

MARCH 7/8 2020

FT Weekend Magazine



How African DNA could change the world

BY NEIL MUNSHI

A different perspective

Some furniture is made for the here and now. Some is built to stand the test of time.

At Neptune, we believe it can do both – look good, and wear well.

Because good design never gets old.



N
NEPTUNE



ARMANDO GALLOZZUMA/EYEVINE

'Women's stories aren't being told from our points of view. It's shocking'

Keira Knightley, p20



'The government's response to coronavirus has turned Beijing into a theatre of security'

Tech World, p8



'A sprinkle of salt, a good measure of white chocolate and whole peanuts for crunch'

Honey & Co's peanut butter cookies, p38

-
- 5 Simon Kuper**
Do less work: top tips for the modern boss
 - 6 Inventory**
John Macfarlane, theatre designer and artist
 - 8 Tech World**
Bad tech nearly sent me to coronavirus quarantine
 - 10 Robert Shrimmsley**
Fee-free, extra Gramsci: life at Tony Benn University
 - 10 Letters**
-
- 12 Unravelling the African genome**
Africa's vast, untapped genomic data could spur a global scientific revolution, transforming how we treat disease. But can we do it without exploiting the continent?
Neil Munshi reports
-
- 20 Interview: Keira Knightley**
In her latest film, the actor plays a real-life activist who disrupted the 1970 Miss World. She talks to *Emma Jacobs* about #MeToo, motherhood and her own 'feminist awakening'
-
- 24 How to be believed**
Dina Nayeri on why we tend to think that most Harvard Business School graduates are telling the truth – and most refugees aren't
-
- 28 Into the frame**
Photographer *Rineke Dijkstra* talks to *Andrew Dickson* about her contemporary take on the portrait
-
- 34 Waste not...**
Tim Hayward on *Silo*, which aims to be the world's first zero-waste restaurant
 - 38 Honey & Co**
Peanut butter cookies
 - 41 Jancis Robinson**
Argentina: mainly excellent
 - 42 My Addresses**
Chef-patron *Francesco Mazzei* on Cosenza, Calabria
 - 43 Nicholas Lander**
SingleThread, California
-
- 45 Games**
 - 46 Gillian Tett**
From New York nail bars to Washington

Issue number 860 • Online ft.com/magazine • Editorial inquiries 020 7873 3282 • Advertising inquiries 020 7873 3121 • FT Weekend Magazine is printed by the Walstead Group in the UK and published by The Financial Times Ltd, Bracken House, 1 Friday Street, London EC4M 9BT © The Financial Times Ltd 2020 • No part of this magazine may be reproduced in any form without the prior express permission of the publisher

Cover illustration by *Diana Ejaita*



TIME TO
EXPLORE
MAKE IT EXCEPTIONAL

Scott Dunn[®]
EXCEPTIONAL TRAVEL

There's no present like time – and at Scott Dunn we really understand that your holiday time is extra precious.

It's why we've always made it our priority to be great listeners. Because we believe that only by getting to know you can we create the magical moments and timeless memories that will make your adventure truly exceptional.

When you make time for what matters most, we make it exceptional. Call 0203 5539 880 or visit scottdunn.com/timeto

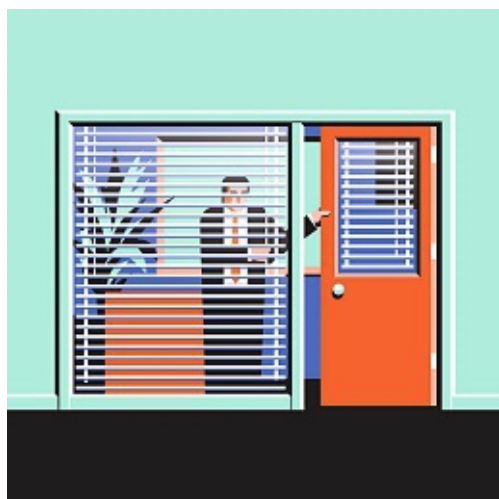




SIMON KUPER

OPENING SHOT

Do less work: top tips for the modern boss



I'm at an age when some of my peers are becoming bosses of their organisations. I've recently chatted to three who admit to feeling confused. When they were underlings, they knew what their tasks were. But now they wonder: what is a boss meant to do all day?

Being Generation X-ers, they suffer from imposter syndrome, are somewhat in awe of their staff and don't want to run around shouting at them. One of my friends has concluded: "There isn't much concretely that I can do in our business without causing accidents." He now takes long lunches and sometimes goes home at 4pm. His management motto, which he keeps secret, is: "Don't just do something - stand there!"

You won't find this motto in airport business books. However, I suspect that many heads of companies, government departments and NGOs should adopt it too.

The traditional boss is a doer. He (94 per cent of chief executives of FTSE 100 companies are men) has typically spent his career getting up early and hitting key performance indicators (KPIs). He was selected partly for his stamina. The late chief executive of a giant multinational company was distinguished (one of his friends tells me) by his ability to get drunk until 2am, then rise at 6am and - after fortifying himself with a swift tot - deliver a fluent presentation at 7am.

The doer-boss rarely lacks ego, especially after getting the top job. At 7am on day one, he charges into the office, eager to get stuck in.

The only problem is: what to do? Elsbeth Johnson, author of the new book *Step Up, Step Back: How to Really Deliver Strategic Change in Your Organization*, says the boss's job is making strategy: "What is the purpose of our organisation? What does good look like? How do we behave - with each other, with our customers - in order to deliver these outcomes?"

She says an organisation needs a limited number of priorities and projects. The boss should set these early on, then spend years ensuring they get carried out. "You have to be prepared to be bored," Johnson tells the bosses she mentors. "You'll be talking about the same strategies, not making new decisions."

But nothing in the typical boss's ascent has been a preparation for strategic thinking. Few organisations set KPIs. Many bosses regard strategising as something to do in their downtime, after the real work of producing stuff is done. In the phrase of one banker: "Strategy is for after five." And so the boss starts "helping" his expert underlings with their daily work, even though he's probably years out of date, especially on the tech. He ends up wasting his salary doing grunt work and stunting everyone else's career growth. The model for the leader as micromanager is Jimmy Carter, who in his first months as US president personally reviewed staffers' requests to use the White House tennis courts.

When doers take on strategy, their manic energy ("change is the only constant!") can be disastrous. Johnson says that, especially after the Christmas holidays, bosses risk coming back with "random new ideas they have come across, or the latest management fad in their sector, whether it's 'agile' or 'digital'."

'Many bosses imagine they have to motivate staff. In fact, the risk of demotivating them is much higher'

She explains: "They read something in Harvard Business Review, they're in the airport and pick up a business book, and the shiny new idea gets put into the system when it's the last thing the system needs."

Many bosses also imagine they have to motivate staff. In fact, the risk of demotivating them is much higher. Millennials, who consistently say in surveys that they crave empowerment at work, don't want a 55-year-old shouting slogans at them and sticking up laminated posters about their organisation's amazing "culture".

The underlying problem is that the boss typically thinks he's Steve Jobs, when statistically he is much more likely to be the maddening incompetent David Brent from the TV series *The Office*.

A new boss should therefore take the traditional physician's oath: first, do no harm. My "Don't just do something" friend emails: "I've made sure there is a strategy (mostly written by my colleagues), I solve problems between colleagues, I represent the organisation towards our board and sometimes externally, and I keep things happy in the office (we're getting ping-pong tables!). That's about it."

When I ran his leadership philosophy by Johnson, she partially approved, though she thinks he should be doing more strategy. It's true that my friend may not go down in history as a transformative leader. On the other hand, he's unlikely to be a catastrophe either.

Think of the world's most prominent boss job, the US presidency. George W Bush spent the first months of his administration taking repeated holidays at his Texas ranch. He was often criticised for that - until, after the attacks of September 11 2001, he rushed back to the office and threw together a strategy to remake the Middle East. Now, people criticise Donald Trump for playing too much golf. I wish he'd play more. **FT**

.....
simon.kuper@ft.com @KuperSimon

‘The moment when all the costumes come on stage – it’s the purest happiness’



INVENTORY JOHN MACFARLANE, THEATRE DESIGNER AND ARTIST

John Macfarlane, 71, is an international costume and set designer for opera and ballet. He has worked with companies such as the Royal Ballet, the Welsh National Opera and the Metropolitan Opera in New York. In 2019, he received the scenographer’s laureate at the Benois de la Danse awards. His artwork can be found in museums across the world.

What was your childhood or earliest ambition?

Pretty well what I do now. My dad, who passed away when I was about seven, was a painter and architect, and helped me make tiny theatres out of empty wooden matchboxes, with miniature curtains and drops.

Private school or state school? University or straight into work?

State: Hillhead High School in Glasgow. My education, and my life, started at Glasgow School of Art.

I won a Leverhulme travelling scholarship, went to Italy, then got an Arts Council bursary. And then a Hamburg Shakespeare Prize – the winner could pass on a smaller prize to someone who was up-and-coming, and [theatre and film director] Peter Brook passed his to me. It led to my first ballet design and first exhibition – the point where everything really started.

Who was or still is your mentor?

Robert Stewart at the Glasgow School of Art. I specialised in textile design because of him. He taught me that you can move between disciplines – a huge lesson. On opening nights, I think: “I wish Bob could see this.”

How physically fit are you?

Reasonably. My stamina is very good.

Ambition or talent: which matters more to success?

Talent – with the discipline to use it. Luck also plays a huge part.

How politically committed are you?

I used to be. Sadly, I’ve become more cynical, and depressed by the corrupt, self-serving, dishonest behaviour of politicians.

What would you like to own that you don’t currently possess?

I own a very beautiful Yamaha grand piano but can’t shake the desire to own a hand-built Steinway.

What’s your biggest extravagance?

Business-class travel. But that has become an essential. My downfall is beautiful watches and beautiful leather bags and luggage.

In what place are you happiest?

In my studio at home in the Black Mountains. Also, when you’ve worked on a production, which can be for over two years, the moment when all the costumes come on stage, it’s lit, you see it all together for the first time – it’s the purest happiness. It’s like a huge, moving painting. I have ended up in tears.

What ambitions do you still have?

To be free of the Scottish Presbyterian need to always be working. I’d like to learn to be calm and not always have a schedule.

What drives you on?

The belief that somewhere round the corner is the perfect drawing.

What is the greatest achievement of your life so far?

Still being here – being able and allowed to do what I love. Sharing my life with a loving partner.

What do you find most irritating in other people?

Loud voices and behaviour in public spaces.

If your 20-year-old self could see you now, what would he think?

He would be pretty happy. I was passionate about opera and ballet. I fantasised about working in Covent Garden, Vienna, San Francisco – and this is what I do. He’d be even more pleased that I live in the country. When I was a child, visiting Auntie Peg on her farm in Perthshire was like going to heaven. I would cry all the way back to Glasgow. Though he would be quite shocked with the ravages of how you look at 71.

Which object that you’ve lost do you wish you still had?

If it were a person rather than object, this answer would be a very long one. I can’t think of any object that couldn’t simply be replaced.

What is the greatest challenge of our time?

Climate change. Not just trying to tackle it, but also persuading all countries that it applies to them.

Do you believe in an afterlife?

No, I’ll happily go back to the earth.

If you had to rate your satisfaction with your life so far, out of 10, what would you score?

Nine and a half. There’s no such thing as a perfect score. **FT**

Interview by Hester Lacey.

John Macfarlane designed the set and costumes for “Tosca” (April 11) and “Maria Stuarda” (May 9), which will be broadcast internationally from The Met: Live in HD; metopera.org

aramco



REAL PROGRESS CHANGES THE FACE OF AN INDUSTRY

We believe that diversity of talent helps us discover new solutions. Our STEMania Program has brought thousands of young women into the worlds of Science, Technology, Engineering and Math, accelerating their progress in traditionally male-dominated fields.

**THIS IS REAL ENERGY.
THIS IS ARAMCO.**

TECH WORLD NOTES FROM A DIGITAL BUNKER

BY YUAN YANG IN BEIJING



ILLUSTRATION BY PÂTÉ

Bad tech nearly sent me to coronavirus quarantine

Our temperature is abnormal. We'll have to send you to the hospital," said the guard standing at the gate to my Beijing compound. It was a frosty Saturday morning and I had come back from walking my dog. He had tried to take my temperature with his infrared thermometer, the standard device used across China now to test people for signs of fever, a possible symptom of coronavirus.

These sensors were popular because they were fast and didn't require physical contact: you could hold them an inch from someone's forehead or wrist. They also frequently malfunctioned. This one was showing three dashes on its display, my zombie temperature.

I laughed awkwardly. Was the softly-spoken, elderly guard who

often inquired about my love life and complimented my dog really going to ship me off to quarantine? I took a step into the compound. He moved to block my path. "No, we have to resolve this. Your reading is abnormal. You can't go in."

While it is still too common to be detained or threatened by authorities while reporting in China, I was not willing to let it happen for the sake of a faulty thermometer. I bargained with the guard and eventually he let me into my flat after I promised to measure myself the old-fashioned way, with a mercury thermometer. (I am neither feverish nor dead.)

When I spoke to a salesperson for the infrared thermometers - in this instance from Xiaomi, the Chinese tech giant that rose to profit on the back of its cheap but slick smartphones and smart home appliances - they told me that the thermometers don't work properly below temperatures of 10C. In Beijing's

below-freezing winter, that made them useless outdoors.

The problem is not just the technology but its misapplication. The government's response to the coronavirus epidemic has turned Beijing into a theatre of security. In the same way that complicated luggage scans at airports are to reassure passengers as much as to actually catch would-be hijackers, China's display of gadgets and tech "solutions" is designed to show that authorities, and tech companies, are at least doing something.

But doing something can be worse than doing nothing. Security as theatre gives false confidence. At several checkpoints, I had a guard try and fail to take my temperature, then simply write down a fake one. The list of visitors preceding me all happened to have temperatures of 36.5C. President Xi has instructed officials to do their utmost to prevent contagion and shown he is willing to fire high-ranking ones who fail. In response,

local officials create paper trails, and outsource their decision-making to unreliable instruments: if they stick to a bad process, they won't be blamed.

False positives abound. The state telecoms carriers, which own the location data of hundreds of millions of subscribers, are now providing users with records of where they've been. This can be used to show authorities you have not left your city and, specifically, not been to Hubei, the province at the heart of the outbreak. Some subscribers were surprised to find they had visited dozens of cities in one day, according to their location history. It turns out they had taken a train journey and their phone had checked in with all the cell towers on the way. This would incorrectly classify them as having visited coronavirus hotspots.

