

THE ARROW



POLITICS // MUSIC // OPINION // SCIENCE



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GCSE
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Hi, my name is Muhammad Ali.

I am a private tutor of 20 years' experience, with a PhD in Physics from Cambridge.

The results my students achieve show that my approach can make all the difference in helping students overcome difficulties and succeed in realising their potential. Not only do I share the same name as the (late) great boxer but, like Ali, I also believe that I'm the best at what I do. But you don't have to take my word for it - you can read my testimonials below and many more on my website.

Muhammud Hi

From struggling in Maths and Sciences at the beginning of the GCSE courses, Muhammad helped me reach my target grades and beyond with his clear tuition.

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HARRY ROBINSON, YEAR 12.

My daughter had 1:1 Skype tuition with Muhammad as we don't live in London.

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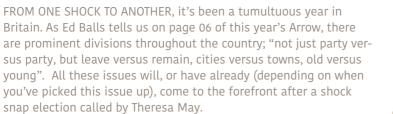
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Thankfully, this year's Arrow does have a number of different perspectives. That, in addition to its long history, is why it's such a proud tradition for the school. As seen on pages 10 and 11, two Year 11 friends debate the EU Referendum. They're both still friends. Free speech is the cornerstone of the country's democracy. And it's important to remember that. "Remoaners" should not be a thing. Too often, a forgotten 48% exists. The issue that led to Brexit, one could suggest, was disillusionment, many people were simply forgotten by the elite that rule the country. Now the other half of the country are cast aside. That's no way for a country to progress. Refugees have quickly been forgotten, too. I'm sure most readers will remember the gut-wrenching picture of poor Aylan Kurdi. Yet the refugees are now cast aside. As airstrikes hit their country, there are a number of key politicians trying to rid them from our country. That's discussed on pages 13 and 15.



FROM THE EDITOR

HARRY ROBINSON

ARROW MAGAZINE EDITOR



Meanwhile, what cannot be disregarded is the objective media. The BBC will have undoubtedly come in for criticism during the election campaign. Of course, both the left and the right will claim they are the victim of biased reporting. Reporters and politicians alike will receive vile abuse on social media that no one would dare say in the street. That is wrong. Let the media be open and free, and respect our objective organisations because they are more important than ever before as fake news becomes all too common. And then, on the lighter side of things, this year's edition carries the recreation of that famous Abbey Road album cover, with four teachers. There's something for everyone with articles on Hip Hop (page 24), dragon blood and the antibiotic apocalypse (page 33), Namibia (page 28), Sigur Ros, Oasis, Prince (page 22), Sports (page 34), Science Fiction (page 31), and more.

Enjoy the 2017 edition of the Arrow Magazine, it's been a pleasure to produce it.

MEET THE TEAM:

Harry Robinson; editor in chief
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grisha kirby

year 13 2017

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 "REMAIN"

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"Being content with who you are," Ed Balls states, "accepting that nobody is perfect, finding ways to deal with things that are harder for you and working for them, while trying to be good at the things that you're good at, that's all you can ever do."

It's a quote that should be planted right across every school in the country. This is Ed Balls, former Member of Parliament and Shadow Chancellor, chef and baker, dancer. He's had a stammer all his life, "I didn't know it was a stammer until I was in the cabinet," he says. "I stammer all the time, I stammered in this interview, I'm just good at [dealing with] it these days." Listening back, you wouldn't notice it at all. For a man whose life has been taken over by Strictly Come Dancing, whose public personality has been radically altered, he mentions the BBC show rarely. Only when we talk about the stammer. "If my dance goes wrong, then it's like my speech going wrong. It doesn't matter really, because it's who I am, so take it or leave it."

These superb words, that everyone should aspire to, come at the end of a fascinating hour with Ed Balls where we talk Labour and its demise coinciding with Jeremy Corbyn and his rise. Are the two linked? Of course. But why? Ed also gives us incredible insight into the life of an MP on election night (though at the time we didn't know of Theresa May's snap-election for June 8th) and explains what must happen to combat the terrifying phenomenon of fake news (page 12).

Ed on Labour

"Look, I'm sure there's a part of him that would like to be Labour Prime Minister," Ed Balls admits of Jeremy Corbyn, unconvinced. We've just played a short game of word association. To politics, he quickly says "purpose". To Labour, he adamantly says "government". To Corbyn, there is a pause of five seconds or so, and a cautious, "outsider".

"He was an outsider all the time we were in government," Balls explains. "And therefore, his purpose was never to change things in the way we saw our purpose as being to change things through government." Currently, "there is an interest in outsiders," but while people

may vote for outsiders, "governments change things, you can't do anything without power." The Labour Party is certainly in turmoil. More so than ever before? Certainly not. There are divisions, Ed Balls concedes, as there are in the country; "not just party versus party, but leave versus remain, cities versus towns, old versus young"; but Balls remembers the years following the first EU Referendum, then deciding the United Kingdom's membership of the EEC, the European Economic Community. "Interestingly, I don't remember the 1975 EU Referendum, it wasn't as big. It was interesting, though. As a consequence, Labour split and we were out of power for 18 years."

"I spent 18 years with Labour out of power thinking there should be a Labour government, and then 13 years in it. I'm not going to give up on the word Labour being associated with the word government."

Some have suggested the Labour Party's lifeline is short, others insist it is already dead. Theresa May announced her snap election after we spoke to Ed.

"There's nothing inevitable," insists Balls of the Labour party dying. "If the Labour Party ends up being perceived as a left-sect then it will die, but there's always been a voice of the left in the Labour Party. And there's always been a voice of the London intelligentsia. But the marginal seats for Labour voters are working people who don't live in the big cities. Labour loses when those people don't feel the party speaks for them. It's not only about internal leadership challenges and about members."

"When you listen to some people from the Corbyn left, they're saying 'it's great, we have more members than we've ever had before and the MPs [who are, in the majority, against Corbyn] are not representative of the members'. Well, if you think Labour exists simply to be a membership organisation and a left grouping, well then you can be very pleased. But the reason these MPs are MPs is because they're elected by voters, and Labour's not a membership organisation, it's a party which has to stand for the aspirations of others."

It's a difficult balance, then.

"If you [as leader] succumb to one faction or group or you position yourself with a factional group which is not where the voters are, then you don't succeed politically. Having more members doesn't solve that problem at all. We've got more members and terribly bad opinion poll ratings."

Corbyn has, though, inspired a huge number of young people to join the Labour party and become active participants in politics. His first leadership election victory, before the EU Referendum, saw an increased interest in Labour and politics from the younger population. Seats which are not traditionally Labour, but are university cities, like Bath and Colchester, saw big rises in Labour supporters and members following Corbyn's victory. Membership almost doubled in less than a year, between the 2015 election where Ed Miliband was humiliatingly defeated and January in 2016. 'Corbynmania' it was dubbed at the time, the 'outsider' turned leader and celebrity, icon. The wheels have fallen off since Corbyn's second leadership election victory, forced by a vote of no confidence from his MPs. Corbyn has the support of the Labour members but not his own party's MPs. What will happen after the 2017 snap election remains to be seen.

"I'm happy to credit Jeremy Corbyn telling people that we need to keep focusing on our values. He reminded the Labour Party that it exists to talk about social justice and making the world a fairer place, to talk about tackling poverty and challenging unaccountable power," Ed Balls admits, perhaps surprisingly. "If the members are saying, through Jeremy, that Labour has got to be for fairness, then that's a good thing to be reminded. I think you could argue that Labour had lost touch with that passion and that desire to tackle social justice."

There's an important caveat, one which Ed Balls is at pains to stress. "But you've also got to be in government, and people have got to trust you, those are two different things."

"I don't think people are looking for utopia. People don't just want an aspirational, inspirational values-based plan for fairness; they also want credibility. The sums have got to add up. You've got to be willing to make tough decisions, people have got to see you can grip a situation and be competent.

"If you simply say we've got to plan to reduce unemployment and make everybody better off by sending X hundred billion pounds, people will say how? Really, how does that add up? How does that work? Are you sure? Do I trust you guys? Is it going to end up with me paying more tax, or the economy going bad?" That has been proved through the 2017 election campaign with Labour's Diane Abbott and policing costs and Education Secretary Angela Rayner and schooling costs. Ultimately, though, there is a fundamental difference between Ed Balls of the centre-left, pragmatic, and Jeremy Corbyn of the hard-left, ideological. Everything with Balls is focused on government, on achieving change through power. For Corbyn and his supporters, Balls doesn't know what the aim is. It's possible, he says, that Corbyn now wants to be a Labour Prime Minister, "it's very hard not to want that as leader of the opposition", but he also suggests an alternative priority, to "institutionalise even more the left in the Labour Party." This is not simply Corbyn, this is those who Corbyn surrounds himself with; "Jeremy Corbyn may agree with them, or he may just be letting that occur."

Many in the Parliamentary Labour Party (PLP), the Members of Parliament elected by the country rather than the party membership, oppose Corbyn's leadership. They oppose this idealistic view of politics, the view that Labour will lose in 2017, so they may as well lose with values, as some of Corbyn's supporters have suggested. Ed Balls is the same, having supported Owen Smith, Corbyn's only opposition in last June's leadership challenge. "Once Owen Smith was a candidate, of course I thought it would be better if he won," Balls says, but he describes the challenge as a "mistake" and as a "kneejerk reaction to the EU Referendum."

There is clearly a respect for Corbyn from the man who ran for Labour leader in 2010, and lost to Ed Miliband. "Part of the reason Jeremy Corbyn has succeeded and part of the reason people voted for him is because he's quite a nice person who wants to do nice things, and probably does so as a constituency MP."

"That's how he views his job," Ed Balls says, hinting at that fundamental contrast in political beliefs. "It's quite a long way from being Prime Minister."



"LEAVE"

article by nick scott, year 11

What links Iceland, Norway and Switzerland? These three countries are three of the five richest in Europe. Critically, none of them are in the European Union.

THE AFOREMENTIONED COUNTRIES are all European democracies. Norway has prospered because of its natural resources; Switzerland is a world-leader when it comes to financial services. Majorities in each of them oppose EU membership. The United Kingdom - a state with the fifth-largest economy on the planet, a permanent seat on the UN security council and three of the world's ten best universities, to name but three achievements - cannot succeed, we are told, outside the declining customs union that the EU has become. Wrong.

It is true that the EU makes up a large percentage of our trade, but that fraction is decreasing as countries like China and India grow rapidly (our contribution to the EU budget, incidentally, has been increasing for decades). Being in the EU means that we are forced to accept EU tariffs imposed on those countries, we do not even have our own seat in the World Trade Organisation (WTO). Leaving the EU was a once-in-a-generation opportunity; we had to look to the future, not the past. The EU is waning; globalisation means that it is almost as easy for Britain to trade with Bangkok as with Brussels. Should we spend the next 40 years being part of a global revolution, or shackled to a corpse?

If you're worried about economic chaos, remember that George Osborne promised an "emergency budget" that was meant to slash spending, and David Cameron himself warned of a massive, immediate recession. This has not happened. Furthermore, Remain's claim that Brexit would cost households £4300 a week was described by the economist on whose research it was based as "pure Goebbels". I would venture that these patently false statements are at least as important as one number on a bus.

