this is that heat especially impacts and reduces REM sleep. During this phase, there is increased brain activity as short-term memories are consolidated into long-term memories. By reducing the time spent in REM, heat directly affects a person's memory and learning.

During the summer, many students naturally shift their bedtimes later, to take advantage of not having to go to school. This is compensated by having a lie-in in the morning, except because of the SCN's photo-receptivity, sleeping later into the morning will not be as restful as sleeping exclusively during the night, reducing the amount of sleep attained. With teens needing 8–10 hours of sleep but many not even getting 7 (sometimes even less in the summer), learning, memory, mood, growth and more are negatively impacted.

“King of Olympus”: Europe introduces exascale supercomputer

MOJTABA CHOWDHURY

On the 5th of September 2025, German Chancellor Friedrich Merz, alongside EU Commissioner Zaharieva, introduced Europe’s brand-new supercomputer system, *JUPITER*.

Benchmark testing

The new supercomputer, inaugurated at the Jülich Supercomputing Centre, is the first in the region to exceed the Exascale threshold, a standard of supercomputer speed set to the level of performance required to perform one quintillion floating-point operations per second (FLOP/s). This number is so large that it may be difficult to comprehend the scale – so the number provided at the ceremony was the combined computing power of 1 million modern smartphones.

This would make this computer the fourth fastest supercomputer in the world, and the fastest supercomputer outside the United States. The computer has 1 exabyte of storage (equivalent to 1 billion gigabytes), 51,000 network connections, allowing it to transmit 3x more data than the entire global data traffic at any given moment, and JEDI, (one rack of JUPITER), is the most energy efficient supercomputer in the world. (source: NVIDIA)

Use cases

With the rapid growth of the AI market in recent years, Jülich collaborated with NVIDIA, the world leader in AI processors, and their Grace Hopper™ platform in order to help build Europe’s best simulation computer. Jensen Huang, NVIDIA’s CEO and Founder, says that “AI will supercharge scientific discovery and industrial innovation.” Ma spoke of the potential of JUPITER, alongside Huang, such as how it is a “landmark achievement for European science and technology” – a remark by Thomas Lippert, the co-director at Jülich, who also mentioned some aims with regards to the use of the supercomputing system, for example “propelling foundational research” in fields such as “climate modelling, energy systems and biomedical innovation.”

Researchers particularly aim to make use of the climate simulation abilities of JUPITER, as it can run weather and climate scenarios at kilometre-scale resolution, allowing more accurate forecasting for floods, storms, heatwaves, and other extreme events. The computer may also enable breakthroughs in physics, medicine and materials science, experts say.



European AI-ms

While the supercomputer system announced recently is a large step in European technological innovation, it aligns with the EU’s broader aims to establish AI “gigafactories” – a project

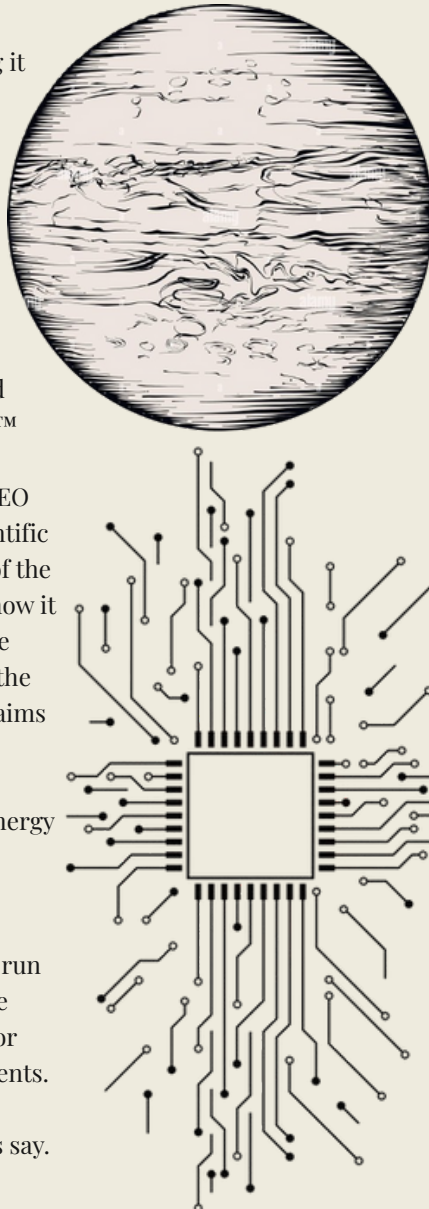
which has an end goal to produce large scale AI-developing training hubs.