'The government's response to the epidemic has turned Beijing into a theatre of security'

Human rights are at risk too. Since the government instructed local authorities to "take in those who need taking in", health agencies have been exercising their quarantine powers. Videos of people being dragged from their homes by their armpits suggest some citizens disagree that they fall into that category. My friends in Beijing say they are most afraid of catching seasonal flu or some other common illness, then being quarantined in non-segregated fever wards with coronavirus carriers.

Some epidemiologists argue that containment is now impossible. They say the virus is so contagious, and there are so many carriers showing no symptoms, that it will inevitably become endemic - that is, always present in the population. If that is the case, then no amount of data-driven surveillance by the Chinese state will work, despite its attempt to play to its strengths in carrying it out. Only vaccines, well-funded hospitals and test kits can help. **FT**

Yuan Yang is the FT's China tech correspondent in Beijing

CHAMPAGNE POL ROGER



By appointment to
Her Majesty The Queen
Champagne Supplier
Pol Roger & Cie



See the film at polroger.co.uk

A DUTY *to* DELIGHT

SINCE 1849



ROBERT SHRIMSLEY

THE NATIONAL CONVERSATION

Fee-free, Gramsci-heavy: life at TBU

I was hugely excited to hear last week of the plan for a Tony Benn University of Political Education. The scheme is the brainchild - I know one hesitates to use that word in this instance - of Richard Burgon, a soon-to-be-defeated candidate for Labour's deputy leadership.

I doubt he actually believes in the idea but he hopes it will help him corner the envious position of moral heir to Jeremy Corbyn, once Rebecca Long Bailey has lost the Labour leadership contest.

Burgon is approaching that task with a splendidly cynical demeanour. It basically seems to involve coming up with the most leftwing ideas imaginable and then promising to implement them if elected. This is not as easy as you might think. Several of the most promising wacky notions were in the last Labour manifesto. It would be very easy to take a wrong step, such as insisting all football matches end in a draw or offering free broadband to all voters.

But Burgon argues that the party and the nation will benefit from this new centre of political excellence - although, obviously, excellence is a bit elitist, so it ought by rights to be more of a centre of averageness and mediocrity. Naming the college after Benn is a nice touch, though if things go well for the next Labour leader, he may feel a Keir Starmer College is more appropriate.

It is easy to mock the Tony Benn University - at least I hope it is, I've got 700 words to fill here - but TBU could be exciting and intellectually stimulating. (Incidentally, one of the great stories about Benn is when he told his fellow Labour MP Tony Crosland that they needed to lose the stigma of intellectualism, and Crosland replied: "You'd better gain it first.")

There are big questions raised by the plan. Will the Tony Benn University have a Rag Week? What will its attitude be to student



ILLUSTRATION BY LUCAS VARELA

sit-ins? Will the lecturers be punished or promoted for going on strike? Will there ever be any days not lost to industrial action? In fact, will turning up for lectures lead to marks being deducted?

It is worth contemplating life on TBU's pithead campus. For one thing, it would obviously be free - Tony would not have wanted tuition fees charged - so it will be open to students of all means and none. This already makes it significantly more attractive than quite a lot of the alternatives that charge fees and aren't named after Tony Benn: the James Chuter Ede University of Home Affairs, the Stafford Cripps College of Financial Engineering and the Tony Blair College of Just Gimme the Money.

Then again, perhaps it will be reverse means-tested so that only the wealthy pay, the problem here being that they might then decide to go to a - oh, what's the word? - serious university instead.

The university will offer a wide range of courses, including a very healthy dose of Marxist dialectic, Gramscian critique, how Labour won the argument at the last election and absolutely oodles of courses on the Latin-American model, which would also attract public schoolboys who were good at classics and misread the title.

Obviously, there will be a lot of contemporary history: the myth of the Soviet purges; war crimes from Kennedy to Blair; and the Tory government, 1979-2010.

There will be side modules in how we would have won if it wasn't for the media; how we would have won if it wasn't for Blairites; how we would have won if it wasn't for the warmongers; and how we would have won if it wasn't for the Jews, sorry Zionists. And there will be ample extra-curricular activities, including a very healthy dose of Marxist dialectic, Gramscian critique and how Labour won the argument at the last election.

It is early days, and very much in the conceptual stage, but, sadly, there may not be any competitive sport - though there may be room for five-a-side Gramscian critique and aqua-Marxist dialectic.

Given the commitment to lifelong education, a degree from TBU may be just the start. After the Tony Benn University for Political Education could perhaps come the Jeremy Corbyn College for Political Re-education. I'm surprised Burgon hasn't thought of this already. Perhaps he's saving it for the final run-in. **FT**

robert.shrimsley@ft.com
 @robertshrimsley



Reply

Re "Why penguins may help us predict the impact of climate change" (February 29/March 1): a superb piece of reporting on an issue and a region that lies at the heart of what it means to be a human on this planet.

Liu Xiaobo via FT.com

I admire the humanism of Anne Case and Angus Deaton's research ("America's 'deaths of despair' and how to tackle them", February 29/March 1), and I also commend Joshua Chaffin for his excellent reporting. Pieces like this are a bridge to empathy. These people went from something to little to nothing. They were basically purged, bearing the brunt of changes in the value/supply chain - their jobs were traded.

Ephialtes via FT.com

@KeithNHumphreys February 28
 Excellent profile via @FT illuminates that economist Anne Case is exceptional not only in her intelligence but also in her compassion

Further to Gillian Tett's column, "An all-American approach to legalising marijuana" (February 29/March 1). It's time. But the right way to go about this is to legalise marijuana at a federal level and then let individual states decide how they want to regulate and tax usage for themselves. It will happen.

Good European via FT.com

The article by Olivia Laing shines beautiful light on Andy Warhol (February 29/March 1). As a 17-year-old, I encountered Warhol in a week-long art happening in Finland. I quit school for the week to cover it as a press person. It was his four- and five-hour films in particular that knocked me out. Warhol has revealed so many other unexpected facets each time one encounters art produced by his curious mind.

Tapani Talo - Architect via FT.com

To contribute
 Please email magazineletters@ft.com. Include a daytime telephone number and full address (not for publication). Letters may be edited.



To mark **International Women's Day**, we speak to **Laura Bates, Emma Dabiri** and **Emilie Pine** about **feminism now**. Listen to the conversation in the latest Culture Call, the FT's transatlantic culture podcast; ft.com/culture-call

FT.com answers The link was metals 1. James Goldsmith (The Referendum party) 2. Tin Machine (The singer was David Bowie) 3. David Copperfield 4. Iron lung 5. Nickelodeon ("Put another nickel in...") 6. Google Chrome 7. Mercury 8. Brass 9. Steel City 10. Silver Linings Playbook **Picture quiz** Buster Merryfield + Diane Keaton = Buster Keaton

SAVOIR

×

Bill Amberg



EXTRAORDINARY BEDS

savourbeds.com

London Paris New York Düsseldorf Moscow Shanghai Hong Kong Seoul Taipei Singapore



How African DNA could change the world

The continent's untapped genomic data could spur a scientific revolution, transforming how we treat disease. Why have we ignored it for so long? *Neil Munshi* reports. Illustration by *Diana Ejaita*

More than 7,000 years ago, during the last Green Sahara period, when the vast north African desert was rain-fed and lush, a child was born with extraordinary powers - and the seed of a curse.

Locked inside the child was a genetic mutation that gave a heightened immunity to malaria. Over the following 259 generations, the disease would become the deadliest in human history. Indian scribes of the Vedic period called it "the king of diseases". Malaria hastened Rome's fall. It killed up to 300 million people in the 20th century alone - one in every 20 deaths.

The child survived because of a change in haemoglobin, the molecule in red blood cells that carries oxygen, which was then passed on to its descendants. The mutation persisted because it was a means of survival in malarial sub-Saharan Africa. But its potency held a dark secret. Sometimes, when two of those descendants procreated, their ▶

◀ children inherited two mutated genes, and their red blood cells collapsed into crescents, clogging their blood vessels. The result is what we now call sickle cell anaemia - a painful, sometimes deadly genetic disorder that afflicts 300,000 babies every year, mostly in Africa.

The link between sickle cell and malaria was established in the 1950s and had a profound impact on the field of human molecular genetics. But the existence of the child - which may be crucial in finding a cure - was not discovered until 2018, by Charles Rotimi and his colleague Daniel Shriner at the US National Institutes of Health.

The mapping of the entire human genome - a 13-year effort to list all of the roughly 3 billion "letters" that make up a person's DNA - was completed in 2003. Since then, the reference genome that scientists use to conduct their research has steadily grown, adding different types of people to further our understanding of the fundamental building blocks of human life. But it remains incomplete: nearly 20 years on, the vast majority of it is still European. Genetic material from people of African descent makes up just 2 per cent. It was this small portion that produced Rotimi's groundbreaking research.

The lack of African genetic material constitutes a significant obstacle to understanding how our bodies and diseases function. African genomes are not only humanity's oldest but our most diverse, and that diversity holds within it an almost unfathomable potential - from scientific breakthroughs to gene editing to the rewriting of our evolutionary history, the very story we tell ourselves about ourselves.

"The continent of Africa represents what I would like to call the root and trunk of human evolutionary history," Rotimi tells me over the phone from Maryland, where he is the director of the Center for Research on Genomics and Global Health at NIH. "We have lived the longest as humans on the African continent, and that has very, very important implications for understanding... how forces that existed on the continent helped shape present-day human genomes, either in terms of how to survive infectious diseases or survive the environment."

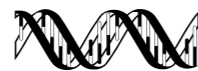
Researchers, academics, drug companies and start-ups around the world have recently woken up to the potential that Africa offers. A consortium of roughly 500 African scientists is conducting groundbreaking research on the genetic causes of blindness, Alzheimer's, cancer, kidney disease and other afflictions under the umbrella of the H3Africa programme - an initiative created by Rotimi, and funded by the NIH and the UK's Wellcome Trust, in 2012. Their work, Rotimi says, is just beginning to bear fruit. Meanwhile, pharmaceutical groups are on the hunt for genomic data from African populations - in some cases provided by new home-grown biotech start-ups - as they seek to develop the next generation of blockbuster gene-based therapies.

There is, however, concern about who will ultimately own Africa's genomic data. A US official told the FT last month that the Trump administration wanted to block China's plans to build an \$80m headquarters for the Africa Centres for Disease Control and Prevention, in large part because of Africa's "vast amounts of genomic data". "The Chinese... want to eventually steal the data," the official said (Beijing called the allegation "ridiculous").

As the commercial possibilities become clear, and private companies from the US, Europe and

China take an interest, scientists in Africa are grappling with the complex ethical implications of practising an extractive science on a continent with a long history of exploitation from abroad.

Roughly 99 per cent of our evolutionary history occurred in Africa. Modern humans emerged there 200,000 years ago. About 100,000 years later, small groups of our collective ancestors began a procreational march around the world. They took with them just a fraction of our genetic diversity. Those in Africa held the vast majority, and as they intermarried and reproduced, that diversity remained, buffeted and transformed by environmental pressures including disease. Tapping into that diversity has implications for all of humanity.



Not long ago, a tailor came to my home in Lagos to take my measurements. I asked him if he could also make dresses for my daughters. He said he knew someone who could, his ex-business partner. Actually, he said, she was also his ex. Ah, I said, it's always hard to mix business and love. No, no, it's not that, he said. We're both AS.

Inside each human cell is a nucleus with about 20,000 genes made up of strands of DNA that contain four chemicals called nucleotides, or bases. The entire human genome - which includes all of a person's genes - contains 3.2 billion pairs of those bases - lettered A, C, T and G - which provide the blueprint for how our cells function.

Two copies of the haemoglobin gene sit in each of those cells. For some Africans, one of them is normal (A) and one of them is mutated (S). They carry the sickle cell trait but don't suffer from the disease. Roughly a quarter of Nigerians are AS; the country accounts for half of the babies born with the disease each year. When things between the tailor and his girlfriend got serious, they - like most young Nigerians - took a genetic test. He was unlucky, as many others across Africa and in the diaspora are, to have fallen in love with another descendant of the child born in the Green Sahara, hundreds of generations down the line.

Genomic research is the search for variation. Humans share roughly 99.9 per cent of their DNA but it is the difference in what remains that is important. These mutations are known as SNPs, or single-nucleotide polymorphisms - the equivalent of a single typo in all of the words in a thousand bibles. Most are benign, causing blue eyes or big ears or nothing at all. The ones scientists seek are more dangerous - causing cancer, Alzheimer's, high cholesterol, Parkinson's - and more heroic, protecting us from such afflictions.

Without including the genetic data of Africans, precision medicine, gene editing and other scientific advances risk becoming the province of the white and wealthy. Many genetic tests are already better at predicting breast cancer and type-1 diabetes in patients of European descent than clinical methods, because the tests are based on them. This bias is "the most critical limitation to genetics in precision medicine", according to a 2019 paper in the journal Nature Genetics.

Broadening genetic research will benefit everyone. Years ago, Dr Olufunmilayo Olopade, one of America's leading cancer researchers, began noticing higher rates of breast cancer, at earlier ages, ►



OMAN SETH AHOUANSOU

'I think it's more acceptable to the African population if they see their peers doing the research, rather than seeing people from outside. That can remind people of the old days, of people coming in and taking the resources and going out'

Guida Landouré, Bamako, Mali

'We have lived the longest as humans on the African continent, and that has very, very important implications for understanding how forces that existed on the continent helped shape present-day human genomes'

Charles Rotimi, Maryland, US



NATE PALMER

◀ in women in her native Nigeria. In 2018, she co-authored the first-ever study to use sophisticated genomics analysis of African women. The results could change the way we think about how breast cancer develops and how it should be screened for – regardless of where you come from.

“For a very long time, we have thought that cancer went through a systematic, slow growth, so you wait until 50 and you get your mammogram once every two years and you’re going to be OK,” says Olopade, a MacArthur genius grantee and director of the Center for Clinical Cancer Genetics and Global Health at the University of Chicago. “I think this really has just turned that on its head, because you may need to start earlier... And it shows that we need to do more genetics research in Africa, because otherwise we will have the wrong policies, we will start in the wrong place, and that’s why we have not had the kind of progress we needed to have.”

Advances in sequencing mean finding mutations is increasingly easy. Determining which ones matter is far more difficult. Researchers have found that including even a few black people in studies can improve results. But most analysis is still done on European-ancestry populations, because they are the most common in scientific literature. Without robust data from African populations, scientists are missing out on the secrets of thousands of generations of human evolution.

A recent study of just 910 people of African descent revealed that 300 million base pairs – out of more than 3 billion – are not found in the reference genome. “That’s massive. That means that potentially you have 10 per cent of the area that you just don’t know... and that completely harms our capacity as scientists to do good science,” says Dr Ambrose Wonkam, associate professor in the division of human genetics at the University of Cape Town, who is studying the longevity of sickle cell patients. “So when we say equity in science now is important, specifically with the African population, it’s not about charity... It’s something that is absolutely necessary for us to do the science the way it should be done. Otherwise, we all lose.”

