

Down on the farm with Cambridge's
vets – and a whole lot of lambs.

Could there be anybody out there?
On the hunt for life on other planets.

Once upon a time... why a good
story is more important than ever.



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Cambridge Alumni Magazine

Lent Term 2024

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Editor

Mira Katbamna

Managing editor

Steve McGrath

Design and art direction

Rob Flanagan

University of Cambridge

Elizabeth Warr
Clare Monaghan
Charis Goodyear
Matt Norton

Publisher

The University of Cambridge
Development & Alumni Relations
1 Quayside, Bridge Street
Cambridge CB5 8AB

Editorial enquiries

Tel +44 (0)1223 332288
cameditor@alumni.cam.ac.uk

Alumni enquiries

Tel +44 (0)1223 332288
contact@alumni.cam.ac.uk
alumni.cam.ac.uk
facebook.com/cambridgealumni
@Cambridge_Uni
#camalumni

Advertising enquiries

Tel +44 (0)1727 739196
paul.heitzman@cplone.co.uk

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Julian Anderson

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YBM





Welcome to the Lent edition of *CAM*.

Two hundred cows. Three hundred lambs. Two hundred and fifty hectares of arable. And as we were there in February, absolutely loads of fluffy, gambolling lambs. The University's farm (yes, farm) is located just four miles from central Cambridge – and you can find out what it's like on page 36.

Speaking of finding out what it's like, have you ever considered what it's like to lead the greatest university in the world? Vice-Chancellor Professor Debbie Prentice says it's the best job in the world – and explains why on page 12.

Meanwhile, if you've ever looked into the night sky and thought it unlikely that our tiny planet, in our (relatively) tiny solar system, could possibly be the only place that supports life in the vastness of the universe, we know what you mean. On page 16, we ask: do aliens exist? And if they do, what do they look like? The answers may surprise you.

Elsewhere, on page 44, we find out why everyone else seems to think Gen Z are lazy, and on page 22, we visit Kettle's Yard to discover what it's like to borrow a real Ben Nicholson or Henri Gaudier-Brzeska to decorate your College room.

On these topics – and on all things Cambridge-related – we look forward to your contribution to the debate, online at magazine.alumni.cam.ac.uk, by post and email or on social media.

Mira Katbamna
(Caius 1995)



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Inbox

CAM is too interesting

✉ When my wife and I play cribbage, it takes her longer than me to sort out the cards for she is blind and has to finger the dots on the braille cards we use. This gives me a few minutes' free time each hand, time I spend reading CAM. But perhaps you could make the magazine less interesting, which would enable me to focus more on the actual cribbage, for in overall games scored I am losing 173-275!

Steve Royle (St John's 1968)

The myth of obesity

✉ I found Professor Sadaf Farooqi's article (This Idea Must Die, CAM 100) on the myth of obesity being a question of willpower very interesting, and fully support her plea for a change of attitude towards obese people. However, it failed to address the question that must concern many of us: why do we apparently have an epidemic of obesity at present? Or is that a myth too, driven by increasingly rigorous definitions of obesity? Experience within the NHS of the number of obese patients presenting with serious medical conditions might suggest otherwise.

Colin Johnson (Trinity 1959)

✉ I have always assumed that being naturally thin is a matter of luck, but was pleased to read

that there is a scientific basis for this. But in my lifetime the proportion of overweight and obese people in the UK has risen sharply; hard to believe that this indicates rapid genetic changes in the population. More likely it is to do with the amount of processed foods that so many people now eat. Either it is a side effect of ingredients used to reduce production costs or the food industry deliberately includes ingredients to stimulate appetite and so increase sales. In the absence of an industry whistleblower or some quality research into the matter we are unlikely to find out which.

Stephen Ades (Trinity 1982)

✉ A daily diet of Chelsea buns from Fitzbillies will have an effect on one's weight, not all of which can simply be blamed on leptin deficiency.

Iain Rodger (Fitzwilliam 1976)

My room, your room

✉ John Simpson (My room, your room, CAM 100) seems to think that having to walk down the corridor to the loo at Magdalene was something of a tribulation. At Peterhouse in 1953, it was on with your overcoat, shoes and hat and across Gisburne Court in eight inches of snow to the Birdwood. It's amazing how long one can hold on.

David Latimer (Peterhouse 1951)

👍 Lovely piece! I had a wonderful set of rooms at Girton in my final year – D29, with south facing casement windows overlooking Mares' Run, an idyllic field that was home to several silver horses. It was magical. I'm sure Julia Golding, my predecessor, agrees.

Sharon Jones (Girton 1989)

Black Atlantic

✉ The caption to the picture of Akan gold weights (Black Atlantic, CAM 100) mentions that the weights were a gift to Miss Mary Cra'ster, who is described as "an assistant at the Museum of Archaeology and Ethnology in the 1970s". This description does Mary Cra'ster little justice. She was Assistant Curator of the world class archaeology collection, archaeologist, author and FSA London. She dedicated her life to the University and encouraged generations of undergraduates, including myself, to follow careers in archaeology and research. I am sorry that she seems to have been forgotten.

Iris Barry (New Hall 1969)

Cambridge committees

✉ Your piece on committees (On the ball, CAM 100) reminded me of my own "band that got away" story. Mine is of the time I was Chair of the 1978 King's Committee, when one day

I received a note in my pigeon hole asking me to call a band management company. It turned out that the band Magazine were in the recording studio and wondered if we would like to book them to headline the Ball. As we had a sold out Ball with a full band roster I said no. So it was that the first and leading post-punk band that inspired a generation – including Radiohead, Simple Minds, the Smiths, Pulp and more – did not go to the Ball that night.

Paul Filer (King's 1976)

👍 Churchill Ball committee during my final year! I remember painting a wave mural inspired by Hokusai (ocean-bound theme) – it was such a great mental break from the pressures of finals. Even at times in life when you are under such high pressure, it actually helps to have a different thing to focus on some of the time. I also found myself working alongside people I'd never have chosen to, so that was a great life lesson too – how to build that trust and respect, no matter what your differences. Of course, it helped that we had a great committee chair, Adam Bishop (Churchill 1999) to make sure we all got along. Now I volunteer to chair a committee that co-ordinates undergrad vacation students at my organisation, and it's one of my favourite parts of the job.

Hazel Parry (Churchill 1999)



£56m raised so far to build the new Cambridge Children's Hospital – halfway to the £100m target.

cam.ac.uk/cch



Academic rankings

Cambridge academics ranked among the top female scientists in the world

Twelve Cambridge academics have been ranked among the top female scientists in the world – one of whom is also ranked first in Europe.

Kay-Tee Khaw, Emeritus Professor in Gerontology and a Gonville & Caius Fellow, was placed fifth worldwide and top in Europe, according to Research.com's Best Female Scientists in the World 2023 rankings. Her study on how differences in lifestyle are associated with better life expectancy informed the 'Small changes, big difference' campaign in 2006.

Barbara Sahakian, Professor of Clinical Neuropsychology in the Department of Psychiatry, and a Fellow of Clare Hall, was placed sixth in the UK. Her recent research includes a study showing how reading for pleasure when young can boost mental health and cognitive performance.

Joining Professor Khaw and Professor Sahakian in the UK top 10 is Carol Brayne, Professor of Public Health Medicine in the Department of Psychiatry and Fellow of Darwin. She was awarded a CBE in 2017 for services to public health medicine and has pioneered the study of dementia.

Nine further female Cambridge scientists made the rankings, which are based on an analysis of more than 166,000 scientist profiles.

Imed Bouchrika, co-founder of Research.com, says that the purpose of the ranking was "to recognise the efforts of every female scientist who has made the courageous decision to pursue opportunities despite barriers. Their unwavering determination in the face of difficulties serves as a source of motivation for all young women and girls who pursue careers in science."

Research

A Cambridge-led study has shown for the first time why many women experience nausea and vomiting during pregnancy – the culprit is a hormone known as GDF15, produced by the foetus. This discovery points to a potential new treatment: exposing women to the hormone before pregnancy to build up their resilience.

cam.ac.uk/pregnancy-sickness-cause

Deconstructed

Wild honeyguide birds communicate with humans to help find honey

A new study has found that wild honeyguide birds in Tanzania and Mozambique prefer to team up with local human honey-hunters to find wild bees' nests.

Honeyguides and humans use specialised sounds to communicate with each other – increasing their chances of finding honey and beeswax.



And while human honey-hunters in different parts of Africa use different calls, the birds studied showed a distinct preference for their local partner's calls.

Co-lead researcher Dr Claire Spottiswoode works closely with the Yao and Hadza communities, whose guidance the team has relied on for more than a decade.



Three-minute Tripos

DROUGHT WAS BEHIND THE RISE OF SKATEBOARDING IN 1970s CALIFORNIA. DISCUSS.

Dude, it's hot. Real hot.

I get you, dude.

Like, it's so hot, I ain't gonna fill my backyard swimming pool.

You don't have one, dude.

But if I did, then I'd keep it empty, so I could do some rad 360s, acid drops or Casper flips.

I don't know what those are, dude.

That's because you're not a skater in 1970s Ca-li-for-ny-ay, dude.

Neither are you, dude.

But if I was, dude, then I'd tell you how it was only the extreme drought conditions of the 1970s that made skateboarding possible.

I think you'll find it was a tad more complex than that, dude.

How so, dude?

This heavy new study shows that beyond the drought, it was, like, the entanglement of environmental, economic and technological factors that led to the explosive rise of professional skateboarding culture in the 1970s.

Woah.

I know, right?

Like what entanglements?

Like new technology, like polyurethane making wheels grip better... Like Cali's entrepreneurial culture and the rise of the hand-held video camera...

Like, it could never have happened at any time except, like, then. The only 'then' in the history of, like, ever.

Like this lead dude author Professor Ulf Büntgen from Cambridge's Department of Geography says: "These developments are not random – in the case of skateboarding, you needed each one of the ingredients to exist in the same place and time. It couldn't have happened 10 years earlier, 10 years later, or a few hundred miles away."

Cool, dude.

cam.ac.uk/stories/skateboarding

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LUXURY HOTEL BOAT

The company operates the Edward Elgar hotel boat, rated 4-star by Visit England. She has a maximum capacity of

just 22 passengers so you'll find a relaxed and chatty atmosphere aboard whilst the live-in crew deliver an unfussy and personal level of service.



INTERESTING DESTINATIONS

There are some interesting destinations and sights to see along the way. Different cruise itineraries visit the maritime history of Gloucester Docks, the architecture of Gloucester and Worcester Cathedrals, the Steam engineering of the GWS Railway, the heraldry of Berkeley Castle, the wildlife of WWT Slimbridge, local vineyards and many other places of interest.

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Richard Clements, Emmanuel, 1966.

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All

that

jazz!



Getting in the swing... If it's a challenge you're after, the Jazz Orchestra is for you.

WORDS CLARE THORP
PHOTOGRAPHY ADAM LAWRENCE

If you think jazz is all about the standard Duke Ellington, Miles Davis and Glenn Miller, then the Cambridge University Jazz Orchestra (CUJO) are here to make you think again. Sure, they know how to serve up the classics – but at their performances you're just as likely to hear something more unexpected, whether that's an experimental jazz composition, some modern funk or maybe even a bit of American R&B band Tower of Power.

"CUJO plays very different music to a lot of the other big bands," says President and bass player Louis Henry (Fitzwilliam, Fourth Year). Prior to joining the orchestra, Henry was a member of the Fitz big band Fitz Swing. "That was really lovely," he says. "But in my third year I wanted a change. CUJO does have our classic swing chord charts, but we also do some really contemporary, technically challenging jazz music."

To join, you'll need to get through a rigorous audition process,



and the society works with the University's Centre for Music Performance, which set up masterclasses and sectional coaching by professional musicians. These have included pianist Nikki Isles, trumpet player Yazz Ahmed, vocalist Zara McFarlane and Mark Armstrong, artistic director of the National Youth Jazz Orchestra.

Guest musicians provide guidance – but just watching them up close is a lesson in itself, says Henry. "Playing behind these professionals and observing how they work, it subconsciously shows us how to rehearse and interact better as musicians.

When we're working with a professional, they mentor us on the tunes, but we also get to take those tunes away and come up with something which is more than just playing someone else's music. We're collaborating and adding our own touches to it."

This spring, the ensemble will work with Mo Pleasure, former member of Earth, Wind and Fire. And CUJO also collaborate with other student orchestras and big bands from across the country. "When we play with



the Oxford University Jazz Orchestra, it's billed as the varsity of jazz. There's a friendly competitiveness, but it's a really fun thing to do."

