The World in 2065

ESRC writing competition in partnership with SAGE

The shortlist

The 10 best entries
from the competition

#in2065

DIGITAL

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SECURITY

HEALTH

FAMILY

CITIES

ECONOMY

E·S·R·C
ECONOMIC
& SOCIAL
RESEARCH
COUNCIL

1965 - 2015
50
E·S·R·C
50 YEARS SHAPING SOCIETY

SAGE | 50 YEARS

Congratulations to our shortlisted writers – emerging talent in social science

Winner

CITY Inc. – by James Fletcher

Commended

The World in 2065: A rapidly changing climate and a renewed social science – Gioia Barnbrook

They know how much oxygen I breathe, which is fine by me – Josephine Go Jefferies

Shortlisted

Doubting gender. Or why it is best to leave certain questions unanswered – Kristin Hubner

After 'posh and white': the 50 year slog towards achieving educational equality – Elizabeth Houghton

Navigating private life in a public world – Sam Miles

Keeping pace with the 'perennial gale of competition' – Samuel Ian Quigg

People will soon be at the very heart of law making – Louise Thompson

One morning in 2065 – Matjaz Vidmar

Policing in times of financial austerity and beyond: The role of psychology in maximising efficiency – Rebecca Wheeler

Foreword

As a leading, independent, academic and educational publisher, with a distinguished history supporting the social sciences, SAGE are proud to partner the ESRC for the newly launched social science writing competition, celebrating the minds of our next generation of social scientists.

When Sara Miller McCune established SAGE in 1965, it was to support the dissemination of usable knowledge and educate a global community. Over the past 50 years this unique mission, coupled with our passionate advocacy for the social sciences, has remained unchanged.

Support of our next generation of academics is a key part of the fulfilment of that mission. The work carried out by scholars is pivotal in not only developing but challenging academic disciplines and facilitating progressive conversation around key issues, ensuring that good social science enquiry and engagement with research can make effective public policy, provide a better understanding of society and lead to genuine social benefits.

Awards such as these go a long way to both underscore and recognise the longevity of the social sciences and the importance of their societal value. SAGE sends our congratulations to all those shortlisted.

Miranda Nunhofer,
Executive Director, SAGE

Introduction

To celebrate ESRC's 50th anniversary and to encourage and recognise outstanding written skills among the next generation of social scientists, we launched an essay competition in partnership with SAGE.

This challenged our PhD students to look towards the future and predict what big challenges society will be facing 50 years ahead in 2065 and how their own research may influence that future world. We invited the writers to envisage how social science will provide vital evidence and insightful knowledge to address the profound issues envisioned, and improve lives.

The dramatic effects of climate change; the economic and social impact of free markets; the ways in which the electorate engages with politics; and the risks and opportunities posed by technology are just some of the subjects covered in the 70 essays submitted.

From living on the moon with the assistance of artificial intelligence to efficiencies in community policing, ESRC PhD students demonstrated their ability to engage their readers with essays ranging from science fantasy to more realistically grounded research. But who knows, looking 50 years ahead, what will be fantasy and what will be reality?

Effective written communication is vital to demonstrate the value of world-class social science research and facilitate evidence-based policy. The written standard of the entrants was extremely high, the use of creative and reasoned arguments highly impressive. Congratulations to all who made the final shortlist and, in particular our winners, all of which are showcased in this programme.

How accurate their 2065 predications will be… only time will tell!

Dr Alan Gillespie
Chair, ESRC

CITY Inc.
James Fletcher

On February 12th 2015, I moved to London to begin my PhD. During my subsequent 50 years as a sociologist studying and living in them, cities have undergone momentous transitions. This brief history charts their recent prosperity through the story of London – a tale of decentralisation enabling visionary corporate finance and social science to recast the physical and socioeconomic architecture of cities.

I arrived in London just as the social sciences were beginning to develop the approaches that would ensure their success, focussing on practical impact, interdisciplinary collaboration and corporate involvement. I moved into the borough of Tower Hamlets, London's economic powerhouse, with an economy worth £6 billion annually and a young population where more people had been born in Bangladesh than in the UK. This wealth production, youth and diversity was representative of London more generally. Conversely, the rest of the UK had a faltering economy and an ageing conservative population with increasing immigration concerns. Thus, London and the UK were diverging. 2015 also saw unprecedented election gains for the Scottish National Party, triggering increased devolution to Scotland, Wales, Northern Ireland and some cities. Strong SNP election performances in 2020 and 2025 forced the government to offer federalisation in 2027 to avoid a referendum on secession. Eventually, on December 12th 2042, England, Wales and Northern Ireland were also federalised, mirroring a global decentralisation trend.

Amidst decentralisation, London continued to grow, steadily gaining devolved powers. As 2043 arrived, the city I had moved into 28 years previously was unrecognisable. From the 900 metre high tower where I now lived, I surveyed a transforming cityscape, embracing recent technological developments.

This began back in 2022 with Saudi Arabia's Kingdom Tower, the world's first kilometre-high building. Besides technological innovation it also had profound cultural implications, with a range of social science consultants having pioneered community creation models. Under their guidance, its 5.5 million square feet of floor space offered offices, malls, accommodation and even artificial forests, stimulating a self-contained society with a culture of independence. Twelve years and four towers later, Kingdom City was a thriving metropolis of 2.1 million people. It represented a triumph for private finance and social science collaboration, setting a precedent for socially conscious corporation rule with minimal

On May 4th 2058, London voted to become the UK's fifth state.

state involvement. Kingdom City prompted numerous equivalent developments throughout the Middle East and Asia in the late 2030s; social theory-informed, self-contained and privately managed. These 'express cities' dealt with population problems and boosted economies with ease, vindicating social planning.

