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The Future Is Here (www.thefish.co)

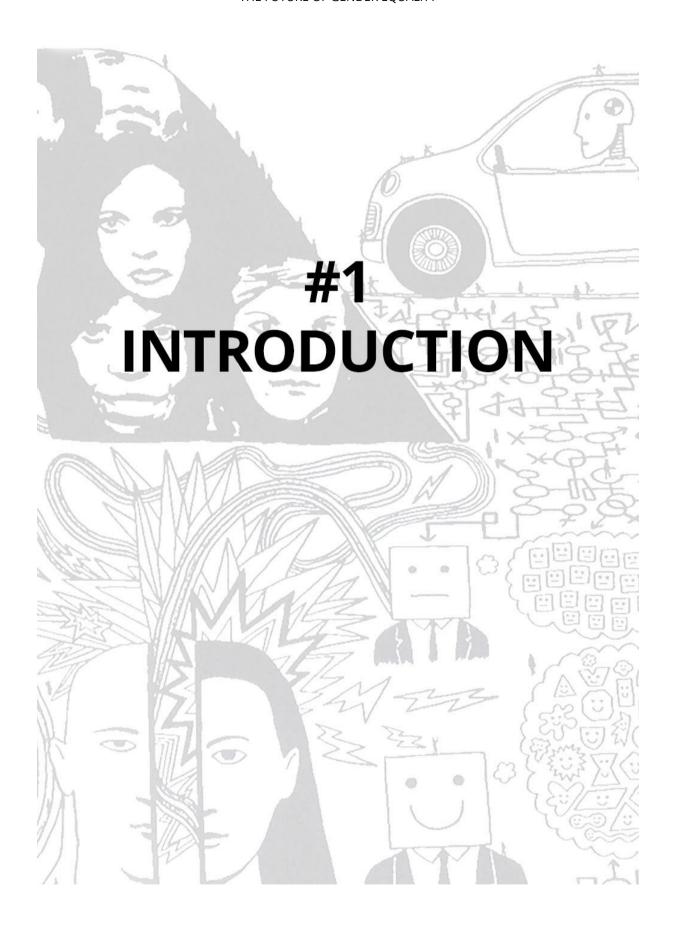
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Contents

| 1. Introduction | 4 |
|---|---------|
| 2. Methodology: How <i>The Future Is Here</i> tells the future | 7 |
| 3. The Past: A very brief overview of gender equality | 10 |
| 4. Factors: The macro-trends that will shape life & gender equality in the ${\sf ne}$ | ext 100 |
| years | 13 |
| 5. The Future | 20 |
| i) NEVER MIND THE GAP | 21 |
| ii) A MORE FEMALE FUTURE | 24 |
| iii) FEMTECH | 28 |
| iv) THE MORE GENDER AGENDA | 32 |
| v) BEYOND GENDER | 35 |
| vi) BYE-BYE BIAS | 38 |
| vii) 50/50 FUTURES | 40 |
| viii) WELL-BEING: THE NEXT FIGHT FOR FAIRNESS | 43 |
| ix) MASCULISM | 46 |
| x) TRANSHUMANISM: THE EVOLUTION OF THE EQUALITY QUESTION | 49 |
| 6. Conclusion | 52 |
| 7. Acknowledgements | 55 |





1. Introduction

This report describes the future of gender equality. It was produced by *The Future Is Here* on behalf of Yell Business.

How to read this document

You can be traditional and read it from start to finish. Or you can head straight to the futures section (that's the reason you're reading, right?) and then head back into the Factors and Methodology whenever suits you. They help make sense of why we believe the futures will happen.

Notes for editors:

Yell Business

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The Future Is Here

As per Ray Kurzweil's Theory of Accelerating Returns,¹ and Ian Morris's Index of Social Development,² it is clear the world is changing faster than ever before.

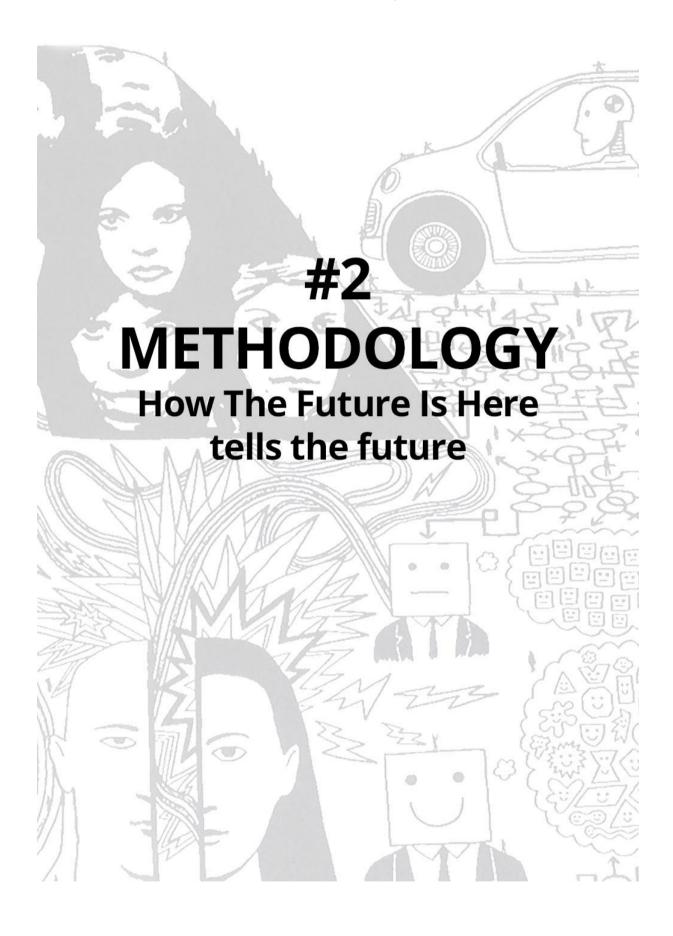
The Future Is Here (www.thefish.co) was founded by futurist and author James Wallman to do two things.

- 1. To track the trends happening today and understand what they mean for tomorrow
- 2. To advise businesses, organisations, startups and you on how to be more successful now and in the future.

² Ian Morris, "Social Development", *Ian Morris*, <u>www.ianmorris.org</u>, October 2010; Ian Morris, Why the West Rules—For Now: The Patterns of History and What They Reveal About the Future (New York: Farrar, Straus & Giroux, 2010)



¹ Ray Kurzweil, "The Law of Accelerating Returns", *Kurzweil Accelerating Intelligence*, <u>www.kurzweilai.net</u>, March 7, 2001



2. Methodology: How *The Future Is Here* tells the future

The Future Is Here's methodology is inspired by something the futurist William Gibson once said, that "the future is already here, it is just not very evenly distributed".³ It is informed by a way of reading cultural change that has been applied more than 5,000 times since it was first codified, by a sociologist called Everett Rogers, in 1962. Named the "Diffusion of Innovations",⁴ this describes how new ideas – which could be new ways of dressing, banking, shopping, innovating or healing people – catch on and spread from the innovators to the early adopters and the mainstream.

Here are three examples of when *The Future Is Here*'s founder, James Wallman, has forecast the future:

One — in 2008, Wallman forecast driverless cars, and that they would be available to buy by 2020. Of course, no one is surprised by the idea of driverless cars now, but in 2008 the idea was still science fiction. Ford, Toyota, and Tesla⁵ have publicly stated they expect their driverless cars to be on the road between 2019 and 2021.

Also in 2008, in an interview with Sky News,⁶ Wallman said that autonomous cars will "look a little like a lounge on wheels". In 2015, Mercedes-Benz released a driverless prototype which looks like a "living room".⁷

Two — in 2009, Wallman forecast⁸ that we would be able to 3D print shoes by 2020. Adidas, Nike, Under Armour now have trials to 3D print sports shoes.⁹ New Balance has been selling 3D printed shoes since spring 2016.¹⁰

Three — in 2013, Wallman forecast the cultural shift from materialism to "experientialism": that people will shift their spending from things to experiences. His best-selling book on this, Stuffocation,¹¹ is published by Penguin.

¹¹ James Wallman, *Stuffocation* (London: Penguin, 2015)



³ William Gibson is reported to have first said this in an interview on Fresh Air, NPR (31 August 1993)

⁴ Everett Rogers, Diffusion of innovations (New York: The Free Press, 1962)

⁵ "Forecasts", *Driverless Car Market Watch*, <u>www.driverless-future.com</u>.

⁶ See "Robot Taxis Set To Take To The Streets In The Future", http://news.sky.com/story/606134/robot-taxis-set-to-take-to-the-streets-in-the-future

⁷ "The Mercedes-Benz F 015 Luxury in Motion", Mercedes-Benz, www.mercedes-benz.com.