Last spring they revived a pre-Covid tradition of performing a concert with CUJO alumni, which included trombone player Tom Green, now a successful musician. "I've played his music with my friends, so I was like: 'Oh my god, you're actually Tom Green!'" says Henry. His personal highlight, though, is a concert CUJO played with multi award-winning saxophonist Emma Rawicz last November for the Cambridge Jazz Festival. "We played to 500 people at a sold out West Road Concert Hall. All of the pieces were her own compositions, but she really pushed everyone to take a solo at least once in the concert, and to really make those solos their own. There was one bit when we cut down to just a trombone solo with me accompanying on bass, which had a really cool textual effect."

Challenging yourself is all part of the fun. "We all strive to play some really hard music," says Henry. "Some of the arrangements we do involve really complex rhythms, complex time signatures and very exposed parts. You really have to know your part and be paying attention. You can't rely on anyone else to pick up any slack. But when it goes well, there's a huge sense of accomplishment."

cambridgeuniversityjazzorchestra.co.uk

V6 Bodley's Court, King's

Novelist Zadie Smith joins History student Romeo Liyan to explore the “luxurious” surroundings where she started her award-winning debut.

WORDS LUCY JOLIN PHOTOGRAPHY MEGAN TAYLOR



Award-winning novelist Zadie Smith (King's 1994) and first-year History student Romeo Liyan both light on the same word to describe V6, Bodley's Court: “luxurious”. They have a point. Tucked away at the top of a winding spiral staircase, with its mullioned windows, high ceilings and (arguably) the best view in town, it's the archetypal Cambridge room. And all the more beautiful for being a world away from where they grew up.

“It's a very special room for me, because I'd never had my own room before,” says Liyan. “I lived in a one-bedroom flat in Croydon with my mum, my brother and my little dog, and I shared a bedroom with my brother.” Smith, famously a north London native – her first bestselling novel *White Teeth* is set there – agrees. “It was twice the size of my bedroom at home. And very

different from the room I shared with my brother when we lived in a council flat.”

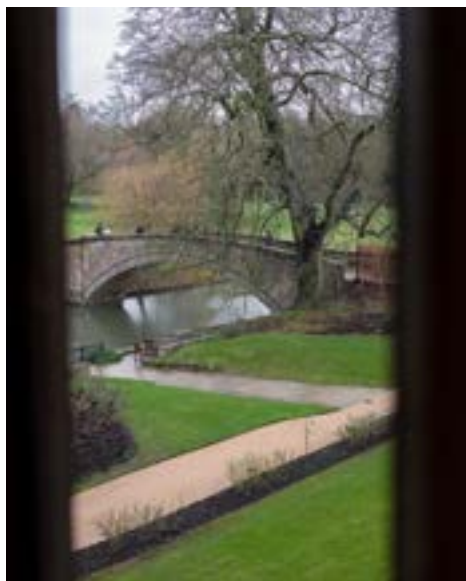
She made the most of it. “The College allowed me to stay through the holidays. I lied to my mother and told her that College was all year round. She didn't know the difference.” Liyan nods. “I had to leave home a few months before I came here, so I was couch-surfing and temporarily homeless for a while,” he says. “I was worried about reaching out, but when I did, the College were so supportive.”

The room was a fresh start for Smith, too, she admits, in a rather more prosaic way. “A mouse died behind the skirting board in my previous room, and I never bothered to do anything about it. I was infamous for having the room that stank. So this room was a big step up because it didn't smell like a dying mouse...”

They make a brief foray into the bedroom before settling down to identifying which bits of furniture still survive from Smith's era. Smith stands at the desk by the window which looks out over the lawns and river. “That tree is spectacular in summer. It's all pink. This is where I started *White Teeth*. Well, I don't know how long the current desk has been there, but it was very like this one.”

The squishy sofa certainly wasn't there: the hairy carpet is a maybe. The stone fireplace, of course, has been in situ since time immemorial, with the mantelpiece now crammed with Liyan's keepsakes. From the photo commemorating his time as a ball boy at Wimbledon, you'd expect Liyan to be a tennis fan. His tastes are a little more extreme, however: he's into bouldering and rock climbing. “I do it about five or six times a week. And yes, I know Cambridge is pretty

This is where I started *White Teeth* – I don't know how long the current desk has been there, but it was certainly very like this one



flat! There are centres where you do it. But I can't wait to start travelling and climbing with all my friends."

Smith wanted to "sing and dance" in her first term. "But I chickened out and did nothing else at all. Just a lot of reading and a lot of drinking." Both agree that finding the right balance of work and play is tough. "In my first term, there was so much I wanted to do outside of work," says Liyan. "So this term I decided I'll go to every lecture. I thought attendance was a bit arbitrary last term, but it turns out that it definitely wasn't. I do love history: I love trying to dissect it all.

"In my childhood and early teens, I was just very fixated on what I wanted to happen," says Liyan. "I wanted to go to this school, this university. Now, I want to detach from that and just enjoy myself." And while there were plenty of emotional moments in V6, says Smith, everything fell into place in the end. "I was heartbroken because I wanted to do graduate work, but because I failed my Part Ones, I couldn't do that," she remembers. "But I remember very well walking out of dinner one night and telling my supervisor I was writing a novel. He was like: 'Well, that's a pointless thing to do, but good luck to you.' Things might feel like disasters, but they're not."

Zadie Smith's first historical novel, *The Fraud*, is out now. Romeo Liyan is preparing for the end of his first year.



Genetics

Ancient DNA clue to diseases origins

Researchers have revealed the origins of neurodegenerative diseases – including multiple sclerosis (MS) and Alzheimer's – by sequencing ancient human DNA.

The international team, co-led by Professor Eske Willerslev at the Department of Zoology, studied the bones and teeth of almost 5,000 humans living in western Europe and Asia up to 34,000 years ago. By comparing ancient DNA to modern-day samples, the team mapped the spread of genes and diseases over time.

The study found that the genes which significantly increase a person's risk of MS were introduced into north-western Europe around 5,000 years ago, by sheep and cattle herders known as the Yamnaya people, migrating from the east.

These genetic variants protected them from catching diseases from sheep and cattle, but also increased the risk of developing MS. The findings explain why there are around twice as many modern-day cases of MS in northern Europe than southern Europe: the Yamnayas are thought to be the ancestors of many people in north-western Europe.

"These results change our view of the causes of MS and have implications for the way it is treated," says Professor Willerslev.

cam.ac.uk/neurodegenerative-disease-origins

In brief

A NEW LOOK AT HISTORY

In a challenge to our understanding of Roman history, a Cambridge-led team of archaeologists has found that Interamna Lirenas in central Italy bucked Italy's decline in the 3rd century AD. "We're not saying that this town was special: it's far more exciting than that," says author Dr Alessandro Launaro.

cam.ac.uk/interamna-lirenas

PARENTAL BONDS

A loving bond between parents and their offspring early in life increases a child's tendency to be 'prosocial', kind and empathetic, says research from Ioannis Katsantonis and Dr Ros McLellan in the Faculty of Education – emphasising how powerful early parenting can be.

cam.ac.uk/bonding

FRENCH LETTERS

Professor Renaud Morieux's study of more than 100 letters sent to French sailors by their fiancées, wives, parents and siblings reveals rare and moving insights into the lives, loves and family quarrels of everyone from peasants to officers' wives. The documents, now held at the National Archives, were confiscated by the Admiralty 265 years ago and never opened – until now, that is.

cam.ac.uk/love-letters

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Professor Ruchi Choudhary is Professor of Architectural Engineering and leads the Energy Efficient Cities Initiative.

Energy efficiency in housing: it's time to act not just talk

INTERVIEW MEGAN WELFORD ILLUSTRATION KATE COPELAND

When it comes to improving the energy efficiency of housing in the UK, it seems that we are still having the same conversations we were having 10 years ago. Why is this? It's certainly not because we don't have the technology – we do. And it's not because our modelling hasn't improved – we have better, more accessible data than ever before. Our simulation platform, EnergyFlex, from Cambridge's Energy Efficient Cities initiative, has, for the past decade, been modelling what changes will be needed to improve each house's energy efficiency. We can even factor in economic uncertainties and the impacts of different policies, as well as figure out how to optimise existing energy networks.

Ten per cent of global carbon emissions come from heating and lighting our houses, so if we're to reach net zero, things like insulation, which reduce demand for energy, are as crucial as decarbonising the grid. So why are our houses not becoming more energy efficient as fast as they should?

Retrofitting existing homes has well-known issues: people live there (in the case of flats, lots of people), it's disruptive, it's expensive and it's inconvenient. Also, efficiency measures first upgrade living standards before yielding any financial savings. But other countries in northern Europe also have ageing housing stock, and they're doing much better than we are.

One problem is that we are not building new housing to a high enough standard. If we were, we would have a diminishing problem. New housing built to even a basic modern standard should require very little heat, and we should also be thinking about ventilation to manage increasingly hot summers. But we're not, because we have a severe lack of any regulatory mechanisms for either penalising or incentivising building standards. We cut costs because we don't see the value – we're not valuing health in relation to housing, for example, and this is increasing the NHS burden from the mental and physical issues attached to poor housing.

There are ways to incentivise customers and markets without public funding, but we need a top-down effort to make energy efficient housing desirable and fundable, to make it easier for markets to be flooded with energy efficiency products.

We also need to start building up skills, and contractual and construction pipelines for decent standard housing. We are seeing some skills transfer from academia, with our engineering graduates able to work with councils and industry on improving energy efficiency, and consultants and SMEs learning to use our models. But the pipelines for products, and the incentives for skills, are not there.

What we also need is a much more nuanced and tailored approach to policy. Our own research into homes built since 2000 has shown that energy efficiency varies greatly depending on where you are in the country, with homes in the north, which typically have poorer quality housing, less energy efficient than homes in the south. Then it depends on the ownership typology; someone in socially rented housing will need different incentives to a private landlord, and offering this tenant some money off an expensive heat pump just isn't going to work.

Our modelling, until recently, also neglected this one crucial element: the humans who live in the houses. So since 2013, we have worked with urban geographers and urban analysts to plug the socioeconomic context into our models, creating synthetic populations of households specific to geography. We can now calculate the likelihood of uptake of heat pumps in certain areas, for example.

Achieving energy efficient housing is complex and we haven't had the stability in governance to focus on it. And that's why we're still talking about it. We have the understanding, we have the tools, we just need to get on with it!

Find out more about the Energy Efficient Cities Initiative at eeci.github.io/home

One problem is that we are not building new housing to a high enough standard. If we were, we would have a diminishing problem

VC: year one

From California to Cambridge: Vice-Chancellor Professor Debbie Prentice wants to use her fascination with the way humans interact to help her establish a common mission.

WORDS LUCY JOLIN PHOTOGRAPHY LLOYD MANN

It doesn't happen by luck, and it doesn't happen by magic. So, the question is: just how do you become Cambridge's Vice-Chancellor? "That's exactly what the King asked me!" says Professor Debbie Prentice, who became Cambridge's 347th VC last July. "Well, I told him that it's a job that you apply for in the usual way. Yes, it draws on a lot of different skills and there are a great many ways to do it, but it is just a job – albeit, as previous VCs have told me, the best job in the world."

A fifth-generation Californian, Professor Prentice spent her early years in Los Angeles while her father was writing music for television and her mother, who pretty much raised her single-handedly, worked in insurance. She attended state schools and spent much of her time playing the piano for fun – and sometimes for money – but didn't have a strong sense of exactly what she wanted to do next, just that it would be something scientific.

"I was interested in science and maths broadly. I found my way into biology because I loved the systems-thinking, but then I discovered psychology – by 'accident' – and realised that you could apply the methods and the thinking of a natural science like biology to understanding how people behaved in the social world."

After a biology and music degree at Stanford, and further study at Yale, she joined the Department of Psychology at Princeton, and began to explore in earnest her fascination with the ways that humans represent themselves. "It was the first time in my life that I had ever been in an environment that functioned like the social groups I had studied in my psychology classes; the conformity pressures that exist and the ways in which people get their identity from the groups of which they're a part."

And then, one of her senior students, Jenifer Leightdale, started talking about her experiences at "eating clubs" – the Princeton equivalent of Cambridge dining societies – and the mainstay of student social life at that time. "Jenifer described the drinking culture at Princeton, which involved heavy drinking, especially on Thursday and Saturday nights – not Fridays because there were sporting events on Saturday morning, so everybody had to abstain on Friday nights. But Thursday and Saturday nights were the big nights.

"She told me that everyone was having a great time and was fine with it, but that it was worrisome to her. I asked: 'How do you know everyone else is fine with it?' – and of course she wasn't sure. It seemed to me that what she was describing was 'pluralistic ignorance' – where your belief that everybody else is comfortable with a certain behaviour leads you ›







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You understand the parts by understanding the ways in which they interact with each other. I've always thought about human beings in their social worlds that way – as an ecosystem

to act like you are comfortable with it too, even though you're not. Your private reality and your public reality are in conflict – a situation that each individual believes is unique to them but is in fact shared by everyone in the group.”