But there was another reason to leave the EU. 'Sovereignty' is far more than just a word. It is the simple, indeed intuitively obvious, idea that decisions that affect Britain alone should be made solely by the British people or their elected representatives. This is one of the fundamentals of democracy. At the heart of the British political system for four hundred years has been the concept of parliamentary sovereignty. The idea that our parliament is supreme; it can create any law it chooses to, and cannot be bound by any previous parliament. That is the theoretical idea; the practical application held true until we joined the EU.

This is more than just philosophical. It has major, real-life consequences. If a non-EU country, like Switzerland, wants to trade with the EU, it must follow EU regulations. But if it wants to trade with China, it need only adopt Chinese regulations in order to be able to do so. Britain, by contrast, has to obey EU rules when trading with any country in the world. This costs millions of pounds every year. Moreover, EU regulations hurt Britain disproportionately. The UK is outvoted in the EU Council far more than any other member, which becomes significant when we see that over 25% of our laws come from there.

In the end, however, this debate is almost irrelevant. Theresa May has triggered Article 50; there is no turning back. Regardless of our personal opinions, Britain must now unite behind her government in order to get the best Brexit deal for all of Britain. And that, I think, is finally something which we can all agree on.





article by afra sterne-rodgers, year 11

"No man is an island,

Entire of itself,

Every man is a piece of the continent,

A part of the main.

If a clod be washed away by the sea,

Europe is the less."

- John Donne

IN A TIME WHERE international co-operation has lost so much stability, the need to support others, not in spite of our differences but because of them, has risen once again. When the use of dangerous rhetoric is steeply escalating, we must depend on others and let others depend on us. Where war becomes more probable, the most perilous move we could make is to isolate ourselves from mainland Europe by voting to leave the European Union. Leaving the EU divides us in more ways than one: it has prompted Scotland to (attempt to) hold another referendum on whether they should remain part of the U.K. IndyRef number two had previously been debated but the frustrations of the Scottish people and government transformed this into a significant possibly; a reality created by Brexit. Not only did Britain decide to leave, we did so not on the basis of fact, but speculation, probability and Farage's inflammatory speeches, whose words were not only contradictory, but incited the wave of xenophobia towards in particular, but not limited to, EU immigrants. There is a clear correlation between this and one of the main leave arguments: that we must somehow 'take back control' through immigration numbers. If someone in power advocates this kind of hatred, it legitimises everyone else's doing so. This kind of scapegoating we see right now, while an ancient tradition, nearly always ends in discrimination, polarisation, and dehumanisation. This spiral we have been falling into is one which has repeated itself constantly throughout history, but this is no reason to condone it.

This issue, magnified by the Brexit vote, comes in the form of the attack on Westminster Bridge, where a British Muslim attacked innocent people in an isolated terror attack. The first outcry among many British people was blaming the Muslim community in Britain. The issue, not caused but enlarged by Brexit, stems from the fact that when it came down to it, Brexit was not about economics, but about immigration. The vast majority of the Brexit voting population voted Leave not because they were compelled to by claims we were losing £350 million a week to the EU, a falsehood in itself, but because they wanted control over immigration. In a world where there is increasing turbulence, it is unsurprising that we want to isolate ourselves, and lash out at others in self-preservation, but we must fight this instinct and come together. There may be flaws with the EU, but so many countries still depend on it, making it our responsibility, as human beings, to make sure they are cared for. The issues with the EU are not so great they cannot be fixed; it is unjust to abandon fellow peoples when we are all in danger. Furthermore, leaving

the EU means a likely exit from the European Courts of Justice, leaving the highest order to our own courts. The worrying issue with this is that when we feel our own courts have violated our human rights, there is no one to turn to; to appeal to. This gives our courts immense power, power which cannot be overridden, which is a dangerous thing for one entity to hold above another.

Overall, though we cannot stop Brexit, we must work in harmony to ensure that we make the best leaving deals we can, and make sure that as a country we protect others, and spread love in a climate sorely in need.





THE FORGOTTEN 48%

article by harry robinson, year 12

Imagine the scene:

Nigel Farage is raging. His face is throbbing, a solid 'Vote Leave Red'. He stands, and proclaims a crime against democracy. "Four percent," he stops to sip his pint, "cannot be enough to determine this matter."

48% of Britain's population support him. "Yes," they think, "this issue shouldn't be over just because of a four-point difference." And so, a tumultuous year begins in British politics, David Cameron refuses to hold a second referendum, insisting that a result is a result. Jeremy Corbyn tells Labour supporters he'd like to renationalise the railways, for the fortieth time. 48% of voters become alienated. By the 2020 election, turn-out is just 40% with much of the country disillusioned with politics. Cameron's refusal of a second referendum has seen the right of the Conservative Party (of course never satisfied) force him to resign as Prime Minister. Theresa May takes over, delighted with the result, having voted and campaigned for Remain. She rolls out rhetoric about the dangerous fate that the UK almost succumbed to in leaving the EU: "Jobs have been retained, companies have remained.

Our Human Rights were under threat, dangerous nationalist views were encouraged. Thankfully, the Remain victory quietened those vile individuals. Britain's population came close to voting for higher prices, both at home and abroad, with the pound dropping dramatically forcing prices on imports up and holiday expenditure abroad up."

She's right, of course. Even if she has the personality of Eeyore, leaving the EU would have been a life-changing moment for Britain's population.

Farage continues to be outraged. Still, after six or seven years, though, Farage argues, "How can the government let a once in a lifetime opportunity be decided on a four-percent margin," Almost half of a divided Britain agree with him. The UKIP leader continues, "not only has the government refused a second referendum, but they describe all those who voted Leave as 'moaning', the 'crying Brexiters" and refuse to consider their views and struggles as we stay in this disgrace of a union." Farage, of course, is talking about the EU, his employer.

All of that, of course, is fake. Not only is it fake, but it an awful scenario to imagine. A divided Britain, split down the middle with the losing side, in a referendum split by just four percent, discriminated against, their opinions not represented by anyone but a smaller party like UKIP or the Liberal Democrats, their voice not heard in Parliament, scorned at, "enemies of the people" because they want to see 48% of the country listened to.

Oh, the irony.

Supporters of Brexit had been 'moaning' about Britain's membership of the EU for 41 years. 'Remoaners' apparently do not have the same right to complain, to ask for change, to ask for the country to have another choice after seeing some of the consequences of its membership or non-membership of the EU.

It is both ridiculous and unbelievable that the voice of more than 16 million people is being bullied out of them. More people voted Remain than for any British political party in history. The Brexit Bullies, as Nick Clegg describes them, want those who voted to Remain to shut up, to not point out the faults in Brexit, to not try and get the best for the country, whether that means staying in the EU, staying in the Single Market or simply getting a deal with the EU. They want to get rid of scrutiny and accountability, they don't want the bankers to make predictions about the economy or the judges to make judgements about constitutional matters. They want to do everything without opposition, and that's not good for anyone, Remain or Leave.

Whether you voted Leave or Remain, it simply does not matter. 48% of the country cannot be disregarded just because they voted for the losing side. That is going against the will of the people, against democracy, those who spout this garbage are the real "enemies of the people".



Ed on Fake News

'Fake news' is a major issue in an era of politics that is divisive at its very heart. It began as a term used to describe pieces of 'news' that were flatly false. Now President Trump uses fake news to describe information he dislikes. The majority, of course, presume that Trump knows that the news is not false. However, a small minority of Trump voters are being convinced that everything against them in the media is false, causing a catastrophic and potentially fatal distrust in the media and a rapidly decreasing accountability towards politicians.

A recent Stanford study suggested that fake news impacted the 2016 US election less than previously thought. It stated that, in a survey of 1,200 voters, the majority asserted that their main source of news was not social media, where fake news is prevalent. While people assume Facebook and Twitter are not their main source, much of the population do, in fact, read a huge quantity of opinion-defining news on these outlets. Ever read an article via social media? That may not seem like news, but it is.

"This is not a new problem," Ed Balls says of fake news. "Every generation has had to deal with people who have tried to use propaganda to push a kind of warped ideology; that's exactly what the Nazis did in Germany, but they didn't do it with Facebook or Twitter."

Balls readily admits that "it's harder now," to cope with the phenomenon of fake news.

Politicians have always been distrusted, and rightly so, it allows accountability and scrutiny.

Balls suggests that this has increased since 2008, though.

"For understandable reasons, we're currently in a phase where there is scepticism about authority and institutions. We had a global financial crisis [in 2008], so after that, this feels like a natural consequence."

"People are much freer to choose the 'news outlets' that they see and read. 50 to 100 years ago, your range of sources were quite small whereas now you can choose on Facebook to be bombarded with news which comes from sources that you have chosen because they are the kind of things that you agree with." It's a dangerous freedom. Even the globalisation-adoring left are too inward. They surround themselves with likeminded people, something that's always happened throughout time. Now it's a constant online effect that effectively brainwashes people - but only into believing what they already believed, just to a greater extent, as Balls says.

People are thinking, according to Ed Balls, 'I don't need to look at the other sources to tell me I'm wrong because that's what you'd expect the establishment to say.'

"That's what's wrong," he says. It's difficult not to agree. Accountability and scrutiny are both expected and welcome, complete and utter distrust in the political system can rarely generate anything positive.

Twitter was founded in 2005, Facebook a few years earlier. It's been more than 5 years since the two took over the world. How can they be controlled to prevent fake news? Balls partly blames figures like Boris Johnson and Michael Gove, spearheads of the Vote Leave campaign.

"The sort of Boris Johnson NHS line in the referendum and 'don't believe the experts', that is really corrosive, that is really bad and not statesman like. There is an extra responsibility on politicians to be very careful what they call truth. People in democracies who are active have a responsibility to behave better than that."

"There is a responsibility on media outlets themselves to be careful and to be proper, and the third thing is that institutions which are trusted and objective are a massive advantage. You've got to look after them, the BBC. It's so much more important now than it was 20 years ago because you need a source of news which most people think is objective and fair."

"Of course, that means that people who have an agenda or who are ideological are going to attack the BBC. But that's because its role is more important."

We question whether education, as well as the media, can play a role in ensuring people understand how to avoid fake news. In secondary education, there is little emphasis on educationoutsideofthecurriculum,outsideofbasic subjects, standard teaching. "We should teach PHSE as a core and compulsory part of the curriculum," Balls thinks. "So, sex, race, education, issues around health and body image but I would also put into the same category, personal finances, citizenship which is how democracy works, which includes the media."

"Those things are important, it's not fair when people don't get the chance to be taught those things at school."

Ed on Ed

He was once a Minister in a Labour government, a key figure in determining

education policy. That's no longer the case, but Ed Balls is still busy. Strictly, of course, but also other important things in his life. Norwich City is one of them, having become Chairman of his boyhood club. Another is helping others with Action for Stammering Children and Whizzkids, two charities focusing on helping kids and teenagers with stammers.

For parents to see Ed Balls speak in the Houses of Parliament, dance across the country for Strictly, all while having a stammer, it's comforting. "The truth is if you have any kind of disability, it's not something you've caught. You don't get rid of it either, you just make it work for you." Balls explains that he regularly visits the Michael Palin Centre in Finsbury Park to talk to teenagers with stammers and their parents. They were a bit taken aback by his insistence that "if you gave me the choice again, I'd have the stammer." But, he says, "it's true, I would definitely."

"I think actually for a 13-year-old with a stammer, that's a really hard thing to hear, but when I was 13 I'd probably have got rid of my surname but now I'd probably keep it, so same deal," he says with a smirk.