With an immense housing crisis and a ballooning population shackled by construction regulation,

London was desperate to emulate these eastern successes. It turned to its collection of world-leading institutions, including internationally renowned social psychologists, human geographers and many more, to plan groundbreaking reinvention. Throughout the 2040s, backed by multinational finance, London set about implementing this vision. Whilst primarily based around sociological community-seeding housing ideas, it also facilitated a transport revolution.

London already rejected cars, instead championing cycling and enjoying an unrivalled underground system following four Crossrail projects. Driverless electric vehicles had been increasingly present since the mid-2020s as battery technology improved. By the mid-30s London proposed banning all human-driven petrol-fuelled vehicles, but the UK government was opposed, concerned that decreased fuel imports might jeopardise Gulf State relations. By the early 2040s London was powerful enough to press ahead. Again the social sciences, bolstered by increasingly successful corporate ventures into city design, were instrumental in infrastructure planning, embedding the belief that public and corporate desires for liveability and efficiency were compatible. As a result, in 2053 the last human drove through the city. Simultaneously, influential internet scholars drove a complete 5G rollout, providing unparalleled internet access. In contrast, large parts of the rest of the UK still lacked 4G, creating a national digital divide. The scene was now set for divorce. In 2056 the government accepted a federalisation referendum. On May 4th 2058, London voted to become the UK's fifth state.

Today, whilst technically federalised, London is essentially sovereign. Since the early 2050s state involvement has been nominal, particularly following parliament's relocation to Manchester. London, like many traditional capitals, now is more similar to the Martian colonies than the nation surrounding it. These old nation states, largely unaltered from 2015,

In 2053 the last human drove through the city.

are increasingly inferior, especially as Space X's mines and hydroponic innovations further improve city living standards. Social science's guidance of private capital has enabled Jakarta, Doha and many more to smoothly transcend state structures, each now existing as a well-organised corporate amalgamation. This change is evident in my current work. Whilst trickle-down economics and stringent immigration controls have all but ended real-term deprivation, inequality remains entrenched. Employed by London Inc., who are concerned about barriers for talent, I am currently developing proposals to stimulate social mobility. This is just one example of how corporate-social science synergy is cultivating prosperous city societies in 2065.

They know how much oxygen I breathe, which is fine by me

Josephine Go Jefferies

As they say: High! Welcome to the Scafell Pioneering Neighbourhood! Did you enjoy the view of the algae farm terraces on your way up? They're here to keep us comfortable, rather than for survival per se – although thinking about it, they do provide mitochondrial biofuel to maintain vast server systems, so you could argue they are, in fact, for survival.

So far from sea level, we get most of our potable water through our aspiration of the atmosphere aided by hyaluronic acid supplements. We are clean air fanatics up here, and it's nice to recycle and know that the quality you put in is what you get out in water terms.

Your visit is sponsored by our historic brigade of mountain rescue volunteers. Now that we're all moving to higher ground where it's cooler and drier, we do what we can – and hope you will too, by letting your data be tracked while you're up here to advance the science of controlling conflagrations from human or natural causes.

You know what they say: Sport is good. Data rules… right?

I've trained as a Mountain Search and Rescue Volunteer, but we're all standing members of the Fire Service as we anticipate global warming to trigger more drought and forest fires, especially in the lowlands. Our hope is to make wildfire and combustion relics of the past. Only nostalgia buffs and the most privileged innovators can afford to burn oxygen – really, who would want to? We all agree it's precious.

Firefighting is quite an interesting spectacle. Actually, I don't know if you'll ever get to witness one unless it's during a commemorative public fixture. Planned tabula rasa combats conflagration by asphyxiation – literally dialling down the oxygen in the atmosphere. It's harder to control oxygen in the more populated areas, but they're working on it.

Ooh, good question! I think it was someone who thought of reversing the power of flash mobs – I mean, it's still about solidarity but now it's kind of organised to maintain the balance of power in society, so everyone does their bit. I think there's less inequality now, do you know what I mean?

Forgive me, because I'm not an expert, but I think it started with experimental smart cities and they took up the idea from Zuurmond's infocracies – I mean, the reason we managed to go solar initially is because the server farms required it, right? The power needed to run anticipatory rather than participatory democracies?

Some say they manufacture dissent – for drama, and catharsis – but I think it's also to flush out the data flow from shadow populations who are more apathetic; making everyone a heavy breather, at least for a little while, you know, just enough to register a reading and get a snapshot of oxygen consumption at a given time. You know what they say: Sport is good. Data rules… right? Anyway, during the spontaneous census they will interview me to see why I'm in favour of this and against that. Just to ensure my

opinions haven't been hacked, you know, to guard against corruption by harmful private interests. Data rules infocracies, and democracies people do!

So how it works is, the actions we take are screened for relevance to any given question. We consent to our acts and opinions being counted, and it's made transparent in the continuous count so we understand the implications of our acts and opinions as a collective. Any inconsistencies are flagged, and we get an option to compare ourselves against the values of the electorate.

The small things seem to matter more these days, which I'm in favour of.

What, actual elections? They're kind of just ceremonial, really. I guess it's less dramatic but we're a more steady community – without all that manipulative rhetoric flying about in what's left of the news media, making everyone angry and anxious. Life's tough enough up here without making enemies of your neighbours. The small things seem to matter more these days, which I'm in favour of.