So far, €500 million, in a joint investment between the EU and Germany through EuroHPC Joint undertaking, have been invested into the project. Thirteen proposals have already been backed by EuroHPC to create AI factories, and by June 2025, 76 expressions of interest were submitted, showing rising demand throughout the continent to build these AI hubs.

JUPITER’s computer power is central to training AI LLMs, and it is the first step to increasing Europe’s AI sovereignty. While

JUPITER doesn’t match some U.S. Supercomputers, which reach over 1.7 quintillion FLOPS/s, it is undeniably a large step forwards for European technology.

“ With Europe’s first exascale supercomputer, we are opening a new chapter for science, AI and innovation. JUPITER strengthens Europe’s digital sovereignty, accelerates discovery, and ensures that the most powerful and sustainable computing resources are available to our researchers, innovators, and industries. ”



End of the Dollar's reign? SCO bets on local currencies

06

On the 1st of September 2025, the Shanghai Co-operation Organisation (SCO) met at a Summit in Tianjin, where the organisation's ten members – including big names such as China, Russia and India – pledged to settle a larger portion of international transactions using local currencies.

MOJTABA CHOWDHURY

President Xi's vision

“We must continue to take a clear stand against hegemonism and power politics”, said the Chinese President at the summit. The remarks of the CCP's leader were primarily focused on the desire to achieve a standard of multilateralism between Eurasian economies.

Although the SCO has been a mostly symbolic organisation since its founding in 2001, President Xi's ambitions proposed at the summit suggest that the group may play a greater role in worldwide economics starting from now. The Chinese leader proposed the creation of a development bank for the SCO, announcing a contribution of 2 billion RMB towards the project, as well as another 10 billion RMB in loans, which would go towards the development of other SCO members.

The future impact on green energy trade – The “electro-yuan”

The creation of the development bank has been a key turning point in Xi Jinping's recent aims to involve the Yuan more in transactions with other countries. Notably, a Chinese firm invested a 500-megawatt wind power project in Uzbekistan in 2023, exclusively using the Yuan to settle contracts.

The President, in his keynote speech, spoke of working with “fellow SCO countries to increase the installed capacity of photovoltaic and wind power each by 10 million kilowatts in the next 5 years” as well as committing, alongside India and Russia, to develop AI, establishing a cooperation centre within the SCO framework.



These clear pledges mark Xi's goals to increase demand for the Chinese currency, as global and regional demands for AI and electric vehicles are increasing rapidly. This may mean that, in future, a yuan-dominated green electricity trade could challenge the west and potentially cause the Yuan to rise against the “petro-dollar”.

But will it really work?

Some experts are doubtful, however. Neal Shearing, Chief Economist at Capital Economics, mentions how he's “sceptical” about de-dollarisation, as well as how “it's going to take an enormous amount to unseat the dollar from its central position within the global financial system”. He mentions the statistic that just under 90% of all global transactions are denominated in dollars, and that even a 5, or 10% increase in the Yuan's share would mean that the dollar remains in financial dominance.

On the other hand, Analysts at Deutsche Bank, working together with Jane Foley at Rabobank, offer the angle of political risk, with Foley adding that “Trump's trade and foreign policies have forced Europe on a path towards reduced reliance on the U.S” which will likely “imply a desire for reduced reliance on the dollar”.