Meanwhile, we're speaking a few weeks before 'Ed Balls Day'. The story goes, while buying a 12-hour slow roast pork, Ed was told to look up an article on him by his agent. A Twitter rookie, he typed his own name into a tweet, the rest is history. Two years later, he finally realised he could delete it. It was too late, and 'Ed Balls' recently surpassed 85,000 retweets. In 2016, he baked a cake to celebrate the occasion. "On the day, I might think, what should I do? But by its essence it's something you shouldn't think about until the day. I don't even know where I am that day, I should probably find out," he says. He does exactly that and we wrap things up, I am fascinated by insights into the Labour Party and educated by his comments on

Meanwhile, he collects our empty mugs of tea.

being yourself.





refugees

article by honor chilton,

THE DEFINITION OF A CRISIS is a time of intense difficulty or danger – a term used more and more in recent decades: the financial crisis, the NHS crisis, the housing crisis. Punchy and frightening news headlines thrust the unfolding dramatic events into the public eye. But after a while the dilemma fades from the foreground. The media stop reporting it, and we assume the time of intense difficulty or danger is over. We forget that crises have consequences. For those affected the most, their suffering will continue long into the future. And this can be applied most aptly to the recent refugee crisis.

In 2015, more than one million people crossed into Europe - predominantly coming from the Middle East and North Africa causing a crisis as countries failed to cope with the influx. We saw tragic images of families in overcrowded rafts, weeping mothers and fathers. Most poignantly, the unforgettable picture of three-year-old Aylan Kurdi washed ashore in Turkey. Leader of the Liberal Democrats Tim Farron said the photos were the "wake up call" that the then-Prime Minister David Cameron needed, along with calls to act from many major politicians. But a week later he released a statement encouraging the EU to "do more to return migrants [to their country of origin]." Those who have been granted asylum in this country via the complex application >>

over. They arrive in the UK from areas of severe conflict, having experienced torture, trafficking, and violence throughout their lives. Many are children and adolescents who have lost their parents under harrowing circumstances who are in vital need of care. Thankfully, this need for care has been acknowledged. Various charities and organisations have been set up, aiming to provide guidance and counselling to these young people and to help them settle into their lives in the UK. One such organisation is the Baobab Centre for Young Survivors in Exile. It was founded in 2008 by a group of clinicians and experienced human rights workers who realized the need for specialized care for children and young adults with physical, mental and educational difficulties.

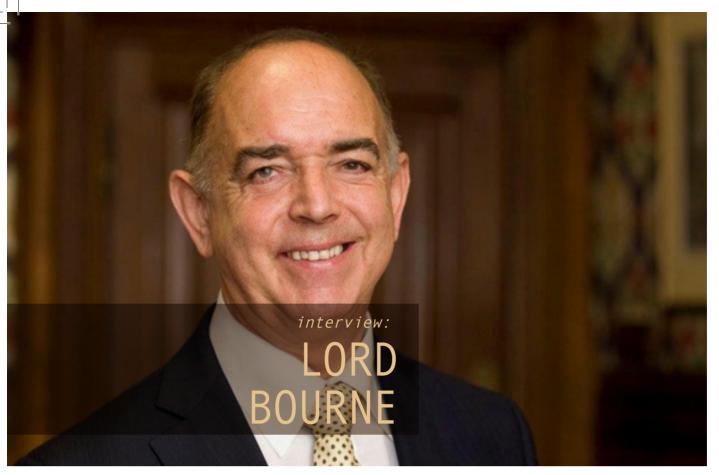
Over 90% of those who attend the centre are under 18 and arrive in the UK alone. Not only does this bring the challenge of trauma, but also the difficulty of navigating a new society and unfamiliar surroundings without family support, which often exacerbates previous trauma.

The Baobab Centre offers a variety of services including psychotherapy, social work support, group activities and

>> process are a fortunate few, but their battle is far from English classes in hope that young refugees and asylum seekers can move towards a better future. One young person said, "When I am alone it's too much. There is too much stuff going on inside my head. Sometimes I feel like giving up. But when you see people who understand, who are on your side, for the first time, you have courage and hope. It's like when you are fighting a battle and you lose everyone. Then all of a sudden reinforcements come you feel that you can win. Baobab gives me the foundations and I can start building from there."

> So, while this crisis is far from over, we can be thankful that there are groups like Baobab and others that are doing something to help. The more refugees we successfully integrate into our society, the more we can save from lives stripped of freedoms and happiness.

It's simple to contribute to this effort. Donate money at baobabsurvivors.org or the websites of other organisations such as Refugee Action at www.refugee-action.org.uk. Many charities, including Baobab, take old phones and printer cartridges as donations. We can all play our part to help end the times of intense difficultly or danger for thousands of people across the world.



interview by becca downie and honor chilton, year 12

Lord Bourne is a life peer and Minister for the Department for Communities and Local Government. He is responsible for Government policy on faith and integration, migration and communities (including the Controlling Migration Fund and the Syrian Refugees Programme).

We had planned to meet on the 22nd March, which turned out to be a momentous and dreadful day with the terrorist attack on Westminster bridge. The interview was rescheduled for a week later, 29th March, which turned out to be momentous in a different way, with the triggering of Article 50. Our interview took place in a committee room of the House of Lords. We were able to question the Minister on the Government's handling of the refugee crisis and on its integration strategy.

Countries such as Canada and Germany have taken huge numbers of refugees. As a developed country with enough resources why has the UK not done the same?

The first point to make is that there has been a huge humanitarian crisis on all sorts of fronts. You can't judge a country's response just simply on the numbers of refugees they take in. They are important of course but you have to look at other things the UK does. For example, 0.7% of our GDP goes on international aid, which puts us at the head of the pack.

The philosophy of the UK government is to say: look, there is a refugee

crisis, but there are things we can do in some of the home countries to try and prevent the crisis becoming worse. In places such as Libya there are things we can do to make the political climate more stable. We do of course accept many refugees, and my Department works closely with the Home Office on the Syrian refugee programme and the Dubs Children programme. We've also been working closely with the Canadian government to learn from them about community sponsorship of refugees. Canada has done interesting work here, enabling institutions such as universities and churches to take responsibility for looking after refugee families. We are keen to see what the UK can do. We have very good links with the Church of England; the Archbishop of Canterbury has taken a Syrian family into Lambeth Palace and there are signs that other churches, synagogues and mosques will also get involved. Community sponsorship of refugees is not simply about saving money. People across all parts of society feel a deep need to do something practical to help. The Government can create a framework in which other institutions can operate, building on the trust which these institutions have across society.

Today the UK government has triggered Article 50. Brexit showed deep divisions within communities, how has this affected integration strategies?

Just after the vote there was a surprising spike in hate crimes. However, as a nation we came together stronger and more united. Today for example, in response to last week's Westminster attacks, people from all sorts of backgrounds came together on Westminster bridge to march and show unity.

The Brexit agenda has been set. Theresa May's statement earlier today was useful, constructive and uniting. She spoke about how we are an outward-looking country still. We are leaving the EU but not Europe; we still share many of the same values as the rest of Europe. It was very clear in her statement that it's a high priority for the Prime Minister to regularise the position of EU nationals here.

Against the background of Brexit and the ongoing threat of terrorism, what can be done to promote integration?

After any attack, such as we saw last week, an important first step is to reassure people that we remain a united, tolerant society. But of course there are several challenges still ahead.

The Prevent programme is designed to safeguard people in the UK from extremism. Much of the threat comes from radicalisation which is reported to be in the name of Islam though of course we know it has nothing to do with true Islam. Prevent is also about tackling the far-right, a message we have not got out firmly enough. Groups such as the EDL present a real threat in many communities.

Another significant thing that we are doing is a 'racial disparity audit', to bring together and publish as much data as we can about the experiences of different ethnic groups. All government departments are working on this audit, which will cover topics such as housing, employment, health and justice. By publishing data and revealing differences we aim to tackle unfairness and to build a stronger, more integrated society.



We scramble onto a boat,
My breaths tightening in my throat
Slipping on the moist rotten wood
I hate this, but I know I should,

Migration

We are leaving but with no happy farewell,
As we are rained upon by bits of shell,
And bullets firing loudly around us.
But everyone stays silent, the present not a subject to discuss,

Migration

Syria is out of sight,
Colours so beautiful, but fill me with
fright,
Of the explosions I see wrecking my
hometown,
Demolished by the men, each bearing a
menacing scowl,

Migration

Our boat approaches land and the realisation hits,
Syria is no longer whole, but in flaming bits,
This all there is our home lost and destroyed,
And the more I think of Syria, I just feel sad yet annoyed,

Migration

I see this new place, no, not place - life, I wonder if I could further endure the strife
I carried and never dropped, and never complained to say,
"Can I get rid of this load?" but maybe England could be my loading bay?

Migration

But this is not going to be our Heaven, but our only alternative to hell,

Migration

And this is what we have travelled across the world for as our home is now just fire and fragments of shell,

Migration

They talk about us like leeches, unable to rid us of their country, like they are superior, and we have no voice,

Migration

They mock us with decisions, like we made a decision for our country to get bombed and our nation terrorised, but they didn't realise that we were never given a choice,

Migration

And just remember this, our people are not here to take your jobs, or to hurt your people, but are simply here as escapees, and did not travel here to be rejected,

Migration

This is what has happened to us, don't pity, just understand, that we are here because it is our only alternative, so don't believe that we are savages like the media suggests, but people, equals, and just want to be respected

This is migration



CLIMATE CHANGE IS BY FAR THE MOST pressing issue facing this generation and the generation to come, so why isn't anybody doing anything about?

Firstly, it's important to understand, as the title suggests, that I'm a libertarian who believes in significant government-led environmental protection. That sounds inherently wrong. But I'm stuck between a business-related free market, antigovernment ideal and a care for our planet. This article demonstrates how one can be both, and brand myself as one depending on each particular issue.

Why is it a shock that a member of the right believes in climate change? Unfortunately, you will find climate change deniers all across the right side of the political spectrum, from Milo Yiannopolous to Donald Trump. They do not believe that man-made climate change exists as a result of the greenhouse gases man emits, despite the science. Report after report is produced, yet the politicians consistently deny its existence. This is as a result of the amount of oil money that goes into politics. During the 2016 Presidential campaign, \$9,788,249 was

received by the top 20 recipients in the House and the Senate as well as by candidates Trump, Clinton and Bush [Open Secrets]. Even President Obama, who once said "there is no threat to future generations greater than climate change", received \$972,269 in 2008 and \$853,377 in 2012.

In 2013 & 2014 the total amount given to fossil fuel companies in federal production and exploration subsidies was \$41,840,275,998 [Price of Oil]. The bottom line here is that while even the most anti-climate change politicians may whine and moan about the issues it brings they are not doing anything about it.

So, what's the issue with capitalism in relation to this? Some say it's undeniable that capitalism does nothing but ensure the existence of climate change. The economic problem has factories working at full capacity with little care for the environmental knock-on effect with the competition between firms furthering the large-scale output. Capitalism is a climate change catalyst and, given the current stance of government, there's nothing we can do about it. Capitalism, being the best economic model, could also offer the solution having created the issue.

Competition from capitalism creates

innovation. The average price of solar panels has decreased by almost £7,500, a 50% drop in five years [The Eco Experts]. The new monetary incentive brought about by this innovation leads to a demand increase. My parents bought over a dozen sets of panels because of this. I cannot deny capitalism is part of the problem, but I strongly believe it is our best option to solve it.