My paid job is to test these wearables designed to optimise blood oxygen saturation. We're all extreme sportswomen up here! Implants? Nah, it's easier to upgrade with skins, and surfaces are minimally invasive. Go smooth systems! These info drones help me to train at altitude, and will accompany the family

on holiday soon. My Search and Rescue duties, my job and my life are intertwined. There were great ideological battles in the past about work-life balance, but that was before ubiquitous streaming, which gives our team advantages on the happiness meter, earning time-off in lieu. It's just the idea of time-off, really, but ideas count! I think happiness matters more than bitcredit, care dollars and the million other point schemes you could choose. Anyway, while I'm on holiday, as long as the geo-climatic conditions and my exertion levels show positive alignment, I get professional development credit and a dopamine rush! Everyone's happy!

The World in 2065: A rapidly changing climate and a renewed social science

Gioia Barnbrook

It is one of the most iconic visual representations of climate change: a lone polar bear stands on a thin ice floe, surrounded by a sea so grey it reaches the horizon and simply merges with the sky. In some versions the polar bear instead perches on rocks, its fur scraggly and muddy, standing protectively over cubs. Either way, the intended impact is the same; the picture tells us that these are the victims of the melting Arctic. It is rarer, at the moment at least, to see images of the human cost of climate change. We see its impacts primarily in terms of the natural world, and rarely think in terms of social costs.

Communities in the Arctic, and the researchers who work alongside them, are already noticing drastic changes in their environment – rising temperatures are affecting sea ice and making traditional subsistence hunting activities far more precarious and dangerous; people have died travelling by snowmobile across previously solid ice that rising temperatures have made fragile. At the other extreme, record high temperatures across parts of Europe, Asia and the Middle East have led to fatalities. At present we in the UK are protected by our location, but we know from past experience that the intricacies of global markets, resource trading and politics mean that difficulties in other parts of the world have global impact. What happens in any one part of the world can have global ramifications.

If, for the moment, we still think primarily in terms of the natural consequences of climate change, in 2065 it will be impossible to ignore its social and humanitarian impacts: food and water shortages, mass migration and resource wars seem likely, coupled with large-scale political and economic unrest. Perhaps it is fitting that some of the most popular books and films of the last decade have been set in dystopian futures. Dreams of tomorrow, once populated by hoverboards, flying cars and holidays to Mars, now seem far less hopeful: they no longer come to us in the technicolour joy of the sixties and seventies, but in a muted, washed-out sepia.

> **Meeting the environmental and social challenges of the next 50 years will not be easy or simple.**

From this vantage point, the future looks decidedly bleak, and we may well wonder what use we will have for the social sciences in a world of catastrophic environmental decline and change.

This would be a mistake. The social sciences are unique in the way they enable us to understand the complexity of the conditions, networks and interconnections that influence human behaviour, on both the large and small scale. This information will be essential in aiding governments, non-governmental organisatons and policymakers to develop appropriate responses to the humanitarian and social crises brought by climate change. Social sciences that emphasise long-term qualitative research, such as my own discipline of anthropology, will be of particular value in developing regional and group-specific responses. Anthropologists working in the Canadian Arctic and sub-arctic region have already begun to collaborate with indigenous

communities and natural scientists in documenting the impacts of climate change and developing possible resilience and adaptation strategies. These studies also show the importance of interdisciplinary approaches that involve local, scientific and social scientific perspectives: in the future we will be struggling with issues that have both natural and social causes and impacts, and we will need research that can gather these perspectives. Sustained ethnographic research, surveys and statistical modelling will help us to develop inter-disciplinary approaches that can do justice to the complexity of these challenges. In 2065 we will need the social sciences more than ever before.

Meeting the environmental and social challenges of the next 50 years will not be easy or simple. It will require innovative interdisciplinary approaches that can bring different stakeholders together. It may be necessary to challenge current disciplinary divisions

2065 will bring a robust and re-invigorated social science that can play a vital role in tackling these complex environmental and social challenges.

and rethink how we structure funding in order to make interdisciplinary collaboration easier. It will be necessary for us reflect on the true wider purpose of the social sciences, and of academic research. As researchers we can play an integral role in attending

to the many complex challenges of the future. In the last 50 years social scientists have done exactly that, helping to shape our national and international policies. The world of 2065 will be drastically different to the world today, and to the world of 50 years ago, but the benefits social scientists can bring remain the same. Far from being obsolete, I think that 2065 will bring a robust and re-invigorated social science that can play a vital role in tackling these complex environmental and social challenges, for the benefit of people and the environment.

After 'posh and white': the 50 year slog towards achieving educational equality

Elizabeth Houghton

On a summer's day in 2015, in a small lecture theatre in London, a primary school student turned to his audience and said: "When we watch the news we've seen how university fees have risen so people from state schools feel like they can't afford to go. All we see in the media is posh white kids going to university."

His audience were budding academics, charity workers and educational professionals trying to find out how to break the link between high-earning households and access into the UK's top universities.

That morning in the same theatre, the Director of the Office for Fair Access (Offa), Professor Les Ebdon, had challenged top universities to use their research expertise to overcome the "tough challenges in improving access".

With an issue like inequality there is never going to be a single piece of research that will change everything.

'Highly selective universities are full of highly intelligent people who excel at solving problems,' he said. "If they truly harness their wealth of research expertise, it could bring a step change in progress."

And change was needed. A year earlier Offa had found that only 2.9 per cent of teenagers from the poorest 40 per cent of households went on to study at the UK's top 24 universities, an increase of only 0.5 per cent from 1998. Though more people than ever were going to university, where they were going was still very much a matter of concern.