⁸ In his monthly column about the future for T3 magazine

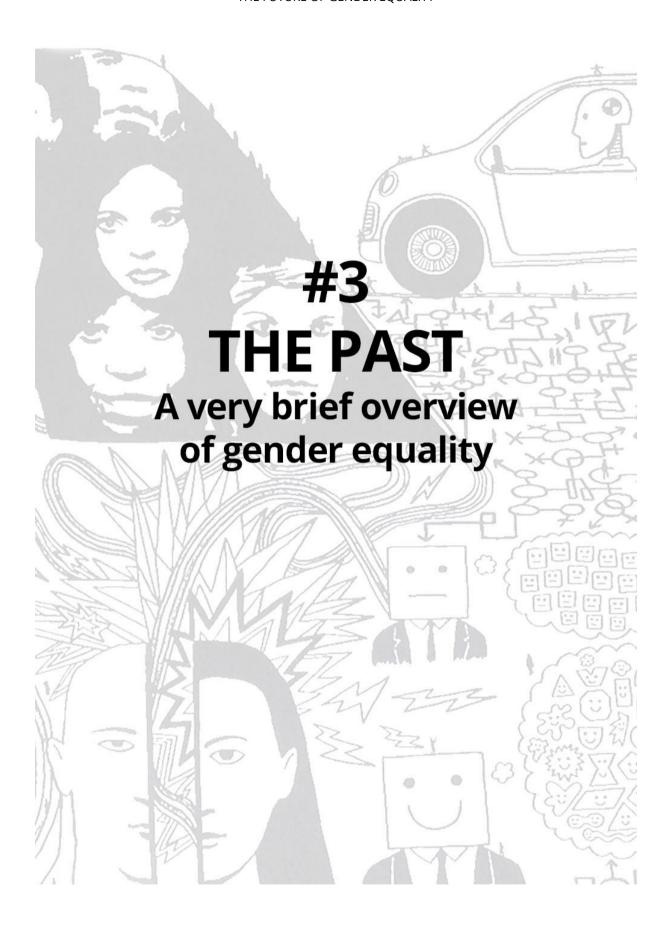
⁹ "3D Printed Shoe Race", *The Motley Fool*, <u>www.fool.com</u>, April 2, 2016

¹⁰ "ED Printed Midsole", New Balance, www.newbalance.com, April 15, 2016

Since then, this forecast is constantly being confirmed and corroborated by data and comment from, among others: The Guardian, the Washington Post, the US's Bureau of Economic Analysis, the UK's Office for National Statistics, the European Commission, and investment firm KKR — which made this statement to its clients in January 2016: "we believe that a major decoupling within retail sales is now occurring, with consumers choosing to spend on 'experiences' rather than 'things'."¹²

¹² Henry H McVey, "Outlook for 2016: Adult Swim Only", KKR, www.kkr.com, January 12, 2016





3. The Past: A very brief overview of gender equality

From the emergence of modern humans to the time when our ancestors settled down and made farms, men and women held equal, if different, roles in the hunter-gatherer lifestyle. Typically, the men hunted, and the women gathered fruits, nuts, and vegetables.

Farming led to changes in gender roles and equality. Men tended to work outside of the home, and take on the tasks that required more physical strength. Women tended to work closer to home, and do the tasks that required less physical strength. "It was only with the emergence of agriculture, when people could start to accumulate resources, that inequality emerged," says Mark Dyble, an anthropologist at University College London.¹³

Fast forward to feudal times, and we see women and men in broadly similar roles.

Take another step into the industrial and consumer revolutions from the 18th to the 20th centuries, and we see those roles continuing: men (in general) as provider, protector and breadwinner, and women (in general) as family- and home-focused caregiver.

But those same revolutions — especially the arrival of machines to do heavy lifting, of tools to get things done, of weapons to protect and project power — meant that men's physical superiority (in general, in size terms at least) was no longer as relevant as it had once been.

And so, welcome to today, after more than a century of questioning the aeons old structure of our society. A time when the shift in power from men to women is happening at a precipitous pace, in comparison with the rest of human history.

The big change began with the suffragette movement, which emerged in places like New Zealand, Australia, and the Isle of Man in the late 19th century.

The two world wars were important. With men away at the fronts, women took jobs previously held by men, and new jobs were created. Once peace came, women were not prepared to simply go back to their previous lives.

Women first got the vote in the UK in 1918 — but you had to be aged 30 or over, own property or have graduated from university.

¹³ Louise Dore, "Early men and women had gender equality, say anthropologists", 15 May 2016, The Independent



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All women (over 21) have been able to vote since 1928.¹⁴

In 1961, the contraceptive pill became available on the NHS. It was mostly prescribed to older married women who didn't want any more children. For the first time in history, women had control over when they might get pregnant and give birth.

In 1970, the UK government passed The Equal Pay Act.¹⁵ This prohibited less favourable treatment of men or women in terms of pay and conditions of employment.

In 1974, family planning clinics began prescribing the pill to single women.

In 1975, the UK government passed The Sex Discrimination Act. This protected people from discrimination on the grounds of sex or marital status.

And yet, almost half a century later, women are often paid less and discriminated against because of their gender.

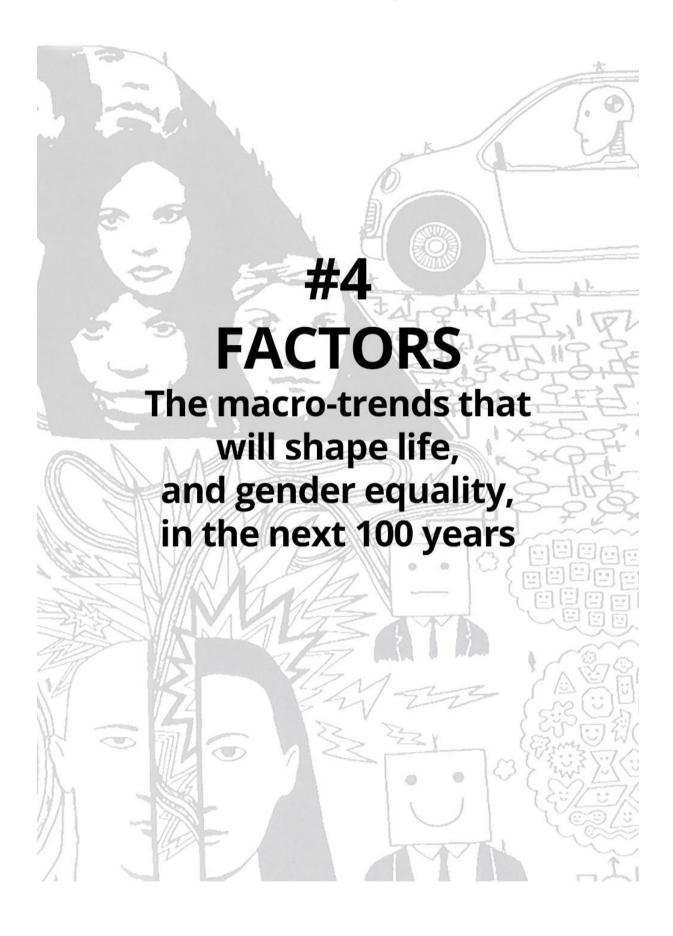
So what does the future hold? Is it all hopeful? More laws and efforts to make the world fairer, but with little progress?

Actually, the opposite of that. We believe that there is now the political, economic, and social will to see the changes through, and that the 21st century will see a much fairer world, for all genders.

 $^{^{\}rm 15}$ This has now been updated and superseded by the Equality Act 2010



¹⁴ "Women and the vote", Parliament, www.parliament.uk



4. Factors: The macro-trends that will shape life & gender equality in the next 100 years

Originally inspired by Michael Porter's PEST analysis¹⁶ — of political, economic, social, and technological factors — *The Future Is Here* uses an updated model that includes more areas, which form a mnemonic we call "DAS STEEPLE"¹⁷, where:

D — demographics, e.g., longer lives, aging populations, more people

A — aesthetics, our changing perception of what is/isn't beautiful, useful, and usable

S — science, as discoveries change our attitudes and behaviours (think what happened when science showed that jogging was good for you and smoking was bad for you. The government shared that information, and discouraged smoking, through levers like taxes and advertising bans. Jogging has become a pastime for tens of millions, and was one of the reasons for the growth of the sportswear industry)

S — socio-cultural, our attitudes, aspirations, dreams, behaviours

T — technological, arguably the most important driver of change in the 21st century

E — economics

E — environment, the time bomb in any conversation about human behaviour in the 21st century

P — political, how we act as groups and get on with others (think of Occupy and the Brexit campaign)

L — legal, as laws can speed up/slow down change (think homosexuality and marijuana)

E — ethics, social norms and beliefs

There are seven key macro-trends that will impact our society in the 21st century.

Connected world: the internet of people, the internet of things

Digitisation and the internet are inventions as important as Gutenberg's printing press in 1440.

By changing data from analogue to digital, it has become far easier to measure, monitor, track, compare and improve much about our lives, from business data, such as customer interaction, to our personal lives, such as how many steps we take or how many calories

¹⁷ More information can be found at www.thefish.co



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¹⁶ More information can be found at <u>www.pestleanalysis.com</u>

we ingest each day, or how our blood pressure changes relative to time and location. Consider the DietSensor, which analyses and records the food you eat, or Clue which tracks a woman's menstrual cycle.

We are more connected than ever before. There are more than 1.9 billion people on Facebook (that's more than the population of China or members of the Roman Catholic Church). In a single minute, around 21m WhatsApp messages and 150m email are sent, there are 2.4m Google searches and 1m Vine loops.¹⁸

And our things are more connected than ever before too. With 50 billion connected devices¹⁹ – including phones, chips, sensors, and implants — by 2020, the internet of things (IoT) stands to revolutionise our world. It enables, for instance, people to access cars rather than own them: think of Zipcar. And it means you soon won't lose anything ever again —thanks to IoT start-up Tile, which raised \$18m in a funding round in May 2016.²⁰

Democratisation — from the pyramid to the pancake

There is a general trend in our society from a feudal, fixed, closed, "top-down" system of power and information, to one that is democratised, fluid, flatter, open, and "bottom-up".

Consider the transfer of information over the years. Mail systems were considered so important they were often controlled by the monarchy. In the 20th century, we got our news from a few sources: the TV, newspapers. Now, we are as likely to get our information via the web, from blogs, Twitter, and Snapchat.

Or think about fame: celebrity was once controlled by Hollywood, and the big TV stations. Today, it's possible for a YouTuber to rise to fame from their bedroom.

²⁰ Mike Farley, "Tile raises \$18M Series B", *Tile*, <u>www.thetileapp.com</u>, March 6, 2016



¹⁸ Live statistics are available at *Internet Live Stats*, <u>www.internetlivestats.com</u>.

¹⁹ Dave Evans, "The Internet of Things How the Next Evolution of the Internet Is Changing Everything", *Cisco*, <u>www.cisco.com</u>, April 2011

Automation — AI, the blockchain, robots

Since prehistory, technology has been enabling humans to achieve more than they could with their bare hands: from sharp stones to the plough, the wheel, the bicycle, and the aeroplane. Technological advance has speeded up since the beginning of the Industrial Revolution. In the 20th century, robots took over manual, blue-collar workers' jobs. Now in the 21st century, software is likely to take over many clerical, white-collar worker jobs. In total, 11m jobs across the UK are at high risk of being automated by 2036, according to accountancy firm Deloitte.²¹

Driverless vehicles will be one of the most visible, and important, shifts. Just as cars replaced horses, so driverless vehicles will change our streets, our attitudes towards ownership (access rather than ownership) and jobs. The trucking industry in the UK employs 2.2 million people and 600,000 people have HGV licences.²² In addition there are just under 300,000 taxi driver licenses in England.²³ What will all those people do once driving is done by machines?