While I believe government sanctions are necessary, is it okay to solve the solution of corrupt government by bringing in more government? Socialism or Communism is not the answer. A full government takeover of business is unnecessary to the extreme, particularly when a company like Tesla has capitalised on the trend of innovation related to climate change. They now make more sales than their competitor Ford, through campaigns to combat climate change, selling electronic cars. The Green energy market is expected to be valued at \$7.4trillion by 2040 [IEA]. To put that into perspective you would need to own 9867 Apples to completely buy out that market - yeah, Apple as in the company.

Capitalism created this mess, but it will get us out of it too.



OUR WORLD MOVES FORWARDS as time passes by. Not just economically and technologically, but socially as well. With less oppression, more attention is paid to issues often unapparent to privileged groups. Representation in the media has been especially under critique in recent years. A common argument against the lack of it is, 'it's only a film and not real life so it doesn't matter!'

Yet, unsurprisingly, those who offer this argument tend to be represented and may not understand just how important representation is. Media consumption shapes our perception of reality, and it is well-known for perpetuating gender stereotypes. Unrealistic body types shown in the media, meanwhile, can lead to eating disorders in children. Some kids believe this is how we should look and follow this dangerous example.

In a similar way, minorities who are shown onscreen usually come in the form of one archetypal side character. We are often presented with the smart Asian character or angry black character, and while these may seem harmless, the same stereotypes are common in real life. For the past few years, the 'Black Lives Matter' movement has been prominent in the US and other parts of the world. The police have defended their brutal actions by saying their victims were a threat. This idea of black people being dangerous largely stems from media where this group is commonly portrayed as violent. Representation of minority groups in the media can be harmful to the real world.

There have been protests against the lack of diversity in the media that have recently made the news. In 2016, we saw #OscarsSoWhite. All twenty actors nominated for the awards were white, the same trend as in 2015. Celebrities of all races spoke out and boycotted the awards that year. There is a very clear reason for these nominations, other than pure coincidence. White actors are consistently cast in roles that should go to actors of colour with films like 'Gods of Egypt' having mainly white casts. With the recent 'Ghost in the Shell' casting Scarlett Johansson as the Japanese lead, there has been some controversy. These roles were denied to actors of colour, who are offered few roles as it is. Film and television directors use a number of arguments to defend the lack of representation in their content. A frequent suggestion is that to add more representation would mean there is "forced diversity", which is unrealistic in relation to the true make-up of society. This is

untrue. In films released between 2014 and 2015, 28% of characters were non-white in film. The accurate percentage of real society would be closer to 40%. Another argument that was used to justify why transgender characters in films are played by cisgender actors of the opposite gender (such as Eddie Redmayne in 'The Danish Girl') is because actors of these minority groups are not famous enough to let the film or TV show make money. This type of casting leads to a vicious cycle in which minority actors cannot get roles, preventing them becoming more famous which in turn leads to them being denied more roles, which is why the industry must break this cycle. The industry needs to start not only including minority characters in their works but to have these characters played by actors of the same race, sexuality, gender identity or disability.

Should a child of a minority group be able to see a superhero, prince or princess that relates to them, that can give hope that, though these children are tormented for the colour of their skin, they can be magical and beautiful as well. LGBT people who face abuse can take inspiration from characters that survive such suffering and prosper eventually.

Unfortunately, this is still largely not the case. Teen sci-fi series, 'The 100' (which had been praised for having a bisexual lead) saw the main character's girlfriend shot and killed minutes after the couple finally got together, causing immense backlash online. There was some suggested underlying racism present, with non-white lesbians being killed off.

Having to endure the hardship of abuse in real life, television provides an opportunity to spread a positive message of hope.

The 2017 Oscars showed an improvement. Films focusing on the lives of black people, with black actors (Moonlight, Hidden Figures and Fences) earned nominations. Hollywood may still lack diversity, but the theatre world is pushing for greater representation. 'Colour-blind casting' has increased in prominence, the policy of casting actors of colour in roles where no race is specified. The hard of hearing have greater access to musicals thanks to the Deaf West Theatre Company. Meanwhile, the BBC have pledged to have a half female workforce in cinema, with 8% LGBT and 8% disabled. This is an incredible step forward for representation.

CHRISTIAN WRITERS

Recently, an article in *The Spectator* proposed a solution to Christianity's apparent decline in the West, a trend prominent in Britain; namely, Christian Rod Dreher argued that the Church should embrace a "minority status" akin to other religions and assert itself as a "counter-culture" to the mainstream, that is to say, the Church should not conform to the government and modern society. Such is a brief summary of his new work The Benedict Option which, alike many apologists of his ilk, looks to defend dwindling Christian influence against the increasingly secular society. Of course, Christianity's decline in the West should not be fanfared by any conservative outcry of lamenting faith or overshadowed with secular cheers, rather, it should be ushered away with admiration of its cultural, philosophical and historical significance. The late Christopher Hitchens aptly put that Christianity - as with all religion - marks mankind's first endeavour in all fields of study; in science, philosophy, medicine and indeed literature.

article by jonathan anderson, year 12

OBJECT TO

Even Richard Dawkins - infamous as he may be among theological circles - concedes to this latter point, however it is precisely due to its inherent belonging as a first attempt that its science, philosophy and medicine are - typically - untrue by modern thought and that its decline has taken so long, being so deeply rooted in our institutions and our moral zeitgeist. The first error however is in thinking this demands disrespect to Christianity and faith, when rather such should be respected among the first substantial attempts of philosophy and reason along with the Vedas, Platonic Dialogues and the Analects of Confucius. The secular viewpoint, that the 'Benedict Option' looks to so capriciously repel, should not be marked as a vindictive and vengeful movement looking to burn Bibles and raze Churches but to implore where it is required, including the rejection of Iron Age faiths.

Why is it then that the case for secularism and atheism should - by the consensus of Christian apologists and theologians - be so untenable? This seemed to be a large part of the sentiment of Rod Dreher's writing and religion's most avid advocates. Alister McGrath in his religious rebuttal *The* Dawkins Delusion? tried to illustrate New Atheism as its own fundamentalist form of irreligion, however this formed an empty argument ad hominem. A major tenet of New Atheism - if such can be ascribed? - is precisely the rejection of tenets without reason, hence being the case against religion that easily (and perpetually) can make illegitimate leaps from faith to claims of divinity, spirituality and morality. Observe no further than the Gallup polls in the United States showing that 42% of Americans reject evolution - which, by various case studies, is a consolidated fact of nature. American creationists have already adopted the 'Benedict Option' with grand reconstructions of Noah's Ark and theme parks showing man fighting dinosaurs in gladiator rings; creationist museums of this sort exist, and such only provides contention for the scientific community, not intuition. Do we really want to encourage the 'Benedict Option' among moderate theism? As Dreher does point out, yes, the Enlightenment did secularise many virtues from Christianity but reasonable intuition does not require such any longer, and so the decline of faith should not be so agonised over; it should be respected in its passing.

SECULARITY ON THE RISE,

morality from a secular perspective in his work On What Matters and so the burden of moral discussion today has not fallen down into the drudgery of subjectivity as many would expect to think or as religious apologists may warn, simply this objectivity must be discerned from partiality that is so often mistaken from moral reasoning. I would develop this more, but thorough discussion of moral issues requires a more comprehensive medium to toy with, yet such should not be daunting to the secular worldview; philosophy without religion thrives on investigation without a prejudiced conclusion, as has science since the end of the Church's obscurantist overruling that was so challenged by the Cosmological Revolution.

Secularity is on the rise. Christians trying to remove themselves from the norm however are only going to worsen the supposed conflict of theism and atheism and encourage the "militant secularism" apologists fear. If religion is to decline it should not be as such with bitterness, however a new renaissance of reasonable thinking as opposed to a Christian resurgence is needed to be embraced soon, most importantly so that the ultimate passing of such faith can be overseen with an honourable salute, rather than a resigned mutter "Thank God that's





"I made some quite good pictures, didn't 1?" Typical northern humility. This exhibition was Tate Britain's fastest selling – ever. It is his 60 years' retrospective; 13 rooms, saturated with iconic, breathtaking, eye-straining work. "[Q]uite good" doesn't quite cut it for me.

david hockney

An exhibition gathering together an extensive selection of David Hockney's most famous works celebrating his achievements in painting, drawing, print, photography and video across six decades.

TATE BRITAIN 07 FEB - 29 MAY 2017

exhibition review by becca downie, year 12

FROM THE VIBRANT WEST COAST OF AMERICA in the 60s, to the simplicity of a summer's day in east Yorkshire, and the dullness of a packet of tea, it is the vast range covered by Hockney's work that is so astounding. The Tate's recent exhibition of 60 years of his work powerfully demonstrates this range, revealing an artist of surprising contradictions.

Peering at a painting of a box of Typhoo Tea, there are inevitable questions. Most obvious, well, what could it mean? Then the answer comes in a drab, slow and comfortingly northern voice through the headset: "but I didn't use it because I was interested in the design of the packet or anything, it was just that it was a very common design.". Straightening up, looking again, you begin to understand; it was ordinary, it was like him. Hockney is ordinary, endearing and easy to relate to due to his cheek, his easy manner and how solidly down to earth he is. That said, his skill and mad imagination is almost unparalleled in recent history, quite unordinary.

Hockney's hallmark is his versatility. This is strongly established through this exhibition, with pieces which span his entire artistic life. Shuffling through the thirteen rooms I was stunned by the variation of colours, styles and subjects. However, beyond this vast complexity is a sense of continuity, a consistency of approach: the way Hockney interprets space and time. In a 1966 work, Peter Getting out of Nick's Pool, Hockney sought to convey the surface of constantly moving water; the problem of capturing time. Hockney was obsessed with the difficulty of this challenge; "It is an interesting formal problem; it is a formal problem to represent water, to describe water, because it can be anything. It can be any colour and it has no set visual description." The squiggly pink lines are an almost cheeky version of reality. Hockney certainly possesses the skill to recreate a realistic, photographic version of the surface of water. However, photographic in Hockney's mind, doesn't necessarily mean realistic; it can't move. The sharpness of the pink and it blue contrast and its double-helix form does make the surface of the water ripple, despite it not being accurate. Capturing the transparency of glass was another challenge; how can a coloured image show space, a lack of colour? In this work and many others, Hockney used angular white lines to convey to his audience the Californian sun bouncing off glass.

Hockney expertly depicted the bright, sun-saturated Californian pools. Yet he also managed to portray Yorkshire in this almost hallucinogenic fashion; no easy feat. His 2000 Going Up Garrowby Hill is an interpretation of a typically unremarkable stretch of Yorkshire countryside turned into a vision of paradise in which it seems as though light is shining through the canvas. Hockney's obvious passion for these rolling hills certainly ignites a desire in me to drop everything and head to Yorkshire.

David Hockney, an endearingly normal, Alan Bennett type; solidly down to earth, a professional Yorkshireman. At the same time, he is a successful portrayer of the Los Angeles of the 1960s, with all its glamour and decadence. Very few artists can claim such a range, and none with such skill, making this exhibition so memorable.







what would you say is your process for physically establishing a character?