Half a century later it is worth contemplating how that's changed. Dr Elizabeth Houghton, who in 2015 was doing her PhD research on how students' economic and social backgrounds affected their experiences of university, explains how it's taken all of the following 50 years to reach a point where a student's past no longer has such an influence on their future.

"With an issue like inequality there is never going to be a single piece of research that will change everything," Houghton explained. "It's a slow slog. It takes decades of work by academics, policymakers, campaigners and teachers to bring about change. But slowly, steadily, things began to get better."

She believes a key turning point came in 2025, when the new government extended compulsory education to 21 – requiring all young people to be studying or training at the equivalent level of a higher education undergraduate degree.

There has been plenty of debate since about the motivations behind this legislation. The official reason was to bolster the UK's 'economic competitiveness'. There was also a recognition of so-called 'credentialism', to borrow the phrase of Basic Income campaigner Professor Guy Standing: as the number of graduates increased, more and more qualifications were needed to get a job, and by the early 2020s the lack of a university degree was effectively a life sentence to unemployment or underemployment.
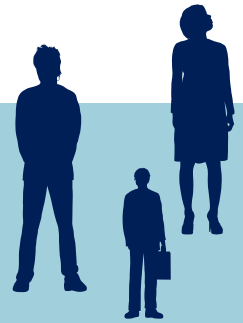
Indeed, some at the time grumbled that extending education was a convenient way of massaging the employment figures, seemingly lifting one million young people out of unemployment.

Others felt extended education was a natural consequence of increasing life expectancies. As the shadow universities minister observed at the time:

> Drip-by-drip, over 50 years, politics and academia stopped looking like it was just posh and white, and the more kids who saw that, the more who thought 'that could be me'.

"If young people are going to be working till their seventies, even leaving university at 21 means almost 50 years of work. We might as well give them the chance to learn something they'll enjoy doing for the next half a century."

Arguably this justification proved apt: creative and social enterprises boomed, as young people had more time to think them up and less worries about getting a job to pay back their student loans.

As Houghton explains: "No one was really thinking about extending education 50 years ago, not least because once it was made compulsory there was no way of continuing to charge student fees. The debts that already existed had to be written off – which was handy as it was predicted it would cost the Treasury £8 billion a year by 2040. Wiping it out actually helped the economy, as graduates suddenly had more cash to spend."

Compulsory undergraduate level education also meant better monitoring of where students were studying. Drawing on the Obama Administration's 2015 changes to the Fair Housing Act in the US, the Fair Access Act of 2030 required all universities to scrutinise their student population for economic bias and provide public reports, or risk losing funding.

"There were some complaints at the time about an intrusive state," Houghton explains. "But I think generally the sense was that we couldn't have another 50 years of poor kids – with the racial bias that comes with that – being excluded from top universities and therefore top professions. The fact that it was university research that largely proved this made it hard for institutions to argue against."

Houghton concludes: "Drip-by-drip, over 50 years, politics and academia stopped looking like it was just posh and white, and the more kids who saw that, the more who thought 'that could be me'. Research along with this exposure helped to change things."

Keeping pace with the 'perennial gale of competition'
Samuel Ian Quigg

Who will be able to cope and thrive with the demands of living and labouring in the 'Competition State'?

Joseph Schumpeter vividly described capitalism as 'the perennial gale of creative destruction'. He is credited with coining the term Unternehmengeist ('entrepreneurial spirit') – and it is such a 'spirit' that everything under the sun should represent for perennial success. To possess an entrepreneurial spirit is to be well-prepared to navigate and overcome the uncertainties and risks that life will bring, and all social institutions, whether (for example) universities or the family, should drive home the message that the good citizen is responsible for securing the future. A 'competition state', as opposed to the welfare state, is one where individuals are enabled and made responsible for realising their economic potential. One policy to enable citizens has been to widen university participation, with the university degree acting as the great equaliser of life chances – allowing young people to gamely wage battle with the invisible forces of the market. However, being a

It is hardly a bold prediction that the welfare state will be an institutional relic by 2065.

graduate amidst a sea of the same ilk is unlikely to alone make the final cut in the coming 'jobs war', where prospective top talent will need to accumulate a wealth of experience that pays testament to their striving to fulfil their potential.

It is hardly a bold prediction that the welfare state will be an institutional relic by 2065, having been usurped by a more globally competitive model heralding the creative powers of the individual to cope with social and economic turbulence. The entrepreneurial citizen is one emancipated from the state and Ulrich Beck's 'zombie categories', such as gender, class and ethnicity. Any talk of limits in the competition state will simply allow the perennial gale to blow the weakest away, while the strongest push forward. It is a gale that will separate the winners with the right work ethic from those who have failed to grasp the multiple opportunities available. In 2065 a multitude of individuals will be competing more than ever to stand out from the crowd, supplementing standard academic credentials with value-added extras, attempting to strategically market every experience as part of a seamless digital identity that communicates entrepreneurial flair.

Continually reinvigorating the entrepreneurial identity is a life-time project, becoming all the more apparent in 2065 as concepts such as retirement, linear career progression and time-out from gainful employment become anathema to the essence of the competition state. It will be a period of accelerated time where every moment is more dreamt than lived, with minds focused upon being better tomorrow than today. Language around the ideal entrepreneurial citizen can seem, on the one hand, akin to a spiritual experience of uncovering the hidden depths of self, and, on the other, simply towards maximising economic performance – as well as, ironically, projecting social conformity. While the competition state may celebrate diverse talents, these should serve the same ultimate purpose, namely economic growth, with responsibility for success in the present and future

resting firmly on the resilience and ingenuity of the self.

