

ROB NOONAN

CAPITALISM, HEALTH AND WELLBEING



RETHINKING ECONOMIC GROWTH FOR
A HEALTHIER, SUSTAINABLE FUTURE

Capitalism, Health and Wellbeing

For those interested in health and wellbeing, this book is a must read. Drawing upon a wide range of sources, and through his simple and accessible writing style, Noonan explains how our current economic system drives many of the health and wellbeing issues we now face. Whether one speaks about growing income inequality or physical inactivity, one needs to understand the root causes of such problems. By eloquently explaining such causes – and offering solutions – Noonan enlightens the reader on how we can change society for the better.

—**Dr Lorcan Cronin, Lecturer in Psychology, Mary Immaculate College, Ireland**

Capitalism, Health and Wellbeing is a book aimed at health professionals, students who aspire to work in health promotion and the general public. While individual responsibility for modern health problems continues to be invoked, this book demonstrates that it is, on the contrary, collective choices, in particular of an elite, which make us sick. The link between capitalism and poor health no longer needs to be proven. We feel through Noonan's words the author's deep desire to fight against inequities. It is remarkable scientific work that he shares with us.

—**Dr Mélissa Mialon, Research Assistant Professor, Trinity College Dublin, Ireland**

While there is now an extensive literature on how economics and politics drive the health – for better or worse – of populations, Rob Noonan of the University of Bolton has provided an accessible volume that brings all of this work together and links it to how we live our everyday lives. How is it that in nations such as the UK wealth has never been greater, yet at the same time the numbers of poor are increasing? For Noonan, the answer is our economic system with its relentless drive for growth that leads to excessive consumption for some and deprivation for many others. Such an analysis is long overdue, and the volume will open up many eyes to the sources – and possible solutions – of our growing health and social problems.

—**Professor Dennis Raphael, School of Health Policy and Management, York University, Toronto, Canada**

Robert Noonan has written an engaging and robust book which explains how the current economic system is damaging our health. It is a rebuke to those who argue that simply achieving more economic growth will improve the health of populations. It is essential reading for local and central government officials who want to understand how to make our populations healthier and how to reduce health inequalities.

—**Professor Gerry McCartney, University of Glasgow, UK**

Rob Noonan has written a book that should be read by all those of us who struggle to make sense of the economic model that governs how we live our lives. He describes in detail how governments have acquiesced in a system that disregards the welfare of the vast majority of their citizens while complaining about the growing cost of fixing the damage that their policies inflict on health and well-being. This book provides an excellent agenda for the things that must change.

—***Professor Martin McKee CBE, Professor of European Public Health, London School of Hygiene & Tropical Medicine***

A vital and sobering analysis of the impact of rising affluence: why is economic growth exacerbating health crises and how can the issue be fixed?

—***Stewart Lansley, Author of The Richer, The Poorer: How Britain Enriched the Few and Failed the Poor***

We are living at a time of multiplying crises in which the economic, social and environmental converge; global conflict is back to haunt us. This timely contribution challenges the capitalist paradigm that frames our health choices and offers a way out.

—***Professor John Ashton CBE, Former PFPH, Independent Public Health Consultant***

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Capitalism, Health and Wellbeing: Rethinking Economic Growth for a Healthier, Sustainable Future

BY

ROB NOONAN

University of Bolton, UK



United Kingdom – North America – Japan – India – Malaysia – China

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INVESTOR IN PEOPLE

For my family.

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About the Author

Rob Noonan grew up in Liverpool, England. He is a Reader in Health and Education at the University of Bolton. He earned his PhD from Liverpool John Moores University, and in 2018 was awarded the Professor Tom Reilly Doctoral Dissertation of the Year Award by the British Association of Sport and Exercise Sciences. His main areas of research are the behavioural and environmental determinants of health. He has a long-standing interest in the promotion of physical activity and wellbeing and tackling health inequalities, and has written and lectured extensively on these topics.

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Acknowledgements

I've spent many years mulling over the ideas presented in this book. Come to think of it – well over a decade. They started to flourish after a (wise) friend posed some very radical ideas. At the time, I wasn't overly convinced that they had much mileage, because they really did challenge my thinking and understanding. But on reflection, it was these very ideas that in many ways gave me the motivation to set off on my own journey to discover what's really happening here and why. I'm pleased I listened.

I have so many people to thank for making this book possible. I have always considered human interactions as opportunities to learn. And there are many people I have been fortunate to speak to and learn from throughout my life. Whether that be on the street, up a mountain, on the golf course or over a coffee. At the gym, the park or whilst out cycling. All of these short conversations have framed my outlook on life and shaped my values. They have made me the person I am today.

I am also indebted to the generations of researchers and scientists whose tireless efforts and ideas have shaped human history, and got us to where we are today. To the authors whose work I have been so very fortunate to read, and whose ideas have inspired me, challenged my thinking, and in some way shaped the narrative of this book. While many of these people are acknowledged in the reference section of the book, there are of course many more that are not.