First of all, you don't think about the character. First of all, if you can be, you should be trained in mime, in movement, in mimicry. So then when you have a character, you don't think about it so much, but your body automatically takes you there. If you have that advanced skill of acting... most actors can't do this, most actors in this country may be good at speaking; some of them have got great oratory powers. They're a little bit physical, but they can't create a character from the body, because they don't know what their body is. They think you shove something in one hole and it comes out the other, but they have no idea. When I create a character, I feel it first of all in the body - it comes so whatever I do, I sense it - what the language is, what the purpose is. Sometimes pretty extremely.

interview:

steven berkoff

Master playwright of East and the adaption of Kafka's Metamorphosis and many more acclaimed plays sat down with me to answer some short questions.

is theatre relevant to the younger generation today?

No. Sadly not because we've been submerged under a deluge of media. So now, people, they can go on their smartphone, and there's comedy shows, football shows, sport shows. And music and other movies that have come out, and they drain the internet to the lowest possible denominator of stimulus. Theatre takes a little bit of concentration, because it deals more with ideas, with language, with symbols, and so the younger people couldn't care less. Also, most theatre is crap. But there is an undertone, where the theatre is beginning to manifest itself in the working class, in unemployed homeless people they start to form groups, and they start to make up things. A lot of them find this in therapy. When they go to jail, they do drama, because you can't do film - you haven't got cameras. But all you need in drama is two people and you have a play, three people you have a company, one person you still have drama. So there are little groups now going round and the best theatre's coming from the deprived, the homeless, the vagabonds. When I was in Los Angeles the people doing the most exciting theatre on Venice Beach were unemployed black people; hip hop came from the working class... moonwalk, mime came from the working class and it came from street theatre where they do the acts. Some of them are so phenomenal, and you don't pay to go in or 'book a ticket', and be ripped off by some scummy rotten piece of old theatre. You're on the beach and you see these guys doing popping and everything and you, well your jaw drops. So there is the possibility that the young will rediscover drama.

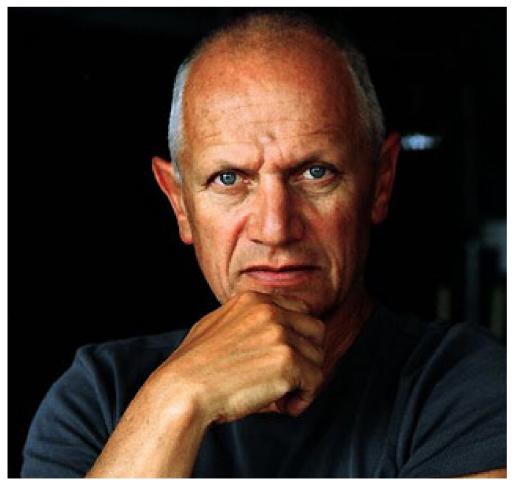


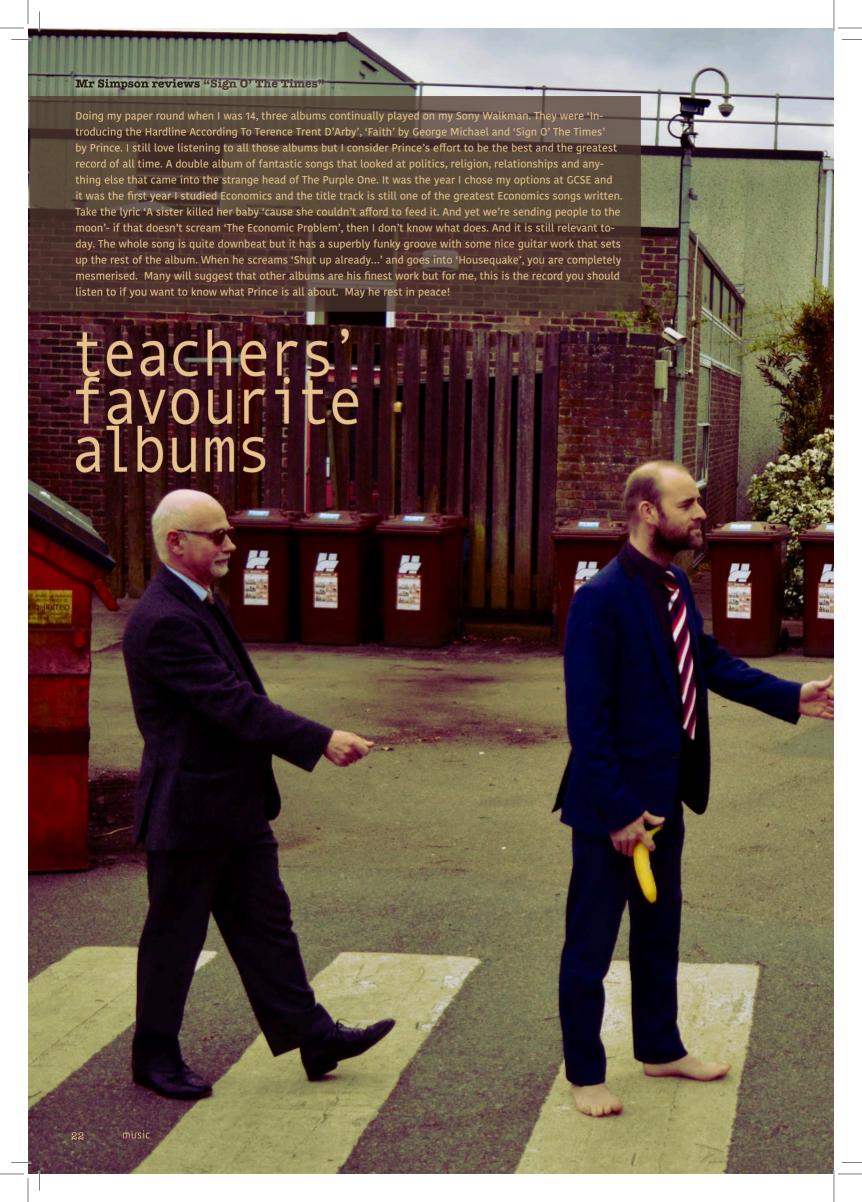
The difference between film and theatre, is that theatre, because it's so raw (it's just a person) the audience "subsidise". So the audience's imagination is made to work. In film it doesn't work. All that works in the film is SHOVING POPCORN IN YOUR BIG MOUTH, that's all that works, STINK!

I know that you're a great admirer of actors such as Laurence Olivier, but who would you say is currently your favourite, or most respected actor?

Jim Carrey, Christopher Plumber is old but he was brilliant, but when I used to go and see Olivier, or Alec McCowen, Ian Richardson... maybe Gielgud, certainly Schofield, I knew, I'd sit there thinking "Oh I'm going to have a night". There's no actor in the realm of Rudolph Nureyev, the dancer, or Miles Davis the musician, there isn't an actor where you're going "Wow, I must see him". But when you went to see Olivier, you just sat there, and in fact he was so incredible at certain times, that you felt nervous for him. You thought "Oh God, how can you carry all this incredibility". The audience is waiting to be incredulised and then you think "Oh, I'm nervous" and when he starts to speak, suddenly you hear this voice that seems to creep from outside him, form his thorax. Then he has his tenor voice. Some people called it affected, sometimes it was. I even channelled him, so I can do his voice - I can do him. When you saw him, it was an event. Now who do I see for an event? When I used to see Alec McCowen (God bless him, he's dead) everything was very "ar-ti-cul-late"; exact and perfect. You would go and...queue, beg for seats, you would queue round the block. Who queues round the block for an actor today? Great acting is very much like parables of fairytales. Think of Cinderella; that she's the prettiest one at home, and she has all these awful sisters and they want to crush her. This is what the directors are doing. Suddenly the directors think; "it is my theatre, I want to show who I am, I am the great master". They crush the actors. The actors have no say and now. It's all about these poncey directors, who are mostly useless. So there are fewer (great) actors. In Olivier's time, he created theatre, he directed theatre, and therefore he was able to pass on all his skills; all the magic tricks, all the ideas, all the kind of nuances of acting, because he was an actor. But when he passed on, suddenly from out of the river - you imagine this swamp - come these creatures, imagine, all with weeds and stink, coming off, they climb out, "I'm a director".

interview by harri jones, year 12





It seems that Sigur Ros are not to everyone's liking. I can't understand it, but I suppose I'll just have to accept it. In case you don't know, Sigur Ros are an Icelandic band who, during the last twenty years, have produced seven studio albums, three of which are absolute classics. You probably know the song Hoppipola from its frequent use on TV, but overall their songs tend to fairly long and slow. After the first time I saw them live I read a review that described the audience as being mainly moody looking men in their 40s who seemed to be attending alone, so at least it was good to know that I had found my people.

Choosing between these albums was difficult, but I've gone for Með suð í eyrum við spilum endalaust, or 'With a buzz in our ears we play endlessly'. It is ten years old next June and I'm expecting the world to pretty much come to a standstill to honour its greatness. The first time I listened to it I found tracks one and five (Gobbledigook and Festival) pretty average and reached halfway thinking it was good, but not great. After that though, the album goes on a run of form surely unrivalled in the history of music, or indeed human endeavour. In particular, Ara bátur, Fljótavík and All Alright are the kind of songs that leave you staring into the distance wondering what the point of everything is, which on reflection might not sound like a great advert for the album.

If you do want to share in the magic, the greatest Sigur Ros song of them all, Varúð, appears on the album after this one (Valtari), so start with that one as a warm up. Then when you are emotionally, physically and spiritually prepared (and have a spare 55 minutes) find a place away from other people and treat yourself to the full Með suð í eyrum við spilum endalaust experience. It's definitely better than Drake.

Mrs Balkind reviews "(What's the Story) Morning Glory?"

Twenty-one years ago, there I was, in a field in Knebworth, nervously waiting to hear Oasis at my first ever gig. And two hours later, my mind (and my ear drums) was officially blown. It was the height of the Britpop era. And at school, it was Britpop civil war; Blur or Oasis. The tension between Liam and Noel, the musical borrowing from Gary Glitter to The Beatles and the sheer brilliance of every single track on 'Morning Glory' made my side easy to pick. From the moment the helicopters swoop in on the title track, to the lullaby of the sea in 'Champagne Supernova', you are taken on a rock and roll whirlwind journey that is every bit as intense and powerful as the band themselves. 'Some Might Say' got me through my GCSEs. 'She's Electric' is just silly, but why not indeed. And 'Wonderwall' is an anthem, and rightfully so. Now, if you have no idea who Oasis are, don't worry. You still have time. But beware, it is unlikely you'll ever hear anything so triumphant and outrageously excellent ever again.

THE HIP-HOP INDUSTRY is one of the biggest in musical entertainment, with artists such as Jay Z and Kanye West, dominating music in general. Although in recent years, a section of the hip-hop industry has splintered into other successful genres such as trap, emcees and rappers remain hugely popular. However there still seems to be a certain stigma surrounding hip-hop - of misogyny, homophobia, violence and drugs. How can this be argued with, when looking at the thuggish lifestyle surrounding these artists? Well, to put it simply, it can. Those who don't look further than the occasional hit song or album cover shouldn't expect to see more than this image. However, artists have been creating hard hitting and meaningful rhymes since the 80s. The Message, a single recorded by Grandmaster Flash and The Furious Five, achieved huge critical success at the time of its release on July 1 1982. If I were to play it to you I am certain that you would remember the iconic beat. But for many this was more than just a song; it epitomised the situation for thousands of African Americans in the Bronx and the surrounding area of New York. The abysmal slum like living conditions in impoverished areas of New York, created a strong feeling of social inequality amongst the working class. The release of this song acted as a mouthpiece for the frustration of thousands of impoverished African Americans, giving them a voice to express their anger, at a time when they arguably didn't have one. The songs commercial success drew further attention to the socio-economic issues in New York, as well as taking what is now referred to as conscious rap, into the mainstream. Since then, Hip Hop has evolved and grown, spreading to all areas

of the United States, with each of these areas having a distinct sound. Therefore, Hip Hop should not just be seen as the anthem for violence. Rather, we should look at what it represents, what it gave, and what it still gives to the black community; a voice.