Computing power has increased incredibly quickly in recent years. It has increased a trillion times between 1955 and 2015. The iPhone 4 was as powerful as the world's most powerful computer in 1985.²⁴ Artificial Intelligence (AI) will continue to become ever more powerful — and may well surpass human intelligence sometime this century. Estimates range from not long after 2020 to sometime in the 2040s. Google²⁵ and New York-based start-up X.ai²⁶ have released early versions of personal assistants to run our diaries.

The blockchain, the revolutionary technology underlying BitCoin, is another development with threats and opportunities. ²⁷ A system of distributed authority, it removes the requirement for third party authority. Just as it threatens the current banking system, so it could change the way, for instance, contracts are made. With blockchain, as Vinay Gupta, software engineer and release co-ordinator at Ethereum Project (which is a "decentralized platform for applications that run exactly as programmed without any chance of fraud, censorship or third-party interference") contracts could be far more complex and fluid. Rather than remunerate a person based on the time they put in, they could be paid according to the value they add, and that could be calculated, re-calculated, and topped up over time.

²⁷ For further information read Don Tapscott, *Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business and the World* (Penguin 2016)



Page 15 of 55

²¹ "From Brawn to Brains, the impact on technology on jobs in the UK", *Deloitte*, <u>www2.deloitte.com</u>, 2015

²² Ben Rossington, "The Trucker is becoming an endangered species...", *The Mirror*, www.mirror.co.uk, September 27 2015

²³ "242,200 licenced vechiles in 2015, the highest number since records began in 2015", National Statistics, www.gov.uk

²⁴ "Processing Power Compared", Experts Exchange, www.expertsexchange.com

²⁵ Google Now, <u>www.google.com</u>

²⁶ X.ai personal assistant, https://x.ai/

Experientialism

Our fundamental value system is shifting from materialism to "experientialism": instead of looking for happiness and status in material goods, we are finding them in experiences instead. The Office for National Statistics, for instance, reports that on average people used 15 tonnes of material in 2001 compared with just over 10 tonnes in 2013.²⁸ Henry McVey, CIO of KKR Balance Sheet at US investment firm KKR, wrote in a recent report: "we believe that a major decoupling within retail sales is now occurring, with consumers choosing to spend on "experiences" rather than "things".²⁹

Amortality

Humans are living longer than ever before. A baby born in 2016 can expect to live to around 80 (male) or 83 (female). Many of those will live far longer lives than their ancestors. Of the 2,000 or so children born each day in the UK, more than half are likely to be alive in 2116.³⁰

These longer lives will have significant implications on our society. Just as teenagers were "created" in the 20th century with mass education, and the gap between childhood and working, so these longer lives will create new life stages — as London Business School professors Lynda Gratton and Andrew Scott point out in their new book, the 100-Year Life: Living and Working in an Age of Longevity.³¹ Instead of the three stages of education-work-retirement, they propose that we'll be living seven or eight stages. (Which makes it sound as appetising as an 8-course tasting menu, as opposed to the 3-course set menu.)

As a result of life-extension, and coupled with life-enhancing technologies like the ability to freeze eggs, our cultural norms about life-stages are changing. According to cultural commentator (and co-founder of the Women's Equality Party) Catherine Mayer, this is leading to an age of "amortality", 32 when people live agelessly and "rarely ask themselves if their behaviour is age appropriate because that concept has little meaning for them". In this new era of longer lives, the answers are changing dramatically to questions which previously were obvious, such as: what's the best age to have children? When should I retire? When should I settle down? Because in the much longer life, there's really no rush.

³² Catherine Mayer, Amortality: The Pleasures and Perils of Living Agelessly (London: Ebury, 2011)



Page 16 of 55

²⁸ "Lynsey Brown, "UK Environmental Accounts: How much material is the UK consuming?", *Office of National Statistics*, www.ons.gov.uk, February 29, 2016

²⁹ Henry H McVey, "Outlook for 2016: Adult Swim Only", KKR, www.kkr.com, January 12, 2016

³⁰ Source: Office for National Statistics

³¹ Lynda Gratton & Andrew Scott, *The 100-Year Life: Living and working in an age of longevity* (London: Bloomsbury, 2016)

Crowd-based capitalism: the sharing / gig economies

Work used to be a place we went to from Monday to Friday. In a world enabled by the internet, and where platforms such as Lyft, eBay, Etsy, and Airbnb enable people to not only work when they choose, but also be both consumers and producers, people are able to work when they want and how they want.

This sharing economy is growing, at pace. It will be worth \$335 billion by 2025,³³ and is growing faster than Facebook, Google and Yahoo combined. This has the potential to be good news for workers, as Arun Sundararajan, at New York University's Stern School of Business, argued in his recent book The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism.³⁴

"The shift back to crowd-based capitalism will be fundamentally empowering for labour," Sundararajan wrote, "because it moves the current system from big employer/employee relationships, to a smaller, more entrepreneurial system."

New realities: VR, MR

Two of the most exciting technological advances in the 21st century will literally change the reality we experience. Thanks to its ability to immerse people in new, imaginary worlds, virtual reality (VR) takes entertainment and marketing to another, far more exciting level.

VR is catching on very quickly. While 350,000 VR headsets shipped in 2015, and more than 9m will be shipped in 2016, around 65m will a year by 2020 according to analyst firm IDC.³⁵ (Note that these figures cover devices like HTC's Vive and Oculus Rift, but do not include headsets lacking electronics, such as Google's Cardboard viewer. As of January 2016, more than 5m Cardboard headsets had shipped, 25m VR apps for Cardboard had been downloaded.)

Mixed reality (MR) — as augmented reality (AR) is increasingly being called — layers digital information onto the real world. The stand-out examples of this are Microsoft's HoloLens and the start-up Magic Leap, which is valued at more than \$4.5bn — despite the fact that it hasn't launched a product yet. "We are creating a new world where digital and physical

³⁵ "IDC Forecasts Virtual Reality Hardware to Soar Past the \$2 Billion Mark in 2016", IDC, www.idc.com, April 21, 2016



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³³ Ashley Kindergan, "CREDIT SUISSE: By 2025, companies could rake in \$335 billion a year from people 'sharing'", *Business Insider UK*, November 17, 2015

³⁴ Arun Sundararajan, Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism (MIT Press 17 June 2016)

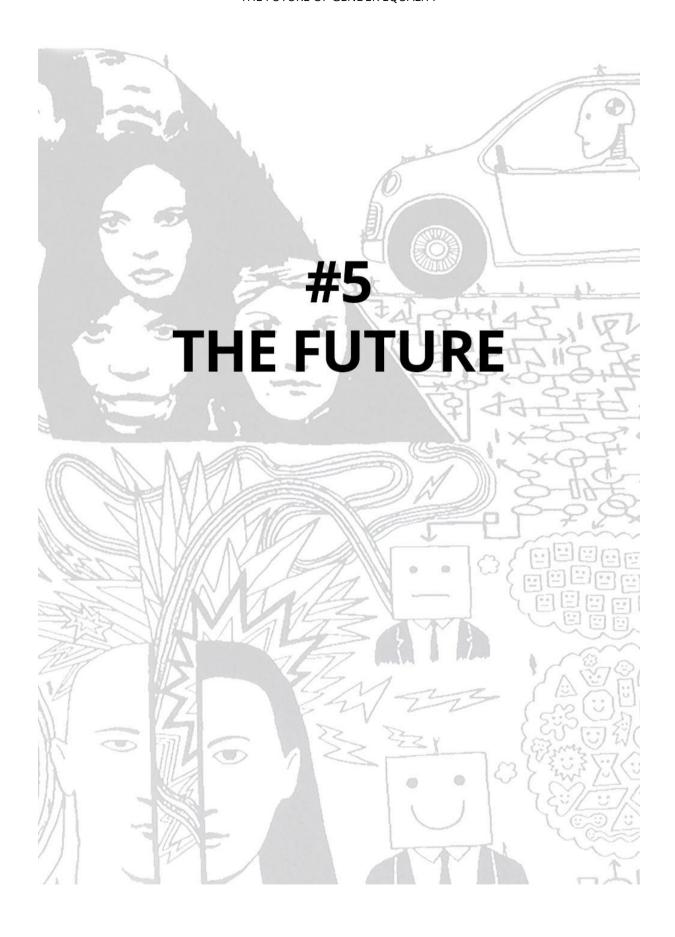
realities seamlessly blend together to enable amazing new experiences," says Rony Abovitz, founder, president and CEO of Magic Leap.³⁶

Because of the practical, commercial, and fun value of mixed reality, it is likely to be more important than VR. Together, their market value will increase from less than \$10 billion annually now to more than \$150 billion by around 2020.³⁷

³⁷ "Augmented/Virtual Reality to hit \$150 billion disrupting mobile by 2020", *Digi-Capital*, <u>www.digi-capital.com</u>, April 2015



³⁶ Dania Beach, "Magic leap announces \$793.5 million in new funding", *Magic Leap*, February 2, 2016





5. The Future

Key observations about the future of gender equality, featuring seven Near Futures and three Further Futures.

As with any sensible forecast, our forecasts are made subject to a "cone of uncertainty". That is, the further from today you get, the less sure you can be of accuracy. This is exactly, if you think about it, how weather forecasters operate³⁸. Hence, we are more confident of the accuracy of the Near Futures than the Further Futures. And we believe that the Near Futures will come to fruition in the mainstream sooner than the Further Futures.

