



Cambridge Alumni Magazine
Issue 95 – Lent Term 2022

Touchdown! How the Pythons
bring America to Cambridge.

What does it mean to be human
in a technological world?

Another way: a new approach
to breast cancer treatment.

C A M



Immortalise your unique academic journey.

Officially and exclusively licensed by the University of Cambridge using quality British design from Bremont, this limited edition Cambridge watch celebrates your unique journey at one of the most decorated academic institutions in the world.

www.oxbridgewatches.com

Officially licensed by



UNIVERSITY OF
CAMBRIDGE



OXBRIDGE
WATCHES

Cambridge Alumni Magazine

Lent Term 2022

Issue 95

Editor

Mira Katbamna

Managing editor

Steve McGrath

Design and art direction

Rob Flanagan

University of Cambridge

Elizabeth Warr

James Hardy

Charis Goodyear

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)20 7520 9474
sharon@lps.co.uk

Services offered by advertisers
are not specifically endorsed
by the editor, YBM Limited
or the University of Cambridge.
The publisher reserves the
right to decline or withdraw
advertisements.

Cover

Adam Lawrence

Copyright © 2022
The University of Cambridge.
CAM is published three times
a year, in the Lent, Easter and
Michaelmas terms, and is sent
free to Cambridge alumni.
It is available to non-alumni
on subscription. For further
information please email
contact@alumni.cam.ac.uk.

The opinions expressed in CAM
are those of the contributors
and not necessarily those
of the University of Cambridge.

CAM is produced for the
University of Cambridge
by YBM Limited. ybm.co.uk

YBM



03 Inbox

04 Campendium

07 Student life

In the huddle with the Pythons
American Football Club.

08 My room, your room

Professor Stephen J Toope
and first-year Joseph Crouch.

11 Museo

The treasures and skills
of the Saka people.

12 Best friends forever?

How will the 70-year old
'special relationship' between
the US and the UK fare over
the next 70 years?

18 Night climbers

The 1937 edition of *The Night
Climbers of Cambridge* lifted
the lid on a secret world that
– some say – still exists today.

24 The human touch

Professor Caroline Bassett
is asking what it means to be
human in a technological world.

28 Breast cancer

Pioneering research, care
and treatment under one roof,
at the Cambridge Cancer
Research Hospital.

34 Cambridge Africa

Camels are a vital part of the
social and economic fabric
of Kenya. When they get sick
it impacts a whole way of life.

40 Alumni groups

Why there really is strength
in numbers.

43 Cambridge soundtrack

Folk musician John Spiers.

44 This idea must die

Examining the role of grammar
schools in social mobility.

47 Crossword

48 Search it up!

Your alumni directory.



Welcome to the Lent Term edition

of CAM. As I write this, the world seems far more unsettled than it has for many decades. As the tectonic plates of geopolitics shift, what does the US really think of its 'special relationship' with the UK, now more than 70 years old? And what do the coming decades hold? We find out on page 12.

Each new wave of technology creates profound ethical, political, moral and social questions about what it means to be human. How do we explore these issues? Welcome to the 'digital humanities' – and meet our guide, Professor Caroline Bassett, on page 24.

Elsewhere, on page 34, we explore the impact of a tiny parasite on the lives and livelihoods of nomadic communities in northern Kenya, and on page 28, discover how pioneering Cambridge research can deliver personalised medicine at the Cambridge Cancer Research Hospital.

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, email or on social media.

Mira Katbamna
(Caius 1995)



CAM online

Check out our new digital home:
magazine.alumni.cam.ac.uk

Write to us

We are always delighted to receive your emails, letters, tweets and Facebook posts.

 cameditor@alumni.cam.ac.uk

 CAM, 1 Quayside, Bridge Street,
Cambridge CB5 8AB

 @Cambridge_Uni

 facebook.com/cambridgealumni

 linkedin.com/school/university-of-cambridge

Letters may be edited for length.
Please mark your email:
'For publication'.

How we use your data

We are committed to protecting your personal information and being transparent about what information we hold. Your data is used by us for alumni and supporter relations, and for fundraising. Please read our full data protection statement at alumni.cam.ac.uk/data-protection. You can update your mailing preferences at any time, or stop all communications from us, by following the link in the footer of each electronic mailing or by visiting alumni.cam.ac.uk/update.

Inbox

CAM 93

✉ Jack Cohen's letter (CAM 93) posits the Cohen Singularity when robots will play themselves in movies. This leads us to wonder how long the world must wait until an even newer singularity sees robots playing humans.

Leslie Clarke (Queens' 1948)

✉ Quentin Letts is, of course, wrong (Inbox, CAM 93) to say that the Brexit revolution was bloodless: an MP was murdered. And I question his logic that says that consensus is bad because public opinion may be "tribally" divided, and "parliamentary ding-dongs are a sign of democratic strength". You only have to look to page 11 of the same issue, where Professor Oldroyd writes: "The longer we stay in a polarised debate, the less time we have to deliver the step change we need."

Steve Rothman (Churchill 1982)

✉ The excellent article on housing problems (Living Room, CAM 93) concludes that thinking about the needs of local people is crucial, but traditional consultation methods can fall far short of the mark. The community-led housing movement, where housing projects are designed by the community rather than for them, has made huge differences to many lives in the US, and has been well-grounded in rural areas of the UK for several decades. London CLT is one of the pioneers in UK cities, working hard with communities to create

permanently affordable homes and transform neighbourhoods. And readers interested in the subject should be aware of Leilani Farha's amazing work in this area.

Kate Gould (née Cartmell, Clare 1991)

✉ The University Appointments Board (Careers Service, CAM 93) may not have known just how well some of their recommendations were turning out. At my interview in 1952, I told the board I spoke four languages and liked writing and travelling. They suggested a career as foreign correspondent with Reuters. One of them turned to the others and said: "Didn't we send a young chap there recently? I think he was called Chancellor." Soon after, I was at Reuters for a series of interviews, the last of them with a not-so-young chap called Chancellor – Sir Christopher Chancellor, who by then had risen to be chairman of the Reuters board of directors. He took me on.

Peter Howard (St Catharine's 1949)

✉ While CAM 93 covered science and technology issues well, it was good to have the counterbalance of the Vice-Chancellor's article (This Idea Must Die) defending the humanities. In his closing paragraph in which he refers to "the myriad ways in which the humanities help us understand humans and humanity", I note that he shies away from mentioning religion. Here we understand the forces that have shaped us

– and incidentally have shaped the University. We neglect or downplay their importance to our impoverishment.

Peter Pattison (Pembroke 1957)

✉ I particularly liked to see the article on the question of just wars (Just War?, CAM 93). My fear for the future is that as global warming gets worse and natural resources more depleted, we will begin to fight over what is left. We will also see mass migration from countries that are too hot for human beings to more temperate climates away from the equator, which will generate conflict over land.

John Gamlin (Fitzwilliam 1958)

🐦 "This is a bit meta isn't it?" says the prof who is in the Cambridge alumni mag...



Rory Cellan-Jones (Jesus 1977)

CAM 94

🐦 Really enjoyed this issue, especially the article (My Garden, Your Garden, CAM 94) about King's College wildflower meadow. Great to see thriving biodiversity and

attention to the potential of the soils and the specific site, rather than considering only what society might want.

Laura Day (St John's 2014)

✉ When my daughter was five or six somebody gave her a T-shirt emblazoned with the message "Kids are people too". We all smiled wryly. James Biddulph's thought-provoking article (Brainwaves, CAM 94) about the importance of dialogue with schoolchildren reminded me of this and of the conundrum about how to remain open to children's wisdom while having to provide them with useful knowledge. Striking the right balance between delivering a knowledge-based curriculum and giving youngsters the chance to be heard remains a challenge, but one worth rising to. Overprescriptive national educational requirements can be a straitjacket to liberating young minds.

Peter Chapman (Caius 1966)

✉ I'm happy that we have enough science and engineering to be able to substantially reduce global CO₂ emissions now. Further progress is no doubt possible, but is not essential right now. What is needed is the economic, political and social environment that will drive rapid deployment of what we have, and these must be the areas for priority development. I do not agree with the tactics of Insulate Britain, but it's a job that needs doing urgently and it's not happening.

John Heathcote (Queens' 1973)



Big number

10.5m acres of land that explorer William Clark planned to steal, as revealed by a newly decoded map

cam.ac.uk/land-grab



Philanthropy

Dear World... we did it. Cambridge campaign delivers lasting impact

The 'Dear World... Yours, Cambridge' campaign has delivered incredible impact across the Collegiate University, from bursaries, scholarships and new academic posts to new institutes and centres and funding for capital infrastructure.

A few examples: 30 students have so far received bursaries created by the Get In Cambridge campaign, while an extraordinary gift from David and Claudia Harding enabled the Harding Scholars Programme, which now supports 78 students from 30 countries. Planning for the ground-breaking new Cambridge Children's Hospital is well under way, with the campaign board continuing to attract new members and the first seven-figure gift having been secured.

And Cambridge Zero has recently received funding from the Natural Environment Research Council and Quadrature Climate Foundation. Together, they will fund a new Centre for

Landscape Regeneration at Cambridge. This will focus on regeneration of the British countryside with nature-based landscape management solutions and will aim to tackle environmental threats to home-grown produce, reduce carbon emissions, secure water resources, manage flood risk, enrich biodiversity and improve resilience.

"These funds ensure that Cambridge continues to provide the very best teaching and research, and to attract and nurture the world's brightest minds," says Vice-Chancellor Stephen Toope. "Reaching this impressive £2bn fundraising milestone ahead of schedule would not have been possible without the hard work of the entire Cambridge advancement community, countless academic partners and volunteers. Thank you to everyone across Collegiate Cambridge who has helped make this happen."

The campaign continues until the end of July.

Cambridge researchers' analysis of Nature's Calendar

Climate change is causing UK plants to flower a month early, a change that could have profound consequences for wildlife, agriculture and gardeners. Professor Ulf Buntgen and his team from the Department of Geography analysed flowering dates using Nature's Calendar – observations maintained by the Woodland Trust which go back to 1753 – and collated them with instrumental temperature measurements.

cam.ac.uk/early-flowering

Deconstructed

Life-changing app will help to regulate insulin for children with type 1 diabetes

The CamAPS FX app, developed by Cambridge researchers, helps to ensure that very young children with type 1 diabetes get the right amount of insulin.

These children have unpredictable eating patterns and respond differently to treatment, so are more at risk of low or high blood sugar levels.



When the app is combined with a glucose monitor and insulin pump, it acts as an artificial pancreas, adjusting the amount of insulin it delivers.

A new study has found that it is both safe to use and more effective at managing young children's blood sugar levels than current technology.



Three-minute Tripos

UNIQUE SUPER JELLY OPENS NEW CHAPTER IN HIGH-PERFORMANCE SOFT MATERIALS. DISCUSS, WITH MOVEMENT.

Wibble wobble, wibble wobble, super jelly on a plate.

Are you regressing?

Not at all. I'm celebrating a new age of jelly. Forget its old, custard-y, children-only reputation. This is the age of... indestructible super jelly!

That sounds like it would be a really bad thing to have at children's parties. For many reasons.

I disagree. It looks and feels like squishy jelly, but acts like an ultra-hard, shatterproof glass when it's compressed. It would be terrific fun.

But how does it work?

The team who created the jelly in Professor Oren A Scherman's lab used barrel-shaped molecules called cucurbiturils to create a new kind of hydrogel. Hydrogel is a material which is stretchy and tough and can heal itself, but which can't be compressed without getting crushed. Until now!

Blimey. So, you could just challenge the kids to crush it, then come back a few hours later.

Super jelly can withstand the equivalent of an elephant standing on it or being run over by a car. It can completely recover its original shape.

Plus, it wouldn't stain the ceiling if the birthday girl decides to see how far she can throw it. I like that.

Sadly, birthday parties were not front of mind during this project. The researchers intend it for decidedly serious uses such as soft robotics, bioelectronics or even cartilage replacement. Making something to chuck at parties wasn't on the agenda.

We clearly need a new song, in that case. Wibble wobble, wibble wobble, isn't super jelly, with significant resistance to compression, great?

cam.ac.uk/super-jelly



OXFORD AND
CAMBRIDGE
— CLUB —



Welcome to your Club

For nearly 200 years alumni have chosen to take up membership of a spacious and elegant private club in the heart of London. The Oxford and Cambridge Club in Pall Mall is the perfect place to meet for a drink, entertain friends and colleagues in magnificent surroundings, play squash, take a break, host a party or just find a quiet corner to prepare for a meeting. A thriving social scene, sports facilities, a lively calendar of events including talks, tastings, dinners and balls, an exceptionally well-stocked library, extensive wine cellars and more than 40 bedrooms mean our members use their club for recreation, relaxation and business - and now you can too.

For details on membership or a tour of the Club house on Pall Mall,
please visit www.oxfordandcambridgeclub.co.uk or call 020 7321 5103

  Oxford and Cambridge Club  @oandclub

#87 **Daniel Starkey**, Jesus, third-year Engineering;
#54 **Will Bunker**, Trinity Hall, second-year English;
#97 **Harry Vellios**, Clare, second-year Engineering;
and #9 **Phil Jiang**, Girton, second-year Engineering.



Hut, hut, hike! The Pythons are here to take American football at Cambridge into the end zone.