Point G Hospital is a dusty complex of low-slung buildings on a sandstone bluff above Bamako. Down below, the Niger river winds through Mali’s sleepy, sandblasted capital. I meet Dr Guida Landouré, an H3Africa-funded researcher, in the faded baby-blue neurology building where his office is lit by fluorescent bulbs and the midday Sahelian sun. His white coat hangs from the curtain rod. Stacks of bursting Manila folders are piled half-a-metre high around his small laptop. He grins wanly as he unfolds his gangly frame to greet me, moving a hand towel in a bashful effort at cleaning up.

Landouré was born in central Mali, the last of 28 children to a Koranic schoolteacher and his three wives. His family tended cattle. After he completed his PhD at University College London, Landouré returned for two weeks to the US, where he’d previously worked at the NIH. “People were saying, ‘Why don’t you stay?’ I said, ‘No, I came to the country to look for something I could not get at home,’” he says. “PhDs are thousands in the US, thousands in the UK, but a PhD in neurology or neurogenetics in Mali? There are none. My goal is

not to go somewhere where it is easy for me to work, or where I can get better paid. No. My goal is to come here to get knowledge that I can also transmit to other people back in my country, those who did not get the opportunity to come here, to train them.”

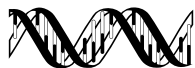
In 2015, Landouré received his H3Africa grant to study the genetic roots of hereditary neurological disorders such as muscular dystrophy or Huntington’s disease. Many such disorders are being studied elsewhere. Some even have a cure. “But we have not even done the survey of these diseases in Africa,” he says.

Five months ago, Landouré’s lab discovered a form of progressive myoclonic epilepsy caused by a genetic mutation that had previously only been documented in two other patients, a German and an Italian. The disorder can be treated with an inexpensive compound called folinic acid. “The patient could not even hold their head up, and was completely absent. But when we saw him later, he was playing!” he says. “So you can see how genetics can change that child’s life. This is what makes us think that we should continue.”

Walking through the lab, it is impossible not to recognise the extreme limitations most African scientists must work under. “It’s completely different,” Landouré says. An NIH lab in the US comes fully kitted-out, with expert colleagues to bounce ideas off. “But here, when I came, they give you an empty space. You bring everything.”

The lab has a number of state-of-the-art instruments, kept under floral plastic sheeting. Shipping costs and diesel for the generator eat up a lot of the budget. Landouré’s H3Africa funding is being used for the entire neurology department. It funds bursaries for students, the clinic downstairs and training for students and faculty alike - important capacity building, though it takes away from the research.

But he hopes it will sustain medical research in Mali for years to come, instilling trust in people who might otherwise be wary. “I think it’s more acceptable to the African population if they see their African peers doing the research, rather than seeing people from outside,” he says. “That can remind people of the old days, of people coming in and taking the resources and going out.”



In 1996, the Nigerian city of Kano was hit by the worst meningitis outbreak in Africa’s history, infecting 120,000 people. Médecins Sans Frontières and other non-governmental organisations convened at the infectious disease hospital. Another team arrived from Pfizer, the global pharmaceuticals company, which was in the late stages of testing a meningitis drug.

“[Pfizer] saw an opportunity for a phase 3 clinical trial,” says Babatunde Irukera, the lawyer who represented Nigeria in the lawsuit that followed. “They scrambled together a team and... started conducting their clinical trial.” Pfizer staff wore no badges differentiating themselves from the humanitarian workers, he says. “People were sending their children to them thinking they were going to treat them,” adds Irukera, now head of Nigeria’s Federal Competition and Consumer Protection Commission.

In 2009, Pfizer paid \$75m to settle the resulting lawsuit. “It was an indication of the kinds ▶



LEE-ANN OLWAGE

‘When we say equity in science now is important, specifically with the African population, it’s not about charity... It’s absolutely necessary for us to do the science the way it should be done. Otherwise, we all lose’

Ambroise Wonkam, Cape Town, South Africa

◀ of things that had been going on in this country for years: pharma companies conducting tests without proper controls,” says Iruker. “Pfizer claims it conducted informed consent, but we have no evidence of that. These are people who don’t speak English.”

In a 2009 statement announcing the settlement, in which Pfizer denied any wrongdoing or liability, the group said that “the 1996 study was conducted with the approval of the Nigerian government and the consent of the participants’ parents or guardians, and was consistent with Nigerian laws”.

Commercialisation has long been a fraught subject in scientific research, especially when it comes to informed consent and compensation. Questions over whether the subject should be paid have been debated for years. Perhaps the most famous example is Henrietta Lacks, the African-American woman whose unique “immortal” cells were harvested by researchers without her knowledge before she died. Their indefinite ability to grow means they have been used in nearly every major medical advance in the past half century, but her descendants have never received compensation.

The Lacks case is a relic of a time before informed consent. But researchers in Africa today must figure out how to obtain it from everyone, including those who may not yet have words like “DNA” or “gene” in their native tongue.

The UK’s Wellcome Sanger Institute was recently embroiled in a controversy over whistleblower complaints that it planned to misuse samples obtained in Uganda and elsewhere in Africa. These include accusations that it was attempting to commercialise the products of the research without proper consent. Sanger, one of the world’s leading genomics institutions, has denied the allegations, citing two independent investigations it commissioned that found no wrongdoing. In a statement, it said: “The cause of concern was a potential commercialisation proposal from an individual working at the Institute at the time. The Institute did not pursue this proposal.”

Separately, during the 2014 Ebola epidemic, doctors and researchers from around the world took more than 269,000 blood samples from patients in Guinea, Sierra Leone and Liberia. None gave consent for them to be used for research. But thousands of samples were sent to foreign labs including Public Health England, according to reporting by the journalist Emmanuel Freudenthal. Beyond the lack of patient consent, this left researchers in those countries without access to the samples that in many cases they themselves collected.

Christian Happi, one of Africa’s leading scientists, was part of the team that sequenced Ebola during the outbreak. The Cameroonian, now based in Nigeria, tells me over the phone that the team made the data public immediately so that it could be used to find treatment. “We were not really interested in terms of storing the samples or keeping the samples or making the fancy Nature or Science paper,” he says. “And that’s what’s different between us that are on the ground and care about our people, and those that are called ‘parachute scientists’”.

Happi grows animated as he describes how Africa has the skills, facilities and knowledge to hold on to its genetic endowment. “We have many, many centres of excellence, we have plenty of people who trained in the best schools in the world that are back on the continent. There shouldn’t be

any room for samples to keep going out of Africa any more,” he says. “There’s no point saying that you maintain and keep all this in Europe, and anytime there’s [a crisis] you parachute in with all the skills and all the tools and eventually go back. That is no longer acceptable.

“We should be collaborating but... you can’t go to America and then take DNA samples out just anyhow. You can’t go to Europe and take DNA samples or virus samples out anyhow. Why should that be different here?”

Such questions have been pondered inside H3Africa for years, says Jenniffer Mabuka, head of the programme at the African Academy of Sciences. “What if a commercial company, for example, came here and requested data and 10, 15 years down the line were able to make a [blockbuster] drug out of it?” she says. “How do the people who contributed that data benefit?”

Options for compensation could include free access to diagnostic services, discounted access to the drugs developed from their genetic material, donations to local clinics - or, most simply and far more controversially, cash.

Many researchers contend that subjects shouldn’t be compensated as it could compromise the science. It also takes years of analysis before anyone can tell whether a mutation means anything. “The idea that I would learn something from your genome and then exploit [it] is actually pretty rare,” says Lawrence Brody, director of the division of genomics and society at the National Human Genome Research Institute at NIH.

But the issue is complicated by the west’s history of plunder in Africa. From diamonds to gold, oil, bauxite, rare earths and, of course, people - the continent is rich in resources but has seen almost no benefit from its bounty. Big Pharma’s record is no better than Big Oil’s. What is to keep Africa’s great genetic diversity from becoming yet another resource that is extracted and refined into multibillion-dollar drugs abroad?

Funding for H3Africa will dry up in two years. There is no sign of any government or institution ready to step in, even as its research is only beginning to reveal the promise the continent holds. Its leaders believe the investments they’ve made will allow African scientists to better compete for funding with their global peers. But those researchers will also have to get creative about how to fund their work.

Since the Human Genome Project there has been a dramatic reduction in the cost of sequencing - from \$500m-\$1bn in the early 2000s, to under \$1,000 per genome today. That has made Africa a more attractive destination for research dollars, despite being higher risk and logistically complex. But the allure of African genomics, both commercially and scientifically, has elevated a familiar debate that is particularly acute in a continent with a history of exploitation: profit versus purpose.

This became apparent in my discussions with Happi and, separately, Abasi Ene-Obong. His company, 54gene, raised \$4.5m in venture funding last year to create Africa’s first private biobank and has just launched a programme to sequence the DNA of 100,000 Nigerians.

Both geneticists trained at world-class institutions (Happi at Harvard and Ene-Obong at

the University of London), and both speak about broadly similar goals: to advance science by tapping into Africa’s potential, to give back to the continent and bring Africans into the genomics revolution. But Happi’s approach suggests a choice must be made between profit and purpose; Ene-Obong believes you can have it all.

This summer, Happi will open a \$4m genomics centre on the campus of Redeemer’s University in Nigeria, funded mainly by the World Bank. The centre will primarily be a research institution, but it will also offer consulting, sequencing and training courses for academics and public health officials. “Our goal is to see how we can use genomic information to actually address problems in Africa... saving lives, making impact, without thinking about enriching ourselves first,” he says. “It’s about making it sustainable.”

Ene-Obong’s office in Lagos still bears the popping primary colours of 54gene’s early history as an African version of Ancestry.com or 23andMe, the US consumer genetics unicorn. He is a big guy with a gentle disposition who smiles easily. His mission for 54gene has some crucial differences to Happi’s. “The question is, are we just building a research tool or is it a business?” he says. “It’s a business. But we want to build a better reference set... because the current leading reference set that is used in the world doesn’t even contain my tribe.”

He is referring to the 1,000 Genomes Project, which followed the Human Genome Project and was meant to address the dearth of non-European populations. In fact, it includes neither his father’s Efik tribe nor his mother’s Igbo, of whom there are more than 30 million in Nigeria.

The company’s planned 100,000-Nigerian database - which it is sourcing from hospitals and academic institutions - is something that pharmaceutical companies would likely pay hefty fees to access. As Matthew Nelson, head of genetics at GlaxoSmithKline, tells me: “If I was able to access a full medical history of 500,000 people across five countries in Africa, and analyse genetic data from that, that would be a far better investment in understanding genes and disease than another 500,000-person study in Europe.”

But Ene-Obong also wants 54gene to work along the drug discovery chain, from contract research for pharma companies to clinical trials to potentially doing drug discovery themselves. He wants the company to be a “precision-medicine powerhouse” so that it can create targeted treatments for Africans.

“But that’s a side effect of the work,” he tells me. “We want to be able to build value, and that value could be drugs that treat people across the world but with a preference also for drugs from diseases that affect Africans disproportionately.”

The plan is to partner with pharma companies, research institutions, governments and biotech. “The [sheer] number of companies that have reached out - there is a real interest in studying diseases in this population, and we just want to make sure that it’s all done sustainably and done well,” he told me, a month after the company publicly launched last July.

Ene-Obong insists the company can contribute to science, give back to Africa and make a profit. Happi is not convinced. “What are we doing to ensure that there is equity, that there is fairness, that you have properly compensated for the *gift* - I mean it is a gift - that they have donated to



KEMIKA AJOKU

'We want to be able to build value, and that value could be drugs that treat people across the world but with a preference also for drugs from diseases that affect Africans disproportionately'

Abasi Ene-Obong, Lagos, Nigeria

mankind?" Happi says he effectively asked Ene-Obong in a recent H3Africa teleconference. He says he's fine with the private sector engaging transparently, but wasn't satisfied with what he says were Ene-Obong's vague answers.

54gene's ethics chief, Aminu Yakubu, served as chair of H3Africa's ethics committee before joining the company last year in September. He tells me 54gene's ethical framework aligns broadly with H3Africa's, though it is evolving. Roughly 5 to 20 per cent of the profits from its research contracts with companies will go to a foundation in each country it operates in. Committees of eminent scientists and societal leaders will decide where the money goes.

Yakubu notes that the ethics of compensation are complicated. Would mentioning the prospect of compensation from a hypothetical billion-dollar drug in a consent form improperly induce someone living on \$2 a day into participating? Should any benefits go only to those who participated in the study or their entire community? Their ethnic group? Their country? Still, if a single person's genes are used to create a drug sometime down the line, Yakubu says the company would want that person to get a portion of the profits.

Ene-Obong tells me he'd noticed something among "old academics, researchers" doing genetics in Africa. "They see us moving fast and they see us being successful and they are threatened because, you know, suddenly the light is leaving them and coming towards us."

Still, he says that he wants to work with academia. He already has collaborations with researchers and institutions in Nigeria, including some affiliated with H3Africa. This is essential to 54gene's work and he wants to do more. "The people who will suffer if [such] tensions continue are African, because the two sides will be focused on each other and people won't be getting the benefits of either," he says. "In other countries, you have a situation where private [companies] and academics come together to partner... [but] I can understand why there is contention in Africa - we are the first private entity doing this."

With H3Africa's funding running out, such collaboration will become increasingly important. Whatever happens, genomic research in Africa must continue, says Rotimi. "For the first time in human history, we now have the necessary tools in terms of biotechnology, computational infrastructure and the scientific understanding of how to interrogate human genomes... and we know that Africa is the home of humanity," he says.

Rotimi is the godfather of African genomics research, widely credited with pushing the notion that we should study the continent's populations. Bringing in more African scientists and studying African genomes is, he says, both a scientific imperative and a matter of social justice.

"The scientific imperative is that there are things in the human genome that we cannot study anywhere else but on the African continent, because of the evolutionary history of humanity," he says. "The social justice issue is that if we don't engage this part of the world, then whatever gains we're going to get from using genomics to improve health or agriculture or even the economy, that part of the world is going to be left behind, just like a lot of other revolutions passed over Africa." **FT**

.....
Neil Munshi is the FT's West Africa correspondent



'Fame. Tricky thing to navigate'

In her latest film, Keira Knightley plays a real-life activist who disrupted the 1970 Miss World competition in London. The actor talks to *Emma Jacobs* about motherhood, #MeToo and her own 'feminist awakening'

Keira Knightley is a hypocrite. And so are you. "We're all hypocrites," she says. "We're human beings. Being a human being is being a hypocrite."