In my short career I have been fortunate to work at several universities and alongside many knowledgeable mentors and colleagues. They have given so generously of their time to listen to my views and read draft copies of my work. The text is greatly improved for their thoughtful feedback on this earlier work. To Stuart Fairclough for taking me on as a PhD student over a decade ago, and for his wise guidance and mentorship ever since. My gratitude extends to the many undergraduate and doctoral students I have had the pleasure of teaching and mentoring, who have motivated me to continually refine the clarity of my ideas. Through them listening to my views and me responding to their questions I've been able to further improve my own understanding.

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Finally, a big thank you, to you, for giving my book your time and attention. I really hope I have done justice to what I think are the most formidable social injustices and challenges of our time.

Epigraphs

The theories that drunkenness, laziness or inefficiency are the causes of poverty are so many devices invented and fostered by those who are selfishly interested in maintaining the present states of affairs, for the purpose of preventing us from discovering the real causes of our present condition.

Robert Tressell, *The Ragged Trousered Philanthropists*, 1914

When one individual inflicts bodily injury upon another, such injury that death results, we call the deed manslaughter; when the assailant knew in advance that the injury would be fatal, we call his deed murder. But when society [ruling power of society] places hundreds of proletarians in such a position that they inevitably meet a too early and an unnatural death, one which is quite as much a death by violence as that by the sword or bullet; when it deprives thousands of the necessities of life, places them under conditions in which they cannot live – forces them, through the strong arm of the law, to remain in such conditions until that death ensues which is the inevitable consequence – knows that these thousands of victims must perish, and yet permits these conditions to remain, its deed is murder just as surely as the deed of the single individual; disguised, malicious murder, murder against which none can defend himself, which does not seem what it is, because no man sees the murderer, because the death of the victim seems a natural one, since the offence is more one of omission than of commission. But murder it remains.

Friedrich Engels, *The Condition of the Working Class in England*, 1845

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Introduction

I've always been fascinated by the health of different populations and sort to understand where health is best. What is it that these healthy places do differently than others? How do the policies and the environments in different places promote and support health compared to other places? What is the culture like in different places? What are the social norms like? What influence do these social factors have on the way people live? How do people in different places spend their time and move around, and what impact do these decisions have on their own health, the health of other citizens and wider society?

Around the world, population health has improved at a staggering rate this past century. At the beginning of the 20th century, around 90% of the world's population struggled to meet the basic needs of life – from nutritious food and clean water to adequate shelter from the elements. Communicable diseases like cholera, typhoid and tuberculosis were widespread back then which led to child mortality rates being high and average life expectancy being low. Thanks to improvements in living conditions and advances in science, medicine and technology, high-income countries in the Global North have to a large extent overcome these health challenges and no longer experience widespread diseases associated with poverty and squalor. Today, these countries face new kinds of public health challenges. Aside from widening health inequalities, physical inactivity and obesity are at epidemic levels and we have a mental health crisis on our hands. But why? What's driving these new formidable public health challenges?

A commonly held belief is that they are the result of bad genes and biology, or down to idleness, laziness, weakness, lack of aspiration and low willpower. Essentially the downfall of the individual. Another explanation, the one I take up in this book challenges this view. It contends that these crises are the result of structural factors, and holds that our health largely depends on our environment and that our economic system – capitalism – challenges health and wellbeing. If income inequality and physical inactivity levels are going up and obesity and psychological distress are at epidemic levels, this says a lot about our environment. While there are many factors contributing to these crises, I've come to realise that our economic system – capitalism – is deeply implicated in them all.

We're frequently told that obesity, one of the major public health challenges of our time is caused by an imbalance between energy intake and energy

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expenditure. But that's a very shallow explanation. To really understand obesity, you have to explore the social reasons that keep so many people around the world eating too many calories, sitting too often and not moving enough. Similarly, climate change – another formidable global public health challenge is caused by excess waste and carbon dioxide being emitted into the atmosphere. But why do so many people (especially in the Global North) continue to purchase so much stuff, use up so much energy, dump so much waste and emit so much carbon dioxide? In order to understand and tackle the world's most formidable public health challenges like obesity, physical inactivity and psychological distress, it's important to look beyond the (guilty) individual and to the environment, the wider economic environment. My goal in *Capitalism, Health and Wellbeing* is to explore how our economic system contributes to some of society's most formidable public health challenges and how we can make society not only healthier, and more socially just, but more sustainable too.