Like most of his Pythons teammates, Daniel Starkey (Jesus) had only seen American football on television before coming to Cambridge, but he knew from day one that he wanted to give it a go. "I had a couple of friends at school with American parents who were fans, and they slowly got my whole friendship group into it," he says. "We watched the games together, but all supported different teams to keep it exciting. My team is the Jacksonville Jaguars, which I shouldn't admit because they're probably the worst team in the NFL! But when I gave playing a go, I absolutely loved it and it became my main thing at university, besides my degree."

Now President of the Cambridge University Pythons American Football Club, Starkey says that he found the game relatively easy to pick up, and the high-octane mix of monstrous hits and fast pace immediately grabbed him. "Obviously it's a team sport, which is a thing a lot of people love, and you need a big squad for it, which gives a nice

Touch

WORDS **DIANE SHIPLEY**

family feeling, certainly within the Pythons. A lot of people watch it and they don't understand it, so they don't join in, but more than half of our players had never played the game before they came to Cambridge. Once I knew what was going on, it captured me like no other sport."

After reaching the playoffs in the pre-Covid season, he's optimistic about the team's chances of promotion to BUCS South East Division 1. He's also looking forward to the highlight of the sporting calendar:

Varsity. "It's a huge day; there's always a big crowd of fans and there's so much excitement." Oxford has proven hard to beat, but last year's disappointing loss prompted Starkey to put himself forward for president. "Like the rest of the committee, I want to



down!

PHOTOGRAPHY **ADAM LAWRENCE**

improve the level we're playing at, aim high and lift the team up." This includes inspiring his teammates before a game. "I'll just tell them that I'm ready to go, that I'm going to give everything to the team and I ask the players to do the same. Maybe we'll talk about the opposition's strengths and weaknesses, but it's mostly just about getting the adrenaline going and getting people excited and ready to fight."

The group camaraderie extends off the field, with members meeting on Sundays to watch televised NFL games before going to the pub and (restrictions permitting) holding a Super Bowl party at the Cambridge Union every February. While the sport has traditionally been male-dominated, the Pythons is open to all, with one woman player at present and people from all backgrounds encouraged to sign up. Starkey says, "There's a wide range of body types on an American football team so everyone should give it a go – they might love it."

He says: "Having this outlet that keeps me active twice a week is massively important for my mental health. When I'm on the field, any deadlines or work I might be struggling with aren't a concern, I'm totally invested in the game."



pythons.org.uk

D16, Wolfson Building, Trinity

The Vice-Chancellor, Professor Stephen J Toope, and first-year History student Joseph Crouch discuss the joys of central heating and rooftop views.

WORDS LUCY JOLIN PHOTOGRAPHY MEGAN TAYLOR



Back in 1983, when the young Stephen Toope first heard he was on en route to Cambridge to study for his PhD, he felt some trepidation. “I was expecting a very uncomfortable existence and packed lots of jumpers,” remembers the now Vice-Chancellor Toope. So D16 in the Wolfson Building came as something of a surprise. “I’m going to sound terribly North American, but I was happy with a room which was comfortable and well-heated and had plumbing that worked well.”

Current occupant Joseph Crouch (History, First Year) admits to similar concerns when he heard he had won a place at Trinity. “I’ve visited those rooms with high ceilings and stone steps which you have to navigate at 2am to get to the toilet. When I found out I was coming to Trinity, I did think I was going to have a similarly uncomfortable existence.

But this is much more modern and homely.” The Wolfson Building is, in fact, even more comfortable now than it was in 1983. It’s Toope’s first time back in the building since he returned to Cambridge five years ago, and he approvingly notes the changes. “Skylights! A lift! And what looks like much better kitchen facilities, I think.”

But the room – with its white paint, orange curtains and window framing a spectacular rooftop view of the city – has barely changed. “It all feels very familiar,” Toope says. He brought, along with the jumpers, his beloved collection of music cassettes (“That dates me!”) taking in everything from classical to jazz to Stevie Wonder. And lots of novels: Dickens, Eliot and Atwood. “I’m a book person, so it just feels good to have books around,” he says. “I knew I was going to get a lot more books

when I was here, but they would all be focused on my work. I wanted to have things about me which made me feel more like a human being and less like a student.”

Crouch brought a coffee machine and his trumpet: despite being a classical and jazz enthusiast, these days, he points out, all the music you could ever need is on your phone. “It’s actually pretty hard to transport your stuff here, so I try not to bring too much,” he says. And then of course, there’s always live music. “Jazz is much less regimented and easier to practice,” he says. Toope, meanwhile, threw himself into theatre for fun, notably productions of Chekhov’s *Three Sisters* and Arthur Miller’s *The Crucible*. “It was just a great way to meet people. That was one of the reasons I wanted to come to Cambridge, because it attracted people from all over the world.”

Did he ever imagine he might one day walk back in as Vice-Chancellor? “Not in a million years. But life takes you in surprising directions”

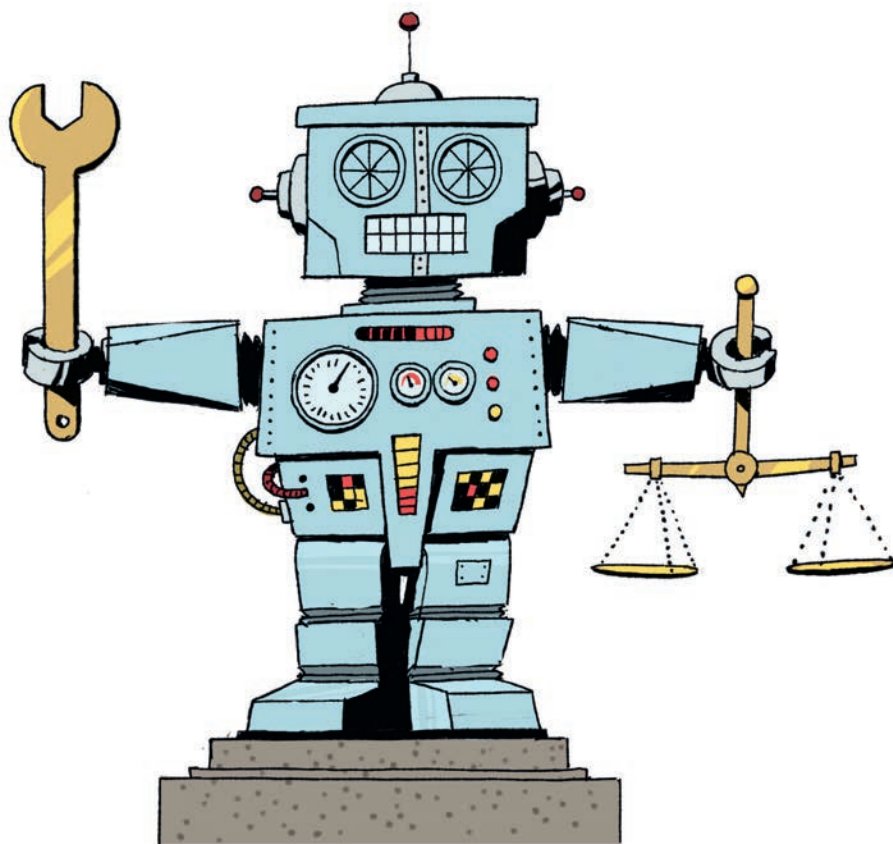


Crouch is currently enjoying the freedom to explore his subject. “I’m surrounded by people who have such a vision of where they want to go and what they want to do, and I can’t fault that – but it’s not something I have,” he says. “Having goals and ambitions is great but having openness and adaptability is the best way for me to think about the future.”

Toope’s Cambridge experience was very different. He came to Cambridge with a very particular goal in mind: he wanted to work with his PhD supervisor, Professor Sir Derek Bowett, who gave him, he says, a model of how to be an academic. “He was just wonderful intellectually, but also encouraging and challenging.”

So when he left D16 did he ever imagine that he might one day walk back in as the University’s Vice-Chancellor? “Not in a million years,” he says. “But life takes you in surprising directions. And I now know not to get too wrapped up in thinking there is only one trajectory out of what you’re doing. I speak to many students who feel that if something doesn’t happen – like not getting into a particular course or college – their whole life is derailed. I’d advise against over-planning – chances are that you’re going to get knocked off course. All this,” he adds, gesturing towards the walls of D16 and the city beyond them, “this was never planned.”

Professor Toope will step down this September. Joseph Crouch is a music enthusiast and plays with the Jazz Society and the Trinity College orchestra.



Artificial intelligence

AI research puts focus on core human values

Artificial intelligence is transforming society, but its unintended social consequences are just starting to become clear: algorithms on social media promote misinformation that erodes faith in democracies, for example, and facial recognition software that claims to identify so-called criminal faces could enable racial profiling.

Now, researchers at the Leverhulme Centre for the Future of Intelligence (LCFI) have been awarded almost €2m from German philanthropic foundation Stiftung Mercator to build a better understanding of how AI can undermine core human values. The grant will allow LCFI and its partners to work with the AI industry to develop anti-discriminatory design principles that put ethics at the heart of technological progress. “Currently our ideas of AI around the world are conjured by Hollywood and a small rich elite,” says Dr Kanta Dihal, who will co-lead the project.

“No one currently knows what the impact of these new systems will be on core values, or what measures will help address such threats,” says Dr Stephen Cave, Director of LCFI. “Understanding the potential impact of algorithms on human dignity will mean going beyond the code and drawing on lessons from history and political science.”

In brief

NEW YEAR’S HONOURS

The 2022 New Year’s Honours recognised Cambridge academics and administrators for excellence in fields ranging from Education to Classics.

Emeritus Professor James Diggle received a CBE for services to classical scholarship. He was Professor of Greek and Latin from 1995 until his retirement in 2011.

Lynne McClure, Director of Cambridge Mathematics, received an OBE for Services to Education, while **Professor Pauline Rose**, Professor of International Education and Director of Research for the Equitable Access and Learning Centre in the Faculty of Education, was awarded an OBE for services to international girls’ education.

Policy and industry were also recognised: **Professor Lorand Bartels**, Professor of International Law in the Faculty of Law and a Fellow of Trinity Hall, received an MBE for services to UK trade policy. While **Dr Robert Bud**, Affiliated Scholar, Department of History and Philosophy of Science, was awarded an MBE for services to the Science Museum and northern industrial heritage.

Bring your learning to life this summer at the University of Cambridge

Choose from over 100 one-week courses across the arts,
humanities, science, business and global studies



Book your place on our Summer Programme
at www.ice.cam.ac.uk/summer

Gold of the Great Steppe

Recent excavations in East Kazakhstan have revealed the extraordinary technological skills of people once characterised as roving barbarians, says Dr Rebecca Roberts.

WORDS JO CAIRD PHOTOGRAPHY THE FITZWILLIAM MUSEUM

This intricate golden scabbard – and the bronze dagger it holds – belonged to a boy aged around 17 to 18. We don't know much about him as an individual, as his people, the Saka of Eastern Kazakhstan, left no written language except for a short inscription on a silver bowl buried about 300 miles away from our teenager. But his scabbard and the other objects found at his 2,700-year-old gravesite have much to tell about the society in which he lived.

These artefacts were the subject of *Gold of the Great Steppe*, an exhibition at the Fitzwilliam Museum that showcased recent excavations of Saka burial mounds in East Kazakhstan. Seen in the UK for the first time since their discovery by Kazakhstani archaeologists three years ago, they demonstrate the extraordinary technological skills of the Saka, whose culture flourished between the 8th and 3rd centuries BCE.

It made this exhibition a chance to set the record straight about a people “misrepresented as the roving barbarians of the past” says Dr Rebecca Roberts, research associate at the Fitzwilliam. The scabbard, which is made of sheets of worked gold covered with tiny golden balls and inlaid with precious stones, is a case in point. “In one piece we've got three different jewellery goldsmithing techniques that have been employed,” says Roberts. “And then the dagger itself is made of bronze. To have all those technologies shown off to their finest degree in that single object is incredible. These are complex people, and highly skilled, with an artistic eye that we can all appreciate.”