Professor Prentice wanted to know more – and so she launched a research project examining pluralistic ignorance in the context of alcohol use on campus. She would go on to be among a very early group of researchers who were able to identify that alcohol abuse among college students is very often not a medical or a clinical problem, but rather, a social problem.

Professor Prentice was able to use her findings to impact student behaviour, designing an intervention where students were exposed to the idea that ‘it wasn't just them’ – in fact everyone was engaging in heavy drinking to fit in socially. “You give them a chance to discuss with the group: ‘Why do we all think this?’ And that intervention lessened the pressure they felt to drink in order to fit in. The result was an overall reduction in drinking. It doesn't eliminate drinking, but we were never about eliminating drinking. We were about enabling people to drink at the level where they felt comfortable. And that's in fact what we showed in our work.”

Of course, students are not the only groups to study at universities. But she is nonetheless amused by the suggestion that her interest in groups, social norms and co-operation led her to university administration. “I've always thought about human beings in their social worlds that way – as an ecosystem. You can't understand a part of it without understanding the rest. So, it's true, I wanted to find out: how do we make this place better? How can we do this project better? In time, I was promoted to department head, and things led to things.” Those things included chairing Princeton's Department of Psychology, serving as Dean of Faculty for three years and Provost for six – and now, of course, Cambridge's first ever American-born Vice-Chancellor.

Nowhere is the impact of social systems more relevant than in the discussion about how we safeguard debate and free speech in education. Does she think it has got worse? And how does she think universities should tackle the issue? “There are many things that lead people to self-censor, and I think that the challenges around not knowing who you're talking to and not knowing if what you have to say is going to get a positive reception lead people to hesitate to express themselves. It's become very difficult to have the kinds of authentic sharing of views that many of us remember from our own college days. So, one of my initial projects here at Cambridge is to look for ways to create spaces to give people experience listening to diverse views, expressing diverse views.”

Initially that has included launching the Vice-Chancellor's Dialogues, which will cover some of the most difficult issues of our time, such as last November's discussion on assisted dying. “The rules were: we love debate, but this is not a debate. This is a dialogue. There were times when you could see some of the speakers wanted to score points, but the ethos and the environment discouraged that. And what was interesting was how, over time, the participants intuitively started to seek common ground. Human beings are inclined to agree. And even if they're facing somebody very different from them who has different views, they'll think harder. They'll try to find those places where there are points of agreement, and then they'll try to figure out what they're disagreeing on.”

So, is it part of a university's role to expose students to different views? “It's about equipping students to know their own limits,” she says. “Because nobody has to come to these dialogues. Free speech: again – it's supposed to be free. It's about relaxing your defences and opening your mind. There are times and issues where it's just not going to happen, and we need to respect that. That's just human nature, as well. The job is to enable students to experience an environment where people can disagree, to learn where their limits are, and how to stretch beyond those.”

The free speech discussion is, of course, just one of many around what universities are ‘for’. Should they focus more on preparing students for specific roles? “Students do learn skills here, but the critical thing is that they learn how to think, and that we help cultivate their curiosity, confidence, resilience and flexibility,” Professor Prentice says. “Because job market skills they can use when they are 21 are not necessarily going to be at all useful to them when they are 25, much less when they're 35 or 85.”

“That's why I always tell students, study whatever you're passionate about. You'll be able to go deeper, think harder, and hone whatever those skills are – and believe me, the skills can be repurposed. Give it your whole self, and your whole mind is going to take you further. That's our job, right? To just let them throw their whole selves at it. The more absorbing it is for them, the more they're going to get out of it.”

What else is on her to-do list? A university, she says, is like a small city: it depends on the people who keep the place running. Professor Prentice thrives on getting these systems working together more efficiently. “It's hard getting everyone to understand that what they are doing is part of a common mission. It's not because anyone disrespects anyone else. It's because it's just difficult! We're all speaking the same language, but we don't always have the same thing in mind. And I've got a huge amount of experience dealing with that.” ☺

Is there anybody out there?



Do aliens exist? What do they look like? Are they looking for us? How long until they find us? If you've ever looked into the night sky and thought it unlikely that our tiny planet, in our (relatively) tiny solar system, could possibly be the only place that supports life in the vastness of the universe... we know what you mean. And we're not alone.

WORDS PAMELA EVANS



An army of mysterious lights streaks across the desert sky. A single vast entity casts a chill shadow across a continent. An inhuman voice quacks out robotic commands over a million radios across the globe. Presidents and prime ministers are rooted to the spot in terror. Crowds, maddened by fear, flock to the streets, and survivalists take to the mountains. This, surely, is how the Earth will discover that we are not alone...

... Or perhaps not. Maybe, to the consternation of screenwriters and conspiracy theorists, life will appear not with glowing eyes and ray guns, but as a line on a graph. In September this year, Nikku Madhusudhan, Professor of Astrophysics and Exoplanetary Science, and his team became the first to detect carbon-based molecules in the atmosphere of K2-18 b, a habitable-zone exoplanet (a planet outside our solar system) just 120 light years away. Using observations from the James Webb Space Telescope, they analysed the light from K2-18 b's parent star as it passed through the atmosphere of K2-18 b.

"From these observations, we can state very confidently that we have detected methane and carbon dioxide in this atmosphere," says Madhusudhan. Methane and carbon dioxide without the presence of ammonia indicate the possibility of that cradle of life – an ocean. And there was another, more indistinct line on those graphs – what Madhusudhan carefully explains is "slight, tentative" evidence for the presence of the molecule dimethyl sulfide (DMS). "This is exciting, because DMS, on Earth, is produced exclusively by life. Much of the DMS in Earth's atmosphere comes from oceanic micro-organisms.





Ex. 1617-1
Crices, New Mexico
Unknown, 1967

A student from New Mexico State University was hiking near Picacho Peak photographing land formations for a geology class when he spotted “a big round silvery object hovering in the air”. He said the object made no noise and disappeared as he looked down to change plates in the camera.

← Associated Press / Alamy



Ex. 1617-2/3
UFO photo and polaroid
Jim Shaw, 1977

In this series, photographer Jim Shaw observes how, in times of uncertainty and distrust in politics, we project our fears onto inexplicable phenomena such as observations of extraterrestrial life. “In the 1970s, when I was starting out, it was the era of the disaster film and of close encounters. It was like people wanted the end to happen because reality was so... boring.”

↖ The Metropolitan Museum

Molecules like this are known as secondary biomarkers. They are more robust signatures of life because they are very hard to make, geologically or naturally.”

The next 10 years of observations will be crucial, Madhusudhan says, in establishing if DMS is indeed present – and, if it is, precisely what that means. In the meantime, we can only speculate about what form life outside the Earth might look like. And again, it might not be quite as outlandish as we think.

“There are constraints around evolution that determine what the nature of life is going to be like,” says Dr Arik Kershenbaum, Director of Studies at Girton and author of *The Zoologist’s Guide to the Galaxy: What Animals on Earth Reveal About Aliens – and Ourselves*. “As zoologists, we try to understand the evolutionary mechanisms that drive particular traits or particular ecosystems. And the more we understand them, the more we find that there is nothing special about Earth. These mechanisms are very fundamental. It’s very natural for a zoologist to think about how we could apply these rules to other places – whether that’s deep in the ocean, on an undiscovered island or on another planet. ›



Predation, says Kershenbaum, is a classic example, despite its origins being quite complicated. “Life has been eating other life for a very long time. But we do know that there came a point in Earth’s evolutionary history when predation became massively important – much more so than amoebas nibbling bits of algae. Suddenly, life was running around trying to catch other life and eat it, or running around trying to avoid being eaten. That is because a world where no one eats anyone else is unstable. The moment someone realises they can get their energy by eating someone else, the game changes. Everyone will have to adapt to the new world order. So if a world without predation is unstable, then we can expect life on other planets to have predation, because unstable systems do not persist indefinitely.”

Sadly, those predators are also unlikely to have characteristics that have no evolutionarily plausible pathway. Take the Xenomorph, star of six Alien films to date. It famously has a potent molecular acid in its blood, which can burn through pretty much anything remarkably quickly. (Though, interestingly, not the Xenomorph itself. Many theories exist as to why this is so.) “I love aliens and it’s fine for fiction to be fantastic,” says Kershenbaum. “And most fictional alien species are designed to have the properties that the author wants, without any consideration of why they should have those properties. Wouldn’t it be great for a whale to be able to fly? But there’s no actual pathway to that. There’s a constraint. There is no food in the air, so what’s the advantage of being able to fly? It doesn’t give you any advantage.”

An advantageous trait, he points out, is likely to evolve multiple times from different origins – a theory known as convergence. And constraints, again, mean that there are only a few ways for that trait to develop. “Biology travels through history but ends up at much the same destination,” says Simon Conway Morris, Emeritus Professor of Evolutionary Paleobiology.

Compare, he says, the human eye and the octopus’s eye. Both evolved independently, from separate lineages – but both have a camera-type eye with one lens, as opposed to the compound eyes of insects, which are thousands of tiny light detectors packed together. “And that is very remarkable. One could argue that on any other planet there will be different sorts of eyes, as there are on this planet. But on the other hand, if you have a relatively large

Ex. 1819-3

Dexter, Michigan

Unknown, 1966

Hundreds of curious citizens turn out to scan the night sky after reports of UFOs frequenting the skies of Dexter in southern Michigan, USA.

↓ Bettmann / Getty



Ex. 1819-1/2

McMinnville, Oregon

Paul Trent, 1950

Evelyn Trent was walking back to her farmhouse after feeding her rabbits when she noticed a slow-moving, metallic disc-shaped object heading in her direction from the northeast. She yelled for her husband, Paul, who managed to take two photos of the object before it sped away to the west.

→ Science History Images / Alamy



If you subscribe to the general ideas of convergent evolution, then there should be lots of planets with intelligent bipeds. Aliens should exist



and intelligent life form, then it will almost certainly possess a camera eye. Convergent evolution on Earth gives us a good guide to any Earth-like planet and its life forms. What applies to this planet will broadly apply to any other planet.”

So, aliens might be fairly like us – or, at least, ‘us’ at some stage of our evolution, which could be anything from intelligent bipeds to green soup. Dr Emily Mitchell, Co-Director of the Leverhulme Centre for Life in the Universe, thinks that key to understanding extra-terrestrial life is understanding the evolution of life on Earth. By studying the origins of animals and what drove their early evolution, we can theorise about what we might find on similar planets, she says. “Life has existed on Earth for four billion years, but it was only around 600 million years ago that we start getting animals. Why? So, when we’re thinking about life outside the Earth, the question for me is: what level of complexity might we expect to find? Would we, on a similar planet of a similar age, expect to find humans, or not?”

Life, she points out, is a tricky thing to create. “Most of the time, life is just microbial, bacterial, very simple. If we look for life elsewhere, we may find it, but it’ll all be microbes. Perhaps we were lucky to evolve at all.”

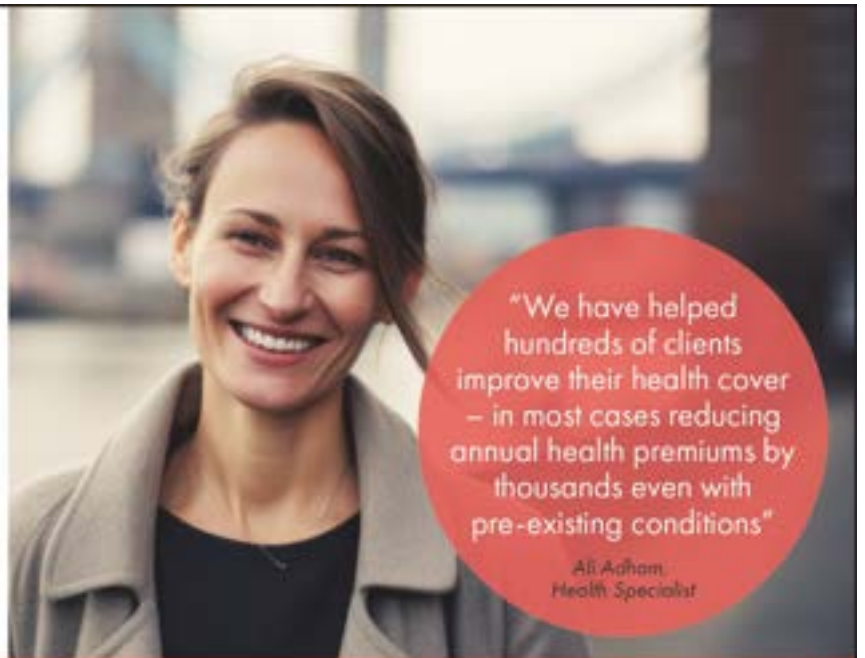
But what about life on planets which don’t share Earth’s characteristics? “Much of astrobiology focuses on extremophiles and understanding how they live,” says Mitchell. “But lots of the extremophiles have a hugely long evolutionary history. Early life on another planet won’t necessarily have had the same time and the same evolutionary pressures to have evolved to that sort of level. >





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Ex. 2021-1

Riverside, California

Guy B. Marquand Jr, 1951

Marquand claimed that the object above the skyline was a “flying saucer” that he and two friends saw fly past them at a very high speed. When it came back a few moments later, he had his camera ready to capture this photograph.