The relentless pursuit of economic growth (in a bid to improve living standards even more) has become more important than protecting and improving the health of all. The strong emphasis on continual economic growth and the distraction used to achieve it through advertising and government lobbying is so strong and effective that the blatant canaries in the coal mine – such as rising levels of obesity and psychological distress and the resulting healthcare costs that these bring go largely ignored. The government aren't immune to this distraction either. On the eve of the Conservative Party conference in 2021, the then Prime Minister, Boris Johnson was asked to comment on how he would determine whether his levelling up policies were closing inequality gaps across the country. He suggested that we should ignore health benchmarks like cancer death rates and declining life expectancy, and should instead simply '*look at wage growth*'.¹

We have an incredible level of scientific understanding of what's good and bad for the body, what's good and bad for the mind and what's good and bad for the environment.²⁻⁴ But there's a huge disconnect between this scientific understanding and personal and political action. It's commonly said that the fish do not see the water. Poor living conditions and working conditions and resulting health damaging lifestyles are that common today that they are largely overlooked as a key root cause of poor health. Companies spend grotesque sums of money on advertising and government lobbying and do an excellent job at distracting the public from focusing attention on the waters that surround them. For me, if the fish do not see the water, a key role of educators is to make the largely invisible more visible. By providing an alternative perspective and making people aware of the health and planetary impacts of our economic system.

The only way for impactful population level change is to fill the blind spots in the public discourse, and in doing so, improve wider public understanding of *what's happening here*. Because all societies around the world are becoming more and more complex and more open to shocks than ever before, there has never been a period in history more reliant on a self-aware and highly educated population. A population able to adapt to change. Living in a globalised fast-paced world, it can be difficult to grasp what's happening around us, and perhaps more importantly, why it's happening. We have a wealth of information at our

fingertips, but it's not always easy to decipher which information is credible and which is not. But by asking who benefits you can start to navigate the noise, piece things together and make sense of it all. More often than not, after joining up the dots, following the path and making sense of it all, you will be looking at small gold coins. Or in today's world – digits on a screen. And once you do, you will see how everything is connected.

The current public health crises playing out in society have striking parallels with 19th century Britain. In the long term, the processes of economic growth are strongly related with advances in the prosperity and improved population health. But in the short term, rapid economic growth during the Industrial Revolution had adverse effects on population health. The disruption caused by rapid economic growth was reflected in widespread undernutrition and communicable diseases like cholera. Today, the disruption is reflected in widespread over-nutrition, physical inactivity, psychological distress and non-communicable diseases such as cardiovascular disease. While there are indeed obvious differences in the causes of communicable and non-communicable diseases, there exist commonalities between them with strong evidence supporting the need for positive social and built environmental conditions in order for people to grow, work, live and age healthily.⁵

The rapid economic growth and industrialisation experienced during the Industrial Revolution led to rapid urbanisation which created social insecurity and a range of public health challenges. The public health challenges back then included overcrowding, squalor and a limited clean water supply. Collectively they gave rise to high rates of infectious diseases and premature death, especially among the poor. It was not until the government stepped in and implemented the necessary social reforms and environmental changes like street cleaning, the provision of sewage systems and clean water, improvements to housing and changes to working conditions through labour laws before population health improved. Simon Szreter, Professor in history and public policy at the University of Cambridge notes that unless mediated by the 'state', the disruption caused by rapid economic growth results in deprivation and this in turn leads to increased rates of disease and death. He calls these 'the four Ds' of rapid economic growth: disruption, deprivation, disease and death.⁶

In recent decades, the relentless pursuit of economic growth and the transformations that have evolved from it have delivered disruption in many social, environmental and political spheres of life. I reason here that because such disruption has not been adequately addressed by the government, society has witnessed a rise in social deprivation and inequality, and a greater incidence of disease and preventable deaths. The COVID-19 pandemic brutally exposed just how socially unequal Britain actually is in terms of health with life expectancy falling much more sharply in the poorest areas.⁷

I decided to write this book for two principle reasons. The first is personal. I live in the United Kingdom and year on year, I see fewer and fewer people walking about and speaking to each other on the streets. The people I come across are carrying more and more weight. They are acquiring more and more things but they don't appear to be any more content or satisfied with life. They are

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continually striving for and wanting more. More money and more things. I see them working longer hours at the detriment to their health. But it isn't just about them undertaking more paid work and speeding up in the workplace. They're speeding up in other domains of life too. They're texting not talking, indebting not saving, driving not walking, ordering not cooking. Why the rush? Why the urgency? Why the need to be doing everything faster?

The environment around me is changing for the worse too. In a bid to maximise market competition, boost productivity and grow the economy – I see taxes being cut (to increase incentives to work) which is limiting the distribution of wealth and widening income inequality. Regulation is being cut (to increase consumer choice and drive down prices) which is endangering worker wellbeing and damaging the planet. Trade union power is being crushed which is giving companies greater freedom to suppress wages. Public services are being privatised which is sanctioning underinvestment, corner cutting and minimal accountability. As a result, many of the public parks and green spaces that greatly benefit our health are in rapid decline, and there're fewer and fewer communal places for people to meet and socialise. Specialist local shops – the lifeblood of communities – are being driven out by big chain supermarkets which are draining the locality's economic and social capital. What's more, public transport is in decline and our cities are becoming more and more car dependent. Rather than cutting, it's worsening road congestion, noise pollution and air pollution. And then there's the social pollution. Everywhere I look, advertisements surround me. They're on billboards, the sides of buses, they're on the television and in newspapers. Everybody is competing for my attention, my time, and above all, my money. And that's because our overarching governing economic ideology comprises a core set of values and beliefs centred on competition, self-interest, individualism, financial success and abundant consumption. Why so? To grow the economy, of course.