Near futures

- i. Never mind the gap
- ii. A more female future
- iii. Femtech
- iv. The more gender agenda
- v. Beyond gender
- vi. Bye-bye bias
- vii. 50/50 futures

Further futures

- viii. Wellbeing: the next battle for fairness
- ix. Masculism
- x. Transhumanism: a guestion of equality and evolution

³⁸ For more on this, read Nate Silver, The Signal and the Noise (New York: Allen Lane, 2012) and Nate Silver, "The Weatherman Is Not a Moron," New York Times, September 7, 2012





First, the bad news. In 1970, the UK government passed the Equal Pay Act. And yet, 46 years later, men still earn more. Women earn £300,000 less than men over their working lives.³⁹ Equal Pay Day, the day after which women are effectively working for free, was 9 November last year. No wonder so many really do mind that there is a pay gap.

And now for the good news. The gender pay gap is not an eternal. It has a life-span. Its time has been called.

The World Economic Forum⁴⁰ believes the world-wide gender pay gap will be closed in a little over 100 years' time, by 2133.

OK, so not that soon.

The Institute for Women's Policy in New York⁴¹ believes the US gender pay gap will be closed sooner though: if change continues at the same (slow) pace as the past fifty years, the US will reach pay parity in 43 years' time, by 2059.

⁴⁰ Oliver Cann, "It's Back to the Future as Women's Pay Finally Equals Men's ... From 2006", *World Economic Forum*, www.reports.weforum.org



³⁹ Robert Half, "The UK Gender Pay Gap", *Robert Half*, <u>www.roberthalf.co.uk</u>, March 7, 2016 "Women: Source: according to the analysis by the recruitment company Robert Half"

Not to be outdone, our very own government — no doubt inspired/nudged into action by the Women's Equality Party that was founded in 2015 — is aiming to bring about pay parity "within a generation". Since a generation is considered 25 years, they mean by 2041.

Will pay parity really happen?

So, will it happen? Should we believe in this idea now, when 1970's Equal Pay Act didn't live up to its name? Simple answer: yes, for three key reasons.

First, now that data is digitised, it means wage data is digitised, which means it's far harder to hide wage disparity, far easier to compel companies to be transparent, and far easier to compare pay overtime and across industries. This is sure to have a positive impact on the gender pay gap. After all, as economist Joseph Stiglitz says, "what we measure affects what we do"⁴².

Second, there is manifest political will behind pay parity. New legislation means that by 2018 all companies with more than 250 employees will have to publish their gender pay gap data.

Third, there are numerous economic imperatives to get women working. This is a carrot that excites governments. If the same proportion of women worked in Britain as in Sweden, it would add £170bn to the UK economy and boost GDP by 9%, according to accountancy firm PwC. If we reduce the gap in female participation rates the global economy could expand by an extra \$12 trillion by 2025 according to consultancy McKinsey.⁴³

This is a carrot for individual companies too — because companies with more women make more money. Business advisor Grant Thornton has found that publicly traded companies with male-only executive directors missed out on £430bn of investment returns last year.⁴⁴

Research by McKinsey shows the most diverse companies are 15% more likely to create earnings above their industry's average.⁴⁵ And the New York-based Centre for Talent

⁴⁵ Vivian Hunt, Dennis Layton, & Sara Prince, "Why Diversity Matters", McKinsey, www.mckinsey.com, January 2015



⁴¹ Ariane Hegewisch and Asha DuMonthier, *The Gender Wage Gap by Occupation 2015 and by Race and Ethnicity* (DuMonthier, April 2016)

⁴²Joseph Stiglitz, "Towards a better measure of wellbeing", Financial Times, 13 Sep 2009

⁴³ How advancing women's equality can add \$12 trillion to global growth, McKinsey Global Institute, September 2015

⁴⁴ Francesca Lagerberg, "The value of diversity", *Grant Thornton*, <u>www.grantthornton.global</u>, September 29, 2015

Innovation published a study in the Harvard Business Review⁴⁶ that showed that gender diverse companies are 45% more likely to improve market share, achieve 53% higher returns on equity, and are 70% more likely to report successfully capturing new markets.

So there's a clear imperative. If you run a business, and you want to be successful, hire more women. And if you want to attract the best women, you'll need to pay them the same money for the same work.

For these reasons, *The Future Is Here* believes that by 2045 we won't have to "mind the (gender pay) gap" any more.

⁴⁶ Sylvia Ann Hewlett, Melinda Marshall, & Laura Sherbin, "How Women Drive Innovation and Growth", *Harvard Business Review*, www.hbr.org, August 23, 2013





Hot on the heels of — or perhaps hand-in-hand with — the rise of pay parity will be the issue of representation parity. In the coming years, women will be increasingly taking the limelight jealously guarded by men until now.

To borrow from James Brown and Annie Lennox, it may still be a man's world, but the sisters are coming out of the kitchen... and in the coming years, they will be increasingly taking the limelight jealously guarded by men up till now.

As with pay parity, there are economic reasons, as described above. There is also a political movement that seems to be getting stronger by the day, with specific targets to bring more women into the boardroom and government.

More women in business

There's the 30% Club,⁴⁷ which launched in 2010 with a goal of achieving a minimum of 30% women on FTSE-100 boards. While it hasn't reached this goal yet, the direction is very positive: the number of women on FTSE-100 boards has more than doubled, from 12% in 2010 to 26% today, and there is not a single all-male board left. There were 21 in 2011. Its

⁴⁷ http://30percentclub.org/



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impact isn't only in the top 100 companies. In 2011 there were 152 all-male boards in the FTSE-350 index. Today there are only 15 companies with all-male boards.

With this initial success, the movement is aiming higher: for a minimum of 33% female board members on all FTSE-350 companies by 2020.

More women in politics

There's a similar challenge, and there are similar initiatives, in politics. In parliament today, only 29% of MPs are women. But steam is gathering to increase female representation. The Confronting Gender Inequality⁴⁸ report, by two of the UK's leading gender experts, Diane Perrons and Nicola Lacey at the London School of Economics, recommends introducing quotas — but, with reference to countries like Ireland which are successfully using similar ideas, in an innovative way. Instead of mandating the proportion of parliamentarians that are women, it simply suggests establishing a maximum limit on the proportion of MPs of either sex allowed to stand for general election. To begin with, we should have a maximum of 70% of either gender candidates in each political party in the first general election after the law's been passed. And in the following election, that should be reduced to 60%.

More women on TV

There is still one glaring area of misrepresentation: the media. The Confronting Gender Equality report presents damning evidence in this area:

"Just as women are underrepresented as writers of news stories, they are also underrepresented as subjects of news, where overall they appear only in 31 per cent of print news stories, 30 per cent of radio reports, and 35 per cent of televised stories, and are more likely to appear in eye witness roles, to provide personal narratives or represent public opinion than men who predominantly feature as protagonists, experts, commentators or spokespersons."

It's worse in the movies. A recent film study, called "It's a Man's (Celluloid) World"⁴⁹ analysed the top 100 grossing films. It found shocking underrepresentation and gender stereotyping, including:

⁴⁸ Nicola Lacey & Diane Perrons, "Confronting Gender Inequality", *Gender Institute, www.lse.ac.uk/genderInstitute,* October 2015 ⁴⁹ Martha M. Lauzen, "It's a Man's (Celluloid) World", *The Center for the Study of Women in Television and Film*, www.womenintvfilm.sdsu.edu, 2015



- Only 12% of all clearly identifiable protagonists were female
- Females accounted for 30% of all speaking characters
- Male characters were more to be identified by their job, such as doctor or business executive: 61% of males vs. 34% of females
- Female characters were more likely to be identified by a personal role such as wife or mother: 58% of females vs. 31% of males
- Characters who were leaders were overwhelmingly males: males made up 96% of criminal leaders, 89% of business leaders, 89% of military and government agency leaders, 82% of political leaders, and 81% of scientific/intellectual leaders

But positive steps are being taken to change this. The UK's biggest media organisation, the BBC,⁵⁰ has promised that women will make up half of its workforce on-screen, on-air and in leadership roles by 2020. (Note that the major shift here will be in media representation: 48% of the current BBC workforce is female, and 41% of its leadership roles are already held by women.)

Are quotas the answer?

No one suggests that quotas are enough. A recent report on female representation in the boardroom, The Rise of Women in Society,⁵¹ authored by Sucheta Nadkarni, Sinyi Professor of Chinese Management at the University of Cambridge Judge Business School, found that quotas are, ultimately, of limited value. Nadkarni's research suggests that the strongest drivers to get — and keep — women on boards are general female economic power, and that the company includes gender diversity in its corporate governance code.

A virtuous circle of women in power

But with more women in power, this will change the types of script that are written, and the types and complexities of character presented. As Nadkarni also wrote in her report:⁵²

"The success of women in different areas of society is interconnected; the success of women in one strata can reinforce success of women in another, creating a virtuous cycle. The numbers of women holding senior positions and female empowerment in general are likely to be strongly interconnecting and mutually-reinforcing forces."

⁵¹ Sucheta Nadkarni & Elaine Oon, "The Rise of Women in Society", *Cambridge Judge Business School*, <u>www.womenomics.co.uk</u>, April 8, 2015





Page 26 of 55

⁵⁰ Ashitha Nagesh, "BBC promises to hire more women and ethnic minorities", *Metro*, <u>www.metro.co.uk</u>, April 23, 2016

More female emojis ;-)

We are even likely to see more women in one of the rising forms of communication: emojis.⁵³ A team of four Google employees (two men, two women) recently proposed a new set of emojis to right the wrongs of "emoji inequality" — which was the topic of a New York Times op-ed piece in March 2016 titled "Emoji Feminism". The 13 new emojis include female engineers, chemists, plumbers, and farmers.

Raining women

One thing is for sure. Compared to today, women will be far more prominent in politics, business, and the media in the future. It may well feel — with apologies to the Weather Girls and their dancefloor classic — like it's raining women.

The end of men?

A final note: some have said we are witnessing the "end of men"⁵⁴ — which is silly; others that this is the female century⁵⁵ — which has some merit. But actually the ultimate aim is diversity, not to get rid of men. Researchers have found that shifting from an all-male or all-female office to one split evenly along gender lines can increase revenue by 41%⁵⁶.