Even more incredible is the fact that the scabbard is with us at all. The burial from which it was excavated is only the second of its period to have been discovered intact

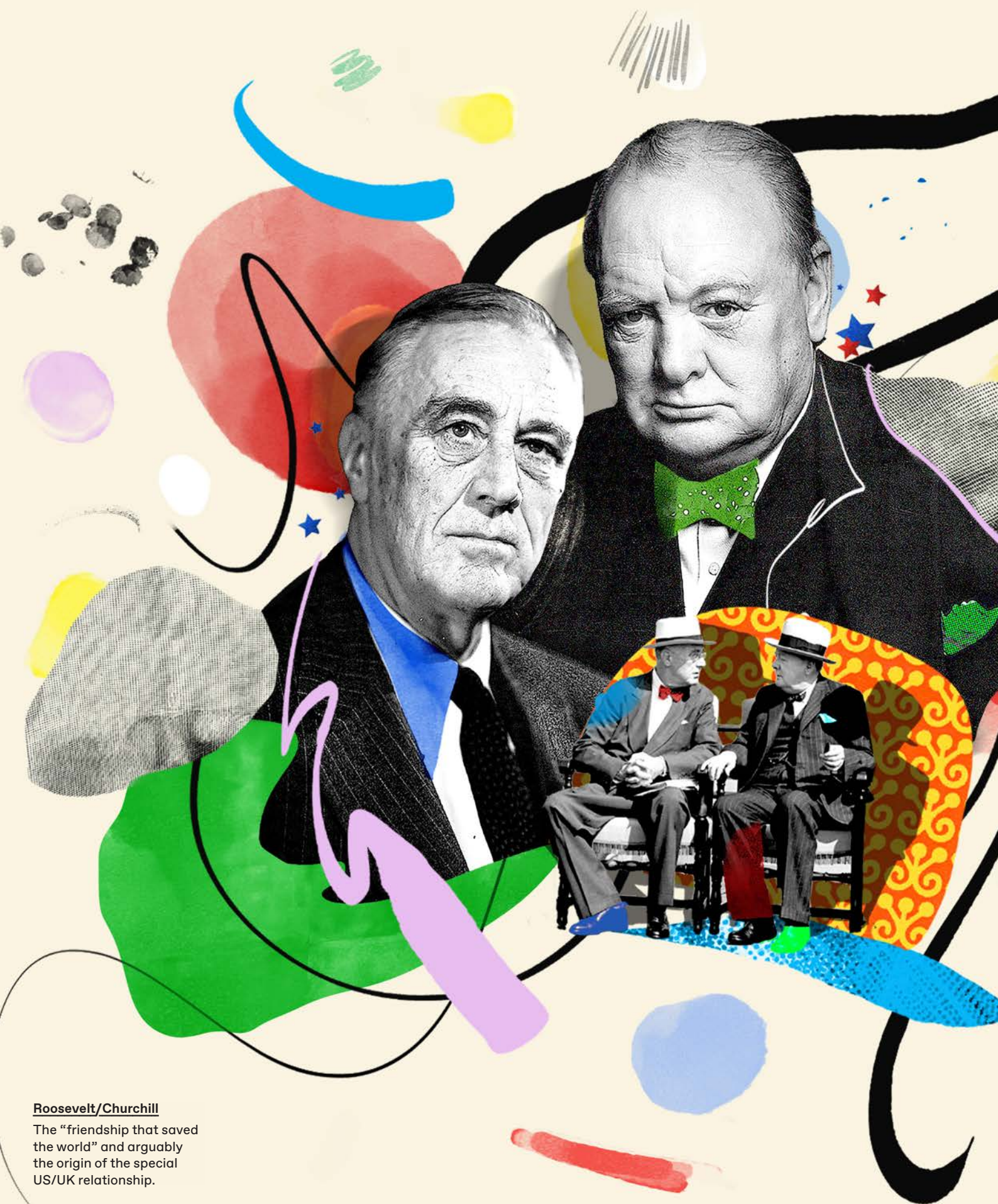
and unlooted on Kazakhstani territory (the first was in 1969). It's a matter of pure luck that the grave of the teenaged boy didn't share the fate of the young girl – probably his sister – interred in the same burial mound. While her grave was looted of all but her bones and a single bone artefact, his was untouched, probably saved by the partial collapse of the burial chamber.

“It represents exceptional preservation,” says Roberts. “Looting remains a problem today: our archaeologist colleagues in Kazakhstan have excavated looted tunnels that have cigarette butts and crisp packets and plastic bottles in them, so we know it's an ongoing problem. This discovery shows how under threat this heritage is, but it also highlights the role of chance in archaeology and history, because what's preserved determines whose stories we can actually tell.”

Dagger and gold sheath with turquoise and lapis lazuli inlay. Eleke Sazy, Group II, Kurgan 4. 8th-6th century BCE.

On loan from East Kazakhstan Region of the Republic of Kazakhstan and Regional Museum of History and Local Studies of the Department of Culture, Archives and Documentation of East Kazakhstan.





Roosevelt/Churchill

The "friendship that saved the world" and arguably the origin of the special US/UK relationship.



Best friends forever?

The “special relationship” between the US and the UK has ebbed and flowed for more than 70 years. Can it adapt to survive for another 70?

WORDS VICTORIA JAMES ILLUSTRATION SELMAN HOŞGÖR

The small city of Fulton, Missouri lies between Kansas City and St Louis in the American mid-west of America.

With a population of just 13,000 people, its local attractions include an antiques barn, a smokehouse and a collection of historic motors – but also, and impressively, America’s National Churchill Museum.

For it was here, in March 1946, that British Prime Minister Winston Churchill stopped off with US President Harry Truman and delivered a speech that would embed not one but two, concepts in the global political consciousness: the “Iron Curtain” between the Soviet sphere and the West, and the “special relationship” between the United States and Great Britain.

In his 1946 speech, Churchill had warned: “Neither the sure prevention of war, nor the continuous rise of world organisation will be gained without ... a special relationship between the British Commonwealth and Empire and the United States.” This would require “not only the growing friendship and mutual understanding between our two vast but kindred systems of society, but the continuance of the intimate relationship between our military advisers”.

Yet although Churchill’s words are clearly rooted in their immediate post-war moment – the defeat of Fascist Germany and Italy, and Imperial Japan, with former ally Russia turning inward – the website of the US embassy in London today makes frequent reference to this partnership proclaimed more than 60 years ago. “The United States has no closer ally than the United Kingdom,” it declares. “And British foreign policy emphasizes close coordination with the United States.”

So what exactly is the “special relationship”, both as a concept and a diplomatic reality? Did it really begin in 1946 and in what form has it survived to the present day? Perhaps most importantly – can it endure?

“The special relationship is real,” says Gary Gerstle, Paul Mellon Professor of American History. “It’s not just a UK construct to bolster the image of a smaller country relative to a larger one. The two nations share a conception that you could call ‘Anglo-American liberty’, which is important to people in both countries. It has been strengthened by alliances through the First and Second World Wars and the Cold War.”

But it didn’t begin in 1946 – indeed, Nicholas Guyatt, Professor in North American History, says that, perhaps counterintuitively, a shared vision can be discerned throughout the American Revolution.

“Great Britain and the US had a fraught relationship after the American Revolution [of 1775-83] – and obviously the relationship before the Revolution was not so hot, either,” Guyatt says wryly. “However, in some ways, the Revolution was rooted in the failure of British officials to devise a political structure which could contain and recognise white American colonists’ claims to equality within the British Empire. We usually think of Empire as British officials ruling over non-Europeans, usually without their consent. But the US-British relationship was born in a different moment in which American colonists (ultimately the white Founders of the United States) were co-workers in the project of extending British influence, territory and power into indigenous territories in the American interior; and, of course, in the related project of producing commodities for sale back in Europe, often via the use of enslaved labour. So the American ›

The special relationship is real. It's not just a UK construct to bolster the image of a smaller country relative to a larger one

Revolution can sometimes stop us from seeing that white colonists and British officials were really engaged in a single project of colonialism before 1776.”

Guyatt's latest book, *The Hated Cage*, delves into a case in point: the often-overlooked War of 1812 over British violations of US maritime rights and America's desire to expand its territory – and the last time the two countries took up arms against each other. You'd expect the conflict to be a nadir of bilateral relations, but Guyatt suggests that instead it cleared the path to a new understanding of the two nations' altered mutual standing. “The war's messy and inconclusive course suggested to politicians on both sides of the Atlantic that the US and Britain might have more to gain from co-operation than conflict,” he says. “Paradoxically, while the War of 1812 seemed initially to demonstrate deep-set enmities between Britons and Americans, it actually facilitated a recognition of mutual interests, including an interest in bringing the non-European peoples of the rest of the world into an Anglo-American orbit of empire, commerce, Christianity and, on frequent occasions, violence.”

Of course, the US would soon surpass the UK on the global stage. “In the late 19th century, as the United States formally annexed overseas territories, many people in the US began to recognise this expansion of their nation as an empire,” says cultural historian and associate professor Julia Guarneri. “This moment is when popular perception arises of the UK as in some ways a predecessor empire. A model to emulate as a world power, but also to surpass.”

The shift is captured in an 1898 letter written by Rudyard Kipling to his friend Theodore Roosevelt, then Governor of New York, enclosing his as-yet unpublished imperialist poem *The White Man's Burden*. “Kipling sends Roosevelt this poem to try and persuade him that the US must govern the Philippines, because the

Filipinos cannot govern themselves,” Guarneri says. “The poem says it will be difficult and thankless, but that it is America's responsibility and the right thing to do. More broadly, Kipling is also asking Roosevelt and the US to follow in Britain's path and emulate what Europe has done in colonising the rest of the world.”

America never replicated the British colonial model (although its insular Government of the Philippine Islands remained in place from 1901-35), and by the early 20th century, the Irish struggle for Home Rule had cast a chill on UK-US relations. That made the US decision to enter the First World War alongside Britain more complex than it might at first seem. “The US is made up of immigrants, and many at that time were Irish,” notes Guarneri. “They felt betrayed by this decision.”

It is notable, says assistant professor and foreign policy and intelligence historian Dan Larsen, that by the end of 1915, the British were cracking American diplomatic codes. This wasn't a sign of hostility. “At this point in the war, British codebreakers started tackling neutral diplomatic codes, and the most important neutral in 1915 was the United States.” But the major effect of the war on the special relationship was to emphasise the tilting power balance first implied by Kipling's desire to shift – or at least share – the ‘white man's burden’ with America.

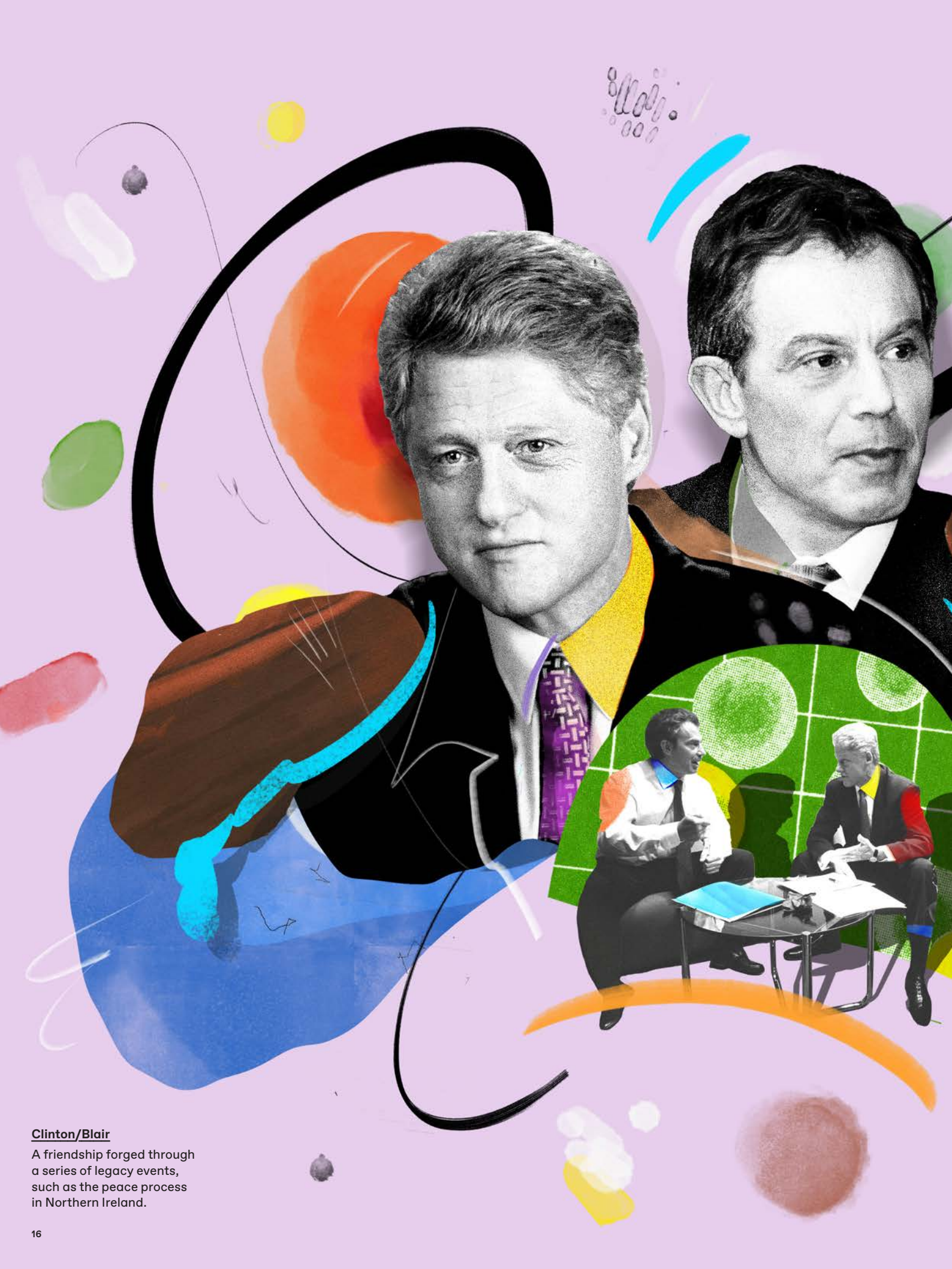
“In the middle of the First World War, Britain and America celebrated a century of peace from the conclusion of the War of 1812,” says Larsen. >



Reagan/Thatcher

A formidable alliance in a time of increasing Cold War tensions and fears of communist expansionism.