People, with all their messy contradictions, rarely live up to their virtuous ideals. That is how Knightley squares a successful career in an industry that projects impossible beauty standards - while also applauding the feminist protests at the 1970 Miss World competition, the subject of her new film, *Misbehaviour*.

Knightley plays Sally Alexander, the real-life activist who, together with fellow members of the new Women's Liberation Movement, interrupted the pageant with ink-squirting toy guns, football rattles and flour bombs. Their actions brought the campaign against the objectification of women to a television audience of 100 million.

For Knightley, exploring conflicting interests - such as the challenge of balancing her own feminist principles with the demands of her job - was part of the film's attraction. "That's why I wanted to do it!" she says, with such force you can almost see the exclamation marks project from her mouth. "I came into this completely on the side of the women's libbers. Totally. Completely. Yes, 100 per cent, this is disgusting. And yet, I am somebody that makes my living, most of my money, from being a model [in campaigns for Chanel and others] and from doing red carpets."

On the day we meet in a central London hotel, she is impeccably groomed in a Loewe black jacket, with smoky eye make-up and waved hair. There have been moments on the red carpet, she says, when she felt she was in "a dog show" with "f**king creepy cameras".

Yet compromised principles are no excuse for inertia. "You're going to find very few people like Greta Thunberg. [But] by going, 'Oh God, therefore I can't say anything', then nothing is going to happen," she says. "Nothing's going to change in any direction whatsoever."

Knightley may be best known for playing the romantic heroine in a slew of period dramas - from 2005's *Pride & Prejudice* (which earned her an Oscar and Golden Globe nomination), to *Atonement* in 2007 (for which she was shortlisted for a Bafta and Golden Globe) and *Anna Karenina* in 2012. But it would be a mistake to pigeon-hole her. She has increasingly embraced more complicated, unconventional roles.

In *Colette* (2018), she played the bisexual French writer and music-hall star, while in David Cronenberg's *A Dangerous Method* (2011), her character Sabina Spielrein was spanked by Carl Jung (Michael Fassbender), before becoming a psychotherapist. There is no strategy behind ▶

◀ her choice of films, she insists. “I read scripts and I go, ‘Yes, I want to dive into that.’”

At just 34, Knightley already has 28 years of acting behind her. As a dyslexic child growing up in Teddington, south-west London, her parents (Will Knightley, an actor, and Sharman Macdonald, an actor, screenwriter and playwright) encouraged her to act as a reward for studying. Her breakout role was in 2002’s *Bend It Like Beckham*, a comedy about girls’ football. Sport had been her “feminist awakening”, she says. “I was really good at football and, suddenly, looking and going, ‘Wait a f**king second, I couldn’t be a professional footballer.’”

While Knightley is refreshingly candid about her views on many things, speeding through an array of subjects, including nudity, motherhood and #MeToo, she has learnt to protect her privacy around certain aspects of her life. Early success took its toll, and at 22 she suffered mental health problems. “Fame. Tricky thing to navigate.” Why? “That is a very long conversation,” she replies, politely but firmly moving the discussion on.

What drew her to *Misbehaviour* were the interwoven themes of feminism and racism, which lift the script above a simple narrative of plucky feminists (good) versus sexist men (bad). We see Miss World founder Eric Morley, played by Rhys Ifans, trying to avert a boycott and appease the anti-apartheid movement by adding a black South African contestant – Miss Africa South – to South Africa’s white entry. It also shows how the media’s focus on the white favourites – Miss America and Miss Sweden – meant the black contestants were initially overlooked, including Miss Grenada (played by Gugu Mbatha-Raw), who went on to win, and Miss Africa South, who came second.

The white Women’s Liberation activists see the competition as degrading. For the black contestants, it is an opportunity. As Mbatha-Raw’s Miss Grenada tells Knightley’s Sally Alexander: “I look forward to having your choices in life.”

Knightley was intrigued by the film’s “two very distinct points of view... it doesn’t judge. It doesn’t tell you what to think. It’s dealing with feminism, and intersectional privilege and racism. It felt very current, and yet it was 50 years ago.”

I say that the scene showing the beauty pageant contestants lining up on stage, and



Activist Sally Alexander (Knightley) with Miss Grenada (Gugu Mbatha-Raw) in *Misbehaviour* (2020)

ARMANDO GALLO/ZUMA/EVINE; PARISIA TAGHIZADEH; ALAMY

‘Now, it’s Instagram. It’s how many likes do you get for your ‘belfies’, bum selfie... It’s so complicated’

turning around to show their swimsuit-encased bottoms, felt shocking. Knightley counters: “Now, it’s Instagram. It’s how many likes do you get for your... ‘belfies’, bum selfie. It’s the derrière part of the beauty pageant. It’s so complicated.” Many of the themes of the 1970s are relevant today, she continues. “We want a lovely little story cycle where [there] is the problem, and then it was fixed. Change takes a very long time.”

Misbehaviour is unusual in that it was written by women (Rebecca Frayn and Gaby Chiappe), produced by women (Suzanne Mackie and Sarah-Jane Wheale), and directed by a woman (Philippa Lowthorpe). “Female directors are held to a higher standard than men,” Knightley argues. “Unless their first film is perfect, and it makes money, and it gets critical success, they’re not given another film. Men are given much bigger leeway.” *Silent Night*, her next film – which she describes intriguingly as *Love Actually* mixed with Lars von Trier – is also made by a female director, Camille Griffin. She is hungry to work on more female-led films. “[Women’s] stories aren’t being told from our points of view. It’s shocking.”

Before making *Misbehaviour*, Knightley knew nothing about second-wave feminism, which was making waves in the 1960s and 1970s, aside from “anecdotal stuff” from her mum. As part of her research, she spent time with Sally Alexander, who is now an eminent feminist historian. Alexander handed her *The Communist Manifesto*, to get a flavour of the kind of books she was reading at the time. Knightley admits she has yet to finish it.

One aspect of the 1970s life portrayed in the film that appealed was communal living, which Knightley declares “sounded like a really fking good idea”.** She lives in north London with her musician husband, James Righton, formerly of the Klaxons. “Being a mother of two very young children [aged four, and five months] – one adult to two young children is not enough. Two adults is still quite [hard]. Three, you start going, actually, this is doable with three. Any more than three? F**king brilliant.”

In 2018, Knightley wrote a powerful, visceral essay about her experience of motherhood and working in film, entitled “The Weaker Sex”. “My vagina split,” she wrote of childbirth and the stitches she needed afterwards. “You came out with your eyes open. Arms up in the air.

Screaming. They put you on to me, covered in blood, vernix, your head misshapen from the birth canal. Pulsating, gasping, screaming.”

Birth, in all its gunky mess, is overlooked by storytellers, she says. We are squeamish over that, while the blood and gore of war and violence is a regular feature on screen. “It’s how we all got here. It’s what half of the population do. It’s what no man can in any way physically understand, can comprehend in any physical way, or emotional way, or hormonal way. And it’s stories that we don’t tell. Partly because our storytellers are men. And it’s the one part of our lives, of our bodies, that they have no way to understand. And yet, we don’t talk about it.”

When I ask if she finds motherhood hard, she looks at me like I’m bonkers. “Doesn’t everybody?” I nod. “I don’t think you can fully comprehend until you start doing it, that it is the most difficult thing that you are ever going to do in your life. Birth is just the beginning of it. Birth, yes. And then, what happens afterwards? Then the sleep deprivation, and the sleep deprivation when your body is ripped to pieces and you’re still trying to heal. And you’ve got a small being that is entirely reliant on you. And we live in a society where you’re meant to pretend that you’re able to do that, and you’re fine, and you’re on top of it.”

Being a new mother is “difficult and wonderful”, she says. “You can be crying one minute and laughing the next.” Going back to work when her first child was four months old, travelling overseas away from friends and family was, she says, a mistake. “It was very difficult.” When she had her youngest, she stayed put.

The problem with only seeing idealised images of motherhood, she says, is that new mothers feel desperately alone, or like failures for finding it hard. “You’re an entirely different person [by becoming a mother]. But that transition to being an entirely different person isn’t easy. That idea that any of that should be easy, that it should be seamless, I find it really offensive.”

Having children has changed her professional life in one significant way – she will no longer strip off in front of the camera. “The nipples droop,” she says. “I always felt completely comfortable doing it when I was younger. I never did anything that I didn’t feel comfortable doing. I’m really happy with my body. It’s done an amazing thing. But I also don’t want to stand there in front of a whole film crew.”

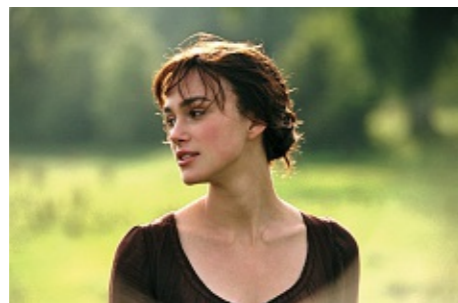
The internet is also a factor. “It used to be that you’d do a sex scene in isolation with the film, and it would make sense. And maybe a crappy paper would put it somewhere but, ultimately, that would be it. But now, you can take the whole thing and put it in a completely different thing, and it’s on some porn site.”

I ask about #MeToo and the lack of diversity in the nominees (and winners) at this year’s Baftas and Oscars. “It’s going to take a very long time in Hollywood, as it [does] everywhere else.” Has she been underpaid compared with a male peer? “I haven’t known,” she says. “Partly because it didn’t feel like that was a fight that could have been won. I have known recently that I’ve been paid the same and more. So, that’s good. I’ll take that.” **FT**

“*Misbehaviour*” is released in cinemas on March 13. Emma Jacobs is an FT features writer



Bend It Like Beckham (2002)



Pride & Prejudice (2005)



Atonement (2007)



A Dangerous Method (2011)



Anna Karenina (2012)



Colette (2018)



How to be believed

Why do we listen to refugees in one way and Harvard Business School students in another?
By Dina Nayeri

When I was a girl in Iran, my cousins and I would wait for nightfall to gather in the back garden of our grandparents' house. We'd whisper as our grandfather emerged, grandly, to tell us dramatic, fantastical stories. We hung on the twists and turns of the tales he wove to transport us. He always found a reason to take out his false teeth and, by the time he did, we were primed to believe he *was* the monster with the aching jaw or the old man who drank tooth-melting poison.

Twenty years later, at Harvard Business School, I sat across from a friend and listened as he described a business venture. That too was invented; we were in a mock negotiation. Each of us had a set of information we could share or hide, plus whatever backstory we wanted to add.

I listened to his phrasing, searching for qualifiers that might force his hand. How much money was he willing to give up? Which of the contract terms were vital to him but less so to me? When the professor later revealed the negotiating position of both characters, I felt triumphant, my friend felt betrayed. Not because he had lost - but because I had listened to his story in the unkindest way, digging for vulnerability. I hadn't seen *him* at all.

It took me a long time to realise that I listen to stories differently. I became aware of it with the same astonishment and betrayed fury that my four-year-old felt when she learnt that there's no correlation between gender and hair length. *What else have I missed before now?*

At 10 years old, I was living in a refugee camp outside Rome. My mother, brother and I had escaped Iran the previous year and had been placed there by UNHCR. We spent most of our time reminiscing with fellow residents over cheap cups of tea, comforted by the instant bond of a shared life story. After almost two years of displacement, my family was granted asylum - and later citizenship - in the US.

Fast forward to 2016, I was a mother in a world hostile to refugees; I craved to understand my past. So, I started spending time with refugees again. I found local immigrant communities, expecting the same ease and

warmth I had shared before. But something about me had changed. I was no longer transported by the stories: now I was trying to decide if they were lying.

Somewhere along the way, I had picked up the instinct to be on guard against other people's despair, against their need, thinking only of their potential. Where did I learn this?

Despite all the talk of leadership and changemaking, what you actually learn at Harvard Business School is how to be believed. Some of that, we were taught, is achieved by developing a reputation for honesty, for precision. Some is communicated through signals and codes, the kind we have in every profession. My classmates and I had privileged upbringings: not all wealthy but from educated families (like mine, who were doctors), or trained at prestigious firms and universities. We had internalised the language of the trusted classes. Over hundreds of case-method discussions, we taught it to each other.

Here is something I learnt: before we decide how to listen to a story, we put people on a spectrum. Do they come to us with need or potential? Should we listen with our guard up or our imagination on? Will aligning with this person benefit or drain us? How does the storyteller signal, before that first interaction, that they are worthy of an unguarded, imaginative listen?

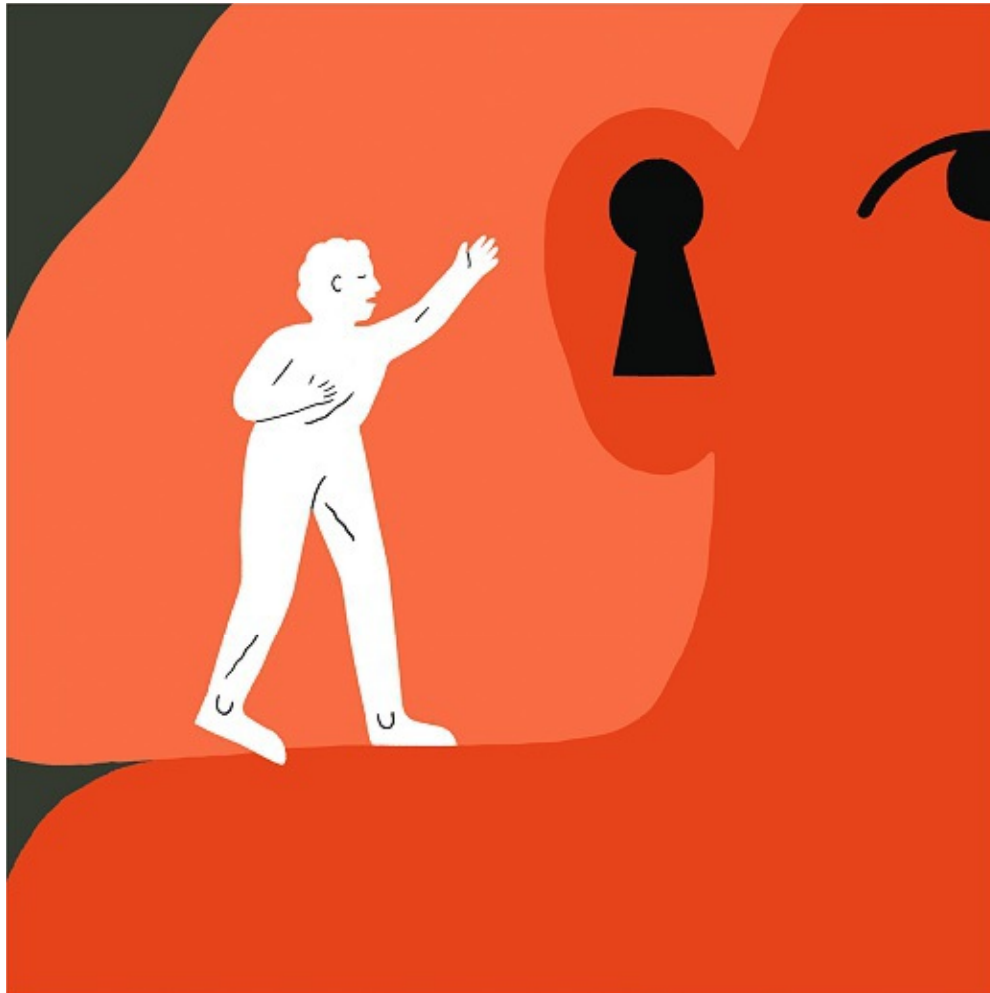
Anyone with a boss knows the basics: lock eyes, shake hands firmly, under-promise, over-deliver, repeat. At HBS, we picked up other ways to affect the need-potential calculus: when pitching something, dismantle scepticism by arguing against yourself. If a narrative lacks complexity, put it into an intellectually satisfying framework. And so on.