What does Hip Hop represent today? Well the nature of it, is that it is always evolving and in my opinion will always remain relevant. Today, 44 years since the birth of Hip Hop, the industry has splintered into a plethora of sub cultures. Some have chosen to take their focus away from lyrics and into the beats – such artists most commonly

THE TABOO OF HIP HOP

article by harri jones, year 12

belong to the trap genre with icons such as Lil Yachty and Young Savage dominating the subgenre. Others dedicate their time to push the boundaries of rhyming, with one artist in particular being at the forefront of this. MF Doom or Madvillan or Victor Vaughn or Danger Doom or any other of his other alter egos, takes his inspiration from the Marvel Villain Dr Doom, now choosing to always wear his trademark mask, on and off stage. However, there is more to the villain than just his mask. He is seen by the underground hip hop community and even the entire hip hop community (seeing as he's popular outside the underground community as well as inside) as one of the best lyricist's of all time. A long time presence in the hip-hop industry, MF's trivial, unique storytelling technique and genre bending style demonstrates how far reaching hiphop is.

What I have mentioned, and what is often overlooked is the skill of hip-hop artists and the power of the industry as a whole. However, what is all too often focused upon is the violence in hip-hop. Firstly, the number of artists who do not use a violent message is greater than people believe. KRS-One, A Tribe Called Quest, Loyle Carner, The Internet, rarely if ever, use so-called violent messages. However, there is more to these violent messages than simply wanting to seem cool, and to suggest so is to take a very narrow minded view on the community. The violent messages allowed artists to be heard when hip-hop was in its relative infancy. For example west coast rap (originating in Los Angeles) may have been completely

different if the group N.W.A hadn't come up with their controversial anti police message. Not only did this message and specifically song (F**k The Police) raise the group's celebrity status and put West coast rap on the map, but more importantly it emphasised the anger from the poorest sections of the African American community, towards the incredibly corrupt L.A.P.D. The violence is often, a reflection of the artists living conditions. The explicit nature of the lyrics, which often normalise gang culture, seems as of it would only have been included for the artist's reputation. Nevertheless, this normalisation may reflect how accustomed the artists were to such a violent environment, further demonstrating through their work, the social and economic issues for many African Americans. Maybe if we want to change the messages in Hip-Hop we should look at the reasons for the artists' views rather than attacking their music. That's not to say I would blindly condone anything a rapper said by linking it to a social or economic problem. I realise that many rappers use misogynistic or homophobic views, and I obviously do not support or condone those views however, this image is all too commonly used to generalise the whole of Hip-Hop. Even those rappers who display some retrograde views also produce meaningful pieces of work. My aim therefore is that when you next look at Hip-Hop as a whole, don't take the easy route by suggesting it's the anthem for violence, realise how diverse the genre is, and look deeper than the surface. You don't need to enjoy Hip-Hop but you shouldn't dismiss it.





THE INTERNET

article by jack higgins, year 12

THE ARRIVAL OF THE INTERNET to the mainstream in 1991 revolutionised the way we would live our lives for decades to come; opening up a world in which sharing and listening to music is as easy as a touch

of a button. It is a common charge levied in this new age that the internet is responsible for pulling up the ladder and preventing new artists from being able to 'break the mainstream', but this is not the case. Since it is estimated that by 2020 over 4 billion people will have access to the internet, this kind of neo-Luddism has no place in the current debate. Instead, we should be looking at all the ways in which the internet has saved the music industry, and will continue to provide a better experience for both music fans and musicians alike.

Perhaps most obviously, the way music is consumed by fans worldwide has changed drastically in the past 20 years; physical mediums such as CDs and vinyl records have given way to new streaming services providing cordless access to a seemingly infinite library of artists. Besides the benefit to fans of having a world of music at their fingertips to explore, streaming is in fact the largest driver in growth within the music industry. According to Spotify CEO Daniel Ek, the reported growth rates of 5.9% in 2016 have turned around "years and years of decline". Whilst there is certainly an argument that this wealth doesn't seem to be trickling down for many smaller artists, the potential of this new technology is so great that it's only a matter of time before the influence of independent artists who want their fair share outweighs that of large labels.

It's therefore also important to recognise how the internet has changed the way artists can grow and build a fan base. For decades, artists were bound to a few multinational major labels who dominated the industry, accounting for 70% of the music revenue stream and controlling arguably the most important

HASN'T KILLED MUSIC; IT'S SAVED

aspect for up-and-coming acts; how and when their music could be heard. The arrival of the internet was a striking democratizing force, putting the power to market and discover music into the hands of the people themselves. The past few years have already shown how this can work, with artists releasing their music online and relying on social media to gain traction. The most famous recent example of this is Chance The Rapper; who picked up three awards at the 2017 Grammy Awards for his newest album Coloring Book, which he released for free on his website and without the help of a label.

As a result of this large scale shake up, music industry executives and investors have inevitably panicked, taking what is essentially an improvement of the consumer experience as a threat to their livelihood. This is nothing new; when the heads of the largest labels in the country took out full-page ads in newspapers in the 1980s reading "Home taping is killing music" they thought that once people could easily tape their friends' music onto their own cassette tape, no one would ever buy an album again. The same theory applied with the invention of the record; if someone could listen to music at home, why would they ever want to go out and see live music again? Instead, these advancements increased the desire for music exponentially, turning people into fans and followers who will willingly buy merchandise or go to see the artist in concert. This hits right to the core of why it is necessary to keep moving forward with technology; it is no coincidence that more people than ever before are currently listening to music. The internet has made it easier than ever before to share and consume music, providing the spark that the music industry needed to keep going.

interview: arun blair mangat

Old Owenian Arun Blair-Mangat is an actor and singer who left Owens in 2009 and has since been involved in many productions including Kinky Boots etc. He has played the role of Benny in the London production of In the Heights and is now in rehearsals for Angels in America at the National Theatre.

how much were you involved in drama and music at Owens?

I didn't actually get involved in the drama department until Year 10, when I was encouraged to audition for Joseph and the Technicolour Dreamcoat. Musically, I was in choir and chamber choir and was involved in that from about year 10 or 11 until I finished school. Drama around GCSE was when I decided to pursue it as a subject at the school. Before that, I was doing it outside school at a local theatre.

in what ways did your experience at the school help you?

I think I always loved watching films and going to the theatre so it was nice to be able to find an outlet for that in the school environment. It was encouraging to have it as an option on the school curriculum. Throughout year 7, 8 and 9, it was a bit of fun and at GCSE, I enjoyed the focus on improvisation and tableau and all the dramatic techniques you get to use. I was already doing things outside school; I was always writing lyrics and watching plays and doing shows at my theatre company but doing Joseph and Guys and Dolls helped me realise musical theatre was a thing as well. I had always wanted to act on screen so it was nice to be introduced into that realm.

tell me a bit about how you began your career after leaving Owens

I left with 5 A Levels and was going to go to King's to do Spanish but I was really lucky and started auditioning for professional productions during my final year of school. I got through to the finals for a production of Spring Awakening and I didn't get it but it secured me an agent and I landed my first job in January 2010. I left in July 2009 so I spent that first autumn honing my craft and trying to find some representation and getting myself on Spotlight which is the actors' network that casting directors use to cast their projects. So I was very proactive and then started working and enrolled at university at a later date. I went to LSE to do history instead.

what do you think is the value of vocational subjects?

I think it's imperative and extremely important to have the right balance and availability of it to allow students to excel in subjects that showcase their skills and best qualities. Drama is really important in learning confidence and interaction and inclusion and acceptance of others. Music is harder because there is elitism in the sense I did not learn an instrument traditionally but taught myself piano. I think there's sometimes a hierarchy, especially at Owens where it's so musical. In that sense, I felt somewhat inferior compared to my peers.

do you have any audition tactics you might be able to share?

It's important to learn the context of the piece you're auditioning for. With In the Heights it was in New York and set in the present day so I made sure my accent was on point, listened to the music and researched the composer and writer. With Shakespeare, I'll try to decipher his beautiful poetry or prose and make sure I understand it because you have to know what you're saying or the audience will never understand what you're delivering to them. Practice does

make perfect. You'll never achieve perfection but practice will help you strive towards it. I'm doing a play at the moment called Angels in America which is on at the National and when I auditioned for that, I researched the subject matter. It's in 1980s New York during the AIDs epidemic and Reagan Administration and I ensured I knew about that. I read about in on Wikipedia and read books and watched documentaries. We're so lucky that we have so many tools at our disposal so nowadays there really are no excuses for not knowing subject matter. In terms of auditioning, they want to see you're a hardworking and conscientious actor or performer. So many people can do the job so you have to make yourself as inherently informed about the project.

what is a typical working day like for you?

I have been lucky in working quite consistently. I did take some time out of acting for about 8 months when I wanted to focus on being a student and I didn't do a job until my first summer break when I did Hairspray. It really varies. At the moment, I'm in rehearsals anywhere from about 10 or 11 o clock until six or seven o clock. I work out and do yoga and some workouts then rush off to work, learn lines on the tube. This week for example, I went in on Monday to rehearse then went to a screening of a new film called Get Out with Daniel Kaluuya who is one of my friends which was great. Tuesday, I had rehearsals then dashed off to a press night of a friend's new show. Sometimes part of it is keeping yourself out there, networking and meeting new writers or directors or producers. When I'm not in rehearsals, I'm often writing. I just finished a draft of my first novel and I've been in the studio this year, recording my debut EP. Everything is innately connected in my mind as it's all creatively inclined. All actors are different and I'm trying to move away from musical theatre right now so I wanted to do more plays and screen but I could have stayed in Kinky Boots and that was a very different regiment and schedule where I was going to bed later and having a relatively normal day before going in and painting my face to become a drag queen for the night. When you're filming like my brother is, he gets up at 5am and doesn't finish until 7pm so it really fluctuates between the jobs you're doing.

since you joined the industry, have you met any famous faces from the world of theatre we might know of?

Yes, it depends on the job you do. I'm working with Andrew Garfield at the moment who is a lovely actor and I really appreciate his work. I got to work with Cyndi Lauper in Kinky Boots who wrote the music for that and we hung out. Lin-Manuel Miranda who wrote In the Heights came to watch that and he is obviously the mastermind behind Hamilton. He's a lovely man. When I was at the Globe, I met an actress I really admire who is in Game of Thrones. She's very talented and is half-Indian so it's always nice to meet people of a similar background doing what you do.

what's it like to work with other people in a production and is it easy to get on with each other?

I'm pretty open minded and easy going because, at the end of the day, in theatre you need to be a family who can really support each other. Whether you're a lead or ensemble or understudy, you need to be down for collaboration and creation. A lot of my friends are actors, singers, writers or performers. I try to make a couple of friends from every production because it's hard to keep in touch with everyone but it is a very nice environment.

you were in *Kinky Boots*. Did you enjoy it and what was it like having to wear those boots every night?