"Improving gender diversity in business is key to driving innovation and growth across the UK economy," says Jacqueline de Rojas, president of technology sector organisation techUK. "Only by representing their customers can companies develop products and services that meet all of their needs."

⁵⁶ Sara Fisher Ellison & Wallace P. Mullin, "Diversity, Social Goods Provision, and Performance in the Firm", *Journal of Economics and Management Strategy*, www.onlinelibrary.wiley.com, April 4, 2014

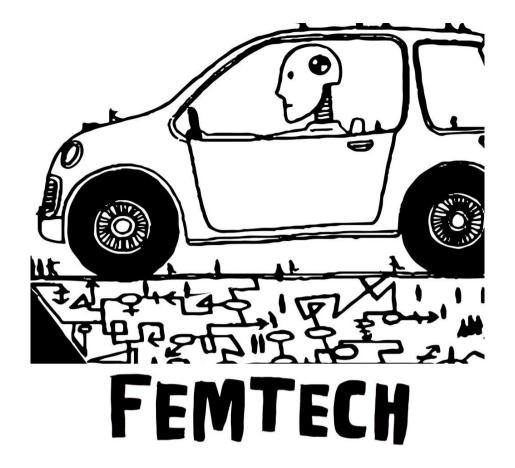


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⁵³ 92% of online consumers use emojis; 78% of frequent users are women vs 60% of men. Source: Rachel Been, Nicole Bleuel, Agustin Fonts, Mark Davis, "Expanding Emoji Professions: Reducing Gender Inequality". Available at http://unicode.org/L2/L2016/16160-emoji-professions.pdf

⁵⁴ Hanna Rosin, *The End of Men: And the rise of women* (Penguin October 11. 2012)

⁵⁵ For example, The Futures Centre (<u>http://thefuturescentre.org/trend-cards/136/female-century</u>)



The technology industry has become notorious for the way it disruptively innovates everything, except gender representation. Only 17% of jobs in the tech sector are held by women. Only 3% of venture capitalists are women.⁵⁷ And only 7% of partners at top venture firms are women.⁵⁸

There is no equivalent general statistic for innovation teams and coders, but the likelihood is that it is similar. This is a significant problem.

"Entrepreneurs have a natural inclination to build services and products for problems they know and understand," says Tamara Sword, tech adviser, founder of photo-filtering app Infltr, and Huffington Post writer. "This explains why so many male-led start-ups create platforms to deliver food, clean homes and do laundry - essentially creating technology solutions to do what Mum used to do."

This issue, of men-only teams solving men's problems, has led to embarrassing examples of glaring gender bias. Of the many, there are two that illustrate this best.

⁵⁸Gené Teare & Ned Desmond, "The First Comprehensive Study on Women in Venture Capital", *TechCrunch*, www.techcrunch.com, April 19, 2016



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⁵⁷ Hollie Slade, "Just 3% Of Venture Capitalists Are Female, But There Are Reasons To Be Optimistic *Forbes*, www.forbes.com, June 5, 2014

Men and their embarrassing mistakes

Car makers used to use crash test dummies that were based on the average man — which meant that female drivers were 47% more likely to be seriously injured in a car crash⁵⁹. This only changed in 2011, when the first female crash test dummies became legally required in safety testing.⁶⁰

When Apple launched its Health App in 2014, and claimed that it tracked everything you needed to know about your health, it didn't include one of the most important indicators for the health of 50% of the world's people: period tracking.

Femtech = better tech

Now women are entering the tech world — strictly speaking "re-entering" as the first coders were women⁶¹, when coding was seen as an admin job — and making things more relevant.

Numerous start-ups stepped into the "gender app gap" left by Apple. One of the best was Clue, a period tracking app.

"When I started Clue, the biggest initial obstacle was demonstrating the value and opportunity of a women's health app in what is a vastly male-dominated tech scene," says Clue's founder, Berlin-based Ida Tin. Clue is now used by 5m women each month. "We have to move women's health away from its status as 'niche'," says Tin. "I remember people said that about Clue when I started, and I always thought 'how can a product for half the world's population be niche?""

And now Apple is trying to right its previous gender-based wrongs. It has introduced period tracking to its Health app. Its smaller iPhone SE was widely interpreted as aimed at women — since the new iPhone is too large for many women's hands. Its most recent closely-watched World Wide Developers Conference (WWDC) featured further signs that the company is moving away from its androcentric⁶² past: a woman made a presentation,

 $^{^{62}}$ Androcentrism — the practice of putting the male viewpoint first — was coined by a feminist called Charlotte Perkins Gilman in 1911



⁵⁹ Nicholas Bakalar, "Safety: Car Crashes Pose Greater Risk for Women", New York Times, 31 October 2011

⁶⁰ In the US. "Beginning with 2011 model-year vehicles, federal regulators have required automakers to use petite female crash dummies in frontal automotive crash tests." in Lee Jared Vinsel, "Why Carmakers Always Insisted on Male Crash-Test Dummies", Bloomberg, 22 August 2015

⁶¹ Laura Sydell, "The Forgotten Female Programmers Who Created Modern Tech", 6 October 2014. Hear the radio show here: http://www.npr.org/sections/alltechconsidered/2014/10/06/345799830/the-forgotten-female-programmers-who-createdmodern-tech

a video showed a female coder, and the Apple Watch now features an emergency alert feature — making any woman wearing it feel safer at night.

In the future, we will see more services not only designed for women, but by women. Lastminute.com founder Martha Lane Fox has pointed out that Twitter might have been better if more women were involved from the outset. Wired's associate editor Rowland Manthorpe agrees. "It's a fact that most trolls are men and most victims are women," he says. "Does this mean that internet norms of unconstrained speech encourage misogyny? A female future might see more careful moderation."

For another great example from the future of femtech, look no further than Slack. "I don't think it's a coincidence that one of the most talked-about companies of the past year is Slack," says Clue's Tin. "It's an organisation that is very aware, and very vocal, about its commitment to placing diversity at the heart of growth and development plans." As a result, women hold 43% of its leadership roles, are 43% of its employees, and are 24% of its engineers (Slack is voluntarily also very transparent).

How Etsy gets better coders

Etsy is another instance of what we might call "femtech". As the global online marketplace for handmade goods, 86% of Etsy's sellers are women. The management realised some time ago that it should have more women in their team. So at a summer camp, they actively encouraged more women to come by offering a stipend. Many more women applied, as you might expect: 600 in fact. But there was another positive you might not have expected.

"They didn't just get lots of great women," says Suzanne Doyle-Morris, author of Female Breadwinners: How they Make Relationships Work and Why They are the Future of the Modern Workforce, 65 and founder of workplace advisory company The Inclusiq Institute. "They also got better quality men — ones who weren't threatened by the women, who were more open-minded, and good communicators. And if they weren't at the start, they were by the end."

⁶⁵ Suzanne Doyle-Morris, Female Breadwinners: How they Make Relationships Work and Why They are the Future of the Modern Workforce (Doyle Harris Coaching and Development, 2011). Prior to this, Doyle-Morris wrote Beyond the Boys' Club: Achieving Career Success as a Woman Working in a Male Dominated Field (Wit and Wisdom Press, 2009)



⁶³ Source: Etsy's IPO prospectus, March 2015 http://www.sec.gov/Archives/edgar/data/1370637/000119312515077045/d806992ds1.htm

⁶⁴ For more on this, read Anya Kamenetz, "How Etsy Attracted 500 Percent More Female Engineers", Fast Company, 5 March 2013

How to interest women in laser physics

Rune Nørager is a Danish psychologist and expert on gender differences. His work previously informed a paper⁶⁶ on the gender aspects of technology at a meeting of the United Nations Division for the Advancement of Women (DAW, part of UN Women). Nørager points out a smart way to engage more women: by broadening the "motivational basis" of technology.

"There was a class about laser physics in Holland, the focus was on how to use laser to digitally store data," he says. "And they were finding it difficult to attract women."

So, the class organisers reworked the focus of the course so that while students would study the same ideas, they would do so in a different context. The course description encouraged students to think about how they could apply the insights to real world applications such as healthcare — for example, how laser physics could help with surgery or skin treatment. The result was that more women applied. "Suddenly, the course had a wrapping with a broader motivational basis," explains Nørager. "Now, the work was related to a real-world situation. Instead of seeing themselves sitting in a basement plugging cables together, potential students could see themselves as part of the healthcare system."

In the future we'll see more tech designed for the 50% of the world who aren't men, and created by them too. As we do, we'll end up with better, more creative teams, creating better solutions for everyone's needs.

⁶⁶ Klaus Schroeder, "Gender Dimensions of Product Design", September 2010, presented at UN Women expert group meeting, "Gender, science and technology", Paris, France, 28 September—1 October 2010





Before the Industrial Revolution, a person's identity was fixed. If you were working class, you, your descendants, and their descendants would remain working class. You would follow in your parents' footsteps.

Although the industrial and consumer revolutions, along with the rise of democracy and meritocracy from the 18th century on freed people from simply following in their parents' footsteps, much of our lives were still prescribed in simple, binary terms.

That meant that, in a male-dominated, pyramid-shaped world where religion still held sway, you were a worker or a boss. You were a producer or a consumer. You were male or female.

The shift from the pyramid to the pancake has happened throughout society: in the breakdown of formal religion, the acceptance and emergence of homosexuality, and the end of the ideal of a job-for-life for one big corporation.



In the far more democratic, meritocratic, fluid world of today, it's clear that we have a far wider choice. We can pick and mix our religious beliefs: a little Buddhism here, say, a touch of animist spirituality there, and the bits we like of Christianity. It's the same at work: we now have portfolio careers. We can be producers and consumers on eBay, Etsy, Airbnb. Our identities are far more fluid.

Sci-fi identities

And now that we are escaping a hierarchy defined in simplistic terms, and social conditioning says it's okay to choose, many are moving away from the binary choices of male or female, and hetero- or homosexual, 67 and exploring and revealing their true desires.