Many experts agree that de-dollarisation is unlikely to happen very soon, however, they agree that the SCO is no small threat to western financial dynamics, with almost a quarter of global output, measured by GDP, coming from the members of the SCO. Furthermore, the rapid growth of AI and Renewable energy is significant, with the market size for AI having an annual growth rate of 26.6%, as well as global renewable energy capacity increasing from 19% in the year 2000 to over 40% in 2025.

07 Oxford University: pay to win? DANIEL NENGIKE

Oxford university, the dream the myth the legend. Among you all, I'm sure you or maybe even a friend of yours have contemplated the prospect of attending such an esteemed institute, and with such a reputation it follows that only the best of the best should be accepted. But what if I told you that that's not the case. What if I told you that this beacon of education could be being tainted by the admission of less deserving students who are children of key benefactors.

How would it impact the University?

What's the big deal?



The first issue with lowered admission standards would be the reduction of the human capital of students. But what is human capital? There are numerous views and definitions that we could view it from. The first of these approaches that we should consider is that of Bowles-Gintis. This view categorises human capital as the capacity of an individual to work in organisations and obey orders. This view would suggest that it is the responsibility of a students university and other influential communities to instil said values of submission to a hierarchal society. However, by lowering the admission standards, the children of benefactors would be negatively affected, being led to believe that through their parents' connections and influence, they are above the rules and systems of the university from the onset of their arrival as an undergraduate, reducing their compliance to the rules, reducing their human capital and worth to Oxford University. Another view of human capital which should be paid mention to is that of Schultz/Nelson-Phelps. This view states that human capital is measured through the capacity to adapt. Due to the wealth of their parents, it is reasonable to assume that the children of benefactors may have had sheltered upbringings, being granted less exposure to the realities of life for people of lesser social capital and who hail from poorer socio-economic backgrounds.

This privilege, which presumably has been instilled from a young age, serves as an inhibitor to adaptability by making the children of benefactors predisposed to comfort and ease, decreasing the likely hood of adaptability, further reducing human capital. A third view of human capital is that of Spencer, which dictates that observable measures of human capital are more of a signal of ability than characteristics independently useful in the production process. This relates directly to Spencer's signalling theory which outlines that when we cannot directly see quality, we use a substitute that is observable (a signal) to enable the market to function. In this scenario the unobservable quality would be the academic potential of the individual, and the signal would be that of their qualifications and grades at A-Level.

Should Oxford choose to lower its entry requirements for a select few, it would allow those with supposed lower academic potential admission to the institute. These students would provide less human capital for the University as they may lack the abilities required of them to meet the rigorous standards of the course as well as lack the adaptability to compensate for their deficiencies, making them a liability to their respective departments. This poses a significant issue due to the nature of Oxford's income. According to their annual budget report, in the 2022-23 cycle, the aggregate income of Oxford's 36 financially independent colleges (Kellog College, Reuben College and St Cross College do not possess a royal charter and so are classed as societies) summated to £668.5m, serving as the source of 23% of the universities total income. Of this 668.5m, 38% stems from teaching, research and residential, raising approximately 254.0m in the 2022-2023 cycle.

08 Were the Russian winters really that bad?

JADEN LE

The last and most effective defence against invasion. It's famous for being instrumental in destroying armies attempting to attack Russia, most famously the German army in Operation Barbarossa (1941) and Napoleon's army in 1812.

It's so well known for this that some even nicknamed it "General Winter" (Allen F. Chew). But how effective were the Russian winters in reality? Surely most generals must have realised how bad they were and learned from the mistakes made earlier in history?