Clinton/Blair

A friendship forged through a series of legacy events, such as the peace process in Northern Ireland.



In both of these moments, you have two powerful countries legitimising each other's empire-building

“On the British side, it was a complex experience. There was still that notion of kinship, but at the same time a suspicion of American profiteering, of America taking advantage at Britain's expense. The British created an enormous war machine that was hugely dependent on American supplies, and there was a big debate within the British government between the view that the Allies could go it alone, and the contrasting recognition that there had been a shift in the transatlantic balance and that they could not win the war without American help. The start of the shift toward American hegemony is the biggest legacy from this period.”

But there are other echoes, too. The groundbreaking intelligence-sharing established during the Second World War is still with us today, Larsen notes. “Through human history, intelligence has generally been a lone-wolf operation, so to get countries co-operating so closely in intelligence – such as Britain and the US in the current Five Eyes pact with Australia, Canada and New Zealand – is striking.”

For Guarneri, Kipling urging Roosevelt to pursue American imperialism is mirrored in Prime Minister Tony Blair's 2003 decision to send British troops to Iraq at the urging of President George W Bush. “The United Nations did not back Bush's move, but the UK did. In both of these moments, you have two enormously powerful countries legitimising each other's empire-building.”

If the special relationship has survived domestic hostility, economic rivalry and outright war, can anything break it? Gerstle concedes that if neoliberalism has bound Britain and the US together for the past half-century, it's possible that as that neoliberal consensus unravels across the developed democratic world, the special relationship could finally fray. “Neoliberalism speaks to an intersection of political thinking,” says Gerstle. “It was carried out in the US and UK under its two most important political creators, Ronald Reagan and Margaret Thatcher. And when their respective opponents, Bill Clinton and Tony Blair, came to power, they continued those principles. Neoliberalism went from two countries to the world.”

However, Brexit has unsettled many Americans, he says, seeming to diminish Britain's utility as a gateway to Europe, and potentially threatening the Good Friday Agreement on the future of Northern Ireland. “That would be perceived with a lot of anger in the US, given the deep sympathy for the Irish experience, and its centrality to the American experience.”

Nonetheless, given the sheer length of mutual history, the two countries are likely always to find their way back to each other. “Reforming groups in both countries at different moments, such as in the 1830s and 40s with abolitionism, have made common cause to critique the current order,” says Gerstle. “Underlying that is an understanding that Britain and the United States share certain values regarding liberty, equality and the public interest. This has been a recurring pattern, so there's every reason to believe it will happen again.” ©





In 1937, *The Night Climbers of Cambridge* lifted the lid on a secret world of shadows. While not recommended, some say it is still going strong today.

WORDS MARK FRARY PHOTOGRAPHY JOHN BULMER

●

The blanket of the dark hides each group of climbers from its neighbours. As furtively as the bats of twilight, they shun the eyes of the world

Like so many good things, the idea took shape in the queue for a kebab and cheesy chips at the Van of Life in Market Square. “It was one of those ‘Hold my beer’ moments,” says Christian Preece (St Catharine’s 2010). “A friend from athletics thrust his food into my hand – three or four minutes later he appeared on the top of a roof four or five storeys up.”

Preece didn’t know it, but this was to be his initiation into a secret club dating back more than 100 years – the night-climbers of Cambridge. Joining his friend on the roof – “up the guttering, across one roof and a leg up over a two-metre wall before arriving on the flat roof above Five Guys on Market Street” – the experience was exhilarating. “It was quite a strange kind of sensation; like looking down on a Lowry painting,” says Preece.

Of course, night-climbing is not the type of activity you sign up for during freshers’ week. Perhaps you might hear subtle whispers, or maybe you come across a dog-eared copy of a slim volume entitled *The Night Climbers of Cambridge*, apparently by a mysterious figure calling himself Whipplesnaith.

Whipplesnaith’s 1937 guidebook for the uninitiated reveals the hidden stairways to the spires, the jumps and pull-ups that can save grazed

skin, and the essential kit to give the best chance of success. The author recognises he did not invent the “sport” – deferring instead to Geoffrey Winthrop Young’s 1901 tome *The Roof Climber’s Guide to Trinity* – but suggests the tradition may have evolved from the difficulty of getting back into college after the traditional 10pm curfew. Whipplesnaith’s is a nebulous world: “The blanket of the dark hides each group of climbers from its neighbours,” he writes. “As furtively as the bats of twilight, they shun the eyes of the world.”

The book’s pseudonymous author has since been unmasked as Noël Howard Symington (King’s 1932), but Tom Whipple (Churchill 2000) often ponders a possible family connection. “We always found the Whipple part a bit intriguing. My grandfather was there at the same time as Symington so it feels like an astonishing coincidence. There are intriguing pictures of other climbers in the book, but we can’t tell if it was him.”

Whipple, now science editor of *The Times*, was initiated into the cult by his father, courtesy of a battered copy of Whipplesnaith’s book. The attraction of night-climbing to the younger Whipple was that it seemed impossibly romantic. “You feel like you are in some Evelyn Waugh novel. Who doesn’t want to imagine they are that sort of person?” he says.

Many others have been inspired to climb by the work of photographer John Bulmer (King’s 1957), who honed his art as a snapper for *Varsity* magazine while studying at King’s. Incredibly, Bulmer is terrified of heights and so many of his shots are taken from ground level, but others required him to follow the climbers up into the spires and slates. In June 1958, for example, Bulmer heard that a group of Caius engineering students had famously hoisted an Austin 7 van onto the roof of Senate House using cables and scaffolding ‘borrowed’ from King’s. His picture of the car on the rooftops taken the next morning is legendary among night-climbers.

Previous and opposite

Trinity ascent, 1959

Ascending one of the towers rising above Trinity New Court.

John Bulmer / Popperfoto / Getty



While a 2013 attempt to recreate this feat was thwarted by the authorities, a desire to put things on roofs has not diminished. Tom Whipple once took part in an expedition to hoist a wheelie bin onto the dome of New Hall that was dubbed the New Hall Nipple until it was removed. And as recently as last November, Santa hats have appeared overnight on the statues of St John's College Chapel.

For others, there is a far more practical motivation for the climbs – a free pass into a May Ball, for example. According to Whipple: “There is a route into John's where you start on a punt, climb up the Bridge of Sighs, onto a balcony, pause in the gap and then drop down. One year, we abseiled into Trinity with our climbing harnesses on under our dinner jackets and walked into the ball leaving

the rope behind us,” he says. Whipple also recalls a route that gets you into St Catharine's, but most colleges are now wise to the club's activities – at King's, security people are posted on routes.

And while Rebecca Wetten (Newnham 2011), who today works for the environmental charity Hubbub, didn't make it *into* a ball without paying, she couldn't resist the urge on the way back from one. “I was walking past the History Faculty on the way home with a friend. The Faculty building opens out like a book; it is high but pretty straightforward and so we climbed up and watched the sun rise,” she says.

The routes to the roofs of Cambridge fall largely into three categories: ‘ladders’, ‘drainpipes’ and ‘chimneys’. Ladders – such as the recessed stone bands on the modern part of King's ›

John Bulmer (King's 1957)

John was a pioneer of colour photography in the early 1960s, and during his time at Cambridge he photographed for *Varsity* and then for *Image*, a picture magazine that he co-founded. In 1959, John sold a story on night climbing to the magazine *Life*, ending his Cambridge career in the process.



Right

Old Schools descent, 1959

Descending the Old Schools gatehouse, dropping down into Trinity Lane.

John Bulmer / Popperfoto / Getty



●
**It
was
one of
those ‘Hold
my beer’ moments.
Three or four minutes
later he appeared on the
roof, four or five storeys up**

on Trumpington Street – are popular starting points because beginners can scale them easily. The cast-iron drainpipes that punctuate the walls of the colleges, like so many exclamation marks, are also a good route up, although many are so firmly clamped to the walls that they offer no finger-room behind to gain a good grip. And ‘chimneys’ describe those ascents where the climber must put their back against one wall and feet against the other, exerting pressure with the legs to prevent slipping.

The Senate House Leap is considered to be night-climbing’s Everest challenge. Climbers ascend the south face of Caius using windowsills and bars and by leaning on the ‘stony celebrity’ to reach the roof. The jump across the passage is seven feet – at its narrowest. “When going from Caius to the Senate, it is about six inches down; jumping back is terrifying,” says John Bulmer.

Bulmer remembers getting caught by the police when trying to photograph someone attempting the Leap. “We were coming out of a play at the Arts Theatre when someone said, ‘We are thinking of taking a look at the Leap,’” he recalls. He popped to *Varsity* and picked up the last of the large flashbulbs that he used – no smartphones back then – before heading back to Senate House Passage. “He did the Leap but the flashbulb didn’t go off,” says Bulmer, still ruing the lack of proof.

“Moments later the police arrived. I hid behind a column but was discovered. The climber disappeared and hid under a bed in Caius. The porter searched but they never found him.” Meanwhile, Bulmer was hauled up before the Proctors. “I said I was just on my way home and by chance I had seen these people doing the Leap. They couldn’t pin anything on me.”

Getting caught scaling a college wall is thought, at worst, a civil offence and most climbers are careful to avoid damaging buildings. Much more concerning than the precise legality of night-climbing is the very real and present risk of getting sent down (not to mention having to explain to their parents why they won’t be finishing their degree). The other big worry is getting hurt. Preece, who rather appropriately now works in risk management, says that while he never got hurt, he occasionally got ‘the fear’. “There are a few narrow ledges, like those around the Guildhall, where you think, ‘One step to the right and it will be game over.’”

Whipple admits to one misadventure that ended in a visit to Addenbrooke’s. “I was just waiting for a kebab at Gardies. I had drunk enough to go up Caius but not enough to go down. I dangled off this stone bishop 12 feet up and thought, ‘Why don’t I just jump down and break my fall on that bollard?’” A painful injury requiring surgery on a sensitive area followed. “It was quite embarrassing as I’d promised my now-wife a romantic night at the Churchill College Valentine’s Ball the next night. I discharged myself and made it to the ball, but couldn’t really walk terribly well. I wouldn’t necessarily recommend the climbs, and I would be very concerned if my children got into it. It was always when you left the pub and you weren’t in the sharpest of states.” ●

So, the next time someone asks you to hold their kebab, be aware you might be about to experience one of Cambridge’s oldest and most discreet clubs, and keep your wits about you.
© **You
feel like
you are in
some Evelyn
Waugh novel. Who
doesn’t want to imagine
they are that sort of person?**



The human touch

Every new wave of technology creates profound questions about what it means to be human, says Professor Caroline Bassett.

WORDS AMELIA TAIT PHOTOGRAPHY SARA AGUTOLI

"Technology is never purely technical; it's cultural," says Professor Caroline Bassett, Director of Cambridge Digital Humanities (CDH). "Take self-driving cars, for example. On the face of it, they don't seem to have much to do with art, history, philosophy or literature. But when you think about them, it's very obvious that they're about the way that we interact, the way that we're human, the way we talk to each other. There are ethical questions, but also political questions, in the sense of power, social power, and division – and those kinds of questions are humanities questions."

Bassett's field is giant and multidisciplinary. So, while practically she sits within the Faculty of English, she confesses that she "floats" – her work flourishes in many fields. At its heart, though, her research champions both the role that technology can play in the humanities, and the role the humanities can play in the technological world. "Each new wave of technology produces a new set of questions about culture, around social structures, and how they are going to relate to that technology, and how problems in them might be addressed or amplified or articulated differently," she says.

Computer science, she says, is very bad at addressing these questions – and as someone once on the inside of the industry, she should know. After studying English as an undergraduate at University College London, she "accidentally became a technology journalist", working her way up to a role as editor of the magazine *MacUser*. It was an exciting time

for Bassett who – by her own account – was one of the first women editors of a tech magazine in the UK. "Everything about technology was changing really quickly. And these magazines were really rather brilliant places just to sit and watch what was happening in Silicon Valley from Soho."

Things haven't slowed down since then, and Bassett hasn't stopped watching. She left journalism to do an MA in media theory at Sussex University before pursuing a PhD, writing her doctoral thesis on narrative and new media. She stayed there as a lecturer, leading projects on utopia and science fiction, big data and communities, and co-writing *Furious*, a technophile feminist take on technological ambition that was also an experiment in collaborative writing. "We argued endlessly," she says of the writing process. "It was brilliant."

CDH was the natural next step. "Computer science and certainly AI at the moment tend to talk about 'the' human and 'the' machine – as in, humans are going to be helped by machines," Bassett says. "And actually the humanities have always asked: *Which* humans? For *whom*? For *whose* interest do you mean?"

For Bassett, it's imperative that we begin to think more about these issues. "There are 35 billion sensors in the world this week, and probably 36 billion next week," she says. She likens humans to fish "swimming in the waters of the computational, that's the sea we're in". While popular culture might promote the enticing idea of digital detoxes, Bassett says that our era could be defined as one of computational ›



High Definition
Floor Light



Excellent light,
it's made reading
so much easier.

Mrs Verrell, East Sussex



Read in comfort for longer

Do you struggle to see small print and detail, even with reading glasses? The right light is just as important as having the right lenses - it helps you enjoy cherished hobbies for longer in comfort, without straining to see.