The most important signal is this: you don't need them - they need you. *Your value lies in the vastness of your potential, so walk into every room potential first.*

Later, I went through my HBS list and tried to figure out what it would be like if a refugee in an asylum interview had this same tool kit. Most refugees try to win the interviewers' affections ►



Illustrations by Julien Posture



'Refugees come to us with need but we tell them there is no room for human error... for the flawed human. Their stories are shorn of trivial oddities'

◀ by praising their host country. What if a refugee made it clear that she didn't want to be there (ie argued against herself)? That she'd rather be at home but had little choice? Asylum lawyers have told me that this works - officers are taught a precise definition of refugee. A *real* refugee has no choice.

The code works, then - it's just that only a few are trained in it. For the refugee, there is no truth beyond what is provable. Whereas, to the bright young thing with a passport and a vision, it doesn't matter what you can prove, only that you can make someone believe in the possibility of you.

When venture capitalists listened to Elizabeth Holmes' fantasies of revolutionising blood testing at her company Theranos, they wanted to be involved in something world-changing. They believed in the possibility of Holmes as a child-genius, an American Marie Curie with a deep voice and a solid family. She was 19, a college dropout with no prototype, and she claimed to have solved some of the most vexing problems in lab testing. Her early interviews should have left little doubt of her rudimentary scientific training. It didn't matter.

By the height of her alleged deception (or delusion) in 2014, when Holmes was interviewed by The New Yorker's Ken Auletta, she was practically broadcasting her ignorance of medical science. Auletta called her words "comically vague", but there was no uprising from investors when their healthcare revolutionary described the workings of her invention like this: "A chemistry is performed so that a chemical reaction occurs."

In interviews, John Carreyrou, The Wall Street Journal reporter who broke the story, put it down to hubris. I think it was more a case of hope run amok. People suspended disbelief to the point of naivety because Holmes had potential. And she had aligned herself with "stellar" or "reputable" people. She didn't know science but she knew the code. "Nothing can be off at a company where arguably America's most famous lawyer is guarding the shop," quipped Carreyrou about the Theranos board member David Boies.

The London charity Freedom from Torture operates one of the largest and most-respected forensic torture documentation services in the world. In a 2016 report called *Proving Torture*, its doctors and researchers wrote that some UK asylum caseworkers “apply the incorrect standard of proof to the claimant’s account”. For refugees, the law requires a “reasonably likely” standard of proof. Instead, researchers found officers were using something closer to the criminal standard “beyond reasonable doubt”, rejecting cases on the existence of remote other possibilities. “They’re listening for a single inconsistency,” said Katy Robjant, FFT’s director of national clinical services. “They are trained to disbelieve.”

I spoke with a former UK Home Office presenting officer, a British woman of Middle-Eastern descent, about how she listened to stories. Her job, from 2014 to 2016, was to argue cases on behalf of Theresa May’s Home Office. “No one questioned what our job was: it was to catch inconsistencies. That was our training... ‘Oh, you said 6pm here and 7pm there.’”

I asked if she ever tried to imagine her way into the stories. It wasn’t her job, she said.

“I found myself saying, ‘He’s lying, he’s lying...’ I know from where I live that sham marriages are happening. Men from Afghanistan and Pakistan marrying women from Poland, Lithuania, Romania. There’s a whole system. There are accountants, caseworkers, solicitors, landlords. So when I’m at work and see these individuals, I know what to ask. I know they’re lying. Many of these guys aren’t the brightest... They get stuck in their own web of lies.”

Now and then, however, despite her training, a story roused her imagination and she *was* transported, the truth of a situation apparent only to her. Once, a caseworker refused to believe that a two-year romance could happen in the streets, in cars, leaving no trace: not a single photo, note or text. “But I know that in Afghanistan you have to have relationships in secret, because if our parents found out, they’d kill us.” So, she convinced the other officer. Would an English person have tried

to understand Afghani youth codes and cultures? Absolutely not, she said. You’d have to teleport to Afghanistan to understand.

A few days ago, I spoke to Marc, a McKinsey friend turned angel investor. I asked him how he listened to entrepreneurs. He talked about the grandiose slaughterhouse CEO, the visionary Broadway producer who sold him on two shows, the friends and family who trusted him when he invited them to join him. As he spoke, I realised his every investment decision was based on believing in somebody, not their stories or business plans. Only people. Why did this seem so right to me? As a writer, I know that good fiction is populated with complex, surprising characters. Maybe the same is true of good investments. “Well, that and diversification,” said Marc. “Be sure whatever money you put in, you’re willing to lose it all.”

This makes sense too. A good investment is about finding opportunities before it’s obvious to everyone else. So, you bet on a dozen and hope one pays off, freeing yourself from the constant calculation of each individual’s place on the spectrum: promise or need. As long as your portfolio is diverse, you can gamble on a long shot – you can hope.

Do I listen to others with this much hope and excitement? Or do I listen with my guard up because I’m afraid of a wrong call?

When my daughter tells stories, I dig for signs of what has happened at school. I am afraid of a single wrong call and that fear momentarily outweighs my hopes.

As a young consultant, barely out of college, I listened to client stories for inefficiencies I could fix so I could prove myself a star. I couldn’t stomach a single mistake.

When I read novels, though, I am generous, looking for subtext, for artful language. I want to be moved, surprised, as I was in my grandfather’s garden. Though I have a finely tuned bullshit detector, in the end, I’m itching to believe. When I’m reading, my motives are pure and empathetic. I’m comfortable delving into other people’s mourning, humiliation, need. I accept that one book will drain me,

the next will bring me joy. I don’t expect one story to fulfil my every literary need.

I read literature the way Marc doles out capital: with his imagination on, ready to believe, because he expects half his visionaries to flop. He saves his scrutiny for the portfolio. I care about my intellectual resources as he does his financial ones, but comfort with risk enriches us both.

Why don’t we apply such wisdom beyond our places of abundance? In the west, we teach our children how to be believed – we codify truth for them. We tell them that they can fail and try again, wipe out their shortcomings and become credible. But refugees come to us with need and we tell them that there is no room for human error, because there is no room for the flawed human. Their stories are shorn of trivial oddities, stripped of colour, removed from the five senses – only the progression and the logic matters. Any discrepancy will damn them, so it’s better not to transport the listener.

In 2017, in a refugee camp in Greece, I met an Isfahani tailor who wanted to design his own clothes. I met a psychologist from Tehran with an idea for a fascinating paper. I met a contractor who sketched buildings. They had lofty goals and they told them to me. After I left, they hid these aspirations. Each sat across from a tired bureaucrat who listened to a rehearsed series of events and ticked boxes, waiting for a fumble.

Soon after, I read that the bodies of migrant father Oscar Alberto Martínez Ramírez and his 23-month-old daughter, Valeria, were found in the Rio Grande. Then 39 Vietnamese refugees died in the back of a lorry in Essex. Everyone listened. These stories happen and we readily believe them, mourn them and share them, because all risk and promise are gone. There is no more spectrum of hope and fear, promise and need. Their stories are finished now, ready to be inscribed in the literature we read generously and believe. **FT**

.....
Dina Nayeri is the author of “The Ungrateful Refugee” (2019) and is writing a new non-fiction book about who gets believed



'Self-portrait, Marnixbad, Amsterdam, June 19 1991'

INTO THE FRAME

Dutch photographer Rineke Dijkstra is best known for her contemporary take on the portrait. As a new exhibition opens, she tells *Andrew Dickson* how she discovers her subjects and why her images are 'proudly old-fashioned'



'Hel, Poland, August 12 1998'



'Sophie and Alice, Savollinna, Finland, August 3 2013'



'Arden and Miran, London, February 16 2020'



'Chen and Efrat, Israel, November 18 1999'



'Chen and Efrat, Israel, May 21 2005'

'I THINK IT'S ALWAYS BETTER NOT TO SHOW TOO MUCH; YOU HAVE SPACE FOR YOUR OWN INTERPRETATION'



'Emma, Lucy, Cécile 2011-12', from the series 'Three Sisters' 2008-14

The upstairs back room at Marian Goodman Gallery in central London is a crowd of faces. In a corner, resting on foam bolsters, there's a large photograph of two young women in a forest. One is standing, the other sitting on the ground. Both wear bikinis: they look a little combative, as if daring us what to think. On the opposite wall, another six photographs of women are lined up. With their identikit white backgrounds, they resemble mugshots or passport photos. It takes you a moment to notice the resemblance, eyes especially: three sisters, photographed at different ages. Similar but different. Variations on a theme.

Few contemporary artists have focused so obsessively on the human form as the Dutch photographer Rineke Dijkstra. For 35-odd years, she has photographed little else. Often the people she captures stand full-length in the places she encountered them, on the beach or in parks. Printed large, near life-size, these images both offer and withhold information; all we're usually given is a first name or a place and date. You find yourself conjuring stories - this schoolboy looks like he'd be cool to hang out with, that teenage girl seems wise beyond her years. Those two boys perched together on a single chair in a bay window - a new photograph - look curiously old-fashioned, with their identical poses and sober expressions, as if they inhabit a previous century. Like all great portraiture, these pictures invite us into the frame.

Dijkstra, 60, isn't sure, even as she prepares to open a new exhibition, what draws her to these people. The most she can say - hesitantly, almost shyly - is that somehow they capture her attention. She'll be on the street or in the park, and she'll be caught by an outfit, or the way someone has styled their hair. "It's difficult to explain - there has to be something that makes you look a bit longer," she says. She scans the faces surrounding her and shrugs. "I just have to like looking at them, in a way."

The exhibition, her first in the UK since 2010, provides visitors with plenty of opportunity to come up with their own

theories. On display will be some of the series that have become her signature: those three sisters, captured in Amsterdam between 2008-14, and a pair of identical twins from Israel, depicted over the course of their adolescence. Stand-alone images of family groups are here too. As often with Dijkstra's work, teens predominate: though these are stills, by and large, the effect is of people changing almost before our eyes. "I like this dynamic feeling, that things aren't fixed yet," she reflects on photographing young people. "Everything is still possible."

Born in the southern Netherlands and trained at art school in Amsterdam, Dijkstra began photographing professionally in the 1980s, shooting people in clubs for magazines and doing corporate jobs. But she chafed at the formulas of commissioned work; she wanted to create images of people that went more than skin-deep. Recovering from a bike accident in 1990, she began to take portraits of herself emerging from a swimming pool. A series on children and teenagers on the beach, by turns unguarded and provocative, followed. It led to other projects on naked mothers with their newborns, as well as on bloodied bullfighters emerging from the ring. Each series is shot in a similar format and using the minimum of props. "I think it's always better not to show too much; you have space for your own interpretation," says Dijkstra.

Even now, she uses the same tools: a large-format, 4in by 5in analogue camera and colour film. From a technical point of view, she's proudly old-fashioned, she laughs. "The camera works slowly, so people understand that it is going to take a while. Exposures can take a couple of hours, every exposure a couple of minutes. It demands some concentration, but at the same time it creates an intensity that involves the sitters."

Though she's sometimes compared to Diane Arbus, that master of the confrontational portrait, Dijkstra herself feels an affinity with the great German photographer August Sander (1876-1964), who made it his life's work to capture his fellow citizens, from boxers and circus performers to politicians. ▶



© RINEKE DIJKSTRA. COURTESY OF THE ARTIST AND MARIAN GOODMAN GALLERY NEW YORK, PARIS AND LONDON

'Night Watching', Dijkstra's 2019 video installation of people looking at Rembrandt's 'The Night Watch'



'The Grandchildren of Denise Saul, New York, October 15 2012'

"It's a very open-minded gaze," she observes. "If it's a gypsy or an aristocrat, you always feel it's the same approach. The same dignity." Is she attempting something similar? She nods. "I'm interested in people's strengths, maybe also their nobility. I mean, it has to be truthful and honest as well," she adds.

It's an interesting point. Some of her images, in particular the beach ones shot in the 1990s, feel raw, almost exposing; would she be able to take them today? She isn't sure, but perhaps not. "If you compare it to 20 years ago, 30 years ago, people are more suspicious. They don't know what will happen to the picture. Will it be put on the internet? Will it be bad for me?"

Sometimes there's a sense of danger in these images, I say, a battle of wills between photographer and subject. Dijkstra smiles: although she works carefully to build trust, sometimes over years, she's the one in charge. "I decide when the picture is good. If they were choosing, they would look for different things."

Dijkstra's aren't the only portraits to feature in the new show. Also included is arguably the most famous group shot in art history, Rembrandt's "The Night Watch" (1642) - albeit seen aslant, via a three-screen video work Dijkstra filmed at the Rijksmuseum in Amsterdam. In it, groups of people stand in front of the painting and discuss it. Schoolchildren coo over the cute dog in the foreground; Japanese businessmen debate the painter's profit margin. Twentysomethings flirt while wrangling over its symbolism.

For Dijkstra, this is a way not only of facing up to Rembrandt, but an exploration of what portraits are really about. We're looking at people looking at people; a nice circularity, she reflects, and a testament to the power and mystery of the form. "With Rembrandt, it feels so real," she sighs. "I can only be jealous." **FT**

"Rineke Dijkstra" is at the Marian Goodman Gallery, London, from March 12 to April 25; mariangoodman.com



The Boulevard

SOUTHWARK SE1

Experience an elegant new take on Zone 1 living

Launch event 12 & 14 March

Secure your place at this exclusive launch of The Boulevard, a boutique collection of new apartments located in the heart of Blackfriars Road, SE1.