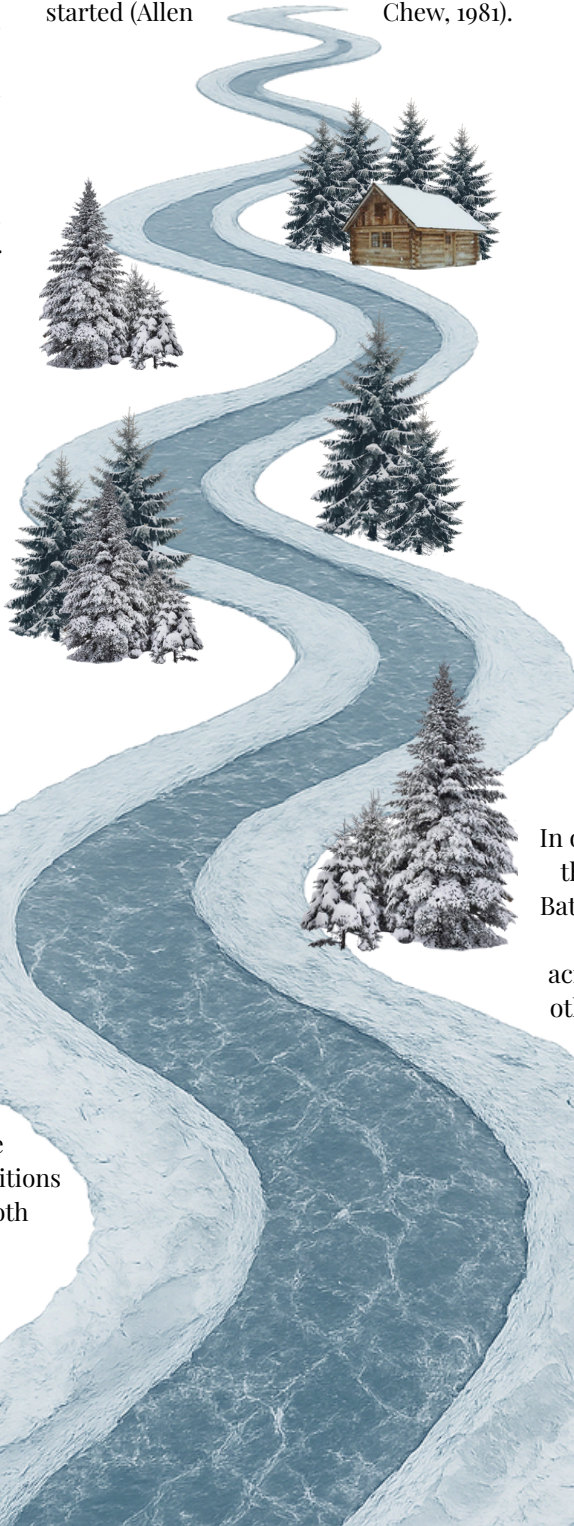
The first thing to understand is just what the Russian winters are like. Whilst the European side of Russia, where most invasions focused on, is relatively milder than the brutal Siberian winters, temperatures still frequently hit -10°C , with snow being seen from October and lasting to March. Considering the gigantic size of Russia, armies could potentially be suffering in those conditions travelling for over a 1000 kilometres or more towards Moscow or St Petersburg, the two main cities that armies tend to attack.

The cold isn't the only issue stemming from the Russian winters as well. Invading armies also have to deal with mud (autumn) or snow, which slows army movements drastically, and forces supply lines to adapt to the conditions. More food and supplies are also required to feed soldiers, which combined with hampered supplies and the general Russian strategy of "Scorched Earth" (destroying all usable crops and shelter whilst retreating), created the perfect conditions to destroy any invading force.

The interesting thing is that no one plans to. Out of the last 3 major invasions of Russia, only one of them (Swedish invasion in 1708) started in Winter; it actually started during late Winter. Both Napoleon's and the German army attacked in June, where conditions were favourable. It was hubris that got to both Napoleon and Hitler in the end, as both (especially Hitler) believed that they could defeat the Russians before Winter came, which led to soldiers being under equipped when the invasion dragged on, causing massive casualties.

So why would anyone invade during winter?

It didn't help that the winters during these invasions were historically brutal, with the winter in 1812 reaching -30°C . A graph showing the size of the French army as it invaded Russia, along with the temperature. However, the effects of the Russian winter are likely to have been exaggerated. Whilst it is true that only $\sim 100,000$ returned home from Napoleon's invasion out of the 610,000 who started in the summer, the army had already lost half of their men even before the winter had started (Allen Chew, 1981).