The second driver to writing the book is linked to my work as a researcher and educator. My research focuses on how the environment shapes health behaviours and inequalities in health. Through this work, I've become a firm believer in the social determinants of health – that health is heavily influenced by the social conditions in which people live, as well as inequities in power, money and resources. It angers me that this evidence continues to be left out of public and political debate. For years, a raft of empirical studies, books and blog articles have detailed the scale of income inequality, obesity, psychological distress and climate change but seldom have they explained the underpinning reasons why. I wanted to shed some light on what's really driving these social changes and public health challenges. I wanted to answer the questions that my students often ask.

Questions such as why we live longer than we used to but die of different causes? Why poor people die young? Why income inequality is rising at an unprecedented rate? How our economic system which emphasises competition, self-interest, productivity and consumption at all costs challenges our wellbeing? Why so many people in rich nations are materially wealthy yet suffering psychologically? Why so many people around the world are living with obesity? Why some countries have experienced more rapid increases in obesity rates than

others? Why so many people around the world are physically inactive and seldom walk? Why there's a relentless drive for automation in the workplace and for workers to work harder for longer? Why treating poor health is favoured over preventing poor health? How the environment shapes our health? And why all those activities which do improve our health and wellbeing – the priceless things like connecting with others, walking and giving our time aren't actively promoted or endorsed by mainstream media or corporations alike. These are the core questions I investigate in *Capitalism, Health and Wellbeing*. I will argue that the formidable public health challenges society faces are the price we pay for continual economic growth. They are the collateral damage so to speak.

In this book, I will demonstrate how tackling the most pressing public health challenges of our time requires a new kind of economics. Continual economic growth forces us to manufacture goods faster, deliver services faster, consume more goods and more services more often, work faster and work for longer. Essentially, it forces us to live our lives faster. No matter what the cost to our health or the environment. The easiest way to feel less stressed is to slow down. But slowing down isn't an option when the ultimate goal is to grow the economy. Decelerating is difficult even for those that understand the importance of balance and want to slow down. If we are living longer than ever before, why the rush to do everything faster?

There is no doubt that the causes of our current public health crises are complex. But the fact is many of them are afforded by our economic system which drives 21st century lifestyles. The impact of continued economic growth on human health and the planet's living systems is a fact of our existence. But it's the inconvenient truth that few people want to talk about. It's a modern-day social taboo. Our inability to even discuss its role is testament to how grave the problem actually is. In *Capitalism, Health and Wellbeing*, I argue that, the drive for continual economic growth is at complete odds with the United Nations Sustainable Development Goals (SDGs), and is a key driver to some of the gravest public health crises we face. I contend that if we're to achieve the United Nations SDG of health for all – then there's an imperative need to redesign the economic system and social progress metrics that promote productivity and consumption at the expense of health and wellbeing. What's more, for societies to achieve the SDGs, there will be a real requirement for governments to mediate the disruption caused by economic growth by way of devising and implementing regulatory policies which not only appreciate the collective physical, social and psychological impact that change brings upon citizens but to mitigate against the anxiety, insecurity and health effects it causes.

By fully exposing the concept of failure demand and showing how our economic system – capitalism – challenges our health and wellbeing, I hope to fill the blind spots in the public discourse and generate widespread debate across disciplines. If the ideas I present here give you a more holistic view of what contributes to your health and wellbeing, enable you to imagine alternatives, see how things can be better and realise the simple steps we can all take to enhance our sense of wellbeing and contribute to transformation at a time when social and economic change is needed – then my job here is done.

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Part 1

Canaries in the Coal Mine

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Chapter 1

Balance: Too Much of Anything Is Bad for Us

Happiness is not a matter of intensity but of balance and order and rhythm and harmony.

Thomas Merton, *No Man is an Island*, 1955

Health functions as a sort of social accountant. Child mortality rates and life expectancy provide a strong indication of how well a society is functioning. They act as a barometer. In well-functioning societies, people live well and they live long. When a society suffers dysfunction, people get sick and they die young. When only 10 children die out of 1,000, this means that the other 990 children survived. Their parents and society have managed to protect them from the dangers that could have killed them – the deadly germs, starvation and human violence. In countries where child mortality figures are very low, it tells us that most families in that country have enough food to eat, and clean water to drink, they are safe and they have good access to healthcare. While it doesn't reveal that much about the health of the children, it reveals a great deal about the quality of life in that society. In the past 200 years, child mortality rates have fallen dramatically. In 1800, the percentage of children dying before their fifth birthday was over 40%. In 2017, it stood at 4%. The global mortality rate of children under the age of 5 years has fell by roughly 60% in the last 30 years or so – but on average, 15,000 children still die every day. And big inequalities still exist between countries. Child mortality rates differ a lot between countries because the way of life across countries differs greatly.^{1,2}