In close proximity to the best of the creative, cultural and social experiences London has to offer, The Boulevard has been designed to reflect and enhance the unique character and iconic heritage of the area.

Register on The Boulevard website or call our sales team today.



LATIMER
by Clarion Housing Group

020 7420 3050

theboulevard-southwark.co.uk

Computer Generated Image is indicative only.

Travel Times* from The Boulevard



*Travel times taken from google maps/tfl.gov.uk and cover the quickest single service available on any given day.

Selling Agent
CBRE



The kitchen at Silo.
Facing page: jars of garum seasoning

Silo claims to be the world's first zero-waste restaurant. But, asks *Tim Hayward*, can food be both sustainable and delicious? Photographs by *Jasper Fry*

“Important” restaurants have something in common - they ask questions. Ferran Adrià at El Bulli asked: “What if we ignored the tired rules of cooking and used science?” Heston Blumenthal at The Fat Duck took it further, asking: “What if we expanded the experience into all the senses?” René Redzepi at Noma asks: “What if we focus intensely on the local and seasonal?” For Fergus Henderson at St John, it is: “What if we use the whole beast?” If questions are the sign, then Silo might well be an Important Restaurant.

Recently relocated from Brighton to a canalside warehouse in Hackney Wick in London, Silo has the scale and gravity of a place of worship, though I doubt they would be comfortable with the comparison. It's post-industrial and gritty too. Everything the diner sees or interacts with is somehow recycled or reused material, from



chairs to plates, but there's no sense of any scrappy “make do and mend”. The interior is by Nina Woodcroft of Nina+Co, a designer renowned for her focus on sustainability. The iron-beamed roof is hung with scarlet nets holding slabs of felted wool, forming a sort of industrial cloudscape that insulates the space and absorbs sound. The tables are made by local craftsman Jan Hendzel from sustainable ash, with tops of recycled plastic packaging. They would not look out of place in a design museum or a Modernist cathedral. Some of the stools and tables in the bar area are grown rather than made - mycelium, the vegetative part of a fungus, is trained into moulds, then baked to harden into a lightweight foam-like structure that is hard-wearing, robust and fully compostable.

Doug McMaster, the chef-patron, takes us through the prep

kitchen. Miso, shiso, kombucha and ferments and cultures without formal names quietly go about their business in demijohns and wooden trays. There is no plastic wrap to be seen. Wine comes from a vintner a little further up the canal, who decants from large tanks into reusable bottles. McMaster opens a large fridge to reveal a stack of branded plastic pots of crabmeat. These, he explains, arrived from a supplier that morning, not in the large container the restaurant supplies, but in the producer's own, branded single-use tubs. They will all be sent back. He explains, with a kind of weary regret, how often zero waste can mean “refusing” before considering “reusing” or “recycling”.

We emerge from the backstage spaces into the kitchen, built in a V-shape, pushing out into the dining area like the prow of a ship. Everything here takes place in full sight of guests, many of whom sit at the counter, talking to the chefs as they explain their cooking processes. McMaster can take a central position and effectively oversee every station, a design feature, he sheepishly admits, he nicked from an Imperial Star Destroyer. There is a small fire pit and several induction slabs set into counters, but this is clearly a very well-policed tubs-and-tweezers environment - hushed, controlled and reverent; not loud, clashing, kinetic and aggressive.

There is nothing in the kitchens or public spaces that reinforces any stereotype of shambolic hippiedom. In fact, there is more that references the tropes of fine-dining restaurants. Yet everything, every tiny detail is entirely on-message, and that message is zero waste.

McMaster is compact, calm and intense. He speaks directly but without arrogance. There's little ▶

WASTE IS NOT



◀ of the easy self-assurance taught and validated by formal education. He's profoundly dyslexic and, by his own description, "failed miserably in school, miserably", leaving at 16 and entering the brigade at the two-star Winterringham Fields in Scunthorpe. It was, he says "everything that a two-Michelin star restaurant was 15 years ago. Crazy hours, aggressive chefs... it was violent, physically and mentally."

Despite this, "I fell in love with kitchens. It was a sort of pirate ship... There were rules but also anarchy and chaos, which I find very appealing.

"I never really fell in love with food. I don't love it, it's so stressful. The pressure I put on myself is so high that if it's not anything but brilliant, then I beat myself up about it. And I don't sleep. And I just obsess over how to make it brilliant, constantly. I don't enjoy cooking because it's not fun... not fun for me."

It's strange to meet a chef that doesn't want to reduce every part of the conversation to the food, but McMaster makes his ideas seem bigger than the plate.

"My vision, core to Silo, is to work with nature," he says. "I feel like this is coming from an artistic place, actually. I don't necessarily really think that I'm changing the world. I just think, as a direction of my life, if I'm going to create some kind of meaning, I'm going to follow this premonition about a zero-waste restaurant.

"Maybe other people won't get it, other people think I'm wrong, and that's fine. But I feel like this is a good idea and I'm doing it because I

really believe that it's the right thing to do... I just have this sort of urge, this... thing."

I am used to chefs with pretensions to be artists, but I don't think I have ever encountered one with a more nuanced understanding of what that might mean in terms of self-expression rather than mercurial behaviour and temper tantrums.

"My dad was a really brilliant artist and he always talked about expression, about certain things in the world that are beautiful and need to be expressed. I just have this sort of way of seeing things and I have to express it. It's like an itch."

We talk for ages but, unusually for an interview with a chef, we don't have food in front of us: a zero-waste operation can't just whip up dishes at the whim of a journalist - and the conversation is about so much more than food.

As a result, I have to come back to experience the whole thing. In the evening, the restaurant is full. The crowd is mixed, but skews towards well-heeled bohemians seeking a proper night out.

The meal consists of a standard set menu at £50. It is neither vegetarian nor vegan by design but often turns out that way. The menu is projected on the end wall of the dining room, within the ghost of an old arch in the brickwork. The effect is cinematic. First is a slice of mushroom stem, lightly cross-hatched and cured like a greyish scallop and dressed with oil and a pheasant glaze.

From top left: beetroot 'prune' with walnut milk and walnut butter; pumpkin ice cream with Yorkshire rhubarb; the dining room at Silo

The dressing brings flavour, the mushroom texture and, though it's gone in a single bite, it lives long on the tongue. It is refined, self-assured cooking, and you need to remind yourself that it was built from offcuts.

Next up is a brown crab emulsion, again pointedly featuring the portion of the crabmeat customarily discarded in upscale cookery. It is dark, bassy and funky, silk-smooth and counterpointed cleverly with fermented rhubarb - all sharp sourness and bright colour. There's pooling, green pea *shoyu*, dressing a quarter of a gem lettuce that's been brined for three hours. Between some of the ingredients lurk little domes of lemon gel. "We wouldn't usually use lemons," the server confides, "but the bar downstairs was chucking out tons of squeezed-out lemon skins."

A single Jerusalem artichoke, peeled and poached in a low-temperature brine, is served with the skin fermented into a delicate little kimchi with a homeopathic quantity of chilli and resting in a pool of brown butter and *tamari* - the "angel's share" liquid skimmed from the top of the restaurant's own miso.

The miso is made from offcuts and crusts of the restaurant's own in-house bread (7 per cent salt, 7 per cent *koji*; soaked then left for three months) and appears in the next course under a smoked fir apple potato topped with slices of red apple and surrounded by a sauce of whey, from cheesemaking, reduced to a 50th.

There's a coherence to the thinking behind every course and the narrative they present in





‘Maybe other people won’t get it [or] think I’m wrong, and that’s fine. But I feel like this is a good idea and I’m doing it because I really believe that it’s the right thing to do’

Chef Doug McMaster (left)

combination. You just can’t miss how the by-products and trimmings of each component recur in other dishes. These are clever ideas, executed in the idiom of fine dining and creditable, as such, in every sense. But it’s the final courses that truly provoke thought.

The “main” is a piece of intercostal muscle from a seven-year-old milker, on a purée of parsnips cooked in beef fat. In Argentina, Spain and Italy, older working animals are treasured for their well-muscled flesh. In the UK, we usually go for younger animals, bred for meat, carefully butchered and aged. At seven years old, having outlived its productive life, a British dairy cow customarily goes to pet food or pie filling. And its slaughter is one of the most egregious examples of food waste.

The piece on my plate is taken from a cut that is not easy to love, even on a premium beast. The muscles between the ribs are hard-worked, coarse-textured and heavily striated with collagen. McMaster braises it for ages, as he must to render it edible, and finishes it in a searing hot oven, but what he produces is not an ordinary piece of steak. Rather, it is a piece of meat in which you can’t escape the story. It has a texture unlike anything else and what flavour it still contains is brilliantly reanimated with a sharp glaze and a crust of black and cubeb pepper with a hint of caraway and a chiffonade of three-cornered garlic. He hasn’t magically made a juicy piece of fillet out of a knackered beast; instead he uses waste meat and makes it delicious. And that raises complicated questions.

What are my criteria for quality? What if they are baseless?

There were two desserts for me to taste. Both were ice creams. The first - served with a sesame seed tuile and a *dulce de leche* made of discarded whey - was made from leftover pumpkin seeds, carefully toasted, and tasted “just like pistachio”, the dessert chef explained. The second was designed to emulate the flavours of tropical fruits that might otherwise require unsustainable transport. There was a topping of fermented rhubarb and the ice cream, made from fermented pumpkin skins, tasted remarkably like mango.

McMaster is utterly sure of his philosophy and his crew are drenched in the ethos, but these dishes are where the rubber hits the road. There are two kinds of diners,

those who take pleasure from the knowledge they are engaging in something important and that the pistachio and mango flavours are incredibly accurate for something made from waste, and those who will ask: “What’s wrong with a real mango?”

What is truly impressive about McMaster is how little of a damn he gives. He doesn’t have an activist’s desire to change people’s minds. He has, instead, the artist’s drive to express what he believes. If that troubles people, it’s fine. If they change their behaviour as a result, that’s a bonus.

Restaurants are about more than food. They are about the environment, the ethos, the audience. McMaster is about more than food too, he’s about a bigger idea. It’s a blessing, then, that he’s an excellent chef with a superb crew so he can express that bigger idea through a successful restaurant.

You leave most important restaurants with your question answered. If the question Silo is asking is: “Can a fine-dining restaurant be zero waste and succeed?”, then the answer is emphatically yes.

That experience is both more and less than a normal night out. Elsewhere, I have paid for things that are, by definition, “rubbish”, yet I have enjoyed them more than I thought I could. Here, I was delighted and I left troubled. In a strange way, I think that’s exactly what Doug McMaster intends. **FT**

.....
Tim Hayward is winner of the Restaurant Writing Award at the Guild of Food Writers Awards 2019



Honey & Co Recipes



Smart cookies

We brought a batch of these cookies when visiting our friends and their very young child. The boy has been peanut butter crazy since his mum introduced him to the stuff in the car park of the Royal Free Hospital. That's where she gave him a taste while keeping a watchful eye out for any allergic reaction. Instead, the boy gurgled with joy, reached out his chubby arms for the jar and has been trying to get to it ever since.

In Israel, peanut allergy is relatively rare, which is often attributed to a ubiquitous snack called Bamba, made of puffed peanut butter. Rich and easy for small mouths to suck on, Israeli babies have been fed Bamba as one of their first solid foods for generations.

For those of us lucky enough to be able to eat it, peanut butter holds an ageless appeal: it has the magic ability to make you feel like a child, whatever your age. It's something about that rich fudginess sticking to the roof of your mouth and its earthy, nutty taste - both savoury and sweet at the same time.

These cookies contain a sprinkle of salt and a good measure of white chocolate, nutty wholemeal flour for flavour and crumb, and some whole peanuts for extra crunch. Whether with coffee at the end of a grown-up meal or just a cold glass of milk in the afternoon, peanut lovers of all ages will be satisfied. **31**

By Itamar Srulovich. Recipe by Sarit Packer
honeyandco@ft.com

Peanut butter cookies

To make 20-24 cookies, depending on your piping

- 70g natural peanut butter (no added sugar or oil)
- 200g white chocolate, chopped
- 180g dark brown sugar
- 2 eggs
- 140g strong wholemeal flour
- ½ tsp baking powder
- 50g peeled peanuts
- 50g white chocolate, chopped
- Small sprinkle of sea salt

1 — Place the peanut butter and white chocolate in a small saucepan on a very low heat and stir until they are melted and combined.

2 — Meanwhile, mix the sugar with the eggs and whisk with an electric mixer to a very strong, fluffy sabayon.

3 — Fold the melted chocolate into the egg mix and add the flour and the baking powder. Mix well to combine. Transfer to a piping bag and rest for 20 minutes before piping out little mounds about 5cm in diameter, spaced out across a couple of lined trays (they will spread).

4 — Top each mound with a couple of peanuts, a few chunks of chopped chocolate and a sprinkle of sea salt.

5 — Rest for another 20 minutes.

6 — Heat an oven to 180C (fan assist) and bake for six minutes.

7 — Rotate the tray in the oven and bake for another four minutes - they should form a nice shiny crust all over. Remove and let them cool on the trays before eating.



SOUTHERNBANK

HAYWARD
GALLERY

Among
the
Trees

ENTER A FOREST OF ART

4 MARCH – 17 MAY 2020
MEMBERS GO FREE. JOIN NOW.

Supported by public funding by
ARTS COUNCIL
ENGLAND
LOTTERY FUNDED

Jennifer Steinkamp, *Blind Eye*, 1, 2018, © courtesy the artist 2020.

Jancis Robinson Wine

Argentina - mainly excellent

Having just returned from my first trip in five years to Argentina, the world's fifth biggest wine producer, it strikes me that Argentine wine producers are very, very good at many aspects of wine production and very, very bad at one.

GOOD

Terroir consciousness This is all the rage. Argentine wine producers used to be obsessed by height, boasting on labels about how many metres up the Andean foothills their vineyards were. Today, the focus seems to be on soil - especially in the high Uco Valley, where all the newer plantings have taken place.

Currently, the valley is being carved up into official sub-regions, or IGs (*indicación geográfica*), according to their soil type and geology. It is a fraught process, not least because the names of the two most obvious IG candidates, Altamira and Gualtallary, have been trademarked. For what is now the carefully named IG Pajare Altamira, they have managed to establish the boundaries of the alluvial fan at 900m to 1,200m (500m is traditionally considered the highest viable altitude for European vineyards).

But because of competing claims, the process has been so difficult that they have not succeeded in doing the same for even higher and more extensive Gualtallary, whose reputation for nervy, finely chiselled wines is already so well established that many producers put the name on their labels even though it has no official status. As many as five different IGs within Gualtallary are being discussed, with third-generation winemaker Sebastián Zuccardi a passionate proponent of this quest for appellations.