"Thinking about the future of gender can sound pretty sci-fi," says Jane Ward, associate professor of Gender and Sexuality Studies at University of California, Riverside, and author of Not Gay: Sex Between Straight White Men. 68 "If you see what my college students are doing — they're pangender, agender, polygender, gender queer... and all of these have distinct meanings for them. They have elaborations of possible gender far beyond what was available when I was young."

This move away from a binary idea of gender is reflected in recent research by New Yorkbased advertising agency | Walter Thompson's Innovation Group. Their March 2016 report found that 74% of generation Z respondents (ages 13–20) are more accepting of nontraditional gender identities compared to a year ago, as are more than two thirds of millennials. And 56% said they knew at least one person who goes by a gender-neutral pronoun ("they" rather than "he" or "she").

Post-binary people

A growing number of non-binary personalities are now rising to fame in film, music and TV. There are celebrity activists such as Caitlyn Jenner and Laverne Cox. There is RuPaul and his/her super successful Drag Race. Beyonce's Formation single featured gender queer

⁶⁸ Jane Ward, Not Gay: Sex Between Straight White Men (New York: New York University Press. 2015)



⁶⁷ Strictly speaking, of course, there was a third choice of sexuality: bisexual. But bisexuality has often been dismissed as a "phase" someone goes through (For more on this read, for instance, Eliel Cruz, "The real life impact of calling bisexuality a phase", i-D magazine, 7 August, 2015)

And the sexuality researcher Alfred Kinsey, working in the 1940s, allowed people to describe themselves along a scale of 0-6, where 0 = exclusively hetero- and 6 = exclusively homosexual. So it seems clear that sexuality has been on a spectrum for some time. However, this spectrum version of sexuality is suppressed in our society, as Jane Ward describes in Not Gay: Sex between Straight White Men

rapper Big Freedia. America's Next Top Model featured trans woman Isis. A few smart brands are jumping on the post-binary bandwagon. A recent campaign by American Apparel, for instance, features drag queens Alaska, Willam and Courtney Act.

Post-binary gender products and services

Now, a swathe of products and services is reflecting this broader range of identities⁶⁹. Tinder will soon let its users identify not only as "male" or "female" — the only options currently available — but with other labels to appeal to transgender people and people of non-binary gender identities.

When Facebook unveiled 1,200 new emojis for its Messenger app, they included, for the first time, gender-neutral options. "We're diversifying the genders," the company announced in a blog post, "to create a more balanced mix that's more representative of our world."

Game designers, such as Sweden's Toca Boca and US-based Tinybop have created apps for children with gender-neutral characters. In response to customer demand, the most recent update of The Sims allows users to create gender-neutral characters for the first time.

Trans is the new gay

If all these new genders seem odd and extreme to you, remember how odd homosexuality seemed to people in the past — and the struggles that the gay community have gone through in the past 100 years simply to express their true identities.

In the future, people will have far more choice, and we'll see more genders.

⁶⁹ Mary Cass, "Gender-expansive tech", JWT Intelligence blog, https://www.jwtintelligence.com/2016/06/gender-expansive-tech/





As well as people self-identifying with more gender descriptors, people will also be more fluid with how they see themselves. After all, if you're set to live 100 years, and you are no longer socially conditioned to identify as one of two genders, why be stuck with one for the whole time when you can experiment?

We're already seeing this fluid ideal in a few innovators: icons like Miley Cyrus and Jaden Smith have talked about their gender fluidity.

"Gender is becoming less salient," says Jane Ward. "In the past race was salient. There were different bathrooms for people of colour and white people. It's still there with gender. Men and women have different restrooms. But now the question is: why is that?" Ward's comments are more relevant for the US of course. But it's easy to see their relevance here — in the rise of the unisex bathroom, in our less gendered expectations of career. Is your manager at work today, or your doctor, or your financial adviser a woman or a man? The direction of the trend is clear: gender is becoming less salient.



The rise of intersectionality

As more people experiment, not only will gender become less of an issue, but the equality agenda will shift beyond gender. The early signs of this are already there. Intersectionality has become a keyword in the feminist movement: it describes how all forms of oppression — like racism, sexism, homophobia, transphobia, ableism, xenophobia, classism — are interconnected and cannot be examined separately from one another.

"The holy grail of gender equality is perhaps a diversion," says tech entrepreneur Sword. "Gender is one factor — but race, religion, age, sexuality, class, disability and combinations thereof continue to disadvantage. The tech sector should strive for true diversity — in leadership, teams, ideas, and products. That should be technology's mission."

This is another area where Slack performs well. The company tracks not only the gender representation in its workforce but also its black (4.4% overall, 8% of engineers) and LGBT employees (13% overall).

What Atticus Finch told Scout

Taken together, the concepts of the "More Gender Agenda", the fluidity of identities and "Beyond Gender" are likely to have a significant, positive impact on equality and diversity — in the workplace, at home, and in politics.

Remember what Atticus Finch told Scout in To Kill A Mocking Bird:⁷⁰ "if you can learn a simple trick, Scout, you'll get along a lot better with all kinds of folks. You never really understand a person until you consider things from his point of view... until you climb into his skin and walk around in it."

A society of people choosing more genders, and being more fluid between those genders, is likely to create a society of people with more understanding for others.

Beware: bias still remains

However, there's a caveat here. While the latest generation, those born after 2000, so-called Generation Z, are more comfortable with exploring their gender and sexuality than previous generations — when it comes to them picking leaders, they still seem to have the

⁷⁰ Harper Lee, *To Kill A Mockingbird* (New York: Pan Books, 1960)



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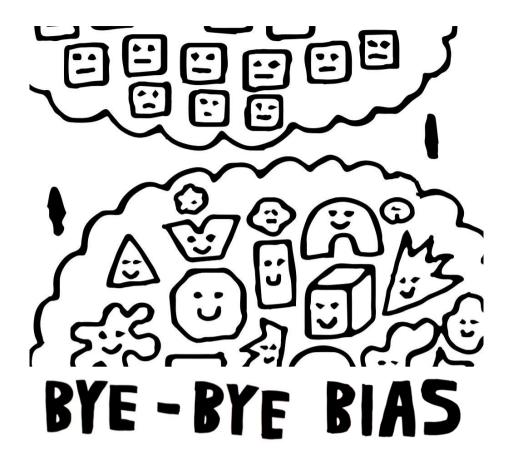
same biases as their parents. One recent US study of teen attitudes conducted by Harvard University⁷¹ found a strong bias towards male leaders. Almost a quarter of teen girls (23%) preferred male over female political leaders. Only 8% preferred female political leaders.

Perhaps a positive here is that 69% expressed no difference in preference. The bias was even more pronounced in the boys though: 40% of them preferred male over female political leaders; only 4% preferred female political leaders; 56% expressed no preference. Interestingly, when it came to business leaders, the boys' answers were similar: 36% preferred male business leaders, 6% preferred female leaders. But there was no significant difference between girls' preference for male or female business leaders.

What's clear from this research is that we shouldn't take gender equality for granted — or else we won't see as many female leaders in the future as we'd like to. There are some smart solutions to this problem of bias.

⁷¹ "Leaning Out — Teen Girls and Leadership Biases", *Harvard*, <u>www.mcc.gse.harvard.edu</u>, July 2015 Richard Weissbourd, Making Caring Common, <u>www.makingcaringcommon.org</u>, <u>richard_weissbourd@gse.harvard.edu</u>





One of the most important discoveries of the late 20th century and early 21st century has been the truths of behavioural psychology:⁷² the realisation that we are not rational agents, that we make suboptimal choices and are heavily influenced by cognitive biases. This explains, for instance, why people tend to hire people who look, think, and act like them.

Your biased job ad

But you can now correct for your biases. A new company called Textio⁷³ is helping people avoid bias in job ads they post, via a web-based tool which is just like a spell checker, but for gender bias. The service lets users — which include hiring managers at Microsoft, Slack, Twitter, and Dropbox — paste the text of a job posting. Textio then highlights phrases which are likely to put women off, and makes suggestions to attract more, and more diverse, good candidates.

[•] Liz Gannes, "Textio Spell Checks for Gender Bias", Recode.net, 20 April 2015



⁷² As summarised in Daniel Kahneman, *Thinking, Fast and Slow* (New York: Penguin, 2011)

⁷³ More on Textio:

^{• &}lt;u>www.textio.com</u>

Kieran Snyder, "The resume gap: Are different gender styles contributing to tech's dismal diversity?", Fortune, 26
 March 2015

For example, use "exceptional", "proven judgement" and "able to work under pressure" and you'll attract more men. If you want more women to apply, swap "exceptional" for "extraordinary".

At present, Textio only does resumes, but this functionality — to analyse text for gender bias — might also be used in other written areas of the workplace, such as performance reviews.

Men's versus women's resumes

Textio's founder, a woman called Kieran Snyder who holds a PhD in linguistics, has also analysed men's and women's resumes, and found a number of differences. Women typically use far more words: 745 compared with 414. Men are more likely to list their achievements with bullet lists: 91% of men do this, compared with 36% of women. Women include more personal background, and are more likely to include non-standard sections, such as "Personal Attributes" or "Continuous Learning": 36% of women do this, and only 3% of men.

Many smart firms are now using bias training. Law firm Pinsent Masons uses games devised by Doyle-Morris's Inclusiq Institute. When Facebook introduced its bias training programme in 2015⁷⁴, COO Sheryl Sandberg introduced it with a blog post in which she wrote: "One of the most important things we can do to promote diversity in the workplace is to correct for the unconscious bias that all of us have. At Facebook, we've worked with leading researchers to develop a training course that helps people recognize how bias can affect them, and gives them tools to interrupt and correct for bias when they see it in the workplace."

In the future, perhaps tools like those offered by Textio will strip out the gendered nature of resumes. And even in interviews it may be possible to avoid bias.

"As we live more in virtual worlds — whether in AR or VR — it will be possible to deflect and undermine strict gender divisions," says Wired's Manthorpe. "You might be a woman in the flesh but a man through the AR lens.

In the future, our workplaces will be far less affected by our inbuilt biases. As a result, the people we hire and work with will be more diverse, and the results will be better.