Still to this day, large health inequalities exist around the world. If you live in Japan, you can expect to live well into your 80s. If you're born in the Central African Republic, you'll do well to make it to your 50th birthday. Among the rich countries, it's the United States that sits at the bottom of the life expectancy league table, despite spending more money on healthcare per person than any other country in the world.³ But why so? People living in rich nations like the United States do indeed enjoy many material advantages, especially compared to the poorest nations. Income provides people with choices and can be an enabling

tool to good health, provided of course that the income is directed towards goods and services that promote and maintain good health. At the individual level, higher income provides people with more command over foods and healthcare services which are both proximate factors to survival. At the societal level, higher incomes can boost chances of survival through an advanced provision of public services including better sanitary facilities and access to clean water, better and more readily access to vaccinations and healthcare and a higher level of education.⁴

When it comes to relations between per capita income and survival rates, there are some countries that underachieve and some that overachieve. Some countries do pretty well (live longer) despite having a low level of per capita income. Whereas some other countries do not do so well (die sooner) despite having a high level of per capita income. Countries like Brazil and the United States, respectively. While there are many reasons why life expectancy varies across countries, social injustice is without doubt a big piece of the jigsaw. In the countries that punch above their weight, there is a more equal distribution of resources which allows higher than expected survival rates amidst poverty.

There are several reasons why America doesn't do as well as other rich countries in terms of life expectancy.³ To understand these reasons, it's important to look at mortality rates cause-by-cause. Life expectancy captures the average age of death in a population. Average life expectancy falls when people die young. Focusing specifically on the causes of death among young people can reveal why life expectancy in America is lower than in other rich countries. Obesity is a key risk factor for many of the leading causes of death in high-income countries, including heart disease, diabetes and cancers. Around 70% of Americans are overweight and more than one-third are obese. But it's not just obesity that Americans suffer more from. Americans also experience higher death rates from smoking, homicides, opioid overdoses, suicides, road accidents and infant deaths. Aside from limited social security and healthcare not being free at the point of need, America is also a deeply unequal country with large income gaps between rich and poor. As a consequence, poor Americans don't have the financial capability to cover healthcare costs and, therefore, don't receive the healthcare they need. Therefore, America's poor tend to die younger than the poor of other rich countries.

Large gaps in life expectancy still exist within countries too, especially rich countries. In the United Kingdom, for example, a baby boy born in wealthy Kensington, London, can expect to live over 10 years longer – and nearly 20 more years in good health – than a baby boy born in relatively deprived Kensington, Liverpool. These health inequalities start early in life and are manifested by the environments in which children grow, live and work. If you take the Northern Line service from Hunts Cross, Liverpool to Southport, a five-mile journey between Aigburth and Kirkdale costs you over 10 years' life expectancy. It's not just about the length of life we live either. What about our quality of life? There's a huge gap between the richest and poorest areas of the country. The gap in healthy life expectancy (the years lived in good health) between the most and least deprived areas of England is almost 20 years. Put another way, people living in

the most deprived areas of England spend nearly a third of their lives in poor health, compared with only about a sixth for those living in the least deprived areas of England.

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To better understand why the main causes of death today are considerably different to what they were in the past, let's focus our attention on the epidemiological transition. The epidemiological transition refers to the way in which society evolves as the country modernises. In the early stages of a country's development, sanitation levels are poor and medical treatments aren't yet well developed which leads to people dying young – largely due to infectious disease. Because the odds of children dying young are high, families opt to have more children as a kind of insurance policy. But as living standards improve, pandemics gradually recede owing to improvements in sanitation systems, nutrition and medical care. This results in a lower crude death rate. As the economy develops and the country becomes more prosperous, women begin to enter the workforce and in doing so, opt to have fewer children. During this stage of development, life expectancy improves but the extra years of life bring with it a greater risk of degenerative and man-made diseases – often referred to as non-communicable diseases. Diseases like cardiovascular disease, cancers, diabetes and obesity. As medical treatments to tackle these degenerative diseases get better, life expectancy improves among the population – but owing to the world becoming more interconnected from globalisation, there's now much greater potential for resurgence in infectious diseases – diseases like COVID-19.

Whereas economic growth refers to an increase in gross domestic product (GDP), which is a measure of the size and health of a country's economy, economic development refers to a structural transformation, principally relating to the economy. According to American economist, Walt Rostow, countries must pass five specific steps in order to become 'developed' (i.e. stages of economic growth). These stages include: (1) traditional society, (2) preconditions to take-off, (3) take-off, (4) drive to maturity and (5) age of high mass (production and consumption).⁵ High-income countries in the Global North such as the United Kingdom occupy this last 'developed' stage.