The boots were not too bad. No, that's a lie. The boots I wore when I was an angel were 5 inches high. They weren't very great because my interior was quite loose and they weren't very sturdy. The Lola boots were very sturdy and tight which made them easy to walk in and had smaller heels. There was one pair that felt like you were walking on stilts. It was a big learning curve for me because I never thought I would do anything like that. I never anticipated or desired it but the whole point of acting is to challenge yourself and that was a challenge I hopefully succeeded at.

you were in In the Heights. Diversity in theatre has been a mainstream topic in media recently. Do you think there has been progress?

I think London in particular and to some extent, Manchester, Sheffield, York and Leeds, there are efforts to make sure there is a lot of representation on stage. I still think it needs to change and show how diverse and multi-cultural the UK is but it's important across the board that there are mixed companies. There need to be lead roles for disabled actors and we need more sign-language incorporated shows to make them more accessible. I hate when shows are branded a "black show" because you never hear of white shows. For example, people call Dreamgirls, The Lion King and Motown black shows but Half a Sixpence and Wicked aren't white shows. We need to change people's perceptions and interpretations of shows need to change to bring about change. That's coming and I hope to be at the forefront of diversity, provoking that change and encouraging but I do think it has to come from the youth.

what can you share about your upcoming projects?

Angels in America takes me through until September which is very exciting. The EP has been recorded and is being mixed and mastered and I'm in talks about how to promote it online and create the best content possible. I want to shoot a video for one song and that will be released in summer. I'm hoping to get a book agent and I'll be auditioning for the next acting project soon!

what would you say has been the highlight of your career?

Maybe the range because my first job was doing an original musical with UK tours and I was only eighteen and very wide-eyed and green (a term we use for when you're new to the industry). Going from that to doing all sorts of things but I really

enjoyed playing Romeo in Romeo and Juliet which I never thought I'd get to do. I really liked performing the role of Lola in front of 1300 people a night. Angels in America is probably the best piece of writing I've been involved in so I would really like to see how that goes down.

what advice would you give to a student trying to get into the arts?

Get as involved as you can with what the school has to offer. I don't know what the school is like now but when I was in year 12, I was writing a musical and tried to get Mr. Werner to put it on and I wrote it with two of my best friends. In hindsight, we wrote it and got the lyrics but made awful recordings on a Nokia. Looking back, I would have liked to have done that as a little workshop and hopefully put it on. If you're creative, try and create and if you want to be part of something creative, whether it's orchestra or choir or debate club, do it. Be proactive, be eager, be keen and don't be scared but on the flipside, if you are scared, that's not something you should shy away from if it's important and means something to you. If you can, do other activities outside your studies, get involved in local theatre communities, see shows and watch films and you're never too old to act. If it's what you want to do, don't worry about having to rush into it. Just know what you want to do.

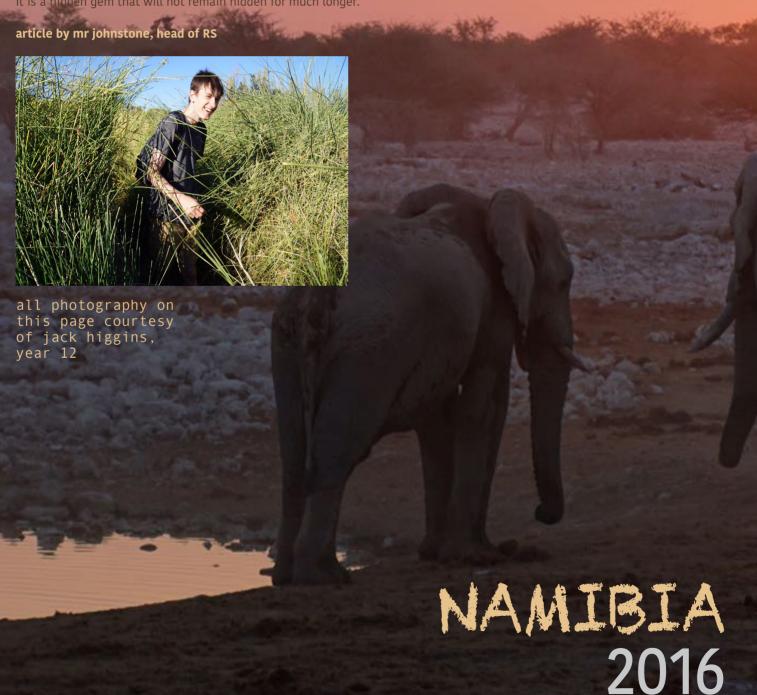


photo courtesy of
Aberystwyth Arts Centre
Summer Production of
HAIRSPRAY, 2012

interview by alexia pierreti, year 12

Namibia is a truly extraordinary country. It is three times the size of the UK and one of the least densely populated places on the planet (fewer than 3 million people). Indeed, you can spend hours travelling through it and barely notice another person or vehicle. It has the world's oldest desert (Namib Desert) and the salt pans that define its landscape can be viewed from space. For any tourist seeking out safari wild life, Namibia is even better than South Africa. With the latter you have to go searching for animals and hope that you come across them. In Namibia's Etosha National Park just about every wild animal congregates around water holes and (in some cases) even venture into the campsites. Indeed, Group 3 found themselves having to make way for a Bull elephant! Listening to hyenas (they really do have a distinctive laugh) and a lion roaring out to a mate at 2:00am while camping in a tent is also an unforgettable experience. This world really is unlike anything experienced in Potters Bar. To say that this trip was memorable would be an understatement. It was a life changing experience for all of us. The activities and experiences were varied. We sand boarded down huge sand dunes at Swakopmund; we met the indigenous Himba people in their village and were familiarised with some of their customs; we visited an enormous sea lion colony at Cape Cross on the Atlantic coast (the sound and smell was unforgettable); we (that is the students) climbed to the top of the world's highest sand dune at Sossusvlei (these sand dunes are like mountains); we visited the Skeleton Coast appropriately named because countless ships have succumbed to its treacherous waves. Finally, we also admired the art engravings of lions and giraffes etc. made on the rocks by local bushmen thousands of years ago. I could go on but there are too many highlights to be included here.

If you are considering a visit to Namibia you will not be disappointed. Superlatives are often overused but it really is a wonderful 'child friendly' country with so much to offer in terms of wildlife, culture, spirituality, geography and of course landscape. My only advice would be to travel within the next couple of years or so before tourism and the film industry (Russell Crowe and Tom Cruise were actually filming while we were in Swakopmund) takes off in this largely unspoilt part of the world. It is a hidden gem that will not remain hidden for much longer.



namibia 2016

Our trip was truly unforgettable, over two short weeks we accomplished so much. No one stayed within their comfort zones, be it racing down sand dunes at some 60 kmph or challenging ourselves on daring hikes, there was a new challenge for all of us each day. For me personally, the best part was the desert itself, it was completely new to most of us, not having experienced anything quite as harsh yet beautiful as this before" - dhillon shukla, year 11

Namibia was an eye opening experience, which I will keep with me for the rest of my life and I'm so thankful to have been part of such an amazing trip. Visiting the Himba tribe was one of the most memorable parts for me, because it opened my eyes to a group of people who live in a lifestyle very different from our own." - emily de naeyer, year 11

Dame Alice Owen's School hosts biennial trips to unseen, unappreciated corners of the world, including Ecuador, India and now Namibia. Students save their Golden Tickets for what is undoubtedly a trip and opportunity of a lifetime.



review by harri jones, year 12

get out

Jordan Peele, known mostly for his role in the comedy duo Key and Peele, has turned his talents to directing, creating a fascinating insight in to the everpresent state of racism in the United States.

The film opens with Redbone, a recent release from artist Childish Gambino, which, with its George Clinton-esque sound, embodies the funk genre of the 70s, which gave rise to many African American artists, as well as coming after an important time in the civil rights movement. The song's lyrics relate to an important reveal in the film; however, to elaborate further would spoil what is an interesting idea. The song accompanies our protagonist Chris Washington (Daniel Kaluuya) and his girlfriend Rose Armitage (Allison Williams)

preparing for a trip away to meet Rose's parents for the first time.

Questions of the parents' reaction to race are quickly assuaged by Rose, and the couple begin their trip from their urban apartment to her parent's rural yet substantial home. An encounter with a deer slows the couple down, forcing them to call the police. This is the first of a few jump scares which tease the viewer with the cliché horror trope of surprise; scaring someone and lulling them into a false idea of the horror that's to come.

Upon reaching the house the two are greeted by Rose's parents, who despite their exclusively black staff seem a pleasant liberal couple. The father justifies himself by stating his love for Obama, whom he says

he would vote for in for a "third term". This classic "I'm not racist because..." line is a comedic moment from a director accustomed to the genre - it also reflects one of the most complex ideas that Peele puts across. Unlike other films, which portray racism through white supremacists or southern plantation owners, Get Out presents the viewer with a more subtle look at racism which arguably, we are all guilty of. The 'liberal' racism presented, is so complex in that it is impossible to pinpoint, and works perfectly by creating a constant state of uncertainty throughout. How can we hate this family if they and their friends love black people so much? This constant theme, makes it all the more chilling when something horrific does happen, and is a testament to Peele's directing talents.

welcome to the real world: science fiction and politics

article by Mr Latham, History and Politics teacher

"Science fiction!?" I hear you snort. "How can little green men, spaceships and death rays help us to understand politics?" Well young Padawan... let me explain. Take this red pill and I will show you how deep the rabbit hole really goes.

The genre of science fiction has always had much more to offer than simple escapism or journeys to other worlds. In fact, much of the finest sci-fi seeks to hold up a mirror to our own world and the course it is on. Take '1984', 'Brave New World' or the 1999 film 'The Matrix'. Each of these, in its own way, takes a worrying cultural or political trend to its extreme in order to ascertain what lessons can be learnt for today. 1984 predicted the dangers of a post-truth world where human beings stand for nothing and so, as a result, easily fall for the promises of extreme ideologies. Brave New World gives us an insight into a world where social mobility no longer exists and each individual knows his or her place and happily performs their assigned role without question. Finally, the Matrix urged us to ask ourselves a fundamental, philosophical question; would we rather be happy or free? Is ignorance really bliss or should we opt for the red pill and step behind the 24/7 media

Take also the recent TV hit 'Black Mirror' as a perfect example. Its creator, Charlie Brooker, follows the simple premise of taking one recent trend per episode and stretching it to an uncomfortable yet deeply plausible future (e.g. hate speech on Twitter or our constant ratings of one another via Trip Advisor or Uber). That us not to say, however, that Science Fiction is inherently gloomy or 'anti-progress'. Instead, science fiction offers us a series of thought experiments or prophetic visions of how things could be so that we may choose a better path. A final, poignant example would be las year's phenomenal film Arrival. A simple description of this film would fit the stereotypical plotline of an 'alien invasion'. However, what this film offers is a fascinating exploration into the nature of language and how words can often limit rather than enable us to understand one another. I'm certainly not saying that all science fiction is going to open eyes, smack gobs or give lessons in philosophy; Jar Jar Binks is testament to that fact. Nor am I saying that Arrival is in any way superior to its competition in the cinemas, hey, Ryan Gosling tap dancing is fine by me! All I want to get across is that sometimes exploring other, albeit fictional, worlds really can help us to understand our own. Perhaps, if we all heeded the warning signs woven into works of science fiction then we really could live long and prosper.



quantum revolution: why biology needs

QUANTUM PHYSICS

On the way back from an Imperial College talk, a friend presented to me the idea of student-given lectures by fellow pupils. At first I questioned whether anyone would show up to watch. Ten lectures in, and several future talks planned, I've been proven wrong, and the 'Student Science Lecture Society' has drawn in mixed audiences of students as well as teachers.