Returning to the 'perennial gale of creative destruction', how might this reflect capitalism in 2065? The competition state will have wholly normalised the onus on the individual to continually prove their intrinsic worth, with those at the wayside left to consider their failure. Regrettably the chances of rising again after falling from the perennial gale

Any talk of limits in the competition state will simply allow the perennial gale to blow the weakest away.

is, at best, negligible, as it will move forward with those remaining in the relentless pursuit of more. The perennial gale of creative destruction is an unforgiving force that will spurn non-entrepreneurial parts, regardless of mitigating circumstances or previous performance, as the competition state, for better or worse, is narrowly focused on the future. Those not carried by this gale are destined to live and labour precariously, on the margins of those who have managed, thus far, to fly high through their permanent restlessness in the present.

Future social research must break down how meritocratic this competitive gale is with respect to who it unscrupulously drops to ground level, leaving them to deal with the 'bads' of entrepreneurial

society. There is likely to be game or membership rules that go well beyond those resources that are easily or freely attainable. Assuming that such a socio-economic model is a good basis for ensuring that modern societies remain globally competitive and fair – which I doubt – the social sciences must remain alert to old inequalities in new forms. While an entrepreneurial spirit in sustaining the winds of change is not to be knocked, it would be a body blow to social progress if this spirit can only be practised effectively by an elite, while a precarious multitude live and labour at the edges – far removed from that gale of inclusion and opportunity that has long since passed.

One morning in 2065
Matjaz Vidmar

Beep, beep, beep…The alarm goes off ringing – my personal assistant, Thor, is scheduled to wake me up as ever for 7.30am. Would be easy to hit the red button now, kill Thor off, and enjoy some more peaceful slumber next to my wife, but I knew it was not to be.

The red button is not there to avoid getting up in the morning, only to avoid mindfulness and 'the Biggy'. Thor is a machine, of course, or not even that, it is a technology which enables total connectivity anywhere and everywhere, and helps me with anything as long as it's about getting information or communicating.

Beep, beep, beep… The red button seems so tempting…

'The Biggy', of course, is the worry that either humans or technology itself could use our personal information inappropriately or against us. Orwell's Big Brother from 1984, that sort of thing. We call it 'the Biggy' now, as a joke, as we hope to have found a solution for it. Every single one of our PA devices has the ultimate switch – press the red button and the thing is off, all power cut! If we notice anything odd or prying, we can just stop the thing – and the PAs know this, too.

Beep, beep. Finally, I hit the blue button – "message accepted". Thor predictably voices in his clinical tone: "Alarm deactivated. Status check-up in five minutes." He will auto-text me in five minutes to ask if I am ready for my run. As I run, he will update me on all the news, read my e-mails, send my replies and put music on, as I like it. He will keep track of my run and let me know when I am slipping off my desired tempo.

Still sounds like Big Brother? Well, apart from being able to switch the thing off, we now also have true democracy and complete control over the 'big data', so no evil masterminds can take over our lives.

Initially there was a struggle (well documented by my colleagues researching public policy), when corporate firms tried to fight off these ideas about free absolute connectivity being a human right – but ultimately they failed. Indeed, how could these profit-driven companies compete with the new co-operatives, which were based on open innovation and have had pre-funded all their technology products, making them free for all customers?

> ## 'The Biggy', of course, is the worry that either humans, or technology itself could use our personal information inappropriately or against us.

Since this Space Revolution 35 years ago, free internet everywhere is no longer a dream and portable devices like Thor are standard issue to all new-borns since 2050. The co-operatives built large constellations of small satellites, enabling anyone to access the web from anywhere. Soon, people started to truly talk to each other, and political and social change was inevitable. We have done away with the nation state and we now have community administration and global governance, as the free

absolute connectivity enables citizens' participation in all key decisions.

We have done away with the nation state and we now have community administration and global governance.

The air is cold and as soon as my feet touch the floor, I shiver just a little – but the heat immediately rises from the PWC carpet and I feel like immersing in a warm pool. I just put on the running suit as Thor texts: 'Ready to go?'

I am particularly proud of the PWC – 'Personal Warmth Carpet' – and many other technologies which I helped develop with my research in innovation systems and knowledge networks. We started small, with the Scottish Space Sector, but soon the understanding we developed led to national and international interventions, supporting the crowdfunded campaigns with access to technical expertise previously locked away in science labs.

Not all of these interventions worked, but by using our Quantified Correlated Impacts Evaluation framework we were able to weed out the struggling projects and invest more in those which returned sustainable new businesses with great potential. As predicted, as soon as new companies supported by the right tools entered the knowledge network, their success was inevitable.

I reply to Thor: "Sure.". "Unlocking the pressure passage" he responds. I step outside. The sky is pale blue due to the thin, carefully constructed layer of atmosphere, and the warm shimmering white light from the Sun is rising from behind the silvery hills. Who would have thought 50 years ago that being here, living here was possible? But possible it is – as soon as humanity started to leave in peace and harmony, pulling together resources and expertise previously used to fight each other, this became a very small step indeed.

As small as the one I make through the door of the compound, filling my lungs with clean morning air. I start to run, ready for another day of my future – living on the Moon in 2065.

Navigating private life in a public world
Sam Miles

Walking down a city street, you feel a buzz from the phone in your pocket. Looking at the screen, you read a message from the coffee shop on the next block. 'We've got a new batch of that Javanese coffee you said you liked last week. Come and try it now and we'll upgrade you to a Grande for free!'