⁷⁴ Find out more about Facebook's attempt to manage bias at https://managingbias.fb.com/





Of course, current initiatives to ensure women make up 30% or 33% is only the first step on the journey to a truly balanced, 50/50 world.

50/50 at work

In time, this will happen. This is the intention behind 50/50 initiatives such as the 50/50 Pledge,⁷⁵ which wants to make sure there are not only the opportunities for women to speak at conferences, but enough female experts ready to stand on stage. It's also the aim of the 5050 Tech Challenge from Martha Lane Fox's DotEveryone organisation.⁷⁶ Its aim is to redress the current gender imbalance in the tech industry by championing female-led start-ups.

⁷⁶Strictly speaking the 5050 Tech Challenge's aim is to increase the number of women in the UK's tech sector — thought it promotes a specific agenda: "Ten years to fix the gender gap in tech". For more, visit https://doteveryone.org.uk/



Page 40 of 55

⁷⁵www.5050pledge.com

50/50 at home

As well as 50/50 representation at work, we will have fairer expectations of contributions inside the home as well. Automation will dramatically reduce the amount of the daily housework people have to do. Our cupboards and fridges will order our food.

(Note though that in an on-demand world, with drone delivery as standard, we will talk to our Siri or Alexa-type system to order just-enough pre-prepared food from companies like Hello Fresh — if we want to express ourselves in the kitchen and cook — or readymade food via Deliveroo's descendants. As a result, we will require less cupboard space. We will use biodegradable plates, and therefore have less washing up to do.)

However, assuming there will be *some* housework to do, since most of our devices will be connected via the Internet of Things, we will know exactly who has done their share of the housework. In that world, with digitised, real-time knowledge of who's done what and how much, it'll be much easier to reach a fairer, 50/50 split of the household chores.

50/50 lives

As men's and women's expectations of their rights and responsibilities shift, we will shift towards what you might call "50/50 lives". To begin with, the pressure to survive will be removed as basic income is introduced, and work will become something we choose. The gig economy will allow us to fit work around other aspects of our lives.

"Being able to work via companies like Uber or Airbnb or as a freelance writer, you can work in different, more flexible ways," says Gary Barker, the founder of a UN-backed global initiative on equality called MenCare. "Instead of stay-at-home Moms or stay-at-home Dads, people will be part-time caregivers and part-time breadwinners."

Work (from home) is fun

This will be very positive for women (and all of us). "An increasingly on-demand economy is actually female friendly," says Wired's Manthorpe. "Ditto flexible working hours, which should lead to the rise of more platforms like Slack, which enable collaborative working by blending work with fun."

One of the key reasons why it's taking so long to close the aggregate gender pay gap is that women (in general) are more likely than men (in general) to choose part-time rather



than full-time work.⁷⁷ This is often because part-time work fits better around the home and family life. The rise of work that is location and time flexible is very positive for women. The rise of new products like Slack will make work more fun. 78 Note also that 95% of Etsy sellers run their shops from their homes.⁷⁹

With people splitting the caregiving and the breadwinning, 50/50 will evolve from a neat, equitable idea to a practical, achievable ideal.

http://www.sec.gov/Archives/edgar/data/1370637/000119312515077045/d806992ds1.htm



⁷⁷ Note that this is changing. More men are choosing part-time work. See Stephanie Pylarinos, "More men opt to work parttime, study shows", The Guardian, 6 April 2016. In particular, "The report [by the UK Commission for Employment and Skills] forecasts a 20% increase in the number of part-time male workers by 2024, with a rise of only 7% for part-time female workers."

⁷⁸ "It used to be that the mark of a "fun" office was a foosball table crammed into the break room. But Slack makes the workspace itself feel like a game." See Amanda Hess, "Slack Off", Slate, 19 April 2015

⁷⁹ Source: Etsy's IPO prospectus, March 2015



Much of the current fight for women's rights in the UK focuses on equality in the public sphere: at work and in politics. It also focuses on that which is measurable. This falls prey to the streetlight bias or "drunkard's search".

Are we looking for equality in the right place?

In his 1964 book The Conduct of Enquiry, philosopher Abraham Kaplan told the tale of a drunkard searching under a street lamp for his house keys, which he had dropped somewhere else. Asked why he was looking there and not where he had dropped them, he replied, "It's lighter here!" Is looking for equality in wages like the drunkard looking for his keys? Is it really the best place to find equality? Or are we just looking for equality where it's lighter?

As our worldview shifts from a materialistic value system to an experientialist one, people and states will look less for status in material goods, income, and GDP, and more in experiential goods, like wellbeing and wellbeing measures.



When we do that, rather than focus on the fairness of pay, people will focus on equality of wellbeing: who spends more time with the kids, who's happier, who has the best work-life balance, who lives longer, healthier, happier lives.

Who's winning the fight for fairness?

If you look at this picture right now, who has the better lot in life — women or men? On the one hand, women don't because they earn less. But then, they do because they live longer. They do, because fewer commit suicide.⁸⁰ Although they increasingly go out to work, they are still the primary caregivers and look after the home.

Long-term data analysed by researchers at Oxford University suggests that women will continue to do progressively less housework, and men will do more. ⁸¹ From 1961-9, women conducted more than six hours of housework per day, while men did an hour and a half. In the most recent period of the study, women were doing an hour and a half less, and men an hour and a half more: from 2000-4, women did just over four and a half hours, and men almost three hours.

What can we learn from the latest wellbeing data from the Office for National Statistics?⁸² That, on average, women have higher levels of anxiety than men (22.5% vs 16.8%), but are more likely to report better wellbeing and that their life is worthwhile. The 43 wellbeing measures include measures of healthy life expectancy and whether you feel safe walking alone after dark. Perhaps this a significant source of anxiety inequality, as most men England and Wales (85.8%) feel fairly or very safe walking alone after dark, whereas only 61.7% of women do. (Remember the Apple Watch's new emergency service.)

Once all these issues are added up, it plays with the picture of equality. With the wellbeing measures currently available to us, it is still hard to compare. And we still have too few years of evidence to really assess any meaningful positive or negative trends.

⁸² Measuring national wellbeing: Life in the UK: 2016, Office for National Statistics, 23 March 2016



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⁸⁰ In the UK, the suicide rate is almost three times higher for men than it is for women. It is 5.2 per 100,000 for women, 16.8 per 100,000 for men. The suicide rate among men aged 45-59 is particularly worrying: at 26.5 per 100,000, it is the highest it has been since 1981. Source: Samaritans Suicide Statistics Report 2016

⁸¹ Source: Gender Convergence in Domestic Work: Discerning the Effects of Interactional and Institutional Barriers from Large-scale Data. Those hour numbers in minutes (men/women):

 <sup>1960-69:
 369/90

 1970-75:
 304/91

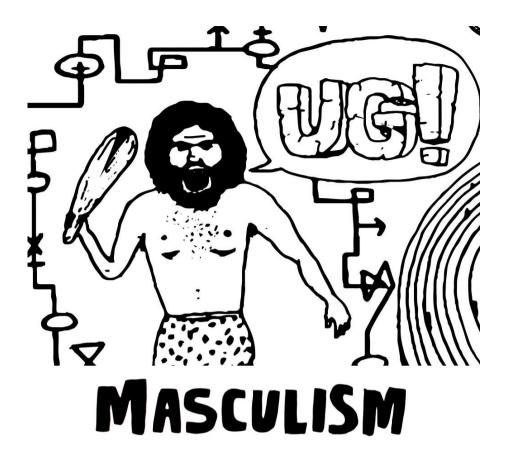
 1985-9:
 320/133

 1995-9:
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 280/148</sup>

In the long term, however, *The Future Is Here* believes we will work out ways to present wellbeing so that we can effectively compare and contrast for different sectors of the population. And then, the new fight for fairness will be less around that which is measured in simple monetary terms, and more in what really matters: wellbeing.





A new movement will emerge with a controversial concept: masculism. It might sound, at first, like a parody. It might even sound disrespectful. After all, women have endured the unfair, often violent downsides of male dominance for thousands of years. And it's only now that they feel like they're coming out from the shadows.

They feel that now is *their* time. That men should "acknowledge" what they've done. That men should give over what is right. After all, feminism, they proclaim is not a zero sum game.

"Equality is not a finite resource," says Catherine Riley, head of communications at the Women's Equality Party. "Gender equality will make Dads happier too, they'll have more time with their kids. And relationships that work better."

There are many men who increasingly believe this. For many, self-identifying as a feminist is really little more than actively signing up to the radical notion that a woman is a human being.⁸³ This is the message of the UN-led HeForShe campaign. And yet the idea of giving up power still sounds "win-lose" to many men.

⁸³ With reference to one of the standout statements from the past 100 years about feminism "Feminism is the radical notion that women are people"—Marie Shear in news journal New Directions for Women (1986); in a review of Kramarae and Treichler, A Feminist Dictionary (New York: Pandora Press, 1985)



Stiffed: are men being betrayed by society?

American commentator Susan Faludi summed this up in her best-selling book Stiffed: The Betrayal of the American Man,84 about how men today are struggling to be happy as the old certainties of a man's world implode and their place in this new era seems under threat.

"As a group, men still hold more power," says the Inclusing Institute's Doyle-Morris. "Yet as individuals they don't feel especially powerful."

How to help men see that equality is good for them too

How to show the average man that society is not out to betray him? How to show him that gender equality is good for him too? And if he has been raised to believe that masculinity is being the strong, silent, emotion-free breadwinner — and his potential partners still look for that — what if he openly cries, or finds life hard?

This concerns Emma Watson, the actress and UN Women Goodwill Ambassador who gave a landmark speech at the UN to launch the HeForShe movement.85

"I've seen young men suffering from mental illness unable to ask for help for fear it would make them look less macho," she said in New York. "In fact in the UK suicide is the biggest killer of men between 20-49 years of age; eclipsing road accidents, cancer and coronary heart disease. I've seen men made fragile and insecure by a distorted sense of what constitutes male success. Men don't have the benefits of equality either."

Given these questions, how to get the average man on board with the idea of gender equality? "If the only note we play on the keyboard to men is 'you're part of the power structure that causes harm, you're responsible'," says MenCare's Barker, "that's not a very useful way to start the conversation."