Zuccardi admits that this is way ahead of what most consumers are asking for and that "it will take more than one generation. Eventually, there will probably be just three or four IGs that become known outside Argentina. But, in them, some



As imagined by Leon Edler

Recommended new wave Argentine Malbecs

With their subregions, whether official or not, and alcoholic strengths

- Cadus, Finca Viña Vida 2014 Los Chacayes 14.5%
- Catena Zapata, Adrianna Vineyard, Fortuna Terrae 2016 Gualtallary 14.3%
- Cheval des Andes 2016 Las Compuertas/Pajare Altamira 14%
- Colomé, Estate 2018 Upper Calchaquí Valley 14.5%
- Cuvelier Los Andes 2017 Vista Flores 14.5%
- DiamAndes 2015 Vista Flores 14.5% (with 25% Cabernet Sauvignon)
- Dominio del Plata, Nosotros Sofita 2015 Los Chacayes 14.5% (with 20% Petit Verdot)
- Estancia Los Cardones 2018 Tolombon 14% (with 10% other varieties)
- Fabre Montmayou Gran Reserva 2017 Vistalba 14.5%
- LUI, Gran Reserva 2017 Gualtallary 14.2%
- Manos Negras, Stone Soil 2018 Pajare Altamira 13.5%
- Mendel, Finca Remota 2017 Pajare Altamira 14.5%
- Michelini i Muffato, La Cautiva 2017 Gualtallary 13.8%
- Nieto Senetiner, Don Nicanor Single Vineyard Villa Blanca 2015 Vistalba 15%
- PerSe, Jubileus 2017 Gualtallary 14%
- Piedra Negra, Gran Malbec 2014 Las Chacayes 14.5%
- Trapiche, Terroir Series Finca Coletto 2015 El Peral 14.1%
- Tres 14, Imperfecto 2016 Gualtallary 14% (with 3% Cabernet Franc)
- Trivento, Eolo 2016 Lujan de Cuyo 14.5%
- Zuccardi, Concreto 2018 Paraje Altamira 14%

Tasting notes on JancisRobinson.com. International stockists on Wine-searcher.com



producers will make wines that will elevate Argentina's image overall."

Certainly Argentina - or at least the Uco Valley - seems to be streets ahead of most other non-European wine regions in its efforts to label *terroir* with real precision.

New-wave Malbec This goes hand in hand with the general move uphill. For many wine drinkers, Argentine Malbec is seen as a big, brash, sweetish, often oaky, bargain variant on stereotypical Napa Cabernet. And that may well be what many consumers want it to be. But the country's new-wave wine producers have different ideas. Nowadays, their perfect Malbec expresses *terroir* (see

'Argentine wine producers used to be obsessed by height but now the focus seems to be on soil'

above), is fresh (picked earlier) and textured rather than oaky (often made in concrete not oak) even if alcohol levels are relatively high.

I must say I was amazed by how Malbec-centric the Argentine wine industry is. Malbec may represent just 22 per cent of the country's 215,000ha of vineyard but it seems to constitute the vast majority of bottled wines on the market. Argentine consumers will pay more for Malbec than anything else.

Exporters have enjoyed balmy times, thanks to US demand, but there are signs that may be over. South American specialist importer Brazos Wine in California, for example, is now asking Argentine suppliers for "anything but Malbec". Blends - both red and white - seem increasingly popular.

Other varieties One alternative to Malbec could be Cabernet Franc. Just as the Malbec grape seems so much more delicious, varied and ▶

◀ sumptuous when ripened in the Andean foothills than in Cahors, its homeland - the Argentines claim their plant material is much older and better quality - so does the signature red grape of the Loire.

While there are also good Cabernet Sauvignons, the best Cabernet Francs combine Argentine ripeness with the sort of beautifully haunting fragrance I always seek in Loire reds, too often in vain.

Meanwhile, Argentine Petit Verdot reaches qualitative heights with a consistency that would be the envy of any Médoc château owner.

Old vines Another of Argentina's unusual attributes is its stock of old vines: nearly 30 per cent of vines are more than 40 years old. It is not the only country where ambitious, younger wine producers are seeking out old, sometimes unwanted, vines with which to make their name. The same is true in California, Australia, Chile and South Africa. But Argentina is unusual in the scope of its official records. INTA (Instituto Nacional de Tecnología Agropecuaria) not only lists every vineyard with varieties and dates of planting, it also oversees a nursery of as many as 700 different grape varieties, most of them based on 19th-century plant material, which could help expand the world's viticultural biodiversity.

Labelling When I first visited Argentina in the early 1990s, the wines were pretty bad - too often oxidised syrups - and the

labels even worse. Today there are myriad clever, eye-catching designs and witty names.

Tourism Huge investment in wine tourism has led to a range of stylish accommodation, often with breathtaking views of the Andes. And it can seem as if every winery has its own restaurant. This is despite the fact that, to reach them, you have to drive for miles on the bumpiest roads and get past the inevitably obstructive gatekeeper.

BAD

Bottles Unfortunately, Argentine wine producers don't seem to have got the memo about how bad thick, heavy bottles are for the environment.

This might be because their main export market is the US, where some importers regard a heavy bottle as an essential part of the package. (I heard more than once that it is American importers and distributors rather than consumers who are demanding them.) It is all the more regrettable since so many Argentine wine producers import fancy bottles from Europe. I hope they can agree to use the standard, lighter bottles produced in Argentina. Labels are so good these days that they can surely offer sufficient differentiation.

But perhaps that's hypocritical, coming from someone who took a long flight in order to make such observations. **FT**

More columns at ft.com/jancis-robinson

MY ADDRESSES — COSENZA, CALABRIA

FRANCESCO MAZZEI, CHEF



I was born and raised in Cosenza in southern Italy, where my two big passions were playing football and making food. Whenever I return home, these are the places I go back to time after time.

— **Ristorante Agorà** is run by Michele Rizzo, who was a protégé of mine many years ago. Located in Rende, it is the best fish restaurant in Cosenza. The menu changes daily but I would recommend the *tagliolini all'aragosta* - freshly made pasta with lobster - if they have it.

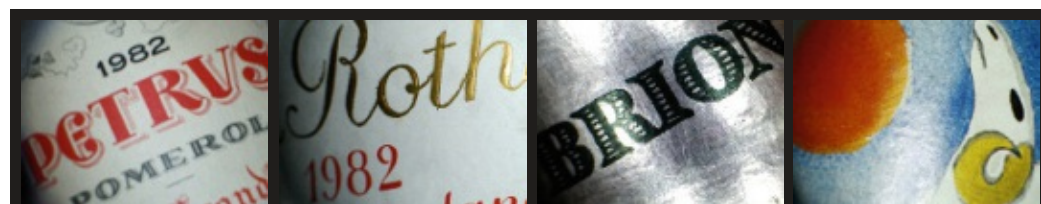
— **Il Vicoletto** is a quaint restaurant near Piazza Bilotti, which serves traditional Calabrian food. Notable dishes include *baccalà* (cod fish cooked in a tomato and olive sauce, above left) and tuna steak with Tropea onion. The service is exceptional and so is the wine list. Every time I go, it feels like I'm at home.

— Tucked behind the duomo, **Caffè Renzelli** has been run by the same family since the early 19th century. For many locals, it's an institution. It's also the best place for your morning coffee, postprandial gelato and evening *aperitivo*.

— You must never visit any Italian town and not sample its best gelato. Here, you will find it at **Zorro** in the old town. Try the *nocciola* - it is, without doubt, the best hazelnut gelato in southern Italy.

— For the finest Negroni (above right) in town, go to **La Bodega**. It's run by Roberto Gulino, a born-and-bred Calabrian and master of mixology.

Francesco Mazzei is chef-patron of Sartoria on Savile Row, Radici in Islington and Fiume at Battersea Power Station. sartoria-restaurant.co.uk



Wilkinson
VINTNERS

WANTED
CLARET, TOP BURGUNDIES, VINTAGE PORTS AND OTHER FINE WINES

WE WILL PAY AUCTION HAMMER PRICES
IMMEDIATE PAYMENT

PLEASE CONTACT PAUL BOWKER or PATRICK WILKINSON
ESTABLISHED 1992

WILKINSON VINTNERS LIMITED
38 Chagford St, London NW1 6EB

www.wilkinsonvintners.com T: 020 7616 0404 E: wine@wilkinsonvintners.com



Advertise alongside the world's finest writers in Food & Drink

Contact Shobnom Dasgupta
+44 (0) 207 873 4114
shobnom.dasgupta@ft.com

FT Weekend

Restaurant Insider

Nicholas Lander



A DASHI OF GRILLED BONES. CHEFS AT WORK IN SINGLETHREAD'S KITCHEN. PHOTOGRAPHS BY JOHN TROXELL

SingleThread, California

We arrived outside SingleThread, in northern California, hungry, thirsty and somewhat exhausted - having spent the day tramping through the nearby vineyards.

We were greeted by a young man, who we informed of our plight. "Well, I guess you are in the right place," he said. Within five minutes of stepping inside, my thirst had been quenched and my appetite stimulated.

The lobby has a view through a large, open panel of an extremely modern kitchen. At a counter, a young chef offered us a thin porcelain mug containing a highly restorative drink made with grains and thyme from their garden. Meanwhile, the waiting staff finished off our table. This showed a high level of thoughtfulness from the owners, Kyle and Katina Connaughton. It had clearly filtered through to all the staff, since neither of the pair was there.

I have never been to a restaurant that understood its customers' needs so swiftly. No European one - even with its offer of bread or an

amuse-bouche - can compare. I haven't even encountered this style of service in Japan, the model for SingleThread.

The Japanese believe that customers need to make a transition from the hectic outside world to the inner sanctum of a peaceful restaurant, and that a neglected aspect of the restaurateur's role is to help them do so quietly and effortlessly. At best, it should be achieved without guests really being aware of what is happening to them.

Inside the dining room (which opens on to the kitchen), our curiosity was piqued by the large and beautiful display of food on our table. There were small dishes of Japanese needlefish with an intense wasabi; shallow bowls filled with finely cut rounds of white asparagus; a bowl of superbly seasoned wagyu beef tartare; a cauliflower panna cotta topped with salmon roe; a small piece of Japanese mackerel and much more, all served on something like a doll's exquisite dinner set.

Then the rest of the show got under way. Our waiter described their approach as "kaiseki" in style - that is a multicourse menu, comprising a range of textures, colours and appearance. There would be 11 courses in total,



'I have never been to a restaurant that understood its customers' needs so swiftly. No European one can compare'

SingleThread
131 North St, Healdsburg
California 95448
singlethreadfarms.com
+1 (707) 723-4646

he said, and we would not have any meat until the seventh or eighth.

Here, however, I would take issue with the Connaughton approach. Not divulging further details about the menu - for which each customer is paying \$264 plus drinks and service - tilts the balance of the meal too much in favour of the kitchen. It could also make choosing wine potentially problematic. Thankfully, assisted by Andrew Rastello, SingleThread's newly appointed wine director, we settled on Anthill Farms Demuth Pinot Noir 2013 and Arnot-Roberts 2015 Syrah, which could not have been better.

The parfait of guinea fowl was over-seasoned, but that was just a small part of one dish. Enough quibbles. The next course - amberjack sashimi with slices of blood orange and a small piece of the belly served warm and topped with chrysanthemum leaves - was a treat both for the eye and the stomach.

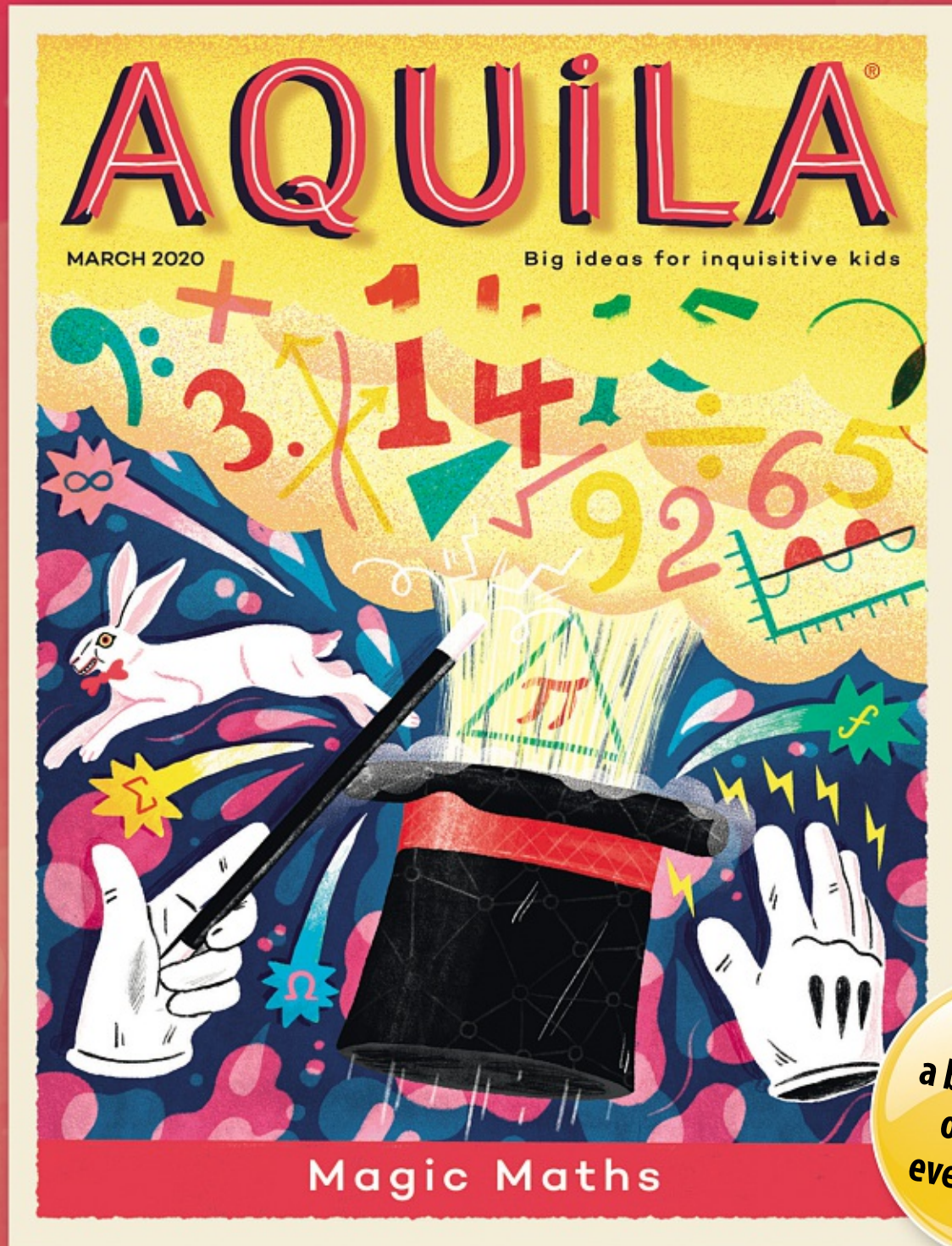
Then a pot containing a broad-bean plant was brought to our table with the explanation that this is the cover crop being used on the farm. Alongside came a *chawanmushi*, a Japanese egg custard topped with Dungeness crab, and a wrap filled with more crab.