→ GRANGER / Alamy



The moment someone realises they can get their energy by eating someone else, the game changes. Everyone will have to adapt to the new world order

Plus, most life isn't like that. If we're looking for life elsewhere, we should be looking for things that we know work in a wide variety of different environments. By focusing on life as we know it now, we're not excluding the extremophiles but we're capitalising on a way of life that we know works."

Thus far, if there is something out there, it has remained resolutely silent. What are our chances of finding anything? "If you accept that life itself is something that automatically evolves, and if you subscribe to the general ideas of convergent evolution, then there should be lots of planets with intelligent bipeds. Aliens should exist," says Conway Morris. "I don't think they do – but I am keeping an open mind."

Kershenbaum believes that the evidence would imply life. "The Earth formed 4.5 billion years ago and cooled enough to have liquid water more than four billion years ago. Life evolved 3.8 billion years ago. That's almost instantaneous, relatively speaking. You can't statistically conclude anything from that, but it implies that the origin of life from non-life isn't ridiculously improbable."

And Mitchell agrees. "Because of the diversity of exoplanets we have and the huge number of them, the circumstances that led to life on Earth probably would happen again and happen repeatedly. But whether we get animal levels of complexity – that I'm not sure of. I'd expect to find a lot of life elsewhere, but probably microbial life."

And Madhusudhan? "I get asked about life elsewhere in the universe a lot, and it's a very risky question," he says. Three decades ago, he points out, we didn't know of any planet outside the solar system at all. Today, we know that almost every star should have at least one planet around it. "That's a sea-change in our perspective of the universe. The scientific side of me says that we must be sceptical about every stage of the process. But if I follow natural logic, life appears to be the logical conclusion." What that life might look like, of course, remains to be seen. Keep watching the skies. ☺

The art



PHOTOGRAPHY KATE PETERS

of borrowing



Ever fancied a Nicholson or Gaudier-Brzeska on your wall? Every year since 1957, students have been pitching up at Kettle's Yard in the hope of claiming a master.

WORDS JO CAIRD

Imogen Grimes
Art History, Third Year

Alongside works from the Student Loan Collection by: Joan Key, a contemporary artist based in London known for her minimalist paintings and prints; and Trevor Bell, an abstract painter who drew inspiration from St Ives in Cornwall.

Miriam Margolyes (Newnham 1960) had never heard of Henri Gaudier-Brzeska. But a small sketch of two muscular boxers, spotted on a visit to Kettle's Yard in 1961, changed all that. "I don't know anything about art but something about that picture took my fancy," the actor recalls.

And at most galleries, that would be that. But at Kettle's Yard, they do things a bit differently. For the past 67 years, students have been decorating the walls of their College rooms with pieces borrowed from the collection. These days, students pay a small fee and careful records are kept. But in Margolyes' day, when Kettle's Yard founder Jim Ede and his wife Helen were still in residence, the picture loan scheme was rather more informal. "I just picked it up and went away," she says.

The Gaudier-Brzeska drawing hung "in place of honour" on the wall of Margolyes' room at the top of Newnham's Pfeiffer Tower for the duration of her second year. "When you take a pleasure in a picture, you look at it all the time," she says. "Only afterwards did I discover that he was an extremely well known artist."

At the end of Easter Term, Margolyes returned the picture and borrowed another, this time a painting of boats by Cornish artist Alfred Wallis. "The fact that you were allowed to take something like that into your own living space was such a present, an amazing kindness," she says. "And it started me realising that art is something that is available. It gave me a kind of audacity that I could make a choice and put it on my wall."

That audacity stayed with her. After Cambridge, Margolyes got into the habit of buying a piece of art with every new acting job she booked. Her favourites were political cartoons of the early 19th century by the likes of James Gillray and Thomas Rowlandson. She still collects them to this day.

Margolyes is not the only student for whom the picture loan scheme has left a lasting legacy. Lesley Cotton (Sidney Sussex 1983) was studying architecture when she first came across Kettle's ›

Yard, which was by then part of the University, having been donated by the Edes in 1966. The couple had moved out in 1973 but the domestic backdrop they had created for their collection was wonderfully unchanged – as is still the case today.

“I remember ringing the doorbell and being greeted by a volunteer who would take you round,” Cotton says. “There was almost a maternal feel about it when you were first away from home, of it being a sanctuary from everything else.”

The picture loan scheme enabled Cotton to take a little slice of that sanctuary with her when she left the gallery. She can’t remember much about the minimalist abstract drawing she borrowed, but the effect it had on her is still vivid in her mind.

“It represented a calmness. Terms are very short and there is a lot of work to get through. It was hard,” she explains. “So the picture was something calm that I could come back to.”

**The fact
that you were allowed to
take something like that
into your own living space
was such an amazing
kindness**

It was also a source of inspiration, a way of keeping her eye on the prize when the going got tough. “It represented the sorts of things that I wanted to design when I was in my professional life,” Cotton says. That inspiration has come good: the Edes’ vision for how artworks and natural objects can work together in a domestic setting, as well as their instinct for the play of light, is a strong feature of Cotton’s architectural practice today, she says.

The Edes had moved to Cambridge in 1956, following stints in London, Tangier, the US and France, bringing with them an art collection that reflected the friendships Jim built over his time at art school, and then as a curator at what was to become the Tate. In Cambridge, they bought and restored four derelict cottages in the hope of creating “a living place where works of art could be enjoyed... where young people could be at home, unhampered by the greater austerity of the museum or public art gallery”.

Then, as now, works by Ben and Winifred Nicholson, Joan Miró, Henry Moore, Barbara Hepworth and many more leading 20th century artists are displayed alongside domestic furniture and natural objects, all without labels getting in the way of the experience.

“Jim Ede was always interested in the idea that you will live a better life if you live with art,” says Andrew Nairne, Director of Kettle’s Yard. Also central to his philosophy was “learning to look” – the idea that pictures, like people, take time to get to know and understand. “He would welcome people in and say: ‘I’ll tell you a few things but go off and wander on your own,’” says Nairne.

Letting students – including now famous names such as the physicist Stephen Hawking (Caius 1962) and Nicholas Serota (Christ’s 1965), former director of the Tate – take their pick from the unhung artworks stacked in the attic was just the natural extension of that thinking.

More than 6,000 student loans later, the scheme is still going strong. But now, the students who queue up along Castle Street each Michaelmas Term to borrow the 90 or so works included ›

**Emma Davis
Emmanuel 2002**

Alongside artworks from the Permanent Collection by Ben Nicholson, Alberto Burri and William Congdon, and a vase by Hans Coper.









for selection are not given any advance information about them. Students must simply choose the art that appeals to them on the day. “Some people spend a really long time considering their choices,” says Naomi Polonsky, Assistant Curator at Kettle’s Yard and the person responsible for running the scheme. “There was one person this year who must have been in there for a good half hour weighing up which picture they wanted to take.”

Sam Cornish (Churchill 2002), who studied history of art and today writes about and curates exhibitions of abstract art, can’t remember how he chose the two small John Blackburn paintings that ended up on the walls of his first-year bedroom back in 2002. But having got them home – a walk up Madingley Road in the company of a friend who’d nabbed a large drawing of Leda and the Swan – Cornish really appreciated “having a proper thing on your wall that you could see in different lights at different times of the day,” he says. “Mostly you don’t notice it, then every now and then you do and that’s what’s so great about it.”

Jim Ede
was always interested
in the idea that you will
live a better life if you
live with art

The lack of hierarchy associated with the scheme is central to its success, believes Emma Davis (Emmanuel 2002). No art knowledge is required, you don’t need to be studying art history to borrow a picture, and students at Anglia Ruskin are also welcome

Davis herself borrowed a dark abstract mixed media work – “a combination of Ben Nicholson and Alberto Burri” as she recalls – in her third year studying maths. And she was so affected by the experience (the work was “quite precious, not like one of my photos or posters”) that since 2020, Davis has been sponsoring the scheme to cover the £20 loan fee and £30 deposit for up to 25 students each year. “£50 is a pretty chunky amount when you consider you can buy a poster at the Freshers’ Fair for £5. I thought, if it was free, would you choose the poster or would you choose the art?” Reflecting on an experience that triggered her own 20-year collecting habit, she says it taught her both how to live with art and how her tastes might evolve.

Imogen Grimes (Art History, Third Year) has borrowed works from Kettle’s Yard for two years running now. Last year she picked a large ink drawing and a tiny oil painting, works that travelled home with her to Wales and back at the beginning and end of each term when she had to vacate her room in the holidays. “I almost cried when I returned them,” Grimes says. “I came back to my room and it felt very bare. Even now, I miss them.”

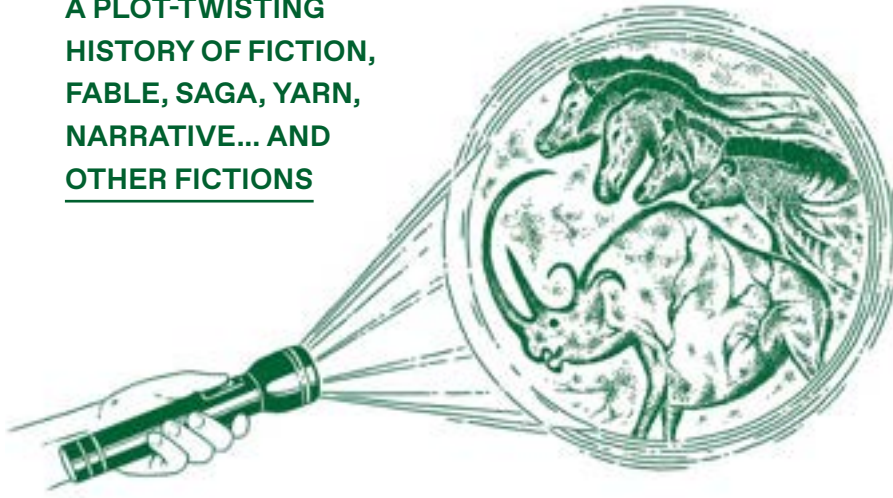
She expects that handing back her current loans – two abstract paintings, one large and free-form, one small and geometric – will be even more of a wrench. “At the end of this year I’m not just losing the pictures, I’m leaving Cambridge too,” says Grimes. “It’s going to be emotional. But the loan scheme has given me a taste for collecting art without spending a fortune – I love thinking about what I’ll buy in the future.” ©

Naomi Polonsky
Assistant Curator,
Kettle’s Yard

With works from the Kettle’s Yard Reserve Collection and Student Loan Collection by artists including Alfred Wallis, Ben Nicholson and Henri Gaudier-Brzeska.

Kettle’s Yard has embarked on an ambitious endowment campaign to raise £5m by 2027 through the Jim & Helen Ede Fund. To find out how you can get involved, please contact Holly Kavanagh at holly.kavanagh@admin.cam.ac.uk

**A PLOT-TWISTING
HISTORY OF FICTION,
FABLE, SAGA, YARN,
NARRATIVE... AND
OTHER FICTIONS**



10,000 BCE

THE BRIGHT STAR MOINEE

Palawa (Tasmanian Aboriginal) stories relating the creation of the Bass Strait, 12,000 years ago, recall Moinee being a bright star near the South Celestial Pole at the time rising seas made Tasmania an island. Recent research from the University of Tasmania has shown that this is an accurate description of the sky and the star Canopus as it would have appeared 11,960 years ago. That means these oral traditions have been passed down through more than 400 successive generations. (There may be stories far older: Indigenous Australian culture stretches back around 50,000 years.)

30,000–32,000 BCE

THE CHAUVET CAVE PAINTINGS

Discovered on 18 December 1994 by three speleologists, the walls of the Chauvet-Pont-d'Arc Cave in France are covered with extraordinary animal paintings: mammoths, cave hyenas, ibex – and even rhinoceroses. A child's footprints pattern the floor. One drawing appears to be an erupting volcano: the earliest known depiction of this event. "This is the birth of the modern human soul," said film director Werner Herzog, who filmed the paintings for his 2010 documentary, *Cave of Forgotten Dreams*.