While the specific stages of economic development are less well defined and established, a majority of economists posit that a country's economic development is linked to three specific transitions. The first is a structural transformation of the economy which relates to a reallocation of economic activity (i.e. composition of GDP), from low productivity and labour-intensive economic activities to higher productivity and skill intensive activities. At the early stages of development, the agricultural sector makes up the bulk share of economic activity and jobs. With development, the share of GDP shifts towards the industrial sector (i.e. manufacturing). Following a period of industrialisation, the service sector gradually overtakes the share of industry, and the agricultural sector declines further.

There is also a process of urbanisation which relates to the migration of people from rural to urban areas in order to secure employment in burgeoning manufacturing industries and a better standard of living. As countries develop

economically, they also experience a demographic transition.⁶ When this happens, the average age of the population rises owing to a fall in fertility rates and a rise in life expectancy. This can lead to an economic problem for governments as there is a strong link between the average age of the population and GDP. As the average age of the population rises, growth in the economy slows down (i.e. a lower GDP). The economic consequences of an ageing population is something that wealthy nations like the United States and United Kingdom are challenged with now and one they and other nations will continue to be challenged with in years to come as more and more people live longer. One way governments have sought to tackle this problem in recent years has been to increase the retirement age for workers. Another headache for governments is the increased health social care costs that result from an ageing population.

Today, non-communicable diseases are by far the most common cause of death and disability worldwide. Non-communicable diseases account for roughly 75% of all global deaths. Every year, around 15 million people between the age of 30 and 70 years die from a non-communicable disease. The global burden of non-communicable disease is expected to rise by around 20% by 2025. Non-communicable diseases like cardiovascular disease are by in large preventable and premature. They are driven by the effects of urbanisation, population ageing as well as modifiable lifestyles behaviours – tobacco use, unhealthy diet, physical inactivity and excessive consumption of alcohol.⁷ Death from infectious diseases tends to be rapid whereas death from non-communicable diseases is far more gradual. Non-communicable diseases, therefore, place far greater staffing and financial demands on health services due to their long-term treatment costs. Without a stronger focus on prevention and more investment in the health and social protection system, how will it cope with an ageing population presenting a mixture of coexisting non-communicable diseases?

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The biggest contributing factor to health improvement and longevity hasn't been growth in GDP.⁸ It's resulted from policy changes and changes to the built environment (which we will explore in later chapters). The provision of safe drinking water, improved hygiene and sanitation systems, better housing conditions and better working conditions are just some of these positive policy and environmental changes that have drastically enhanced living standards, improved human health and extended longevity. But rarely do we hear about these remarkable gradual improvements which have taken place over these past centuries. The gradual improvements which have positively impacted billions of people around the world. If media content was less narrowly and rigidly controlled, then incredible achievements like these would surely be front page news in all countries around the world. There would be experts on television explaining how it was possible. And we would all debate about the ways we could make even more progress. Instead, we rarely hear about success stories like these.

When people feel safe and are content with their life, there are few opportunities to make money. On the contrary, huge profits are available when you promote and induce fear in people. The media, like many companies, are out to make a profit and they know very well that fear sells. There's a well-known saying in media circles that *if it bleeds it leads*. In the Western world, we're surrounded

by a culture of fear.⁹ The negative instinct that exists across the Western world is further compounded by selective 24-hour news reporting. The goal of which is to grab our attention and create drama.

In the media, we hear a lot about wars, terrorist atrocities and natural disasters. As terrible as these events are, they actually accounted for less than 1% of the 56 million worldwide deaths in 2017.¹⁰ Nowadays, more people commit suicide than are killed through war or other forms of violence. Type 2 diabetes, a condition brought on by consistently high sugar levels kills up to 3.5 million people every year. Air pollution kills another 7 million people every year and another 1.3 million people are killed in motorised traffic incidents.¹¹ Of course, human violence and terrorist atrocities create more hysteria and sell more newspapers than reports on high sugar levels and human-generated air pollution, so we hear about them more often. Nevertheless, global statistics show that deaths from human violence have been declining steadily over the preceding centuries. The percentage of deaths attributed to human violence fell from 15% in agricultural societies to 5% in the twentieth century and now stands at around 1% in the 21st century. In his book, *The Better Angels of Our Nature: Why Violence Has Declined*, Professor Steven Pinker notes that the decline in human violence is among the most significant yet least appreciated developments in the history of the human species.¹²

Because media content is so narrowly and rigidly controlled, this can also lead to perspectives being heavily skewed, especially in prosperous parts of the world, like the United Kingdom. It's easy to obsess about the trivial, and lose sight of the fact that death, privation and extreme struggle are still very much a normal part of life for some people in some parts of the world. Almost 60 million people die every year. That's roughly 150,000 deaths every day. To put that figure into context, that's the equivalent of killing off the combined entire populations of the Netherlands, Belgium, Czech Republic, Greece and Portugal every year.