Light up your life indoors

Serious Lights bring daylight indoors. They use bespoke technology to deliver incredible clarity that lets you lose yourself in your favourite books without experiencing the uncomfortable effects of eyestrain.

When you switch a Serious Light on, you'll see text instantly transformed from blurry and fuzzy to crisp and clear. See the difference with your own eyes and rediscover your love of literature.

- ✓ See detail and colour more clearly
- ✓ Recommended by over 500 opticians
- ✓ Try at home risk-free for 30 days

FREE

Compact Light
WORTH £150

with any Serious Light order when you use code **7130**, while stocks last



For Advice. For a Brochure. To Order:

0800 085 1088
seriousreaders.com/7130



capitalism – we live in a capitalist, market system that is “now organised through, articulated by, and saturated with computational technologies”. Escape, therefore, is not that simple.

“Should we leave? Should we stay? The fact is, we can’t just step outside,” Bassett says. “I could turn off my device, but this room is networked. I can refuse to use Apple Pay, but if I use my credit card, really, what’s the difference? We live in this system.”

Bassett’s work probes the ways in which these structural, social and cultural systems shape technology and the ways that technology transforms these systems in turn. One question at the heart of much of her research is therefore not what technology *is* doing but rather what technology *could* be doing. “I’m interested in the ways that cultural technologies emerge and how they come to be what they are, and also how they might have been different, and quite often how they might have been better,” she says.

Computers hold this promise of radical transformation. But what they often produce is an extension of the systems we’ve already got

Most of us are very familiar with the ways in which things have gone wrong. Bassett points to the human biases that are built into tech, producing sexist and racist algorithms or simply just imperfect models. “If you train a natural language processor on a giant data lake which comes from the internet, it’s in no way global – it’s a subset of those people who speak English. We train the AI on this and then expect the results to be neutral. But why would they be?”

When most people talk about innovation in technology, they’re referring to the bigger, the faster, the shinier; when they talk about disruption, it normally refers to the market. To Bassett, these words have entirely different meanings. “Rather than being visibly disruptive, AI is supposed to make things like our interactions with services and commodities smoother and more seamless,” she says, citing internet banking. “But I think the idea of AI agents disrupting assumed conventions – for instance, around gender and sex binaries – is really interesting.”

For Bassett, there are myriad ways that technology “can be disruptive in a way that we often don’t assume that technology is”. While science fiction and popular imagination might obsess about the ways AI can become more human, Bassett is more interested in the ways

in which it can be entirely alien. She is particularly fascinated by technology that is capable of producing writing. “It’s not that I expect an AI to write Shakespeare – in fact, that would be deadly,” Bassett says. “The whole point would be to see what an AI might produce that’s fundamentally not human. That’s profoundly new. That breaks something.”

Yet Bassett also says our current era of computational saturation is defined by a constant flitting between “technological hope” and “technological anxiety” – we’re trapped in a cycle of assuming that new technology will improve our lives before we’re ultimately disappointed. “Computers hold this promise of some kind of radical transformation, but often what they’ve produced is an extension of the kinds of systems we’ve already got,” she says. “In the 1990s, virtual space seemed like a place for creativity and new forms of cultural production, new kinds of literature, new forms of life. What did we get? Facebook.”

Bassett’s latest book, *Anti-Computing: Dissent and the Machine*, explores historical moments of rebellion against the computational. “There was a brilliant moment in 1960s Britain when there was a massively short-lived ‘league against computing’, which at one point claimed to have 4,000 members – and there were about 4,000 computers in Britain at the time,” she says. “For one very brief moment in the history of computers, there was an equal number of people against machines and machines themselves.”

That moment has passed but Bassett stresses that it’s important that we all continue to interrogate what “progress” means in a technological context. “That’s my point of intervention really. We’re encouraged to think that technological progress is inevitable. But it’s not. Computational culture could have been different and there are many things about it that are brilliant. But there are many things that could be better. So I’m really interested in de-naturalising or trying to explore a relationship that we accept as natural or even as ‘just progress’.

“In a way, I think everything I’ve written has tried to explore the question of what constitutes progress. I’ve addressed this in relation to gender and difference, by looking at literature and cultural forms, by theorising technology, and also by thinking about progress and its claims about the future. If you think about technology coming to us, we’re always told the next bit of technology is better. If it’s not better now, it will be in exactly five minutes – just around the corner is going to be better technology and a better world,” she says. “And I think we should decouple those things. Ultimately we may discover that the promises for technological advancement might not actually equate to promises for a better world.” ©

To find out more about research at Cambridge Digital Humanities, visit cdh.cam.ac.uk

When Catharine Scott was diagnosed with stage four breast cancer, the options seemed grim. But then she was offered another way forward.

The Precision Breast Cancer Institute, part of Cambridge's new cancer hospital, is pioneering a new approach to research, care and treatment.

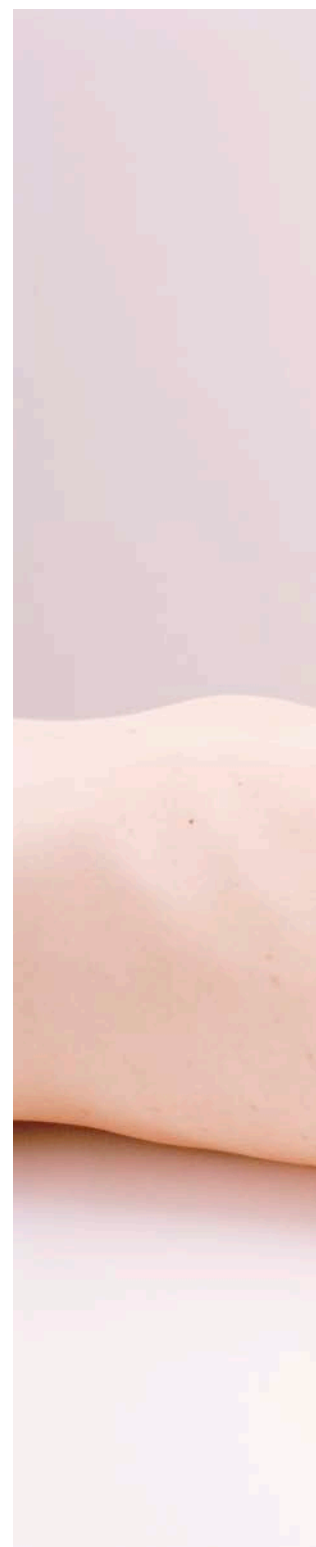
WORDS LUCY JOLIN PHOTOGRAPHY KATE PETERS ART DIRECTION GEM FLETCHER

Catharine Scott was on holiday when she first felt the pain near her ribs. She assumed that she'd pulled a muscle in the gym or lifting a suitcase. But when she got back home, it was still there. She went to her GP, who suggested it would be wise to investigate further, and referred her to the Cambridge Breast Unit.

That was Friday. Over the weekend, Scott, 51, wasn't particularly worried: there was no history of breast cancer in her family. On Monday she got a call from the unit,

asking her to come in on the following Friday. Exactly a week after she went to her GP, she underwent a mammogram, an ultrasound and thorough examination.

"Then they took me and my husband into a room and explained to us that they had seen a couple of things they were worried about, so they also wanted to give me a biopsy that same day to analyse the breast tissue," Scott remembers. "I think they knew it was serious. They made an appointment for me to come back the following Friday to get the results."





Reclaim

This series of portraits, by photographer Kate Peters, explores the ideas of alternative beauty and power by photographing breast cancer survivors who have transformed their scars with tattoos. This powerful act is a way in which women can reclaim their bodies from breast cancer and strengthen their personal identity in the process.

Kerry

“Mastectomy tattoos gave me options. Once I had them, my self-esteem rocketed. Instead of a scar slashed across my chest, I had a beautiful and personal piece of body art.”

Then they took me and my husband into a room and explained to us that they had seen a couple of things they were worried about

Scott’s instincts were right. Her consultant told her that she had a four-centimetre long, stage three to four tumour in her right breast. She would need chemotherapy, possibly radiotherapy and possibly a mastectomy. But unlike thousands of other women in a similar position, Scott was also offered another option. Would she take part in a trial led by the Precision Breast Cancer Institute (PBCI)?

The CRUK Cambridge Centre Breast Cancer Programme in the PBCI brings

breast cancer patients into trials of cutting-edge treatments and world-leading genetic research. It aims to develop personalised treatment plans based on pioneering genome sequencing activity, which determines a patient’s entire DNA and RNA profile more quickly and allows for personalised treatment of breast cancer, using new drugs. Under the NHS’s current treatment guidelines, only a few specific types of cancers are sequenced at all.

“When you have real-time information about the patient’s genome, alongside ›

Sarah

"I don't think I would want my life before the mastectomy back. It's beyond a physical thing; it's a psychological change, and a change for the better."



The only way we can make treatments better is by doing this kind of research. Otherwise, we just stand still

the patient being able to access novel treatments, you can then bring these two pieces of information together,” says Professor Jean Abraham, director of the PBCI and co-director of the Breast Cancer Programme. “Then you can ask: does a patient with this kind of molecular profile respond as well to that treatment as a patient with another kind of molecular profile. You can think in detail about the biology underlying who responds and why they respond.”

Scott was eligible for a new study: the Personalised Breast Cancer Programme. This research aimed to demonstrate that the genome of her tumour could be sequenced within 12 weeks, much quicker than usual. Those results would then be used to ensure she was on the right treatment programme, to identify any genetic markers which might make her more susceptible to side effects, and to inform her of any genetic markers that could increase the risk of breast cancer in her children.

In addition, Scott was offered the chance to enrol in a clinical trial called PARTNER. The trial involved being randomly allocated to chemotherapy plus a drug called Olaparib, a drug developed at Cambridge by Professor Steve Jackson and his team. “At first, I was concerned that I would have to choose either standard treatment or going on the trial,” says Scott, “but Professor Abraham explained that I could have the experimental treatment along with the standard treatment.”

Every cancer case which comes through the Cambridge Breast Unit is discussed by a multidisciplinary team, which creates a treatment plan. Sitting in that room is a researcher from the PBCI, who identifies patients who might be eligible for a particular trial. If the patient agrees to participate, the samples they provide are used in the Centre’s own research and, with their permission, in laboratories studying breast cancer all over Cambridge, and with collaborators in the UK and around the world.

“I consider myself to be in a very privileged position to receive this consent,” says Abraham. “Patients are helping

themselves, but they are also investing in the future for tomorrow’s breast cancer patients.”

Happily, Scott’s analysis found that she was on the right treatment plan, and that she didn’t have any genetic markers for hereditary breast cancer. But this personalisation of treatment, Abraham points out, is about far more than getting the right drugs. Another participant in the programme was found to have the genetic risk factors for a hereditary cancer. These would not have been picked up using the NHS’s current standard of care criteria.

“That means, in practice, we could see that she was on the right treatment,” says Abraham. “We could look at the sequencing to see if there are certain drugs she might react badly to. Surgery can also change depending on the type of cancer. But we could also notify her family to see if they wanted to see a genetic counsellor and consider getting themselves tested. If any of those family members are affected, they can undergo more frequent screenings. This patient has now been cancer-free for four and a half years – were she to relapse, we already know what our first line of treatment would be.”

In the lab, Professor Jason Carroll, co-director with Abraham of the Breast Cancer Programme, is also using the knowledge gained from research participants such as Scott to answer big questions about what causes breast cancer. His work focuses on understanding how estrogen receptor proteins that are present in every woman’s body “switch on” the process that causes cells to grow – a normal process necessary for development. But sometimes they don’t switch off: cells keep growing and cancer is the result.

Using next-generation sequencing technologies capable of analysing vast amounts of DNA, the Carroll Lab has identified where the estrogen receptor protein sits in relation to the genes it switches on. “We assumed the protein would just sit in front of the genes it switches on,” says Carroll. “But Mother Nature isn’t that simple!” They found that, in fact, estrogen receptors are relatively far from the genetic switches they use, and actually move around the genome. “And this means they’re on different switches, and the protein is switching on different genes, which will culminate in an increased or decreased response to treatment. Ultimately, that affects the clinical outcome of that woman.”

Carroll and his team are now looking further into how estrogen receptors work. “Think of the receptors like light switches,”

Cambridge Cancer Research Hospital

**Professor Richard Gilbertson,
Director, Cancer Research
UK Cambridge Centre**

“The mission of the new Cambridge Cancer Research Hospital is to end death and disease from cancer through research, treatment and education.

The PBCI has shown us how to think about integrated cancer medicine: all these techniques are equally applicable to any cancer. We will diagnose and intervene as soon as possible, using AI and machine learning to bring together patient information and use it to make the best clinically informed decision, deploying the next generation of therapies.

The hospital will bring together the very best of Cambridge’s expertise across sectors – from medicine to physics to engineering – under one roof. But you won’t have to live in Cambridge to benefit, as we are developing these platforms to be deployed across the NHS – and across the world.

We have had great success since the 1970s with cancer. But that’s largely been through using existing treatments and looking after patients better – and investment there is diminishing. We need massive breakthroughs, not incremental changes. To do this we need a complete roadmap of the patient. The new hospital will provide that map – an A to Z of every patient’s disease.”