After the invasion, the writer and poet Denis Davydov released a report titled, "Was it Frost that Devastated the French Army in 1812?", in which he demonstrated that Napoleon had already been losing men when the weather was mild, due to disease, desertions, and the scorched earth strategy, forcing the army to garrison their precious supply centres.

The scorched earth strategy also played a crucial role in the defence of the Nazi and Swedish invasions as well, as it forces soldiers to wait for supplies, leading to them being caught in the winter. This was very prevalent in 1812, as the Grande Armée relied on the corps system, where soldiers lived off the land. Likewise, during the Nazi invasion of the USSR, they had already lost 734,000 men even before winter due to tactical failures by German high command, who didn't expect enough resistance to prolong the war.

On 27 November 1941, Eduard Wagner, who was in charge of supplying the army, reported that "We are at the end of our resources in both personnel and material. We are about to be confronted with the dangers of deep winter." In truth, while the Russian winter was certainly horrible to fight through, and a big advantage for the Russians, it was nowhere near the instant war-winning event some would portray it as.

In one case, it actually served to detriment the Russians as when the Mongols under Batu Khan attacked in December 1237, they used the frozen rivers to quickly travel across Russia and sack Moscow and many other cities, consequently putting the Rus under the Mongol yoke for over 200 years. (Uralsk.ru) Harsh winters are also ineffective on offence, as seen in the Winter War of 1940, where the USSR invaded Finland, another country used to freezing conditions. The winter gave the Soviets little help, and the USSR suffered 5 times the casualties of Finland.

09 Anthropology: The Science of being human

GIL OTHNAY

Why do we celebrate birthdays? Why do we speak different languages? The answer is anthropology: the science of us

What is anthropology and why does it matter?

Simply, anthropology is the study of why humans do what we do currently and in the past. According to The Oxford Learners Dictionaries it is defined as the scientific study of the human race, particularly its origins, development, customs, and beliefs.

There are four primary branches of anthropology:

Cultural- studies of human societies and how diverse groups and cultures developed

Biological- the focus on the evolution of humanity and their evolutionary aspects as well as those of our ancestors, the primates

Linguistic- studying how language interacts with language and society and exploring how people have used language to create meaning and identities

Archeological studies past human cultures by analysing the remains of the past ranging from tool and pottery to buildings and other artefacts

Why does it all matter?

I am sure some of you are reading and wondering what is the point of some things which happened in the past when we have evolved so much? Anthropology is not just about understanding the past and while that is important in itself anthropology is also studied to recognise that each way of life a person has is just one possibility out of billions. In such a diverse world as our current one is where people from different races and backgrounds interact on a daily basis anthropology helps us understand what it means to be a 'person' and connect with others.

WEEKLY

ANTHROPOLOGY FACT:

Humans are the only species ever to cook their food

Anthropology lets us understand why we humans care for one another. In an interview, famous Dr Agustín Fuentes from the university of Notre Dame says 'if we do not understand the past, we're doomed to repeat it in the future.'

Anthropology can help us understand why we have handshakes which is due to in ancient times they were used to show a peaceful intent to convey trust and acceptance. Also, the handshake has been found to send chemical signals which build social bonds and promote collaboration.

Anthropology also lets us understand the reasons for many modern events such as sport chants which nearly every football club has. Anthropology teaches us that humans chant to create a sense of belonging and collective identity. In ancient times Neanderthals or early Homo sapiens, Denisovans, Homo Erectus etc. would only have travelled in their immediate families with the father, mother and child so as groups started increasing in number where not everyone was related by blood early man had to find a way to create a sense of belonging. This is similar to why wolves howl together at the moon: it is part of their identity as wolves. Whereas for humans, it is part of our identity to shout for a variety of reasons such as emotional release or a way to create energy if feeling lackluster.

Even emojis can be studied as a language and can have its origins traced back to earliest forms of communication for the Homo Sapiens such as cave paintings and carvings. Much like emojis, these carvings and paintings would convey emotions or share information and record events. These images would then evolve to Egyptian hieroglyphics and then symbols, eventually reaching the invention of the actual emoji in Japan in 1999.