My talk was centred on the theories of quantum biology. Over the last half century, unanswered questions have arisen that have only recently been satisfactorily answered by quantum biology. One example is the migration of the European robin. Unlike our British robins, European robins migrate from Scandinavia and Northern Europe further south to the Mediterranean, escaping harsher climates. This in itself is no mystery, we know birds migrate, and we also know how, using the sun or star positions as directional markers, or using the Earth's magnetic field. These animals' brains are affected by the weak magnetic field, enabling it to navigate itself. The robin did not have these magnetite crystals unfortunately, and so the question remained unanswered. The problem stayed untouched, until a German couple, the Wiltschko's, began an ingenious experiment to prove conclusively the magnetic field was being utilised in robins' travels.

They placed captured birds in a contraption named an Emlen funnel (Figure 1), where the bird is placed on the ink pad, while magnets are placed at positions around the funnel. By changing the magnet positions, the Wiltschko's showed that the robins would change their direction of travel. The birds always travelled towards the north pole of the magnets, however, when the inclination was inverted, they travelled towards the South Pole. In other words, the birds could detect the direction of a magnetic pole, but not which. The mechanism for how requires an abstract form of physics. It is the study of the behaviour of fundamental energy and matter. Quantum mechanics is very different to classical mechanics. The quantum world is unintuitive, and as Niels Bohr famously once said, "If you aren't confused by quantum mechanics, you haven't really understood it".

The quantum phenomena we need to explain the magnetic reception of the robin is quantum entanglement. Einstein once called this 'spooky action at a distance', as it tells us that two 'entangled' objects can affect each other, regardless of how far away they are from each other. The creator of this theory was Thorsten Ritz, a researcher at the University of California - Irvine. His radical pair mechanism involves a protein found on the retina of robins named cryptochrome (Figure 2), confirming scientists' previous suspicions the mechanism needed light. The protein absorbs a photon of blue light that has travelled through the bird's eye, and in doing so emits an electron due to the energy of the light being transferred to the



Figure 1 - Emlen funnel used to detect magnetoreception in birds



Figure 2 - Cryptochrome. The electron is emitted from the FAD pigment (the yellow area at the centre)

electron, giving it enough energy to escape. This leaves an electron vacancy, filled by an amino acid (tryptophan), donating an electron. The donated electron remains entangled with its pair that remains on the amino acid. As the electron can now spin 'up' or 'down', the entangled pair are in a superposition of spinning up-up (triplet state), up-down (singlet state), or down-down. The change in magnetic field strength on the singlet/triplet superposition, albeit small, quantum superimposed states are extremely delicate and the change is enough. If the electrons end up in the singlet state, certain products are produced and the bird is given this chemical information, and if they end up in the triplet state, different products are produced. These chemicals enable the bird to navigate using the magnetic field, and make vital migrations year

article by amir guppy, year 12

Stem Cell Transplantation Therapy for Neurodegenerative Disorders - a Dream or a Reality?

Neurodegenerative diseases, such as Alzheimer's or Parkinson's, previously thought of as 'incurable' are now being explored in a new light after exciting developments in stem cell therapy. Stem cells have been the focus of a plethora of research programs, but now scientists believe that these cells hold the key to curing various neurological disorders as well.

What is Stem Cell Therapy?

Stem cell therapy aims at replacing damaged cells, while restoring and protecting existing neural pathways which have been affected by the disease process. As of yet, the only stem cells that have shown viability to treat neurological disorders have been in the form of embryonic stem cells (derived from an embryo), and iPS ('reprogrammed' body cells). However, the success of this form of therapy is largely limited by the method of transplantation into the patient and also by how quickly and effectively the transplanted stem cells are able to carry out their correct function.

Clinical Success

In 2009, a group of patients with a spectrum of neurological disorders including Parkinson's, Huntington's and ALS, were one of the first groups to receive a clinical trial of this form of therapy. Although the outcomes were varied, particular patients had outstanding outcomes. In a few cases, they were able to restore degenerated tissues. Despite this, the overall results were disheartening as computer simulations had suggested the stem cells would have a more profound effect in repairing previously degraded brain tissue. However, stem cell treatment may soon become a reality for ALS patients. The expectation is that the stem cell transplantation will replace motor neurons, leading to the recovery of neuromuscular functions. Nine patients who received an early trial of this form of therapy displayed improvements as confirmed by electroneuromyography - a method of recording electrical activity in muscular tissue. Remarkably, one patient remained stable after the therapy without displaying any sign of decline,

article by calum connolly, year 12

however three patients died post-treatment as a result of lung infection and myocardial infarction.

The Future of Stem Cell Therapy

As the field of tissue engineering advances, the efficacy of this form of therapy will become significantly better as survival rates increase. Meanwhile, more clinical studies are required so that scientists can determine the most favourable conditions of the brain environment for the iPS and embryonic stem cells to thrive, replicate, and repair the damaged brain tissues. Several ethical and scientific issues must be explored before stem cells therapy is widely adopted in clinical medicine, such as safety issues related to the risk of the procedure. Research up to now indicates that embryonic stem cells are significantly more versatile than their adult stem cell counterparts. Therefore, as more research programs are conducted scientists will eventually find a viable yet effective way to introduce the stem cells to the damaged brain tissue, allowing stem cell therapy to become a widespread treatment for many patients.



Scientists look to Dragon blood to save us from the antibiotic apocalypse

With antibiotic resistant strains of pathogen increasing in frequency at an alarming rate, scientists are always on the look-out for new sources of antibiotic. A recent development has found that Komodo dragon blood contains a compound which may hold the key to winning the war on antibiotic resistance.

The Komodo dragon - which is the world's largest lizard - is found exclusively on five Indonesian islands and even more interestingly, harbours more than 80 different types of bacteria in its mouth, including some harmful strains that can cause serious illnesses. Due to the reptile's apparent immunity to its own deadly bacteria, it became a topic of interest for a group of scientists from George Mason

University, Virginia, USA. The team took blood samples from the Komodo dragons, analysing it to see if they could find traces of cationic antimicrobial peptides (CAMPs). CAMPs are protein fragments that are produced by most living creatures and work as part of the immune system.

From a total of 48 potential CAMPs, they then isolated eight that appeared promising and formed a compound, naming it DRGN-1. The compound was then exposed to two types of superbug, including MRSA, via testing on mice with skin lesions. The tests proved successful and DRGN-1 was shown to heal the mice's wounds faster than rodents that were left untreated or that were treated with existing means. Using CAMPs also

provides further benefits as it may be harder for bacteria to become resistant to them as they act rapidly and through intricate mechanisms. Although the evidence so far is limited, this promising discovery has led the researchers to label DRGN-1 a good candidate for further research. This is encouraging news for scientists, who are always struggling to keep up with constantly evolving antibiotic resistance. However, it often takes years to develop a new antibiotic so it seems what will follow is a race against time to develop the treatment before resistance to the molecule arises.

article by zara lock, year 12

meditation with mr mahajan

A number of meetings with Buddhist monks in Chiang-Mai, northern Thailand, made me aware of mindfulness meditation. It's similar to taking a CD, and reformatting it on your PC because reformatting one's mind is a powerful tool for life in general.

We spend too much time living in the past and the future, but not in the present. Most of what goes on in our mind relates to cogitating about the past or hypothesising about the future. This is not productive. Not living in the present is a significant stress factor, one that can lead to mental health issues. This is tragic, since the 'thoughts' that generate mental health

issues are self-generated and, all too often, have little to do with the reality of everyday living. From a day-to-day perspective, not living in the present is an open invitation for emotions to reduce the quality of decision-making.

Generally, I meditate for 20 minutes at 5AM every morning, focusing on one's breathing, anchoring oneself to the present. When thoughts, positive or negative, arise, accept that they exist, but place no significance on them. Instead, a focus on one's breath takes one back to the present. Evening meditation is crucial, helping to 'reset' my mind after a day of educating

students. I eat dinner and fruit prior to any focused evening work. Sugar has been shown to boost willpower, a "depleting muscle".

After this, I meditate for 20 minutes, using a simple app called QuietMind. I wear a pair of Peltor builders' ear muffs to block out all sounds but the high-pitched meditation bells on QuietMind. This daily process of formal meditation embeds a mindset that enables one to live on the basis of reality; not on hope, fear, or greed.

article by mr mahajan, economics teacher



It was one of the most spectacular fights in heavyweight boxing history. Joshua vs Klitschko had all the elements of a true heavy weight classic; attendance and viewing records, inexperienced power vs. ageing class, immense pre-fight hype and, most importantly, an unbelievable 11 rounds of boxing ending in a TKO. Anthony Joshua's epic win in front of a postwar record 90,000 people at Wembley Stadium against Wladimir Klitschko did much more than make him a heavyweight champion of the world. It exploded the heavyweight division into life and has arguably secured the future of Joshua's sport. >>

>> AJ, through some truly incredible punching, has opened the real possibility of some mega-fights that boxing fans can drool over for months to come. Not least, it has propelled the humble giant into sporting superstardom.

The first four rounds saw the two giants settle into the bout, Klitschko using his usual skill and class to get himself a couple of points up on the scorecards. The fifth, on the contrary, was one of the best rounds in British boxing history. Joshua came out on the bell like a man possessed and was firing shots at Klitschko at tremendous speed, connecting countless times. As the expectant crowd erupted, AJ landed some huge left hooks and upper cuts that hammered Klitschko into the canvas. This was the not the end of a legend, though. Not at all. Joshua had tired himself silly through his earlier onslaught, while the veteran Klitschko showed why he has ruled as king for so long. He came back fiercely with gigantic right hands, leaving AJ clinging on, barely able to hold his

stance. As AJ stumbled his way around the ring, avoiding as many hits as possible, perhaps due to his age, Wladimir was not able to finish him off. Be that as it may, it only got better. For the first time in his professional career, Joshua was put on the canvas, struck by a trademark hammer right-hand from Klitschko in round six. As AJ fell, the hopes of the nation, and perhaps the future of boxing, were on a knife edge. Joshua beat the referee's count, but still had a long time until the bell. Klitschko wasn't going to let him get there smoothly. AJ tantalisingly ducked some outrageous left hooks from Klitschko and, clinging on to a dream racing away from him, with legs like jelly, he was saved by by the bell.

Rounds seven to 10 left Joshua shattered and behind on the score card. Most predicted Joshua's chances had gone. The reigning world champion did not recognise that, nor did his trainer Robert McCracken. Only a knock-out would do. With 1:40 on the clock left in the 11 th , AJ opened up, landing an immense upper cut, sending the raucous

AJ's brilliance: Boxing's bright future

article by sam lodge, year 12

crowd into delirium. Using the rope to help him, Klitschko helped himself up, looking flimsy, just as Joshua had done five rounds earlier. Like a lion sensing his weak prey, Joshua moved in for the kill, opening up another assault to finish the job. Another huge upper cut sent his man to the deck for the second time in 30 seconds. Klitschko appeared to be done. Joshua was. Klitschko, remarkably, was able to get himself up once more. But all too soon, he was on the end of yet another bombardment of punches; left, right and centre. With Klitschko close to being punched out of the ring, the ref jumped in.

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