Diane

“The biggest thing I got from the tattoo was self-revelation. It made me realise I had been avoiding looking at myself since I had the surgery.”

he explains. “The DNA sequencing enables us to see where the light switches are in the room. Once we know where they are, we can take them off the wall and look at the wiring. When we did this, we found two key proteins which the estrogen receptor has to work with, and which we are now investigating – one in particular, FOXA1, has become a particular focus in our lab. The sequencing allowed us to take a completely unbiased approach and let the biology tell us where we should be looking. It taught us about long-distance switches, it found these key new proteins, and it taught us things we can use to identify and classify patients.”

Halfway through her first cycle of chemotherapy, Scott had an MRI scan that found her tumour had reduced significantly. “At the beginning of the trial, Abraham could feel the lump easily, but she started having trouble finding it by then,” says Scott. By the time she finished chemotherapy, she no longer needed a mastectomy and was given a lumpectomy instead, followed by 16 sessions of radiotherapy. That was in May 2017. Annual mammograms since have shown that she is still clear of cancer. “I’m so glad I got involved in the trial,” she says. “After



Elaine

"I remember vividly the morning I was leaving home to have the surgery and I looked at myself in the mirror. I knew I would not look like this again after that day."

Patients are helping themselves – and also investing in the future for tomorrow's breast cancer patients

all, the only way we can make treatments better is by doing this kind of research. Otherwise, we just stand still."

Abraham and her team are now focusing on the fine details of how genome sequencing could drive better breast cancer treatment. "The genome sequencing project initially asked if we could deliver whole-genome sequencing in a timeframe which is clinically useful. The short answer is yes. So the next question is: what kind of difference does having those results in real time make?"

And all this work will come together in the new Cambridge Cancer Research Hospital, where the PBCI's ground-breaking integrated data methods will be

used as a template to analyse and treat other cancers. Abraham is looking forward to bringing together many different strands – genomics, imaging, pathology samples, clinical research – to understand their value and importance in the treatment decision-making process. "The Cambridge Cancer Research Hospital will bring together those pieces," she says. "But we are building those pathways now. When we step into the new hospital, we're not just replicating what we did in the old world. We're doing something new and novel." ☺

To read more about Cambridge's efforts to cure cancer and how you can support it, visit philanthropy.cam.ac.uk/cancer





In northern Kenya, camels are vital to the economic and social fabric. Any threat to herd health can destabilise communities – and the nomadic way of life. So when camels started to get sick, action was needed.

WORDS LUCY JOLIN
AND TABITHA MWANGI

On the dry plains of Laisamis, northern Kenya, Dr Joel Ltilitan Bargul is surrounded by an interested group of farmers and their camels. Using a microscope, he invites the farmers to inspect a pre-prepared sample of camel's blood and say what they see. "Something's running around," says one. "That's the parasite which is causing your camels to be ill," replies Bargul. "That's why we need to check each camel and treat the ones which have the parasite."

But this is no field trip into unfamiliar territory for Bargul: this is home. Herding his father's goats and camels as a child, Bargul saw first-hand the devastation that parasites can wreak on communities like these. Long droughts mean there is no arable land here: the rainy season lasts for just a few days a year. Few children go to school – the nomadic Rendille people of northern Kenya live in homesteads during the rainy season, then the men and older children take their livestock and go in search of pastures. ›



Bloodsucking camel keds thrive all year round in arid areas and are close relatives of the tsetse fly. As their name suggests, they are particularly fond of camels – but little was known about their role in parasite transmission and disease

JODIE GRIGGS / GETTY

This livestock is their livelihood: cattle, goats, and, most importantly, camels – highly prized as a source of income, milk, meat, hides, transport and social capital. Ticks and pests such as biting flies are a constant threat to their productivity.

Bargul's mother insisted that he go to school, against his father's wishes, walking him the three kilometres there and back every day. "I was out of school for protracted periods of time to engage in livestock herding duties as my father preferred – but my mother ensured I got back," he remembers. "At that time, both parents, like many people in the community, lacked clarity on the

importance of education. My three sisters did not go to school as it was perceived to be a waste of money, while my youngest brother had to take over the herding when my elder brother had his leg amputated due to a chronic infection and could not walk far. I am the only one in my family who went to school."

His schooling marked the start of a journey which, today, has brought him full circle. Now a lecturer at Jomo Kenyatta University of Agriculture and Technology (JKUAT), and a recipient of a THRiVE-2 post-doctoral fellowship from Cambridge-Africa, he has made it his life's work to understand more about

how parasites are transmitted – and attempt to fight back. And he is bringing that knowledge home to communities such as Laisamis.

Bargul studied biochemistry, graduating top of his class. He decided to focus on understanding how neglected tropical diseases are transmitted, by studying the interactions between disease pathogens, the insects that spread them, and the animals which host them. During his MSc and PhD research studies at JKUAT, the International Centre of Insect Physiology and Ecology (*icipe*), the University of Guelph, Canada, and the University of Würzburg, Bargul



The economic, social and health costs of these diseases are vast. There is no vaccine and the parasite is increasingly drug-resistant

homed in on that scourge of East Africa: the trypanosomes parasite.

These parasites transmit sleeping sickness (African trypanosomiasis) to humans – which can be fatal if not treated – and the equally unpleasant animal disease trypanosomiasis (also known as nagana) to animals. The economic, social and health costs of these diseases are vast. Along with the cost to human health, they affect meat, milk, hide and crop production, as infected animals such as cattle are unable to work in the fields. There is no vaccine, and the parasite is increasingly drug-resistant.

Bargul's groundbreaking PhD research at the University of Würzburg examined how different species of animal African trypanosomes move, swim and successfully survive in their host. After he completed it, Bargul was keen to return home and make an immediate impact. He started by conducting a survey and found that about half of the camels in Laisamis were infected with trypanosomes.

There was just one problem. In the arid regions of northern Kenya, there

are no tsetse flies, the trypanosome's usual host. So, what was transmitting them? Bargul was determined to find out, and secured vital research funding from the Cambridge-Africa Alborada Research Fund along with a THRiVE-2 post-doctoral fellowship, which provides co-ordinated, cross-faculty research-strengthening and scientific training activities to African scientists. This ›

SEND A TASTE OF CAMBRIDGE

Make someone's day,
or treat yourself with
Fitzbillies Chelsea buns
& gift boxes delivered
anywhere in the UK.

Order online
www.fitzbillies.com



Fitzbillies
Est. Cambridge 1920



This print: Spring, 1936 from block 1, state 2

There is certainly no better school for
precision of ideas than the school of
wood-engraving.

(Gwen Raverat in Time & Tide Magazine)

for CAM readers until July 30th Enter CAMSPRING at checkout

20% discount

You can buy limited edition original prints, some signed,
or, where none remain for a particular image, fine-art
giclée reproductions, books and suitable frames Go to:

Darwin's Granddaughter

Gwen Raverat (1885-1957) was one of
Britain's most celebrated & accomplished
wood engravers & author of Cambridge
classic *Period Piece*, chronicling the late 19th
century Darwin clan. The Raverat Archive
holds an extensive collection of her work,
including limited signed prints pulled by
Gwen herself, and bespoke reproductions
from only £30. With over 800 images to
choose from, there is something to suit
every taste.

THE
**RAVERAT
ARCHIVE**
www.raverat.com

Cambridge-Africa

Dr Bargul is a lecturer at Jomo Kenyatta University of Agriculture and Technology and a recipient of a THRIVE-2 post-doctoral fellowship from Cambridge-Africa – a University programme that supports African researchers and promotes mutually beneficial collaborations and equitable partnerships between African countries and Cambridge.

The programme was founded in 2008 by Professor David Dunne (now retired), a Cambridge parasitologist who recognised the brilliance of his African colleagues and collaborators and wanted to provide the facilities and resources they needed to effectively identify and deal with Africa's challenges.

Dunne was joined the following year by programme manager Dr Pauline Essah, now director of research and insight at Education Sub Saharan Africa. The aim was to support African researchers and promote mutually beneficial collaborations and equitable partnerships between Africa and Cambridge.

Since then, the programme has forged partnerships in 50 African Institutions across 18 countries, with regional hubs in Ghana and Uganda. It has a network of more than 200 Cambridge collaborators, and has provided support for more

than 50 African PhD fellows in Africa and Cambridge, and 75 Africa-based post-doctoral fellows.

Cambridge-Africa's initiatives include the Alborada Research Fund, which awards grants to create new, and strengthen existing, collaborations between researchers in Africa and Cambridge, and support high-quality training activities. Recent funded projects include investigations into microplastic pollution in Nigeria and the impacts of overheating in Ethiopian slum rehabilitation housing. The emergency Covid-19 Alborada grant helped to develop the capacity to print 3D masks in Malawi and Ethiopia.

The Cambridge-Africa PhD Scholarship Scheme, meanwhile, brings pioneering African researchers to Cambridge to study for PhDs in subjects which focus on African priorities. Last year's intake are working on projects including anti-corruption reforms and wind turbine efficiency.

"It's about capacity building and collaboration," says programme manager Dr Tabitha Mwangi. "We connect African scholars from universities and research institutes all over Africa with colleagues at the University of Cambridge. These relationships lead to mutual benefit and academic growth that we are very proud of."

Funding is due to end on the Cambridge-Africa PhD Scholarship Scheme next year.

If you are interested in supporting the work of Cambridge-Africa, please contact Caroline Campbell on caroline.campbell@cam.ac.uk or visit cambridge-africa.cam.ac.uk

enabled him to collaborate with Professor Mark Carrington in Cambridge's Department of Biochemistry, along with Dr Daniel Masiga at *icipe* in Nairobi. "The money from the Alborada Research Fund was used to support my field studies and contributed consumables for the research," says Bargul. "The work would not have happened without this funding."

He started with what he considered an obvious culprit – camel flies (or "camel keds" – *Hippobosca camelina*). These bloodsuckers thrive all year round in arid areas and are close relatives of the tsetse fly. As their name suggests, they are particularly fond of camels – but little was known about their role in parasite

transmission and disease. Bargul collected camel blood as well as keds from Laisamis, took the samples back to the *icipe* laboratory and began experimenting. The work didn't show the results he was expecting. Camel keds seemed to transmit other parasites, but not trypanosomes.

However, this led to a new study. He was able to identify three different types of keds, one specific to camels, another specific to dogs and another that is found in livestock as well as wildlife. Bargul took blood samples from camels over a three-year period and found that around nine out of ten camels are infected with *Anaplasma* parasites, which cause the disease anaplasmosis in ruminants, dogs and cattle.

Although camel anaplasmosis has been reported in some countries in the Middle East and North Africa,

this was the first report of its kind in Kenya. He was able to show that camel keds carrying the *Anaplasma* parasite can transmit it to mice and rabbits via blood-feeding, thus demonstrating for the first time that keds are the main vector for the disease in the North Kenyan region.

Bargul is keen to learn more about the diseases that keds transmit to humans and his next research project, when funded, will focus on both livestock and people. Working with the community, he says, is vital: local livestock farmers share knowledge with him, introducing him to local insecticides which he can use in his research. They also described a disease known as swollen glands syndrome – a short illness resulting in high mortality in camels. This led Bargul to conduct a larger study to try to understand more about how this disease is transmitted.

He is determined to continue the work that he hopes will transform the fortunes of local communities. "We still are not completely clear on how trypanosomes are transmitted to camels in this particular area," he says. "Though we have hunches, more work is needed to pinpoint exact transmitters. These findings will contribute to disease control and guide policy makers in pest control programmes. ☺"

Working with the community, says Bargul, is vital: local livestock farmers share knowledge, introducing him to local insecticides which he can use in his research.



Co-founders of the Cambridge Black Alumni Network Amatey Doku (Jesus 2013) and Nnenda Chinda (Downing 2013) in the North Library of the Oxford and Cambridge Club.



Strength in numbers: why societies are not just for students

From networking to making change, alumni groups and societies can unlock myriad opportunities for progression.

WORDS **LUCY JOLIN** PHOTOGRAPHY **CAMILLA GREENWELL**

Think clubs and societies are just for undergraduates? Think again. Whether you joined everything (or, ahem, nothing) it's not too late: many of the University's clubs and societies have an alumni branch – and many alumni have set up groups where you can meet like-minded people and access a friendly, global network.

Nnenda Chinda (Downing 2013) has taken the second route. She founded the Cambridge Black Alumni Network (CBAN), following the murder of George Floyd in 2020, and is currently co-chair with Amatey Doku (Jesus 2013). “I had been thinking about doing something like this for several years but in 2020, I felt that it was now or never,” she says. “Previously, there hadn't been any alumni groups to bring together black people who attended Cambridge, enabling us to form lifelong relationships after studying here.” The group already has 185 members, with matriculation years ranging from 1965 to 2015, and is supported by a delivery team of eight alumni and an advisory group of 15 alumni. Members are spread across the world and their careers span every sector, from the arts to medicine.

So far, CBAN has held five events online, including a session on how the pandemic has affected different industries, a discussion of the impact of George Floyd's murder one year on,

and a graduation celebration.

In December 2021, the Network held its first in-person event – a very well-attended Christmas dinner. “The Network is giving us incredible opportunities – to help each other, to enable students to see themselves represented in so many industries, and to make a difference,” says Chinda.

Or perhaps you're interested in a specific sector? The Wilberforce Society is the UK's oldest student thinktank, offering students the chance to publish their work on policy. It also runs regular events such as the annual conference, which last year featured a memorable Zoom debate between a founder of Extinction Rebellion, Gail Bradbrook, and Sir Mark Moody-Stuart (St John's 1960), former chairman of Shell.