This is not a vision of the world in 2065, it's what the world could look like this year. Locative technology – that is, the GPS system in your smartphone that can track your location – is now sophisticated enough to link your position in space with corporations who could cleverly use the data to nudge you towards their products, all as you walk down the street in real-time. The only reason we haven't seen this targeted mobile marketing on our high streets yet is because the extent to which our online data is shared between developers, governments and corporations would unnerve us – unless introduced in a way that benefits us as consumers.

What do we lose when we lose our privacy?

My research will change the world by 2065 because digital technology and location-based services will be central to how we chart space, how we connect with people, and how we use the services, shops and social venues around us. I study the ways that gay men – to focus on just one population group – use locative dating apps in their everyday lives. I ask how these products affect social and sexual encounters, and how mobile dating apps mix the concepts of virtual and physical space. But I also explore how dating app users consider privacy, surveillance and commodification.

In 50 years the idea of being locatable in space won't be new, and it might not even raise any concerns: it will simply be a fact of life. We won't need to ask where our friends or family are, because our devices will pinpoint them on maps projected onto our kitchen counter or our spectacles. Rather than mobile phones, we may communicate with wearable technology – not just the digital watches being developed today, but also tiny complex microchips worn as jewellery or even implanted into the skin. These devices will map our movements, our health, and even our appetites to others – including, in all likelihood, private corporations. After all, what better way is there to attract customers into your restaurant than by engineering conversation with someone nearby who you know is hungry and has been on their feet for several hours? Combine this knowledge with their credit card transactions – a penchant for Italian food, a recent holiday to Tuscany – and the restaurant can make the customer feel like the only thing they want to eat is a stonebaked pizza. In this way, corporations will know as much about us as we know ourselves – and maybe more.

If this sounds dystopian, we should consider the positives too. In 50 years, mobile technologies will help ambulances reach medical emergencies even more efficiently than they do now. A phone app was released this year that maps off-duty doctors onto your local city, so that if one is nearby, they can dash to your pinned location even quicker than

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paramedics. This kind of crowdsourced community may develop in beneficial, altruistic ways that we cannot even imagine. Friends and family will feel closer than ever, despite a growth in migration and global networking. Crime and security will be streamlined, with criminal activity mapped even before it happens by aggregating the locational data of known hotspots.

Digital technology and location-based services will be central to how we chart space, how we connect with people, and how we use the services, shops and social venues around us.

But crime and punishment raise some of the biggest questions, too. Many baulk at the idea of an electronic tag monitoring offenders today, but 50 years from now the whole population might be tracked in a similar way. The argument 'if you've got nothing to hide, you've got nothing to fear' will sweep aside the valid objections of civil liberties in the same way that app developers currently sell users' personal data to corporations. After all, as a dating app user you share incredibly personal data not just with potential dates, but with third parties to whom your statistics, behaviours and likes are highly valuable. And you sacrifice this data because you get something out of the exchange too – a convenient social networking tool.

Mobile and pervasive digital technology, like the radio, the phone, and the television before it, is the future. It is therefore vital that we consider the questions these technologies raise. What do we lose when we lose our privacy?

People will soon be at the very heart of law making
Louise Thompson

It's 1st March 2065. Jenny Brown is tucking her son into bed and thinking about tackling that pile of ironing that's been sitting around all week. Her iPhone beeps and alerts her to amendment 52 of the Children Bill which has just been proposed by an MP in the House of Commons. This amendment means a lot to Jenny, as she believes the changes to school staffing ratios made by the bill will badly affect her son's education. She's been following the issue through a hashtag on her phone, allowing her to read or watch debates and questions in Parliament almost instantly. Right now, she watches as the Minister accepts the amendment to the bill – one that she herself drafted online just a few weeks ago.

By 2065 this sort of direct involvement in making the laws which affect our lives could be an everyday thing. Wouldn't it be great if we could all play a bigger part in making changes to laws before they come into force, rather than just complaining about them afterwards?

Perhaps you are reading this and thinking that it doesn't sound very radical? Technology is already racing further ahead than this – but parliamentary institutions generally lag behind. They are the institutional equivalent of your mum sending you to university with an old Nokia and a memory stick, when what you really want is the new Apple Watch and an iCloud upgrade. It's not that they don't know how to use technology. In fact, the UK Parliament has pioneered some fantastic initiatives like the Lords Digital Chamber and allowing the public to ask questions to ministers or witnesses using a hashtag like #AskGove or #AskEnergyFirms. It's rather that the Parliament is often unsure how best to use it, or concerned about the effect reforms may have.

The current Speaker of the House of Commons, John Bercow, hinted at this in 2013 when he said that 'change within Parliaments is an often delayed response to change without Parliaments'. In other words, they are slow to change and struggle to keep pace with the changes going on around them. Television recording may have begun in the 1930s, with 11 million UK households owning a TV set by 1960, but it wasn't until 1989 that television cameras were finally allowed to begin recording MPs in the House of Commons chamber. Apple may have sold five million iPhones in 2007, but smartphones and tablets were only permitted to be used in the House of Lords chamber in 2011, closely followed by a similar relaxing of the rules in the Commons.

But we have every reason to be optimistic. And this is largely due to the increasing impact of research by a relatively small group of political scientists who study the institution every day. Their work has

> **Wouldn't it be great if we could all play a bigger part in making changes to laws before they come into force, rather than just complaining about them afterwards?**

been fundamental to some of the key parliamentary reforms of the 21st century so far. This includes the work of Meg Russell and others at University College

London's Constitution Unit, whose research into the autonomy of backbench MPs was taken on board by a parliamentary select committee and led to the creation of the Backbench Business Committee – allowing MPs rather than the government to choose issues to be debated in the chamber.