The #SheForHe movement

The answer will be the rise of a men's movement. As "feminism" comes from "feminine", so this movement's name comes from "masculine". We call it "masculism", where men have the opportunity to re-define what being a man means.

⁸⁵ HeForShe campaign was launched at the United Nations Headquarters, New York, 20 September 2014



⁸⁴ Susan Faludi, Stiffed: The Betrayal of the American Man (New York: Harper Collins, 1999)

And this has to — and will — come from women as much as men, since much of what men (in general) do, and how they view and define themselves, is based around their relationships with, and ability to attract, women.⁸⁶

The beginnings of this masculism movement are already underway. Since 2011, with funding from organisations including the United Nations Population Fund and UN Women, Barker's MenCare has been campaigning to encourage fatherhood, and both review and redefine what it means to be a man in the 21st century. MenCare's stated aim is to promote men's active, equitable and nonviolent involvement as fathers and caregivers.

Based in Canada, Michael Kaufman is a long-time colleague to Barker, fellow gender equality campaigner, and author of books such as A Guy's Guide to Feminism. He believes that we are witnessing a "transformation of what it means to be a man", and creating a new image where the ideal man is a nurturer and caregiver.

"This is fundamental... it will mean men have more empathy," he says. "But this isn't just about creating more empathetic men. Because men are still so powerful in our society, this will create a more empathy based society."

The issue of engaging men to make a better future is also being addressed by a London-based organisation called Token Man. Founded by four people in the advertising industry, Emma Perkins, Penny Othen, Georgia Barretta and, as the token man, Daniele Fiandaca — it aims to give men in industry more empathy for the challenges women and other minorities face in business. It's been created for a very simple reason.

"No minority ever created change with the support of the majority," says Fiandaca. "Look at the suffragette movement. They had to get the laws changed, but they weren't in power so they couldn't do it. It had to be the majority, the ones in power, who changed the laws."

In time, just as there is a proliferation of campaigns for female equality,⁸⁷ so there will be initiatives alongside MenCare and Token Man. Just as we have feminism and a #HeforShe initiative, so in the future we will have masculism and a #SheForHe campaign.

⁸⁷ For a good list, visit She Summit's "Global Hashtag Movements" page: http://shesummit.claudiachan.com/add-your-voice-3/global-hashtag-movements/



⁸⁶ For more on this, read Geoffrey Miller, The Mating Mind: How Sexual Choice Shaped the Evolution of Human Nature (New York: Anchor Books, 2000)



The accelerating rate of change in technology, and the rapid development and take up of key technologies⁸⁸ — including VR, MR and Brain Computer Interfaces (BCIs, which make it possible to control devices with our thoughts) — will take many ideas from science fiction to science fact.

This rate of change has given birth to a new group of people who believe that humankind is on the verge of a seismic evolutionary step. These people are called transhumanists.

"Transhumanists view human nature as a work-in-progress, a half-baked beginning that we can learn to remould in desirable ways," Nick Bostrom, a philosopher at the University of Oxford's Future of Humanity Institute, wrote in a paper about transhumanist values.⁸⁹ "Current humanity need not be the endpoint of evolution. Transhumanists hope that by responsible use of science, technology, and other rational means we shall eventually manage to become posthuman, beings with vastly greater capacities than present human beings have."

The sort of enhancement options he means include radical extension of human healthspan, eradication of disease, elimination of unnecessary suffering, and augmentation of

⁸⁹ Ethical Issues for the 21st Century, ed. Frederick Adams (Philosophical Documentation Center Press, 2003); reprinted in Review of Contemporary Philosophy, Vol. 4, May (2005)



⁸⁸ It took about 30 years for colour TVs to be in 95% of US homes. Smartphones went from launch in 2008 to 1.5bn device in 8 years. For more, read "Why You Need a Futurist", The Future Is Here, www.thefish.co/why

human intellectual, physical, and emotional capacities — for example, having the sort of senses that humans don't have but bats and dolphins have. Smile now if you like the idea of being able to echo-locate.

This isn't just the sci-fi imaginings of one crazy philosopher in an ivory tower. For one thing, Bostrom's latest book is required reading for the people most likely to finance and make it happen: the tech elite in Silicon Valley. 90 Facebook's Mark Zuckerberg recently described an exciting future of brain computer interfaces.

"You're going to just be able to capture a thought, what you're thinking or feeling in kind of its ideal and perfect form in your head, and be able to share that with the world in a format where they can get that," Zuckerberg said in a video broadcast from his Facebook page. "There's some pretty crazy brain research going on that suggests we might be able to do this at some point."

This sort of thing has, in fact, been happening for some time. Right here in Britain, in the Home Counties. Kevin Warwick, former Professor of Cybernetics at the University of Reading, once surgically implanted electrodes in himself and his wife, so that as she closed her hand he felt an electrical pulse in his head. By doing this, Kevin created the first telegraphic communication between two human nervous systems.

The end of homo sapiens?

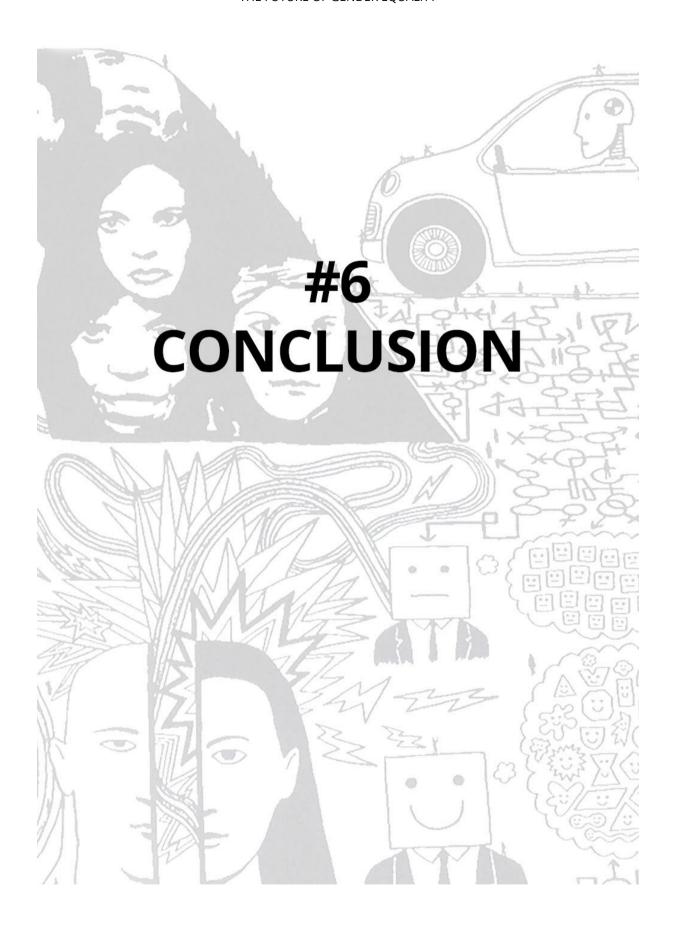
In this brave new world of transhumans, the new fight for fairness might not be between man and woman, but ordinary human and this new, enhanced transhuman. New questions might be: is this the next digital divide? Will this next evolutionary step be available to all, or only a wealthy few? Will homo transiens assimilate or annihilate homo sapiens — just as our ancestors did with the Neanderthals? Will the few in Silicon Valley and the world's risk-friendly, socio-economic elite be fair, and share their advances with the rest of us?

If, like *The Future Is Here*, you follow the Diffusion of Innovations curve, the answer is clear: of course they will. Just as running water, ABS brakes, better healthcare and VR headsets come first to the innovators, who are risk-friendly and rich enough to afford them, and then spread to the rest, so this evolutionary step will reach all of us.

⁹⁰ Nick Bostrom, Superintelligence: Paths, Dangers, Strategies (Oxford: Oxford University Press, 2014)



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6. Conclusion

It is a good time to be alive for women and for men, and for those who identify as some other gender.

In the 21st century, women will achieve meaningful pay parity. We will no longer have to mind the (gender pay) gap. As economic power continues to shift, the rest of society will reflect that. Women will gain better representation in politics, at work, and even in the media. Remember the "virtuous circle" that the University of Cambridge's Sucheta Nadkarni mentioned in her report. We can look forward to a far more female future — one where it may feel, compared to today, like it's raining women. The result will be better business and better technology — as better femtech products and services are designed by, and created for, not only women but also men.

As social conditioning changes, we will leave behind binary definitions of gender, and see **more genders** come out into the open. Then gender will become less salient, we will move **beyond gender**: rather than concerned with one form of unfairness, we will consider the intersectionality of diverse forms of prejudice — including race, religion, age, sexuality, class, and disability. Thanks to smart technology and the rise of empathy, we will sidestep the stereotypes that led to suboptimal choices and behaviour, and cheerily say **"bye-bye" to bias**. In short, rather than fear diversity, we will embrace it.

These changes will be good for everyone, including men. As we pass previous goals of representation and fairness, we will reach for higher, fairer marks. Where once 30% sounded like a reasonable goal, we will aim for proper equality, share the rights and responsibilities of life, and live **50/50 futures**. Parents, for instance, will become part-time caregivers, and part-time breadwinners.

Many men already see that equality is good for them too. A new movement will emerge to convince the rest that equality is a win-win, and to help re-define what a man should be in the 21st century. We call this **masculism**.

As our culture shifts⁹¹ away from one where we think happiness and status comes from what we have to what we do, where we aspire not so much to higher standards of living, but better quality of life — people will be more excited about wellbeing. That will be the **next battle for equality**.

⁹¹ See James Wallman, Stuffocation (London: Penguin, 2015)



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With the emergence of **transhumans**, there will be concern that the technology that enhances lives will be available to all. A new debate about haves and have-nots will emerge, and we'll see the **evolution of the equality question**.

All of these changes will make the world of work and entrepreneurialism an incredibly vital, fun, and fascinating area in the future. More women and more diversity in Britain's start-ups and businesses will make for different, less blinkered, better informed, smarter decisions — and more profits.





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