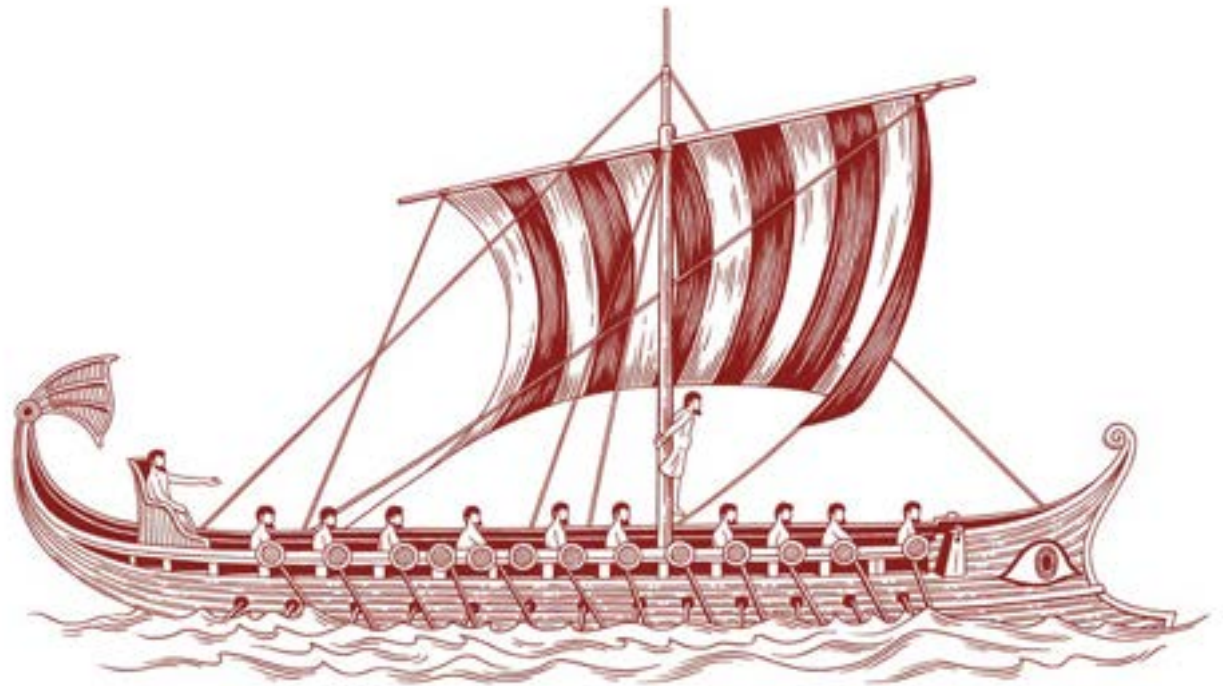
Once upon a time...

Forget facts. If you really want to win an argument, sell someone something or win an election, make sure you've got a really good story. Because humans love stories.

WORDS LUCY JOLIN ILLUSTRATIONS STUART PATIENCE

Once upon a time, on Columbus Day, Monday 10 October 1983, President Ronald Reagan watched a tape of a new TV movie, *The Day After*, showing the aftermath of a nuclear war with Russia in the town of Lawrence, Kansas. "It's very effective & left me greatly depressed," he wrote in his diary. "So far they haven't sold any of the 25 spot ads scheduled & I can see why. Whether it will be of help to the 'anti nukes' or not, I cant [sic] say. My own reaction was one of our having to do all we can to have a deterrent & to see there is never a nuclear war."

Of course, this wasn't the only reason why Reagan became less hawkish about nuclear weapons, moving towards an agreement with the Soviet Union. "But one factor was watching *The Day After* and being enormously moved and depressed and upset by it," says Dorian Lynskey (Downing 1992), podcaster, journalist and author of the upcoming *Everything Must Go: The Stories We Tell About The End of the World*. "It was the

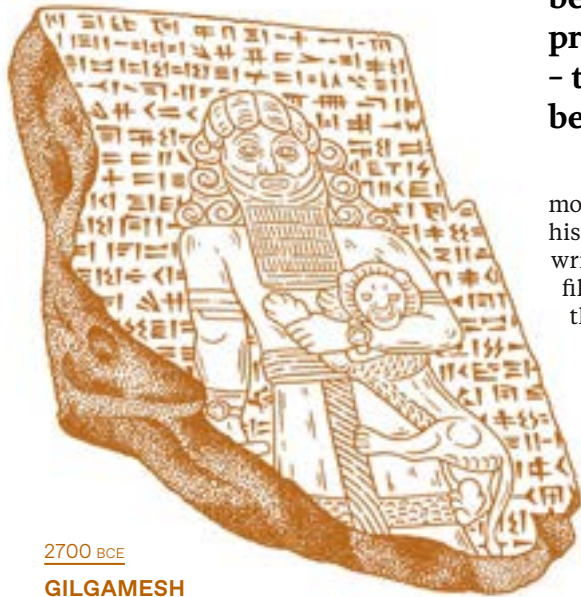


When we evolved extreme cognitive complexity to navigate between the past, the present and the future – that’s when storytelling became intrinsic

700–800 BCE

THE ODYSSEY

“Tell me, O Muse, of the man of many devices, who wandered full many ways after he had sacked the sacred citadel of Troy.” *The Odyssey* is one of the oldest stories still read by modern audiences, but this ancient Greek poem attributed to Homer has also been reimagined countless times across the centuries, from James Joyce’s *Ulysses* to the Coen brothers’ Deep South-set crime comedy *O Brother, Where Art Thou?* A 2018 BBC poll voted it literature’s most enduring narrative.



2700 BCE

GILGAMESH

“Supreme over other kings, lordly in appearance, he is the hero, born of Uruk, the goring wild bull.” Meet Gilgamesh, king of the Sumerian city state of Uruk and hero of the oldest written story yet known, written in the ancient language of Akkadian on 15,000 fragments of clay tablets in cuneiform script. First translated by self-taught Assyriologist George Smith in 1872 – who, the legend goes, was so excited by his discovery that he ran around the room removing his clothes – it contains an account of a great flood written a thousand years before the biblical story of Noah.

most watched TV movie in American history. Countless articles were being written about nuclear war. But the film – the story – was the thing that reached people.”

Not all stories save the world. But it’s hard to imagine a world without them. Storytelling is intrinsic in what it means to be human, says Elias Garcia-Pelegrin (St Edmund’s 2019), assistant professor in comparative cognition and evolutionary psychology at the National University of Singapore.

“We are the way we are because we tell stories to each other. That’s the uniqueness of humanity. I can make you understand what it is to be me, and you can make me understand what it is to be you.”

Appropriately, the origins of storytelling are lost in mystery. “Take everything I’m going to say with a pinch of salt!” says Garcia-Pelegrin. Trying to work out how our ancestors thought is far harder even than working out what they ate or wore, he points out. But we see communication in its most simple form in the animal world:

birds use alarm calls to warn others about nearby predators. Perhaps humans were able to put those simple semantics into a coherent space: a narrative. That calls upon something which almost no other species does: mental time travel. “This is our ability to access our episodic memory and travel back and forth between time and space,” says Garcia-Pelegrin. “We could tell a story not about a predator that is threatening us now, but one which threatened us yesterday, or might threaten us in the future.”

We are not the only animals that do this: chimpanzees can do it, and, incredibly, some crows. “But, as far as we know, no animal does it better ›

Societies need a rigorous understanding of how stories work, and what effects they can have

MARTIN
RANDALL

FESTIVALS

CELEBRATING MUSIC AND PLACE

Opera in SICILY

18-24 OCTOBER 2024

Photograph ©Ben Eslovska

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The south-east corner of Sicily is blessed with many delights, among them a number of gorgeous 18th- and 19th-century theatres. This festival presents five performances in a selection of these atmospheric buildings, all of which are located amid breathtakingly beautiful Baroque towns and cities. Stay throughout in historic Ortygia, one of the loveliest coastal towns in Italy.

MARTIN RANDALL FESTIVALS bring together world-class musicians for a sequence of private concerts in Europe's most glorious buildings, many of which are not normally accessible. We take care of all logistics, from flights and hotels to pre-concert talks. Festivals in 2024 also include: Mozart Along the Danube (28 July-4 August) and The Divine Office (30 September-4 October).

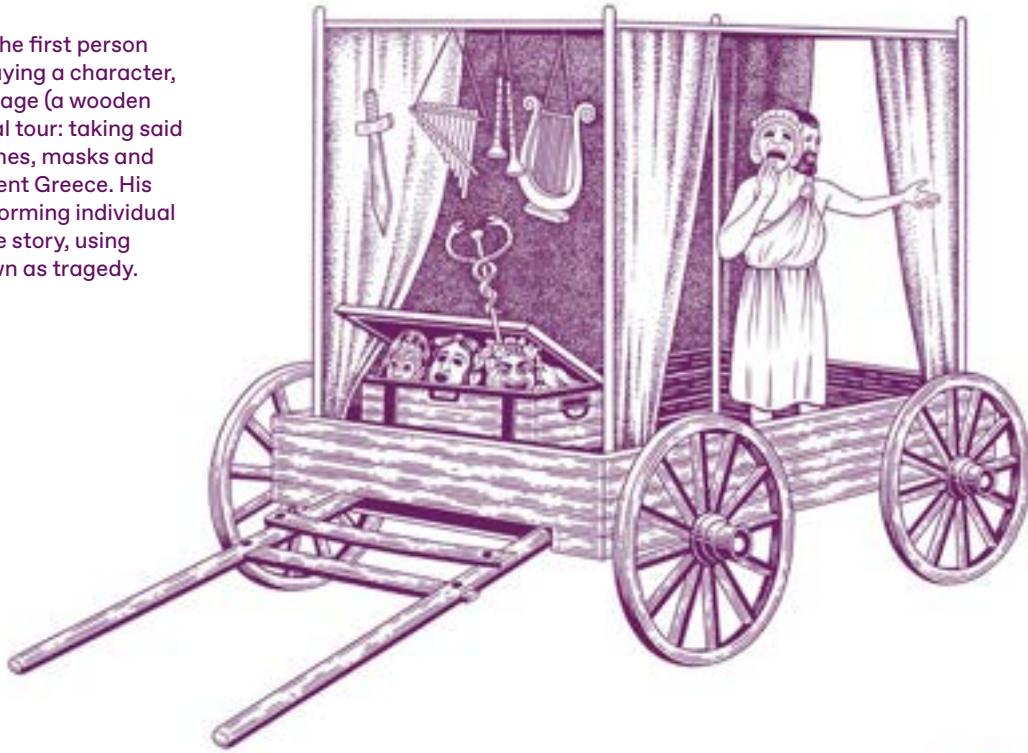
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THESPIIS

Thespis was not only the first person to appear on stage playing a character, he also invented the stage (a wooden cart), filled with costumes, masks and props, to cities in Ancient Greece. His innovative style – performing individual characters in the same story, using masks – became known as tragedy. It has also caught on.



The suggestion is that stories are dangerous because you can't control or categorise them the way you can with other forms of evidence

than us," says Garcia-Pelegrin. "In my opinion, when we evolved this extreme cognitive complexity to navigate between the past, the present and the future – that's when storytelling became intrinsic within humankind. And the fact that we can do it better than anything else gave us an evolutionary advantage. Otherwise, we wouldn't have it."

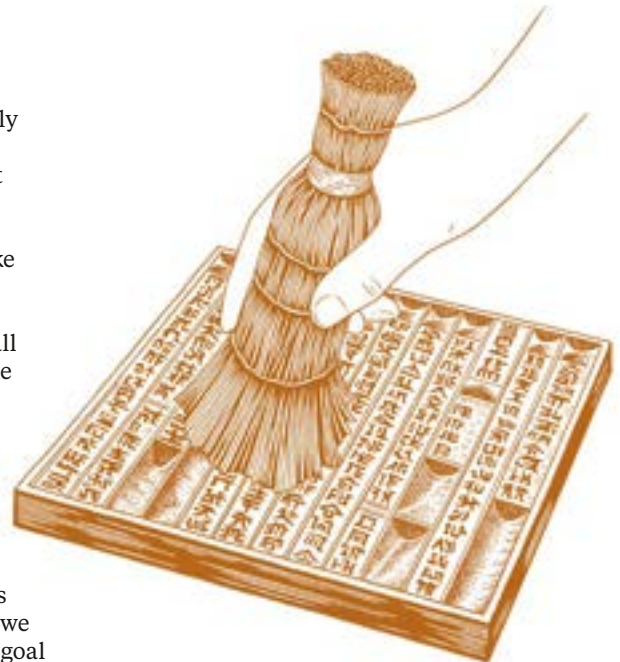
One might ask, for example, why on earth we love a story about the end of our own existence. Multiple reasons, says Lynskey. "Part of it is inhabiting your worst fears and turning them into entertainment. Largely, in most end of the world stories, the world doesn't quite end, and people survive."