By 2065 academic research should be leading the work and processes of Parliament – helping it to fulfil its role as our core democratic institution by bringing the public back in to everyday decision-making.

I'd like to think that my current research on the public reading stage of bills will one day be added to this list of research-inspired reforms. Public reading is an exciting innovation, encouraging the public to comment directly on a government bill, in a similar fashion to how Jenny did earlier on in this piece. Although only piloted once, with a rather clunky web forum, it could be the first step on the road to a more people-orientated examination of new laws. By highlighting what worked well and what didn't, social science researchers can help shape how such a system may work in the future.

Where researchers are successful it is often due to a parliament and academics having a good working relationship. Indeed, the value of social science research is increasingly being recognised by Parliament. For instance, the Digital Democracy Commission launched by the Speaker in 2013 drew on academic research and appointed a political science academic as one of its commissioners. Its report includes a range of exciting suggestions for the future of parliament, including the creation of a cyber-chamber to facilitate public debate on key issues. The creation of a social science section within POST (the Parliamentary Office for Science and Technology) provides a further channel for future dialogue between academics and parliamentary practitioners.

To quote Mr Speaker once more, "societies lead Parliaments as well as follow them". By 2065 academic research should be leading the work and processes of Parliament as wel – helping it to fulfil its role as our core democratic institution by bringing the public back into everyday decision-making.

Doubting gender. Or why it is best to leave certain questions unanswered

Kristin Hubner

"Any social scientist who tries to predict the future should be regarded with healthy distrust", I was told by my professor during one of my first sociology lectures which, ironically, dealt with the subject of social change. If this quote is to be believed, then the following paragraphs can only be understood as a work of fiction. Confronted with the choice between dystopia and utopia I chose the latter, believing and hoping that constructions of reality can eventually create a tangible reality.

In order to paint a picture of how sociology in general and, in this case, feminist theory in particular might change the world within the next 50 years, it is perhaps best to examine one specific example and compare the recent past with the potential future. In 2009, Caster Semenya competed in the 12th IAAF World Championships in Athletics in Berlin and won the gold medal in the 800-metre race. Her success, however, was immediately followed by a controversy regarding her 'true' sex and the question of whether Semenya should be permitted to compete as a woman. After 11 months the IAAF's medical commission, which included a gynaecologist, endocrinologist, psychologist, internal medicine specialist and a 'gender expert' concluded that the athlete should be allowed to enter sports competitions as a woman and keep her medal.

I argue that this case perfectly illustrates the importance of feminist sociology and of incorporating its research findings and theoretical concepts into a wider scientific and social context. If this incorporation will continue to take place over the next 50 years, we might experience a utopia in which we would not encounter another case like Semenya's

again – or, at least, deal with it differently. By 2065, the political and social implications of categories such as gender and sex might in fact have become more widely acknowledged through the dissemination of feminist theory and the expansion of interdisciplinary research. By then, gender, which is usually associated with socially constructed ideas about femininity and masculinity, and sex, which commonly refers to a person's 'female' or 'male' biological make-up, will be recognised as complex and yet somewhat arbitrary categories. It will be acknowledged that a person's chromosomes, hormones, sexual preferences, behaviour and appearance (to name only a few highly gendered human characteristics) cannot and do not need to be consistently categorised as 'female' or 'male'. By 2065, we might even question the use of these gendered distinctions altogether.

> ## By 2065, we might even question the use of these gendered distinctions altogether.

A significant part in the dissemination of essentialist assumptions about gender is due to the segregation between natural and social sciences. When natural sciences are considered a source of objectively measurable truths, resulting in a perception of biology as destiny, it can limit people's views regarding themselves and others. The segregation

between the sciences is in itself a highly gendered classification between the more 'objective' natural sciences and the more 'subjective' social sciences, and has been criticised not only by feminist sociologists. The inclusion of feminist and sociological theory in disciplines such as biology, chemistry or medicine could lead to a more generally accepted scientific

The inclusion of feminist and sociological theory in disciplines such as biology, chemistry or medicine could lead to a more generally accepted scientific ideal.

ideal, which stresses the importance of considering the biases and socio-political consequences of scientific interpretations. Scientists across various disciplines would thus become more aware of how their own internalised ideas about gender, ethnicity and other social categories shape what they infer from their findings. This would also make researchers become more conscious of how their interpretations influence social norms, standards and even laws.

So, if by 2065 another athlete's gender – or any person's gender for that matter – is questioned, society and science in this utopia will, through the influence of feminist sociological theory, have changed to such an extent that there will be no need to refer to a medical commission. There will

instead be a greater acceptance of the notion that gender is a socially constructed concept, based on a too simplistic dichotomy which does not represent 'reality'. There will also be more awareness about racialised notions of gender that shape the way we perceive femininity and masculinity, and which might have contributed to raising the issue of Semenya's 'true' gender in the first place. Indeed, the importance of intersectionality – acknowledging that gender can mean different things for people of different ethnic and social backgrounds – will have become the standard way of researching and grasping the social world.

In spite of not being able to predict the future, this is how I envision feminist sociology will change the world within the next 50 years, and it is the utopian vision I strive to realise through my research.

Policing in times of financial austerity and beyond: The role of psychology in maximising efficiency

Rebecca Wheeler

The UK is in the grip of financial austerity, with police forces among those adversely affected by budget cuts. The Government required a 20 per cent cut in police spending between 2011 and 2015, and the July budget suggests these cuts are likely to continue. The current challenge faced by police is to meet public expectations of policing during austerity, while minimising loss of personnel. Despite this there has been a 15 per cent drop in the number of officers and staff since 2010. This drop in recruitment, combined with the demands of minimising the impact of budget cuts on the public, means police officers are often overstretched.