Depending on how old a person is, where they live and how well travelled and read they are, their perspective will vary a lot. In the Western world, it's easy to forget that compared to some places, we have it pretty well. For instance, take Hulda's life in Uganda. Hulda grows her own food, and she eats the same food for breakfast, lunch and dinner, every day. She has limited money to purchase food from the local shops, so if there is a period of bad weather that leads to a poor harvest, then it's likely she and her family will starve. Accessing clean water isn't easy for Hulda either. There are no water taps close to her home, so she has to walk barefooted over long distances every day carrying a bucket in hand. Her home is made of mud which makes it vulnerable to any sort of poor weather that passes by. But worst of all for Hulda, if she or her children fall ill, the chances of survival are pretty slim. Access to healthcare treatments like vaccinations and antibiotics are rare in Uganda, but in Hulda's rural community, such services are even more uncommon. There are many adverse aspects to Hulda's life.

A useful way to picture and understand how people live and how their standard of living changes as they acquire more money is to categorise the world into four income levels. People at income level 1 are the world's poorest and live on less than \$2 a day. Over half of the world's population was at income level 1 50

years ago but today a little over 10% of the world's population is at income level 1. At income level 2 and 3, people earn between \$2 and \$8 a day and \$8 and \$32 a day, respectively. At income level 4, people earn more than \$32 a day. There are currently around 1 billion people living at income level 1. People at income level 1 have limited access to clean water. They spend many hours each day retrieving water, and this water might still make them ill. The three billion people at level 2 have access to clean water, but it can be far away and they can spend many hours each day retrieving it. Two billion people are at income level 3. People at income level 3 have access to clean water near their home or in their home. At income level 4, people have access to clean water in their home and this water is adapted for different uses (i.e. drinking water, cleaning, hot and cold water). Around 1 billion people are at income level 4.¹³

Technological, economic and political developments during the last 100 years have made for an increasingly robust buffer enabling humankind to achieve the necessary number of calories for their survival. It would be foolish to suggest that mass famines have been eradicated. Mass famines do still occur in some parts of the world from time to time. But these events are exceptional, and are rarely the result of natural events. They are instead almost always man-made, resulting from political decisions.¹⁴ In most countries, overeating has become a far worse problem than famine. In 2010, famine and malnutrition combined resulted in around 1 million deaths, whereas obesity resulted in 3 million deaths. Figures published four years later showed that 850 million people suffered from malnutrition whereas more than 2.1 billion people were overweight. It's predicted that half of the world's population will be overweight by 2030.^{15,16} Moreover, physical inactivity is on the rise which will result in hundreds of thousands of new cases of preventable non-communicable diseases within the next decade.^{17,18} And the number of people with serious depression and anxiety is rising dramatically in high-income industrialised countries like the United Kingdom and United States.^{19,20} The sad thing is all of these health behaviours and outcomes are preventable.

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Economic growth just like personal income boosts chances of survival and contributes to an improved quality of life.⁴ But only up to a point. It's extremely difficult to locate with precision at what point this happens. But it's an important point to highlight in order to stimulate some sort of conversation around what extra economic growth is for? Is it to boost the health and extend the lives of those in high-income countries? Is it to boost our living standards even further? Or is it to achieve a better and more sustainable future for all? The common thought is that growth will result in more jobs and more funds to better our public services. But the fact is – this very rarely materialises. One reason why it doesn't materialise is because the world isn't very good at sharing. Without doubt, there are enough resources for the billions of people alive today to achieve subsistence – if shared equitably. But doing so would go against the competition and self-interest rules of the economic game.

Many of the significant population health gains happen early in a country's process of development. As the incomes of more and more citizens shift from the

mere tens and hundreds of dollars per capita to the thousands of dollars per capita – food deficits and poverty rates fall, child and maternal survival rates improve and average life expectancy is extended. With increased prosperity, the essential prerequisites to survival can be met. However, beyond a threshold of basic needs (i.e. secure food supplies, clean water and access to basic healthcare), increases in GDP don't result in large gains in health, wellbeing or longevity. Evidence for this can be seen when plotting GDP per capita against social outcomes such as poverty, hunger, child and maternal mortality rates and life expectancy.^{21,22} The case of America is also important to consider here. America may well be the richest country in the world. But on average, they're not the healthiest country. Nor do they record the highest life expectancy among other high-income countries.

Beyond the point of satisfying the survival needs of citizens, GDP may well grow, but the driver to this growth is often the result of the increased expenditure allocated to solving societal problems.²³ The societal problems that the economic system has created in pursuit of growth. When societal values centre on material consumption, competition and self-interest, and citizens in turn devote a disproportionate amount of their time to increasing their material standard of living, at the expense of fostering their relationships and engaging in meaningful and health enhancing pursuits – negative health externalities can occur.²⁴ The negative health-related externalities I will give specific focus to in this book are obesity, physical inactivity and psychological distress.

The surfacing of these negative health-related externalities, and others, means that additional government spending is required to fix them. This process of having to tackle the avoidable societal problems that the economic system has created has been coined failure demand.²⁵ Evidence for this vicious circle can be seen in the disproportionate allocation of funds to treatment services in healthcare at the detriment to preventive measures.²⁶ The perverse thing is, as capitalism causes more and more public health damage (i.e. obesity, physical inactivity and psychological distress) – in its pursuit of growth – intense calls are made by politicians for even more growth. And the grim statistics illustrating the public health damage give firm justification for the growth train to keep on going.