It can be a way of appreciating real life: in Emily St. John Mandel's post-apocalyptic novel *Station Eleven*, Lynskey points out, a functioning airport, "which is normally a boring, annoying place to be" is reinterpreted as a taken-for-granted miracle. "But there also more misanthropic, or even nihilistic, writers who like to say how awful things are and imagine how good it would be if that was all

swept away, either in the classically apocalyptic sense of the Book of Revelation, in which the decadent old world is replaced by eternal Paradise, or with the opportunity for a bizarre new life that you make for yourself, which is a feature of JG Ballard novels."

These tropes would have been all too familiar to Reagan himself: the power of a good narrative was central to his success – and the success of many of his peers. "Storytelling is absolutely central to what politics is," says Dennis Grube, Professor of Politics and Public Policy. "Democratic politics, especially, is ultimately the art of persuasion – we need to bring people with us. The goal for politicians, I say, is to tell a story in a way that successfully persuades voters that the government is acting in their best interest, on their behalf, to tackle an issue in a way that works. That's more than regaling people with a list of facts, because facts don't speak for themselves. Facts need to be interpreted and placed in an order that makes sense." ›

Stories are a tool and a method for making sense of elements that we find difficult to make sense of in other ways



868 CE

THE DIAMOND SUTRA

In 1900, a Chinese monk cleaning sand in a meditation cave discovered a chamber filled with scrolls, untouched for 900 years. Among them was the world's oldest printed book – *The Diamond Sutra* – was found: a 16 foot-long scroll, printed by woodblock on paper, with an illustrated cover depicting the Buddha. Along with the Buddha's discourse, it also contains the first known example of open copyright: "Reverently made for universal free distribution by Wang Jie on behalf of his two parents on the 15th of the 4th moon of the 9th year of Xiantong [11 May 868 CE]."

AMBITION IN ACTION

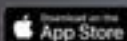
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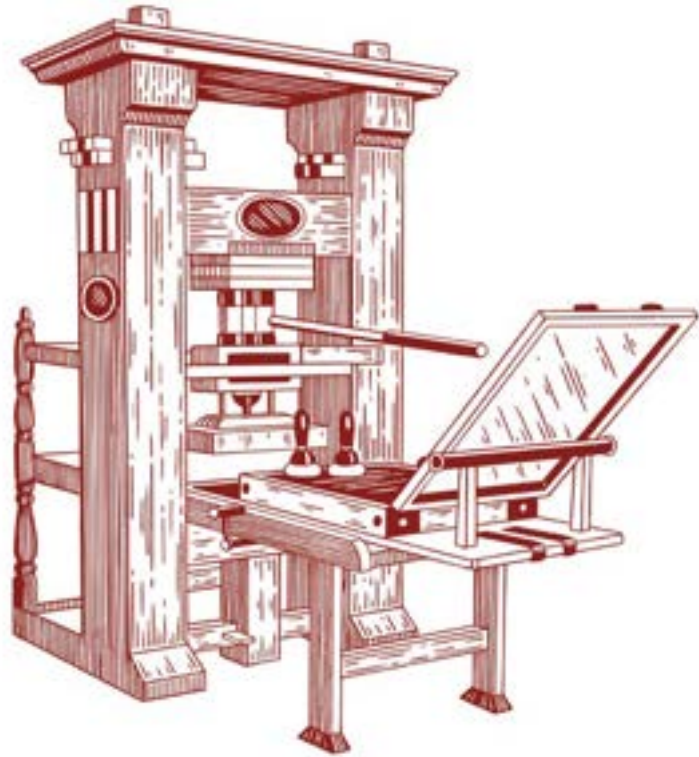
THE TALE OF GENJI

Legend has it that Murasaki Shiki, novelist, poet and lady in attendance at the imperial Japanese court, was inspired to write what is considered to be the world's first novel, at the temple of Ishiyama-dera, while staring up at the August moon. Ian Buruma, writing in the *New Yorker*, sums up her millennia-long appeal: "the keen, sometimes sardonic, and always worldly eyes of a medieval Jane Austen".



We are, as narrative theorist Walter Fisher says, *Homo narrans*. We are human beings defined by the stories that we tell and consume

Today's voters may well be more cynical than those who were exposed to Reagan's folksy anecdotes, but we are still likely to respond to stories that connect with our broader worldview. Grube cites the image of former Prime Minister Boris Johnson driving a JCB digger with 'GET BREXIT DONE' emblazoned on the bucket through a polystyrene brick wall, festooned with the word 'GRIDLOCK'. "On Thursday [election day], I think it is time for the whole country, symbolically, to get in the cab of a JCB – a custard colossus – and remove the current blockage that we have in our parliamentary system," Johnson announced afterwards. The



1454 CE

THE 42-LINE BIBLE

So-called as every page contains 42 lines of text, this was the first book printed in Europe on the moveable type printing press invented by Johannes Gutenberg, who has since been named one of the most influential figures of all time. It was an immediate sellout at the bargain price of 30 florins – around three years' salary for the average clerk. Gutenberg's achievements were recognised in his lifetime by Archbishop von Nassau, who granted him a stipend, an annual court outfit, 2,180 litres of grain and 2,000 litres of tax-free wine.

country duly obliged. "He's telling a story there," says Grube. "It's honestly the simplest story you or I could conceive of. And for that moment, it does the job that it needs to do. It persuades voters that he is the person to drive through this metaphorical wall. It's effective."

And as stories are ever-present and hugely powerful, we should take them more seriously, says Sarah Dillon, Professor of Literature and the Public Humanities, and co-author with Claire Craig (St John's 1979) of *Storylistening: Narrative Evidence and Public Reasoning*. Rather than shutting down English and creative writing departments and pushing STEM subjects to the exclusion of all else, she argues, societies need a rigorous understanding of how stories work, and what effects they can have. >



1896 CE

LA FÉE AUX CHOUX

The Fairy of the Cabbages is arguably the earliest film to tell a story – and the first to be directed and edited by a woman, Alice Guy. For those weary of three-hour epics, it is a commendable 60 seconds long, and involves a couple on honeymoon, a farmer, some cardboard cut-outs of babies, an actual baby, and many cabbages.

THE WAR OF THE WORLDS

“I had conceived the idea of doing a radio broadcast in such a manner that a crisis would actually seem to be happening and would be broadcast in such a dramatised form as to appear to be a real event taking place at that time, rather than a mere radio play.” Orson Welles’ radio adaptation of the HG Wells novel continues to intrigue: was it ‘fake news’? Was the mass panic it supposedly sparked a media-created myth? Was it, as *Vanity Fair* claimed, “history’s first viral media phenomenon”?



Part of it is inhabiting your worst fears and turning them into entertainment

“There is often a desire to dismiss stories, because from a scientific perspective, they are perceived to lack rigour or be overly seductive or persuasive,” she says. “The suggestion is that they are dangerous, in a certain way, because you can’t control them and categorise them the way you can with other forms of evidence. But our argument is that you can’t get away from stories. We are, as narrative theorist Walter Fisher says, *Homo narrans*. We are human beings defined by the stories that we tell and consume.”

Dillon and Craig’s Storylistening Framework provides a way for policymakers to use stories to gain insight into today’s wicked problems, like climate change, or unknown quantities such as AI bias. How might it work? Dillon cites the work of Joseph Weizenbaum, who created the first natural language processing software at MIT in the 60s. He named it ELIZA, after Eliza Doolittle in George Bernard Shaw’s *Pygmalion*.

“He called it that because it could be taught,” says Dillon. “George Bernard Shaw was an advocate of feminism. *Pygmalion* is a very interesting feminist text. What was Weizenbaum thinking when he chose Eliza as the name? What did he not learn from the text that he took the name from? That might have been helpful in informing

1946 CE

FARAWAY HILL

Soap operas had long been popular on radio, but *Faraway Hill* was the first to televise this new form of storytelling. Delving into the life and loves of wealthy New York City socialite Karen St. John, it featured an ‘all-seeing voice’ to advise the characters, which sadly never caught on. “Turn back, turn back, Karen St. John! Something inside you is sounding a warning – this is no place for you... How can you stay?”



and developing his thought and his practice in perhaps more equitable and just ways.” (ELIZA is still very much alive, incidentally: last year she beat OpenAI’s GPT-3.5 in a Turing test study.)

Using stories in this way, Dillon says, helps us understand those parts of the world that can’t only be understood by science. And stories themselves are a part of that world – like rocks or gravity. “Therefore, they deserve to be studied and understood, just like the physical parts of the world. They are a tool and a method for making sense of elements that we find difficult to make sense of in other ways – that involve complex interactions across multiple scales, that involve people and emotions, and all those things that social sciences find it hard to quantify.” Take the recent storm whipped up

There is often a desire to dismiss stories, because from a scientific perspective, they are perceived to lack rigour



2014 CE

SERIAL

Downloaded an estimated 300 million times, *Serial* – hosted and created by journalist Sarah Koenig – was the first podcast to go viral. The first and most famous season investigated the killing of 18-year-old Hae Min Lee and subsequent conviction and life sentencing of Adnan Syed, her ex-boyfriend. In 2022, his conviction was overturned and he was freed.

2023 CE

CHAT GENERATIVE PRE-TRAINED TRANSFORMER

By January 2023, ChatGPT had become the fastest-growing consumer software application in history, gaining more than 100 million users. How the ability for authors to write with the help of AI will change storytelling remains to be seen – though it must be said that no Austens, Joyces or Shakespeares have yet emerged. In July 2023, the *Independent* reported that Amazon was being “flooded” with AI-generated books, including such titles as *ChatGPT smarter than humans?*, *Make more money with ChatGPT*, and *The star weaver’s lesson: Magical bedtime story*.



1976 CE

COLOSSAL CAVE ADVENTURE

At just 700 lines of code and 700 lines of data (including descriptions for 66 rooms, navigational messages, 193 vocabulary words and miscellaneous messages), *Colossal Cave Adventure* could be considered one of the shortest groundbreaking texts ever created. This simple text-based computer game, created by programmer and keen cover William Crowther for his daughters, is the one of the first interactive fiction games, and the first which allowed a player to explore a virtual world – albeit through one- or two-word commands only. (The actual *Colossal Cave* is real: it’s in Kentucky, but sadly, unlike the game, has no dragon.)

by the ITV drama *Mr Bates vs The Post Office*, which brought a vast and complex story of institutional failure – which had previously gone under most people’s radar – to the attention of a horrified nation. We have yet to see the full consequences of the fury this story unleashed. But they could be huge: for victims, for perpetrators, for governments.

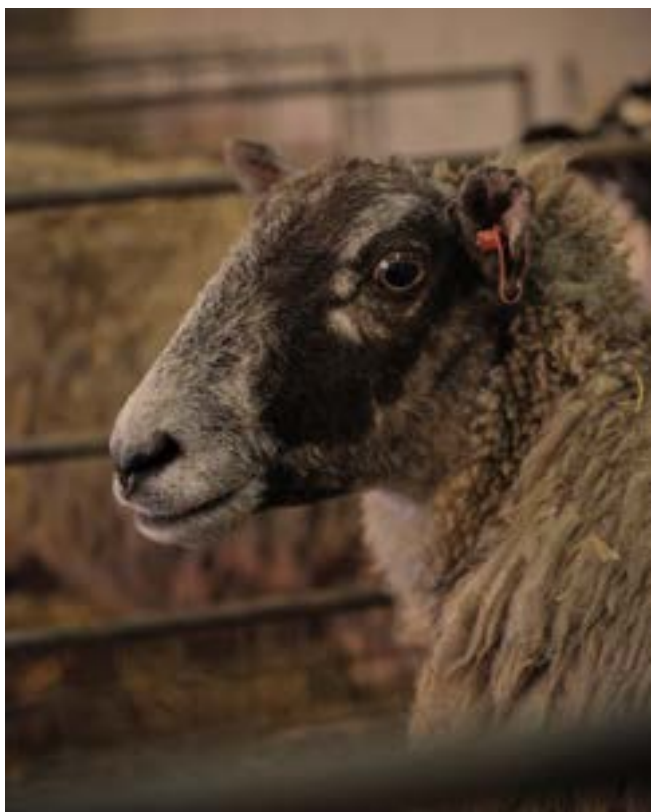
And while, for most of us, stories will have personal not political ramifications, that makes them no less powerful. Yvonne Battle-Felton, Associate Teaching Professor and Academic Director of Creative Writing at Cambridge University Institute of Continuing Education, tells the story of her grandfather. “He longed to be a musician and dreamed of going on the road. His family needed a steady income so he took to teaching the piano. He never fulfilled his dream.” But Battle-Felton fulfilled hers. “From his story, I’m reminded of what it’s like to have a dream and never being able to pursue it – and the importance of following those dreams and making sure that my children get to see me do it.”