One consequence of this overstretching is that training opportunities for officers are increasingly limited, with newer recruits – who often make up the frontline of policing – suffering the most for this lack of opportunity. Minimal time is available for training and, in particular, only one or two days may be allocated to basic victim and witness interviewing skills. This is in contrast to recommendations of HMIC, who suggest a need to improve the efficiency of frontline officers.

Within the UK the 'Cognitive Interview' (CI) represents the gold standard for acquiring information from a co-operative witness. The CI is widely studied in the psychological literature. Indeed, a 2010 meta-analysis conducted by Memon and colleagues reported that the CI has been the focus of at least 65 studies since its development. Yet, with minimal training provided, interviews often fall short of the desired standard. This is deeply problematic given the importance of victim and witness testimony to the criminal justice system. In May 2015 the *New Yorker* reported on a $20 million

settlement awarded when it was established that use of the Reid interrogative technique had resulted in a wrongful conviction. The Reid technique is outlawed in many countries, including the UK. Nonetheless, this case shows the impact (financial and otherwise)

> **The current challenge faced by police is to meet public expectations of policing during austerity, while minimising loss of personnel.**

which poor investigative procedures can have, and has opened the door for any number of similar court cases over the next few years. In light of the technological advances, which allow interviews to be scrutinised in a way not previously possible, it is more important than ever that interviews are conducted appropriately. It is plausible that scrutiny of interviews could reveal inappropriate questioning resulting from lack of training. At best, this could lead to dismissal of evidence. At worst, we could see similar false conviction cases in the UK.

It is by promoting researcher-practitioner partnerships and ensuring that the findings of laboratory studies are transferred to real-world settings that applied cognitive psychology can make a substantial contribution to changing the world over the next 50 years. A first step towards this is to promote the application of psychological research in the training
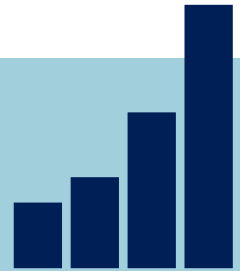
of police officers. A vast amount of research exists on effective learning and memory recall. In recent years there has also been a shift towards research into the efficacy of online learning, something which is likely to continue. In addition, psychological research on how information is cognitively processed has hinted that the layout of teaching materials may affect motivation for learning. Combining research from these areas will place psychologists in a strong position to advise police forces on maximising training time and improve the efficiency of their interviewing officers.

While further training for interviewing officers should remain a priority for academics and practitioners, researchers should also drive advances in interview techniques themselves over the next 50 years. When

Over the next 50 years it is vital that researchers continue to update interviewing procedures to keep pace with the changing demands of modern policing.

the CI method was developed in 1984 it represented a leap forward for investigative interviewing, providing an interview framework and playing a role in minimising the harmful effect of inappropriate questioning on testimony. However, in many ways the CI has not kept pace with memory research, and

it is only in recent years that researchers have sought to address this. For example, current interviewing practice does not meet the needs of officers faced by non-cooperative witnesses – a particular problem in the case of crimes such as gang violence. My own research in collaboration with the Metropolitan Police Service and Greater Manchester Police has begun to explore these issues and consider possible solutions through combining principles from memory and social influence research.

Over the next 50 years it is vital that researchers continue to update interviewing procedures to keep pace with the changing demands of modern policing. It is through strengthening researcher-practitioner ties and developing initiatives in partnership with the groups we aim to support that psychologists are able to have the biggest impact over the next 50 years. In this case I hope to see applied cognitive psychologists leading the way to improve the efficiency of policing in times of austerity.

Our judges

Dr Alan Gillespie

Dr Alan Gillespie CBE has been Chair of ESRC since 2009. In the corporate sector he is Senior Independent Director on the Boards of both Old Mutual plc and United Business Media plc. Previously he was a Partner at Goldman Sachs & Co and Chairman of the Ulster Bank Group. In the public sector he has been Chairman of the Northern Ireland Industrial Development Board; Chief Executive of The Commonwealth Development Corporation and Chairman of The International Finance Facility for Immunization (IFFIm).
He is a graduate of the University of Cambridge where he obtained MA and PhD degrees in Economic Geography. He is an Hon Fellow of Clare College, Cambridge.

Martin Ince

Martin Ince is a freelance journalist specialising in research and higher education, and was previously deputy editor of *Times Higher Education* (THE).
He is a frequent contributor to ESRC publications including *Society Now* and *Britain In* magazines. He chairs the QS World University Rankings and advises universities around the world on rankings issues.
He is president of the Association of British Science Writers.

Miranda Nunhofer

Joining SAGE in 1995, Miranda has worked in journals publishing for nearly 20 years. Her career has included work within a variety of roles within the editorial department, including for a number of years commissioning editor for Criminology books and journals. Miranda joined the Senior Management Group in 2008. As Executive Director for SAGE's Humanities and Social Science journals programme, Miranda drives the overall growth and development strategy for this programme comprising a list of over 250 leading titles and is actively involved in the wider operational and financial oversight of SAGE London.

Tash Reith-Banks

Currently Production Editor for the *Guardian*'s Science desk, Tash Reith-Banks has also been a freelance scriptwriter, subeditor and copywriter. She worked as a writer and editor for the publishing arm of healthcare company Dr Foster, before moving to Guardian books, where she was a researcher and contributing writer on several titles and co-authored *The Guardian Guide to Volunteering*. She has a degree in English literature from the University of Cambridge.