“We'd love to hear from alumni who were members of the Society as students, but also Cambridge grads who now work in public policy,” says current chair, third year George Stokes (Corpus). “We welcome anyone who can get involved with career and networking opportunities for our members, or who is interested in our work. We were only founded in 2009 – so if this is your area and you didn't have the chance to join while you were at Cambridge, get in touch.”

Visit alumni.cam.ac.uk/groups for the full list of alumni groups.

The network is giving us incredible opportunities, to help each other, see ourselves represented across industries and to make a difference



CASTLE ACRE

PRIVATE CLIENT **INSURANCE** BROKERS

Are you paying too much for your Health Insurance?

7/10 of our
clients saved money
and improved cover by
moving their policy, even with
pre-existing health conditions.

For a **free review** of your current cover
contact our Health Insurance Broker:

Ali Adham 0203 966 3614
aliadham@castleacreinsurance.com
www.castleacreinsurance.com

Castleacre Insurance is a specialist independent private client broker.

Bespoke Health and Life policies are amongst a number of insurance services we offer to our clients.

For wider insurance and risk advice contact Directors Guy Everington or Hugo Johnsen on 01787 211 155

enquiries@castleacreinsurance.com

NO ORDINARY INSURANCE NO ORDINARY BROKER

“The trick was to mix in stuff people didn’t know, but keep them on the dance floor”

Folk musician John Spiers (King’s 1994) got his first melodeon as a second year but didn’t learn how to get a crowd on its feet until DJ-ing in King’s bar.

WORDS MEGAN WELFORD



Mouth of the Tobique Sharon Shannon

This track was on a folk music tape my parents made, and it made my head melt. I’d bought my first melodeon, or squeezebox, in my second year – I played the piano before I came to Cambridge as a way to relax, but a piano was expensive and impractical, and

after my wallet (with all my savings in it) was stolen during my second year, College helped me buy the squeezebox – and I tried hard to emulate Sharon Shannon’s sound. But the melodeon was much harder to play than I’d anticipated. There are buttons on both sides, and each button changes the note when you alter the pressure with the bellows. Shannon’s dexterity is amazing and, in the privacy of my room, I tried to get my fingers to keep up. It took me four and a half years to be able to play it.

We’d seek out vinyl at car boot sales and dodgy secondhand shops on Mill Road, then meet up and plan the playlists



Country House Blur

Everything was Blur versus Oasis at that time, and I was never really into Blur – it was like they had made a pact to be a bit weird. But this track was musically amazing. It was still a bit clever, but it was like a Beatles track – progressive, with breakaway bits

and a lot going on. It felt optimistic, like everything did at that time, as if the world was building towards something better. I was busking in Cambridge on the day of the 1997 general election, and I was interviewed about how Labour would be in government. I said, “I don’t really care, let’s just have some fun.” That’s what this song felt like.



Lovefool The Cardigans

This song came out in the spring term of my second year and it felt like everything was blossoming. There had been a lot of grunge music around, but this song was sparkly and trippy and retro: it had a sunny disposition. I cycled around with it in my headphones and,

in the mental snapshots it brings back when I listen to it now, everything is bright. I was determined to make the most of every opportunity at Cambridge. I was learning to DJ and putting on events in the Cellar Bar. And, once a week, I’d nip off to play the folk music I’d been practising in my room to the residents of the Mayflower care home down the end of Mill Road.



Boogie Wonderland Earth, Wind & Fire

By my third year I was installed in the lowly position of minor DJ, and some friends and I were putting on a night in King’s Bar called Tacky Shite Nite. We’d seek out vinyl at car boot sales and dodgy secondhand shops on Mill Road, then meet up and plan the playlists.

The trick was to mix in stuff people didn’t know, while keeping them on the dance floor. Boogie Wonderland has that ‘whaaaay’ factor that gets people up, but you can find lesser-known tracks that have the same effect. I saw that music has the power to affect your mood. It’s in the euphoric chord changes and how the layers build, with percussion solos and vocals – that’s how I learned to build a headline set. There’s music that’s purely functional, for disco dancing, barn dances and ceilidhs. Then there’s music for emotion – the lyrics of a deep ballad, building the musical language. At the King’s Mingle in third year I played the melodeon while Zadie Smith (King’s 1994) sang. She has an amazing, jazzy voice. And then I played Tacky Shite Nite.

John Spiers, better known as Squeezy, performs solo, with Jon Boden in Spiers and Boden, or as part of Bellowhead.

This idea must die: Grammar schools are a tool in promoting social mobility

Professor Peter Mandler says schools cannot compensate for years of different life chances – and, anyway, that’s not their role.

WORDS MEGAN WELFORD ILLUSTRATION GEORGE WYLESOL

During the post-war period there was huge social mobility. And there were grammar schools. Therefore, the grammar schools must have caused the social mobility, right? Well, no. That’s just mistaking correlation for causation.

No new grammar schools have been built for decades, and that’s mostly because parents rejected them and sociologists proved that they didn’t work. They proved that there’s no correlation between school type and career trajectory. Even by the 1960s, most local authorities, even Conservative ones, had dropped grammar schools. Yet the idea persists that grammar schools were good for social mobility.

But let’s think about what social mobility means: moving from a lower to a higher occupational class in society. During the 1940s to the 1970s, and particularly the 1950s and 60s, more than 50 per cent of the population moved to a class higher than their parents’, mainly because the boom in the service industry created a lot of white collar jobs. So people moved from blue collar to white collar jobs. Working class kids had the potential for greater upward mobility, since middle class and upper class kids were already nearer the top of society.

So what role did grammar schools play? We need to start by looking at exactly who went to grammar schools. Most working class kids did not pass the 11+ exam and,

of those that did, many left at 15 or 16. Around 90 per cent of working class kids didn’t go through grammar school. Passing the 11+ and staying at grammar school depends on lots of things working class kids did not have: support at home, resources, even interest in what feels like an alien land. So most working class kids didn’t do O Levels; fewer still went on to A Levels and higher education. Education was not what was advancing them in society.

Sociologists agree, therefore, that grammar schools did not increase social mobility, but neither did comprehensives. Since the 1970s, social mobility has been declining but much of that is due, again, not to education, but to changes in the jobs available – or the lack of changes. Middle class and working class kids today have the same educational experience, and yet the middle class still go into the top-paying jobs. One study showed that 30 per cent of people from Class 1 backgrounds leaving school with no educational qualifications nevertheless ended up in Class 1 jobs. It seems your class position is, mainly, inherited.

The conclusion is that school plays a *role* in socialisation, but not as much as peers, family, your environment and societal attitudes. Education can’t compensate for 18 years of different life chances. As the sociologist John Goldthorpe says, class is often about “looking good and sounding





We would do better to focus on schools making kids happier and healthier, with strong academic standards

right”; looking like you fit in, making the interviewer feel comfortable, picking up on social cues, saying the right things.

Schools are good for socialisation, in terms of how young people relate to each other, for making friends, helping adolescents find themselves and broadening minds. But they’re not incubators for the job market, and it’s a mistake to think of them as such. Eighty-five per cent of employers requiring a degree don’t specify the subject, they just want people to have had enough education.

And education is always a tempting lever for politicians to pull; it’s easier to change the education system than society more broadly. But while raising educational standards is a good thing that everybody wants, it doesn’t follow that it creates a more equal society. To have a more equal society you need to upgrade the economy – create better jobs. There’s an idea that investing in skills leads to better productivity and better jobs, but we’re not actually sure that it does.

We would do better to focus on schools making kids happier and healthier, with strong academic standards, rather than thinking they improve one’s position in the race for life. Grammar schools didn’t give more opportunities to more people, they gave more opportunities to the same people.

Peter Mandler is Professor of Modern Cultural History in the Faculty of History.

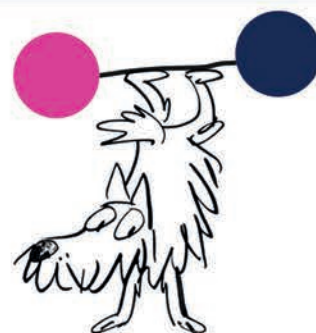
Dating for Oxbridge and the Ivy League

bluesmatch

*"... on my third BM date,
I met someone with
whom I clicked almost
immediately. We've
been seeing each other
ever since ... thank you
for playing your part in
bringing us together!"*

BluesMatch.com

Established in 2001 • Over 5,000 current members



we've got this!

V:Λ
bay tree

executive assistants : perfectly aligned

Professional, flexible, executive assistance
– working as a trusted partner since 2008,
helping you feel more productive
and gain more time

Contact us for a better work/life balance

standingby@baytreeva.co.uk | t: +44 (0)1284 828974
www.baytreeva.co.uk

Fine selection of genuine old maps and prints



Oxford, Cambridge,
Public Schools

UK and foreign
topography

Antique Maps & Prints
P.O.Box 5446,
Oakham, LE15 8WW

www.antiquemapsandprints.co.uk

Our House in Tuscany

Perched on a vine and olive clad hillside near Lucca.
Less than an hour from Pisa and Florence. Peace, walks,
breathtaking views and food / wine. Enjoy being in a real
Italian hamlet. To let when we're not there. Sleeps 4/5. £590
a week. Or ask us about local friends' houses which may be
available. Similar to ours, or larger or smaller. Some with pool.

Tel 020 8965 4494 or 0039 0583 835820

Mike Wilson (Christ Church, Oxford) and
Jessica Corsi (St John's, Cambridge)

Email: to-mike@hotmail.co.uk

Web: www.tuscanycastello.com

VILLA IN TUSCANY

Set in the Pisan hills, a delightful and unspoilt part of Tuscany, Villa Adelina, Chianni, is an idyllic place for a holiday or to celebrate a special occasion in style. Enjoy Tuscan hospitality in local bars and restaurants, take in magnificent views from hillside walks, or sample wines from local vineyards.

A great centre to explore the art of Tuscany: Pisa, Volterra and San Gimignano are a short drive away and Florence, Lucca and Siena can be reached in 1-2 hours. Or stay cool in our large swimming pool. The Villa accommodates parties up to 12 and our recently restored cottage in the grounds will accommodate a further six.

www.adelina.org.uk • Contact Peter Stefanini (Trinity)
peterstefanini47@gmail.com • 01904 705262

To advertise
please call **Sharon Davies** at

LANDMARK
PUBLISHING SERVICES

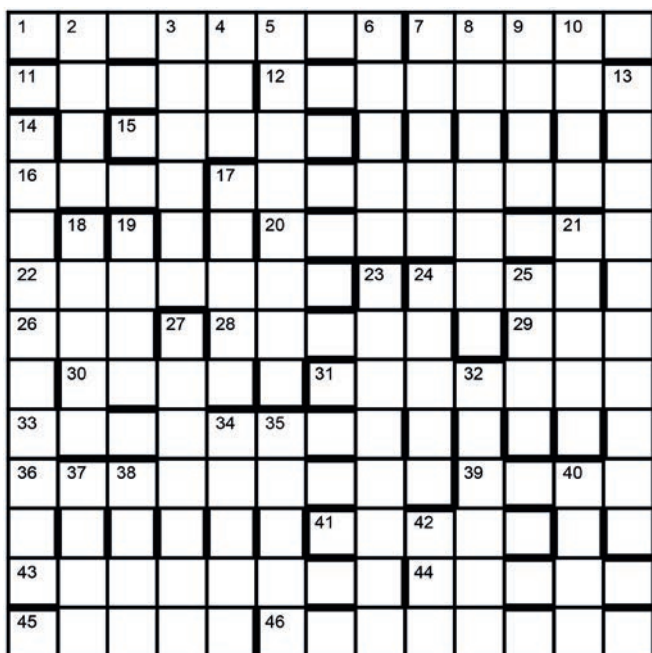
on **020 7520 9474** or
email sharon@lps.co.uk

Match of the Day?

by Nimrod

The answers to several clues lacking a definition may be sorted into sets of Variations to each of a number of Theme words – to be deduced, not themselves appearing in the grid. The relationship of Variations to each Theme is the same, but the types of Variation differ between the Themes.

Wordplay affecting the letter in each of seven cells supplies an incorrect letter for that cell, spelling a two-word phrase. The centre-points of the seven cells – containing the correct letters – must be joined by straight lines. Three letters of the phrase must be changed to form a new phrase describing the result of this joining, to be written under the grid. Finally, three letters must be highlighted in the top row, completing the representation of what, in Nimrod's opinion, is not a very good match.