When Battle-Felton started a true story open mic night, encouraging people to come and tell a story about themselves, she was startled by those who thought they didn’t have a single story to tell. “Because they hadn’t climbed a mountain,

or done something that other people thought was important, they didn’t think they had a right to tell their story. And that still saddens me. We need to be able to tell our own story and write our own story. It’s a powerful thing, being able to write where you see absence. If you don’t see yourself reflected, then it’s easy to tell yourself there are certain things you can’t do.”

Lose stories, she says, and we lose our future. “We can’t allow that. Those in power read, watch movies, go to theatres. But they don’t think other people deserve to. We need to write another ending into existence, where stories are valued. If we do that, more and more people will be able to imagine that ending, visualise it and achieve it.” ☺





↗
Fourth Year Veterinary
Medicine students Millie Green
and Lana Rogan.

→
Shepherd Toby Wilson with
Pip, his sheepdog in training.



Two hundred cows. Three hundred lambs. Two hundred and fifty hectares of arable. And a wood. Just four miles from Cambridge... welcome to the University's farm.

WORDS CLARE THORP PHOTOGRAPHY JULIAN ANDERSON



Cambridge in February. Bitter cold. Middle of the night. As his friends stumbled in from a night out, vet student Ollie Bardsley (Magdalene, Fourth Year) got the call. It was his turn to be on lambing duty at Cambridge University's Park Farm, and one of the ewes was about to deliver. But this was not just any ewe.

"The most common number of lambs is two. Sometimes you get triplets, and very rarely get quads," Bardsley says. That year, however, one of the farm's ewes was indeed expecting quads. "I wasn't particularly confident about lambing, and my friends kept joking that the quad ewe was going to go into labour the night I was there. And of course, at 3am, just as the delirium was starting to set in, she did."

There was initial panic, especially as his fellow student was tied up with another delivery – but eventually, together, they delivered four healthy lambs. "I've got a photo on my phone of me with them. It was such an important experience for me." >

My friends kept joking that the quad ewe was going to go into labour the night I was there. And of course, at 3am, just as delirium was setting in, she did

Because if you want to become a vet, books can only get you so far – practical, hands-on experience is vital. Which is where the University’s farm comes in. “I’d never been near cows or sheep before,” says Bardsley. “But as students, we have to know how to handle and treat all of the major domestic species. So it’s really important that we get that experience.”

Cambridge has owned a farm since 1900. Originally at Impington, it moved to Gravel Hill in 1910, before relocating to its current home in Madingley in 1997. Encompassing more than 250 hectares, the farm is home to 230 Holstein FriesMcCrone cows and a flock of 250 North Country Mule sheep. And on most days, alongside the animals, you’ll also find a herd of students.

“It’s very convenient and gets heavy use,” says Ian McCrone, Professor of Farm Animal Health and Production. “It gives students who haven’t had the opportunity to be on a farm to see how it works and to be involved with species they’ve not had experience of before.” First year students start with an introduction to handling large animals. “Then we’re teaching them anatomy, basic husbandry, clinical examination and, in final years, we’ll do a lot of herd health,” says McCrone. Fourth Year students are responsible for the lambing each year.

But Park Farm isn’t just an incredible teaching resource, it’s also a commercial business, operated as part of the Estates Division. The dairy unit produces around two million litres of milk a year, supplied to Arla, the fifth biggest dairy company in the world. It is also an innovator.

“The students are getting exposure to a state-of-the-art farm,” says Professor Mark Holmes, Head of the Department of Veterinary Medicine. “The farm was a lot less commercial in my day,” he says of his time as a vet student at Fitzwilliam. “We used to go with a bucket to the dairy herd to get milk and put it in our coffee and on our cornflakes. Needless to say, that wasn’t a very good idea, and the students definitely learned about the value of pasteurising milk.”

Things have moved on significantly since. Paul Kelly joined as Farm Manager in 2019 and is one of four core farm staff. “It’s surprising how many people within the University don’t know we exist,” he says. As well as managing the livestock and day-to-day operations, his role also involves finding new ways to make the farm as sustainable as possible. The agricultural industry is a major producer of greenhouse gas emissions, which contribute to climate change, so the industry as a whole is taking steps to address this. Park Farm is a leader in this space, and in 2023 was

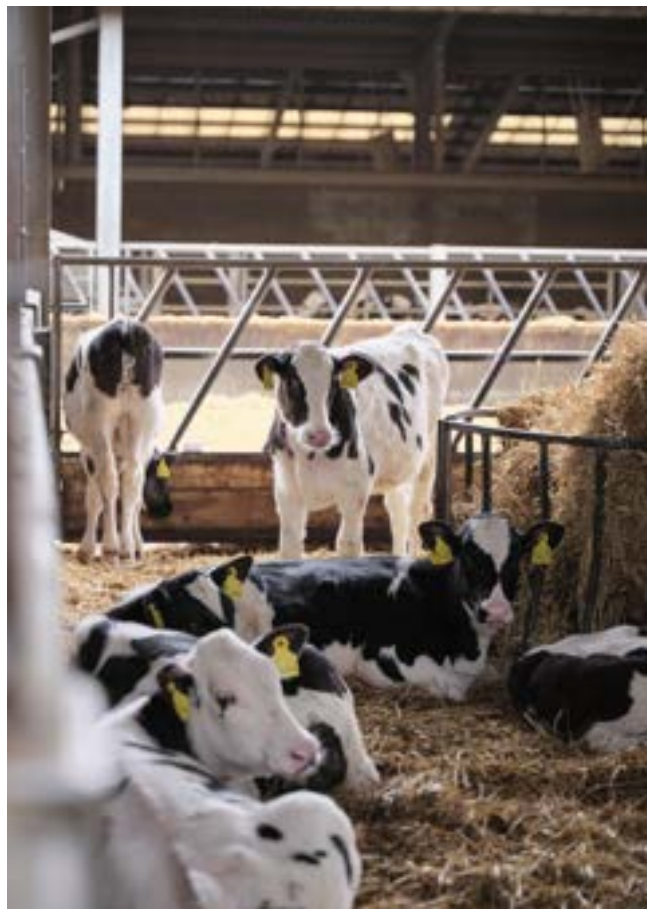
named a Leaf Demonstration Farm, in recognition of its sustainable farming practices, and commitment to improving biodiversity and reducing the carbon footprint of its dairy enterprise.

Steps taken include regenerative soil practices, installing solar panels, and cutting back on purchased feeds while maximising the farm’s own silage production. In four years, the carbon footprint of milk produced at the farm has fallen from 1.27kg of carbon per litre to around 1kg.

And what benefits the environment has positive outcomes for the farm too. “We’re focusing on lowering the farm’s carbon footprint,” says Kelly. “And the flipside is that the technical advances improve the efficiencies of the farm.”

In 2021, the farm installed a slurry-fed anaerobic digester that converts waste from the cows into methane gas, which is then harvested off and converted to electricity. “Around half of our daily produced slurry goes through the anaerobic digester, and it currently produces slightly more than half of our electricity requirements,” says Kelly. Waste from the ›

It’s a voluntary milking system, the cows are not forced to go in and get milked. They go in whenever they want



↘
Farm Manager Paul Kelly says robotic milking is one of the fastest growing developments in agriculture.



When you've been stuck in lectures it's really nice to get out on the farm and remind yourself why you want to do this

anaerobic digester is spread back on the field to help grow crops to feed the cows. "I like to think of it as the circle of farming," says Kelly, who hopes the farm will have a methane-powered tractor in the future, too.

Not that it isn't already at the forefront of farming technology. In the dairy shed, cows patiently queue up of their own accord to be milked, as they have done for more than the decade since the farm became an early adopter of robotic milkers. When a cow enters the milking area, the machine scans its collar to identify the cow, adjusts its measurements accordingly and – after a brush disinfects and cleans the teats – attaches itself to the cow, who is busy munching on some food.

"It's a voluntary milking system," says Kelly. "The cows are not forced to go in and get milked. They go in whenever they want." That works out an average of 3.2 times a day. The cows' collars feed back data on their behaviour – how often they've been milked, how much they produce, feeding habits and how active they are during the day. "Robotic milking is one of the fastest growing developments in agriculture, because it's such a struggle to find staff to do that job now," says Kelly.

"A big advantage of robotic milking is that you don't have to be there at three or four in the morning."

Emily Craven (Murray Edwards 2007) was there when the new system was brought in. "I was helping push the cows up towards the robots on the first night," she said. "They needed a little bit of help to understand at first as they were used to going to the parlour." She says it's not just experience with animals that Park Farm offers, but a vital understanding of the challenges farmers face and the importance of building a relationship with them. "Whatever we want to achieve with our animals is reliant on communication with a farmer. What I love about farm practice and particularly dairy is that you get to form good relationships with your clients, because you work with them consistently."

Craven's time on Park Farm helped convince her to specialise in farm animals. After graduating, she went on to work as a farm vet, and in 2019 she won the British Veterinary Association Young Vet of The Year award. "When you've been stuck in lectures it's really nice to get out on the farm and remind yourself why you want to do this," she says. "But what is also so great is that the farm offers a really safe space to learn. You don't have to worry about asking stupid questions, and can take as much time as you need."

Craven is currently studying for a PhD in farm animal welfare, something that's also a priority for Park Farm, which views its cows as employees of the University. "Our farm animals do far more than just provide milk, they also help train the vets of the future," says Holmes.



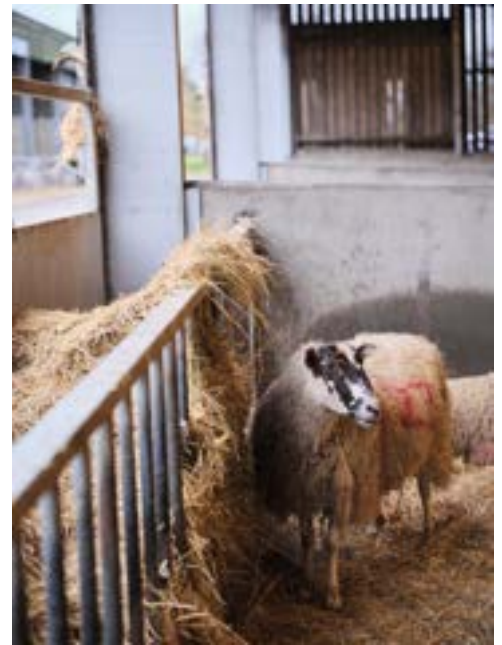


←

Millie Green, Fourth Year
Veterinary Medicine.

↙

Ellie Laughton, Fourth Year
Veterinary Medicine.



“In return we owe it to those cows to give them the right environment and the best possible care. Something like lameness is still a problem, but we’re working very hard to try and make it better because every cow that is limping is one that is suffering. We look at the design of the buildings to reduce the wear and tear on their feet. We’ve made sure that their nutrition supports the health of their feet, and we’re thinking about how we breed cows to have better feet.”

At Park Farm all cattle undergo genomic testing when young. “We’re able to predict the animals with the best potential to be the healthiest, the most fertile, the most milk producing, the best on their feet and the best feed converters,” says Kelly. The farm then only breeds from these animals to replace the milking herd – using artificial insemination with sexed semen to guarantee a female.

We’re focusing on lowering the farm’s carbon footprint, and the flipside is that the technical advances improve the efficiencies of the farm

As farming changes, so does veterinary medicine. With access to new technology and data, the emphasis is shifting from treating medical emergencies to preventative medicine and care. “When you start out in your career, it’s really exciting to bring calves back from the brink of death with clever fluid therapy and things like that,” says McCrone. “But preventing those calves ever getting into that state in the first place is much more important for the farmer and better for the animals.”

Combining a teaching facility with a commercial farm is a juggling act, and any decisions are made with all parties in mind. “We’re aware that the farm is only here because there’s a vet school here, and I’m also very aware of how important the farm’s success is for our veterinary teaching,” says McCrone. “We work together very well.”

Those who come to study veterinary medicine at Cambridge in years to come are likely to find increasingly innovative facilities at Park Farm. “We’re still on that journey,” says Kelly. “There’s lots more to do and improvements to be made. I have some big ideas to take the farm forward, without losing sight of the fact that we are a teaching resource to develop the successful vets of the future.” ☺

Cricketer-turned-psychoanalyst Mike Brearley says to balance the different sides of our personalities, we need to captain ourselves.

WORDS LUCY JOLIN PHOTOGRAPHY CHARLIE HOPKINSON

Michaelmas Term, 1960. Mike Brearley (St John's 1960), classicist and soon to star as Leader of the Chorus in the Greek Play, had a choice to make. Continue with thespian life or... switch to lacrosse (whose matches clashed with rehearsals). Brearley had to decide – and he opted for lacrosse. The play's director, Dadie Rylands (King's 1921), a significant figure in the Bloomsbury Group, was not impressed.