Other highlights included a *nabe*, a Japanese hotpot dish containing pieces of black cod with a caviar sauce laced with kombu; plus our introduction to Time Machine 1712, a dark sake made in Japan from unmilled rice by Englishman Philip Harper, which was served with a duck liver mousse. Then our final savoury course, an interpretation of *tsukemono*, Japanese vegetables preserved in brine, served alongside a shimmeringly clear consommé.

Our dinner ended with another custard (the farm must have some very happy chickens), this time incorporating Okinawa black sugar and jasmine.

According to friends, the Connaughtons' focus has become more and more Japanese over time. SingleThread's seafood, hospitality and capacity to restore life in a weary body - the basis of any restaurant - could not be more impressive. **FT**

More columns at ft.com/lander



AQUILA:
a book's worth
of reading
every month!

IN THIS ISSUE Children can delve into the **magical world of numbers** to discover how maths is an innate part of the world we live in. We investigate **Pythagoras'** theories about musical and **universal harmony** and the 'magic' **number patterns** that appear to rule the natural world. **PLUS:** cook marshmallows using the power of a **parabola!**

AQUILA MAGAZINE is a witty and intelligent publication for curious 8 – 13-year-olds. Every monthly issue is a unique mix of Science, Arts and General Knowledge. Topics from April: The Earth Issue, Discover Dogs and Robotics.

www.AQUILA.co.uk - Tel: 01323 431313

“...Advanced & Philosophical, Curious & Puzzling”

Richard Robinson, Brighton Science Festival

Games



A Round on the Links by James Walton

All the answers here are linked in some way. Once you've spotted the link, any you didn't know the first time around should become easier.

1. Who founded the political party which spent more on press advertising than any other at the 1997 general election – and ended up with no seats?

2. Which band consisted of Reeves Gabrels, Tony Fox Sales, Hunt Sales and a very famous lead singer?

3. What was the first Charles Dickens novel with a first-person narrator?

4. What's the common two-word phrase for a negative pressure ventilator, a common piece of medical equipment in the 1940s and 1950s?

5. What word for a movie theatre came to mean "jukebox" (right) after being



misused in the 1949 song "Music! Music! Music!"?

6. What's the world's most widely used web browser?

7. Who was the Roman equivalent of the Greek god Hermes?

8. Which section of the orchestra comes first alphabetically?

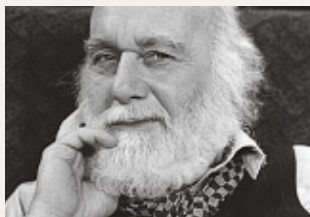
9. What nickname is shared by Hamilton, Ontario; Pittsburgh, Pennsylvania; and Sheffield (above) in Yorkshire?

10. In 2013, Bradley Cooper, Robert De Niro, Jacki Weaver and Jennifer Lawrence all received Oscar acting nominations for which film?



The Picture Round by James Walton

Who or what do these pictures add up to?



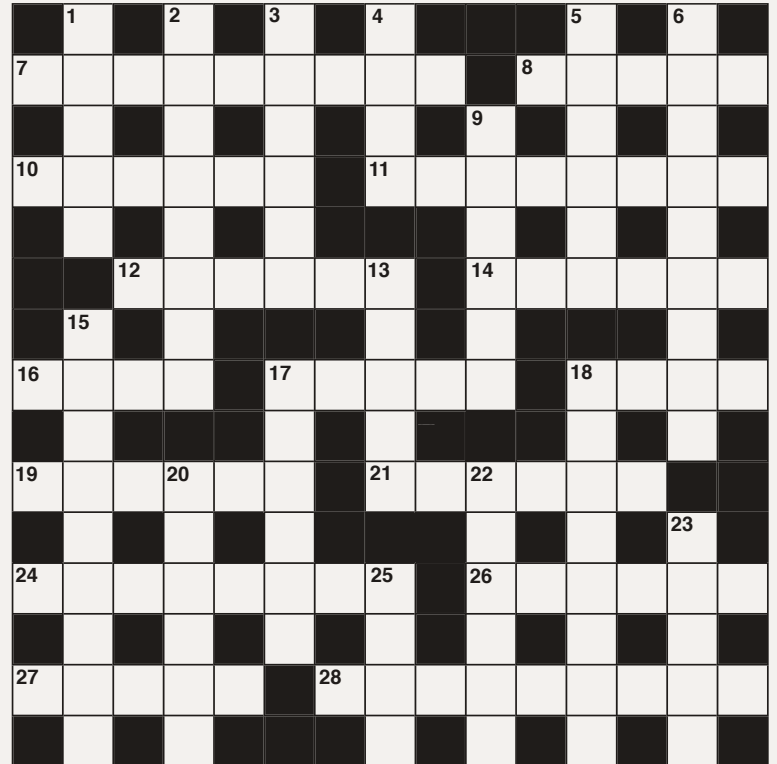
+



= ?

Answers page 10

The Crossword No 478. Set by Aldhelm



The Across clues are straightforward, while the Down clues are cryptic.

ACROSS

- 7** Of course (9)
- 8** Eerie (5)
- 10** Jolly (6)
- 11** Precious metal source (8)
- 12** Idiot, dunce (6)
- 14** Strength, stamina (6)
- 16** Cheesemaking by-product (4)
- 17** Window pane fixative (5)
- 18** Grasp (4)
- 19** Fleet (6)
- 21** Annual (6)
- 24** Agenda (8)
- 26** Lilt, accent (6)
- 27** Second planet from the sun (5)
- 28** Sadness (9)

DOWN

- 1** Cover over bird for the table (5)
- 2** Greed that's increased I'd found in financial district (8)
- 3** Travel smoothly around a lake that's unproductive (6)
- 4** Sell an outdoor sport that's on the up (4)
- 5** Tree's hidden by the broken protective device (6)
- 6** Called in to badly fail second language that's funny (9)
- 9** Unconvincing and poor film, say, one leaves (6)
- 13** Scruffy Scots potato for the audience (5)
- 15** Oddball letter (9)
- 17** Starts to panic – Lassa fever epidemic (6)

- 18** Girl took great strides and ran quickly (8)
- 20** Way to a stadium (6)
- 22** Optimistically somehow beats leader of tournament (2, 4)
- 23** Search for part of an antique statue (5)
- 25** Bring in heads of Europe and restart negotiations (4)

Solution to Crossword No 477





GILLIAN TETT

PARTING SHOT

From New York nail bars to Washington

A few weeks ago, I was sitting in my local nail bar in Manhattan when I noticed a striking poster for Sandra Choi, a young Korean-American woman who is hoping to run for Congress. “My daughter!” the salon owner proudly declared, pointing at the poster.

I was impressed. New York has a vast army of often-ignored immigrants who toil fiendishly hard in service jobs. The Chois are a case in point: members of the family have worked in this salon, often seven days a week, for three decades, ever since they came to the US from South Korea.

For a long time, minorities were significantly under-represented in America’s political landscape, though that has gradually been changing. When I arrange to meet Sandra Choi near the salon, she tells me that within her own community there was a “cultural understanding... that you shouldn’t challenge the status quo”. So the fact that she has decided to run for office is a striking sign of the times. Indeed, Choi’s story also sheds light on some of the bigger trends that are changing the modern Democratic party.

It began when Choi’s parents decided to leave South Korea in the 1970s to follow the American dream. They settled in Queens, where Sandra studied hard at school while, as she grew older, also working shifts to help out. The first member of her family to attend college, she graduated from Fordham University with a degree in international studies, then received a masters degree in security policy at Columbia University – an impressive CV that could have seen her jump into a lucrative private-sector job (as her parents dearly wanted her to).

But Choi, 32, says, “My generation has different dreams from our parents.” She went to work in Detroit, in city development, and supported progressive candidates there who ran for office. She then heard that Alexandria Ocasio-Cortez (“AOC”), a young woman of Puerto Rican descent born in the Bronx, was running for Congress in New York’s 14th district.

The Choi family had never encouraged Sandra to consider politics; on the contrary, they disliked the idea. But when AOC unexpectedly won her race – and teamed up with three other congresswomen of colour to create the so-called “squad” of progressives – Choi felt emboldened.

She decided to use her life savings to challenge the Democratic incumbent, Grace Meng, in her native district in Queens – and, this month, she is scrambling to get the 5,000 signatures required to qualify for the ballot by tapping her local network in churches, schools and businesses.

“I have been so inspired by AOC and how the progressive women are all supporting each other. It’s amazing to see them there, and think that I could run too,” says Choi, who believes she may be the first Korean-American woman to stand for Congress in New York. “But it’s not enough to

just have someone who looks like you in office – policies matter too,” she adds.

More specifically, while Meng is rooted in the centre of the Democrats (a wing of the party that has increasingly been associated with corporate interests), Choi backs the anti-establishment, leftwing policies advocated by progressives such as Bernie Sanders. She is passionate about the need to combat income inequality in places such

‘Alexandria Ocasio-Cortez has helped to reshape the political landscape, making room for more diverse voices’

as Queens, and fight the external developers who want to build luxury apartments that threaten to hurt “a majority of working immigrants [who] are severely rent-burdened” in the area. “Witnessing the burdens of working-class families like mine is why I am running for office,” she says.

Choi’s determination may not be enough to propel her to victory; Meng has strong support from the mainstream Democratic party in Queens. But it would be foolish to ignore her story. For one thing, it shows how people such as AOC are helping to reshape the political landscape, making room for new voices. It also demonstrates the level of passion created by Sanders and his ideas, especially among young people – something that continues to take establishment Democrats by surprise.

Choi’s tale also highlights a wider trend: data from the Pew Research Center suggests that 46 per cent of Democrats identify as liberal, up from 32 per cent a decade ago, and the proportion of non-white voters in the party has leapt from 24 per cent two decades ago to 39 per cent in 2017.

Choi is not the only progressive challenging a more centrist Democratic incumbent in New York; in fact, Melquiades Gagarin, who is of Puerto Rican and Filipino descent, also plans to run against Meng. And Adem Bunkeddeko, a charismatic 32-year-old who hails from a family of Ugandan war refugees, is hoping to run in the 9th district. In 2018, Bunkeddeko came within 1,100 votes of unseating Yvette Clarke, who has represented the district for more than a decade.

“Through this campaign, I am opening up a door for someone else in the future,” enthuses Choi, who argues that the progressive campaign “is bigger than one person running for a seat”. As such, her story is inspiring, whatever your politics. The American dream can be pursued from many starting points – including a nail salon. **FT**

.....
gillian.tett@ft.com; @gilliantett



MARK
STANLEY

EMILY
BEECHAM

DOUGRAY
SCOTT

ANNA
FRIEL

AN AMG INTERNATIONAL FILM

“UNUTTERABLY
MOVING...
TERRIFIC”

The Times Magazine



LOVE IS AN ACT OF ENDLESS FORGIVENESS

Sulphur & White

BASED ON A TRUE STORY

15 Child sex abuse theme, strong sex, nudity, language

IN CINEMAS NOW

RELEASED IN SUPPORT OF THE NSPCC



SULPHURANDWHITE.COM

EMU

Modern
Films

RANGE ROVER VELAR R-DYNAMIC BLACK

INCREASED PRESENCE. REDUCED FIGURE.



ABOVE & BEYOND



FROM £499 PER MONTH PLUS DEPOSIT AND OPTIONAL FINAL PAYMENT

The limited edition Range Rover Velar R-Dynamic Black* takes the undeniable presence of Velar even further. Available in Santorini Black and Eiger Grey with Ebony Perforated Grained Leather seats, it offers an array of enhanced features as standard, including an Exterior Black Pack and gloss black 21" alloy wheels, for an extra touch of drama. Not to mention Privacy Glass for a layer of seclusion between you and the outside world, and a Fixed Panoramic Roof, which enhances the airy, spacious feeling.

From £499 per month, the Range Rover Velar R-Dynamic Black looks just as good on paper. Contact your local Retailer for more information.

Range Rover Velar R-Dynamic Black PCP Representative Example†

On the Road Price	£56,995.00
Finance Deposit Allowance (FDA)	£2,000.00
Customer Deposit	£13,791.00
Total Amount of Credit	£41,204.00
Purchase Fee (included in final payment)	£10.00
48 Monthly Payments	£499.00
Optional Final Payment	£23,643.00
Total Amount Payable (inc. FDA)	£63,386.00
Duration of Agreement	49 Months
Representative APR	4.9% APR
Interest Rate (Fixed)	4.79%

Official WLTP Fuel Consumption for the Range Rover Velar range in mpg (l/100km): Combined 23.0-42.0 (12.3-6.7) NEDCeq CO₂ Emissions 270-152 g/km. The figures provided are as a result of official manufacturer's tests in accordance with EU legislation. For comparison purposes only. Real world figures may differ. CO₂ and fuel economy figures may vary according to factors such as driving styles, environmental conditions, load and accessories.

†Representative Example relates to a Range Rover Velar R-Dynamic Black. 4.9% APR Representative available on Range Rover Velar 20MY registered between 1st January 2020 and 31st March 2020 at participating Retailers only. With Land Rover Personal Contract Purchase you have the option at the end of the agreement to: (1) return the vehicle and not pay the Optional Final Payment. If the vehicle has exceeded the maximum agreed mileage a charge per excess mile will apply. In this example if the vehicle has exceeded 40,833 miles, a charge of 16.8p (including VAT at 20%) will apply per excess mile. If the vehicle is in good condition (fair wear and tear accepted) and has not exceeded 40,833 miles you will have nothing further to pay; (2) pay the Optional Final Payment to own the vehicle or (3) part exchange the vehicle subject to settlement of your existing credit agreement; new credit agreements are subject to status. Representative Example is based upon an annual mileage of 10,000 miles. Credit is subject to status and only available to UK residents, aged 18 and over. This credit offer is only available through Black Horse Limited trading as Land Rover Financial Services, St William House, Tresillian Terrace, Cardiff CF10 5BH. We can introduce you to Land Rover Financial Services to provide funding for your vehicle. We may receive commission or other benefits for introducing you to the lender.
*Limited edition Range Rover Velar R-Dynamic Black available now. Limited availability whilst stocks last at participating UK Land Rover Retailers. Please contact your local Retailer to confirm vehicle availability.