PHRASE: _____

Q	U	A	T	E	R	M	A	S	S	O	W	M
R	I	C	H	M	O	N	D	M	I	M	E	O
P	S	E	U	D	O	E	P	I	G	E	A	N
L	T	T	G	I	M	M	A	L	O	N	V	S
U	S	A	G	E	M	E	S	E	L	T	E	T
M	O	L	E	B	U	S	H	Y	D	U	R	E
R	E	V	E	A	L	M	U	R	M	U	R	
E	X	E	S	Z	E	B	R	A	E	A	T	H
G	A	D	N	O	T	U	S	G	O	R	M	Y
E	V	E	O	D	A	R	D	I	C	E	S	D
N	I	T	W	I	T	S	I	N	C	O	M	E
T	E	T	R	A	C	A	L	C	U	L	U	S
S	R	E	A	C	C	E	L	E	R	A	T	E

Solution to CAM 94 Crossword Another Brick in the Wall by Nimrod

The four sets, silvered for information only, are Professors (QUATERMASS, CALCULUS, PLUM, XAVIER), London Royal Parks (RICHMOND, BUSHY, RICHMOND, HYDE), R.E.M. studio

albums (REVEAL, MURMUR, ACCELERATE, MONSTER) and Finches (ZEBRA, WEAVER, GOLD, SNOW). Ignored letters in the clues for the Wall answers spell APTLY COLOUR TITLE: the central cell being Another Brick in the Wall, representing the potential common fifth member of each group, i.e. GREEN.

Winner: Sara Rae (Girton 1975) **Runners-up:** Brian Midgley (St Catharine's 1957) and John McCabe (Girton 1989).

Across

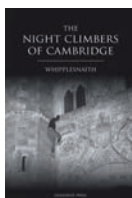
- 1 Rimer looked over titles on book (8)
- 7 Uncompromising options on counter: English or Irish sage (5)
- 11 When your compiler's naughty, take no notice (5)
- 12 To emphasise either, it's essential for me (8, 4 words)
- 15 Lies besetting both sides of House after Government misses (5)
- 16 Olivia's first golden bouquet from Uncle Sam? (4)
- 17 Narcotic took effect in first pub on crawl? (9)
- 20 A ceremonial official's back to visit training vessels (8)
- 22 Pungent-rooted plant pickling from Day Zero (7)
- 24 Fat Parisian officially off the danger list (4)
- 26 Prepared in the kitchen with lettuce, tomatoes etc – but no dressing (3, 2 words)
- 28 Sleep roughly, parking cycles (5)
- 29 Run, but not with this little woman (3)
- 30 Last of parade's fine lookers (4)
- 31 Private caught by chance patrolling base without rigour? (7, 3 words)
- 33 For Ed, exciting denouement: cat not dead! (8)
- 36 Preparation of psyllium hospital's injected in a clumsy way (9)
- 39 Expert appears on pyramid's top step (4)
- 41 Unconventional type somewhat broad in the beam? (5)
- 43 Failure to ban Rio broadcast (8)
- 44 One exposes republic over the airwaves (5)
- 45 Off on date, sample a little pub in Seville? (5)
- 46 Having emptied keg and eaten out, carried on whinging (8)

Down

- 2 New deli in the wynd out of milk (4)
- 3 Officer in Turin lifted gold bars (6)
- 4 Organ repairs needed from time to time (3)
- 5 Lady acclaimed primarily for slips in representation? (8)
- 6 Bereaved mother given elevation in honour (5)
- 7 Android amplifier effective in one sense? (5)
- 8 Engaged by Lord of the Glens, I dispensed with raised digit (7)
- 9 Christiansen's baby's on oxygen ... (4)
- 10 ... McDonald's baby's deficient in boron, his element (4)
- 13 Excellent chap transporting divers here (10)
- 14 20% extra added to every raspberry order from the ground (10)
- 17 End of finger swallowed by European sea fish (5)
- 18 When all went out of bounds? (5)
- 19 A time to celebrate who you are? Indeed (4)
- 21 Inclined to dispense with introduction to team (5)
- 23 Swapping first of infielders with old Heather, sole catcher in the deep? (8)
- 24 Good track punctuated by irregular rock thrown out (5)
- 25 Supermarket chain not having say about the minority? (4, 2 words)
- 27 GI's tail's up, having met his mate (7)
- 32 Equine in shot (6)
- 34 Georgia has top-of-podium position in prospect (5)
- 35 Pottery family's taken over by Independent (5)
- 37 Jack's given the push by big boss (4)
- 38 Low end exposed? (4)
- 40 Language spoken by Algonquian on entering church (4)
- 42 Up last? Nothing odd in that (3)

All entries to be received by 27 May 2022. Send your entry:

- **by post to:** CAM 95 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



The first correct entry drawn will receive a £75 CUP book token and a copy of *The Night Climbers of Cambridge* by Whipplesnaith (Oleander Press).

Two runners-up will receive a £50 CUP book token.

Solutions and winners will be published in CAM 96

and online on 10 June 2022 at:

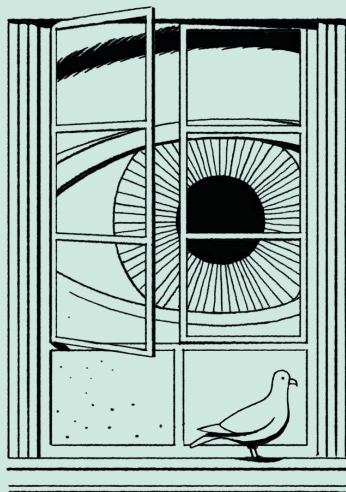
magazine.alumni.cam.ac.uk/crossword

Search it up!

Your directory to alumni life: events, benefits and updates.

Alumni shop

Treat a friend – or yourself – with our exclusive collection of University of Cambridge merchandise for alumni, including the new Alumni Pro Gilet as well as gifts for the home and special occasions. alumni.cam.ac.uk/shop



Cambridge Advance Online

Cambridge Advance Online is a new programme of online short courses from the University of Cambridge, including courses such as: Accelerating Organisational Innovation and Interpreting Consumer Genetic Testing, both starting in September (enrol by August). CAMCard holders are entitled to a discount of 15 per cent. Please use promotional code Alumni15 when booking your place. alumni.cam.ac.uk/cambridgeadvanceonline

Alumni Careers Connect

Becoming a Mentor is easy with Alumni Careers Connect – you only need to provide your Cambridge alumni email address and some basic information to sign up. Mentees will only be able to contact you via Alumni Careers Connect, unless you specify another method (email or telephone). To find out more, visit alumni.cam.ac.uk/careers

Alumni bookshelf

Read recently published titles from the Cambridge community, including a new book, *The Sloth Lemur's Song*, from previous University of Cambridge Vice-Chancellor Professor Dame Alison Richard. Professor Richard has been immersed in research and conservation on Madagascar for nearly 50 years, and her book is described as “full of wonder and forensic intelligence... a love song to the astonishing evolution of Madagascar”. Visit alumni.cam.ac.uk/benefits/book-shelf

Heffers subscription

Give the gift of a Heffers subscription – offering a new book each month for up to a year. Visit alumni.cam.ac.uk/hefferssubscription

Alumni Book Club

Join the debate at the bi-monthly virtual Alumni Book Club, now with dedicated Colleges forums. Find out more at alumni.cam.ac.uk/benefits/alumni-book-club

Digital resources

Explore a wealth of online resources from Cambridge's Colleges, departments, museums and more. From virtual tours to online exhibitions and interesting webinars covering a wide variety of topics, there's something for everyone. alumni.cam.ac.uk/digital



University podcasts

Delve into the world of the University's alumni podcast series, and look out for two new additions: the Cavendish Laboratory's People doing physics, which explores the personal side of physics; and Postdoc Academy Podcasts, covering a range of issues from the University of Cambridge Postdoc Academy. alumni.cam.ac.uk/podcasts

Journals and online resources

Explore your free access to a number of online academic resources wherever you live around the world, including the new Higher Education from Cambridge University Press, which offers the highest quality content to support successful teaching and learning journeys in today's rapidly changing educational environment. alumni.cam.ac.uk/journals

Cambridge Conversations

Listen, connect and engage with current Cambridge thinking in this popular webinar series. For upcoming events and past recordings, visit alumni.cam.ac.uk/cambridgeconversations

Alumni groups

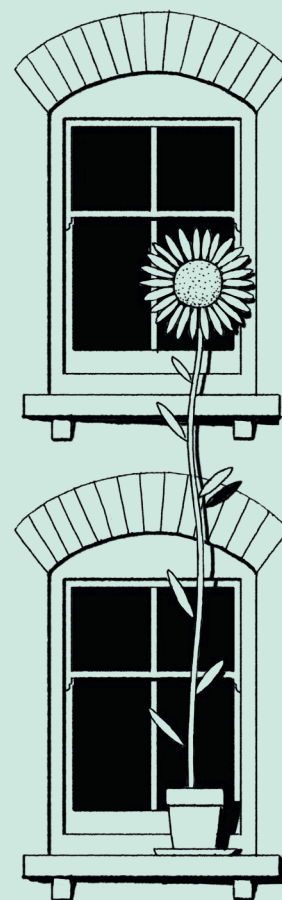
Would you like to meet up with like-minded people and access a friendly, global network? You're eligible to join more than 400 volunteer-led alumni groups around the world, a remarkable network of friendly and engaged alumni sharing a passion and commitment to Cambridge. Most are geographic, while some special-interest groups bring together alumni in the same sector or who have a shared interest. Visit alumni.cam.ac.uk/groups to find your nearest group

Covid-19 latest

Latest Covid-19

research and analysis

Keep up to date with the latest Cambridge research and analysis on the global pandemic at cam.ac.uk/coronavirus



Alumni Travel Programme

Visit fascinating destinations with an expert scholar as your guide and fellow alumni as your travel companions.

Choose from a wide selection of tours including Al Andalus – Moorish Architecture, Minoan Crete and Santorini and Eternal Egypt.

To find out more about the Alumni Travel Programme please visit:

alumni.cam.ac.uk/travel

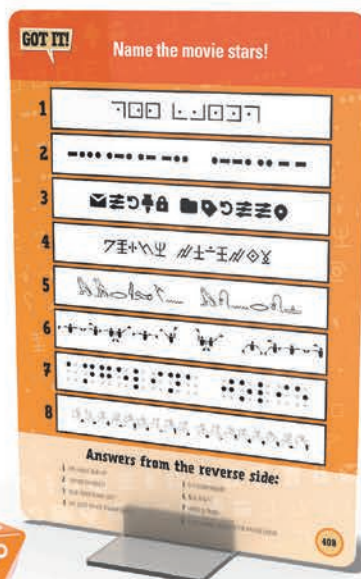


**UNIVERSITY OF
CAMBRIDGE**

The world's first game to use Braille, British Sign Language, Morse Code and Semaphore!

BRAND NEW!

Special Offer!
20% OFF
Reg. Price ~~£19.99~~
Now £15.99
when you quote Ref: CAM6A



The answers are easy... but can you decode them fast enough?

As family games go, this will take some beating!

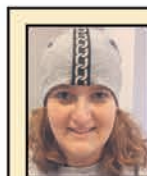
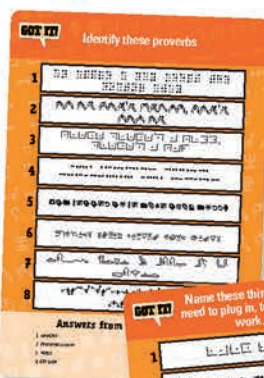
You know that a strawberry is red, or that Paris is the capital of France. You probably also know the names of common musical instruments, famous Kings and Queens of England, sporting events or even breeds of dog. Of course you do...

The question is, would you know all of these things if they appeared in code?

When the question is so easy, 'Got It!' turns into a game of speed, as you race your opponent(s) to decode the answers and enjoy that 'Got It!' moment as everything falls into place!

Got It! features 960 question and answer challenges covering a wide range of family-friendly subjects, with commonly used code languages, including Braille, Semaphore, British Sign Language, Morse Code and hieroglyphics. A history of each code language is also included. For 2 to 6 players.

Ages 8 to adult. Box size approx. 27cm x 27cm



"What a brilliant game, hilarious fun and incredibly educational too!
The whole family love it!"

★★★★★
Heather Romer, Hendon

Remember to quote CAM6A to get your SPECIAL OFFER price

★ Trustpilot **RATED 4.7 OUT OF 5 FROM OVER 39,000 REVIEWS!**

the
Happy
Puzzle
Company

Buy Now! Call 0844 848 2823*

quote ref. CAM6A to receive your 20% discount.

or visit www.happypuzzle.co.uk/gotit

Send coupon to: 'Got It!' CAM Offer
c/o THPC, PO Box 586, Elstree, Herts WD6 3XY

CAM6A

Order Code	Item	Qty	Was	Now	Total
HPCGIT	1 x 'Got It!' 20% OFF!		£19.99	£15.99	
HPCGIT	2 x 'Got It!' SAVE £8!		£90.98	£31.98	
HPCGIT	3 x 'Got It!' SAVE £12!		£50.97	£47.97	
Standard Delivery (approx. 3 to 5 days) Please note that offer code also discounts delivery charge by 20% (regular p and p £4.95)					
				£3.95	
Orders over £50 have FREE Standard UK delivery					
Next Day Delivery - Order before 2pm and receive your order on the next working day (excludes weekends and Bank Holidays)					
				£8.95	
Grand Total					

Title _____ Initial _____ Surname _____

Address _____

Postcode _____ Daytime Telephone Number _____

I enclose a cheque / postal order, payable to THPC ☐ Value £: _____

Or please debit my credit / debit card ☐

Card No. _____

Expiry Date _____ Valid From Date _____ Issue No. _____ 3 Digit Security Code _____

Print Name _____ Signature _____ Date _____

* Our 0844 numbers cost 7p per minute plus your phone company's access charge.

Offer ends 11.59pm 31st December 2022!