“At an early rehearsal, I apologised and said I couldn't do the play,” remembers Brearley. “And Rylands announced to the cast: ‘This young boy has chosen to play netball for the University.’ He was a nice man, though: he even offered me a smaller part. But there has always been a degree of tension between my two sides: the sports side and what you might call the intellectual side. And I have always been aware of the ways in which people on both sides treat the other side with disrespect – intellectuals being snobbish about mere sporting hearties, and sports people being disparaging of intellect, of thinking about things, and of seriousness about intellectual pursuits.”

Brearley explores how you can reconcile the different sides of your personality in his latest book, *Turning Over the Pebbles*. His own sporting side, of course, is well known: he was captain of the England cricket team from 1977 to 1981, winning 18 test matches and losing only four. The following year, he was recalled to the captaincy for the Ashes home series and led England to one of their most famous victories. He is regularly name-checked as one of England's greatest captains.

But after reaching the pinnacle of his sport, Brearley chose to explore his intellectual side, becoming first a philosophy lecturer at Newcastle University and later, in 1985, a psychoanalyst – a profession that he has practised for the past 38 years. And in fact, he thinks the two sides have proven complementary. He recalls his friend,

legendary cricket commentator John Arlott, writing a piece about him headed “Physician, heal thyself”.

“He was talking about my cricket; that I could perhaps help some other people better than I could help myself. I thought it was a good point. When we think about captaincy or leadership, we think of someone being at the front, pointing the way to others and telling them what to do. And that is one element of captaincy. But it seems to me that listening to people, finding out what they are like and what they need to do, and how they can help themselves or develop themselves or heal themselves is just as important.”

He remembers the contrast between Ian Botham and Bob Willis, who he says are two of the best cricketers he has played with. On the surface, they seemed similar: extrovert, lively, argumentative and fun. “But one was more sensitive to criticism than the other. I could say to things to Botham that were hard for him to take, and it would stir him up into more action or more aggression, which perhaps was what was needed at the time. I could say things that he didn't want to hear about his batting and he might disagree or argue, but he would then think about it and come round. Whereas if I was a bit too caustic to Bob, it would make him less confident rather than more confident. It's about knowing what makes someone tick.”

Just like a team, he says, an individual has different players within the self. “As with sports people and intellectuals, each side tends to put the other down and you feel like you are stupid or to blame for having this apparently alien thought or attitude. We all have an indulgent side, a playful side, a serious side, a work ethic, a superego or a harsh conscience.”

And just as a good captain must work to reconcile those different sides, we can learn to captain ourselves. “You nudge yourself, rather than force yourself. It's a slightly different place, a different orientation, a questioning of one's way of being



Mike Brearley OBE captained the England cricket team 31 times between 1977 and 1981, winning 18 and only losing four. He was President of the MCC in 2007-08, and President of the British Psychoanalytical Society 2008-10. His latest book, *Turning Over the Pebbles*, is published by Constable.

in some aspect. There is always more to do. One of the things I like about working with patients and working as a supervisor of other analysts or therapists is that you are always learning. For every two steps forward you take, there's going to be one step back. Nothing is ever completely achieved."

Aristotle had it right, says Brearley, with his theory of balancing or reconciling different attitudes, each

of which is part of ourselves, and necessary.

"He spoke about the morally good person and the happy person. The Greek word for happy is somewhere between 'morally good' and 'fortunate'. Having good fortune is a person who can keep things in balance within the self. It's about finding harmony and being respectful of disharmony. Breakdowns can become breakthroughs."

This idea must die: “Gen Z are lazier than previous generations”

Professor Thomas Roulet says, actually, we must all adjust to the new working environment to hit our true potential.

INTERVIEW JO CAIRD ILLUSTRATION GEORGE WYLESOL

Ask any senior business leader for their top HR issue and you'll get one answer. Laziness. Not everyone, by the way. Just younger generations, who are perceived to be lazier at work than their predecessors ever were.

But despite a thousand headlines about why Gen Z don't have the same work ethic as their parents, this idea is not new. In fact, every generation thinks the workers coming up behind them are lazier than they were themselves. In my lectures I show covers of old business magazines going back decades, all of which are concerned with this issue of generational divide in the workplace; the idea that the generations are motivated by different desires.

But in fact... it's not true. A 2008 study in France looked at younger generations' motivation at work and compared it to a similar study from 1972. They showed more or less the same results: both cohorts of young people wanted interesting work, a good working environment and to earn a decent living.

What changes across the generations is what we ask from work. Because work has become a more significant part of our life, we ask our employers to provide us with impact and growth, but also not to overshadow our personal lives. The result is that the demands on employers of Gen Y and Gen Z are greater than the demands of older generations. It's not that they are motivated by anything different. It's just they give more to their workplace so they ask more in return.

It's a trend that has been accelerated by the shift to hybrid working, because there is now more space for employers to offer more to their employees. This leads to variance in what employers offer, which obviously creates equity issues, followed by even more demand from employees.

The wider economic context is important here too. While for older generations work was a guarantee of financial security, enabling you to buy a home and pay the bills, that's no longer the case today. So if work isn't offering security, it has to offer something else – purpose, flexibility and a work-life balance.

There is a lot of research available now showing that being an ethical company and providing your employees with a sense of purpose generates motivation and job satisfaction.

In times of uncertainty and crisis like today, people entering the job market tend to look for roles that give them purpose, and if they don't find that purpose, they naturally disengage from work.

And if you look at what's happening with 'WorkTok', a Tiktok trend with 2.3 billion views where people comment on the world of work, you might conclude that younger people are lazy and overly demanding. What's actually going on here is that they are just reacting to work taking more and more space and not giving them the purpose that they are looking for in life. WorkTok is about a failure of organisations and employers to keep people motivated.





Employers love the idea that people have become lazier, because it enables complacency on their part

Employers love the idea that people have become lazier, because it enables complacency on their part. Putting all this down to generational differences absolves them of the responsibility to do anything to fix the situation.

If we come to the conclusion that younger people are not worth the time and the effort, it means we don't work on getting them engaged and don't prioritise helping them to build meaningful connections in the workplace. Generations are motivated by the same factors, but you might have to change your strategy, to put more emphasis on the purpose of your organisation, to get younger people on board.

Organisations, and professional service firms in particular, cannot afford to lose the engagement and the hard work that younger generations are ready to put in. Their advantage is their human capital, so they need new entrants in the workplace to be motivated, excited and committed. It's been a useful wake up call for those firms to start thinking about how they can meet the demands of new entrants. Because if they don't, they will have a disengaged workforce that will make them lose their competitive edge.

If, as a leader, you conclude that your employees are lazy, you could be missing out on a whole lot of potential.

Professor Thomas Roulet is Professor of Organisational Sociology and Leadership at Cambridge Judge Business School.

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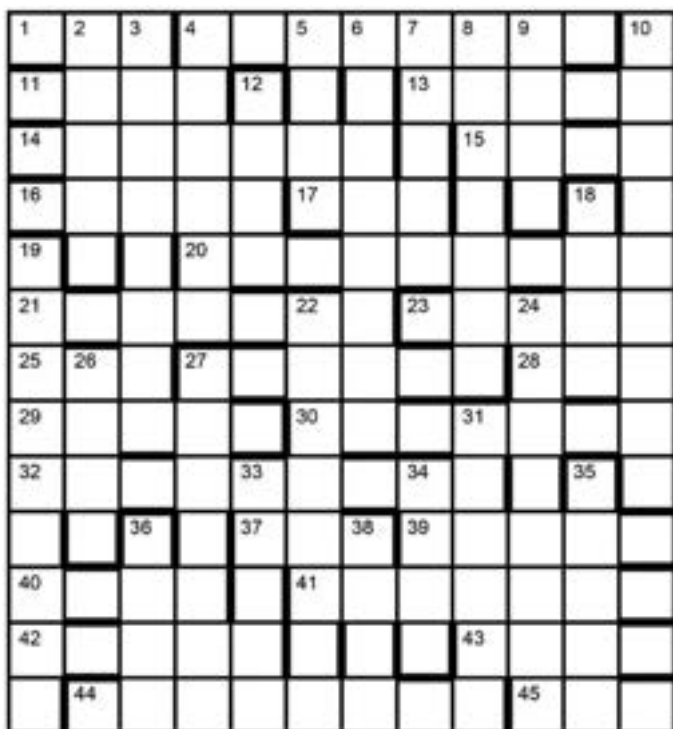
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2s, 3s & 5s by Nimrod

Two integers x and y , terms 2 and 3 in a mathematical series, are to be deduced. Each term in the series is described by reading – in order, in two sets of x across clues – the 2nd, 3rd or 5th letter of the superfluous word in each clue. Five exemplars uniquely identify y : (i) letters obtained in the same way from two sets of x in the remaining clues; (ii) the rest from sets of x in the grid, which must be highlighted.

In three other clues a sequence of, respectively, 2, 3 and 5 letters must be removed before solving: unjumbling each sequence successively provides a further two-word hint for the highlighting.



Across

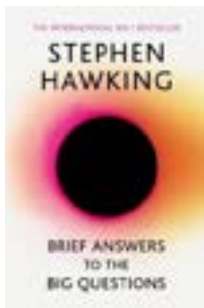
- 1 Worker spies children dropping out of tree (3)
- 4 *Guardian* man's endlessly bullish about reference books (8)
- 11 Novel plots from them, maybe (4)
- 13 I forgot to tell you I agreed upon particle physics (5)
- 14 First-time-out female jockey coming clean (7)
- 15 This pilgrimage through Buddha's birthplace makes flagrant charge (4)
- 16 Airline flies Pole back (5)
- 17 Some local railway tracks about town (3)
- 20 Commander cunningly stationed counteracting agents (9)
- 21 Belting up, this person now back in seat, for unconventional departure (7)
- 23 Empty a Scottish stream (5)
- 25 Supply minibus following misfortune (3)
- 27 Go round in hell topless, would secretary (6)
- 28 Fans see replay off and on (3)
- 29 Cox shifting section aft spreads weight, technically (5)
- 30 Urge to acquire perfume (7)
- 32 A bottle drip-feeding overdose by turns? Not necessarily (9)
- 37 Openings for registrars and nurses (3)
- 39 Old stamping ground's retro dishes (5)
- 40 Unbridled bunkum about City brokers (4)
- 41 At front of display cabinet lies gold tooth (7)
- 42 Leader of Islamic believers from Mumbai, possibly? (5)
- 43 Taking a westward route, drew near summit (4)
- 44 Up and moving the charges without a war, any (8)
- 45 Strain from country cycling anticipated of course (3)

Down

- 2 In truth policemen don't change for the better (5)
- 3 Bride overlooking a special bubbly table mates arrange for engagement (8)
- 4 Deposit mutinous sailors (6)
- 5 Books culprit, having picked up dive at Brisbane Road? (4)
- 6 Through lowest points, what comforted rising playwright (8)
- 7 One year in home was enough for objectionable old man (5)
- 8 Taking old money between him & me and her & me sorted our budget (7)
- 9 Foreign royal's boosted opening ceremony (4)
- 10 Saunas, say – wholly edifying bathes yet to be tried (9)
- 12 High School afraid to ring one number belonging to man in the village? (4)
- 18 Springy, I've fable to perform (4)
- 19 She's on the tail of a shifty copper in a train moving south of Belgium (9)
- 22 One stops showing a capital T for Tolstoy? (8)
- 24 Furnish sparkling tinsel trim for Christmas trees (8)
- 26 Patriarch oversees case of love and sex (4)
- 27 Wall in northern bar keeps shelves of Bud hidden (7, 2 words)
- 31 The lecherous look of the old earl, regularly picking up ladies (6)
- 33 Misguided belief she'll be looking after her pups (5)
- 34 Stupidly pass up hot water north of the border (4)
- 35 Large dormitory scrubbed, shifting obstinate dirt (5)
- 36 Boat ready for Chinese guy leaving Mexican peninsula (4)
- 38 One thousand hot cross buns (4)

All entries to be received by 31 May 2024. Send your entry:

- **by post to:** CAM 101 Prize Crossword, University of Cambridge, 1 Quayside, Bridge Street, Cambridge CB5 8AB
- **online at:** magazine.alumni.cam.ac.uk/crossword
- **by email to:** cameditor@alumni.cam.ac.uk



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Solution to CAM 100 Crossword

"DON'T STOP ME NOW"

Celebrating CAM's milestone, the thematic answer is 4dn TON-UP. (a) As suggested by other fast things in Queen's "Don't Stop Me Now", the perimeter reads GREASED LIGHTNING, A BAT OUT OF HELL, THE CLAPPERS, THE WIND; (b) TON is put UP in TON-UP, UNDERTONE, DETONATED, PITONS and CANTON; (c) CENTURY and FASHION, synonyms of TON, are put UP in the final grid, and highlighted.

Winner: Rachel Omotani (Girton 1967)
Runners-up: Charles Reid-Dick (St John's 1969) and Bernard Banks (Trinity 1970)



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