Consequently, governments around the world including the United Kingdom are locked in a system of reactive spending. They have to continually deal with the collateral damage of their growing economies. On top of the consolation spending by individuals (i.e. goods and services to deal with a fast-paced stressful life), government spending is needed to address not just the impacts of income inequality, rapidity and uncertainty but also the effects of the status competition, hyper-consumption and physical inactivity. The externalities the economic system – capitalism – creates. While the economic system stands on the touchline throwing flammable objects on the fire – intensifying the burn – public servants, from the police, fire and National Health Service to teachers and social workers desperately scurry around, trying their best with the limited resources they have to water down and mop up the destruction and collateral damage caused.

For instance, when workers are paid low wages so that the company can achieve higher profits for shareholders, the government is obligated to top up

worker wages through universal credit payments. When psychological distress kicks in because of the precarious nature of their working and living conditions and the worker is no longer *fit to work*, the government is obligated to cover their living costs through incapacity benefits. When the consolation spending kicks in on excess alcohol and tobacco consumption in order to mitigate the psychological distress resulting from being unemployed, and health deteriorates further as a consequence, the National Health Service is obligated to provide the necessary healthcare to deal with the stress-induced health problems that have unfolded.²⁷ In the United Kingdom, long-term sickness or disability is the second most common reason for adults to be out of work (after looking after family). Government spending on benefits related to health has become an increasingly large share of working-age benefit expenditure and is expected to continue to grow significantly. The sharp rise in economic inactivity is thought to be due to a high proportion of people waiting for treatment as the National Health Service struggles to cope with excess demand, as well as people who are living in permanent ill health thereby restricting both the amount and type of paid work they're able to do.^{28–30}

Expensive drug treatments and psychological therapies are endorsed for those stressed by overwork, or the uncertainty resulting from precarious work and livelihoods. Clinical treatments and behavioural intervention programmes are implemented to change the lifestyle habits and physiques of those whose eating and energy expenditure patterns have been adversely shaped by capitalism's drive for productivity and hyper-consumption at all costs. Surely, a more sensible and indeed effective approach for governments to take would be to implement the regulatory and preventative measures to limit the health damage caused by capitalism in the first place.³¹

One key reason why economies including the United Kingdom's have continued to experience at least some growth in recent decades has a lot to do with increased marketisation.³² A system whereby behaviours and relationships are now disproportionately driven by competition, profit and self-interest. Among other things, what it has done is turn non-economic activities into economic activities. Cooking – once a household chore – is now for many, a paid service – operating in the professional economy. The takeout meal industry and food delivery services like Uber Eats and Deliveroo have expanded exponentially in the past decade. Extra work pressures and every day productivity demands displace people's time and energy levels to cook, which provides a profitable market niche. Consequently, nowadays more and more goods and services including foods are purchased at the latter stages of processing. In the United Kingdom alone, the total market value of foodservice delivery was worth over £10 billion in 2021.³³

In the chapters that follow, we will examine the various other ways in which capitalism impacts health and wellbeing, and afterwards we will expose the mechanisms – which I refer to as externalities – linking them together. The externalities that result from an economic system that's built on productivity and hyper-consumption to meet supply. A system that promotes competition and self-interest, and one that's deliberately disruptive in nature to create new tastes

and new desires to achieve the productivity, consumption and growth it so desperately needs.

The first externality we will cover that impacts health and wellbeing is deprivation and rising income inequality. We will then examine how constant disruption and change drives feelings of insecurity and uncertainty, and how corporate advertising distorts our psychological needs by promoting status competition which drives social anxieties and material consumption. We will then focus our attention on the workplace because while it can be a key symbol of status, it's also a primary source of chronic stress for many through overwork. We will critically examine how the drive for productivity is at the centre of workforce automation which is displacing workers, and creating a casualised, low wage workforce. Keeping with the theme of productivity and rapidity, we will then explore its link with physical inactivity and mass motorised forms of transport before briefly investigating some of the environmental impacts of mass production and hyper-consumption.

But now that we have covered the concept of failure demand, let's consider in more detail GDP and its limits as a measure of social progress, explore the stronghold the pursuit of economic growth has on political systems and how this overarching economic goal challenges the United Nations Sustainable Development Goal of ensuring healthy lives and promoting wellbeing for all. We can then turn our attention to the health signs – the psychological and physical toll – which is all too obvious to see, showing us that as a society, we're not functioning quite right.

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Chapter 2

Gross Domestic Product, Productivity and Social Progress

I have no doubt that it is possible to give a new direction to technological development, a direction that shall lead it back to the real needs of man, and that also means: to the actual size of man. Man is small, and, therefore, small is beautiful. To go for giantism is to go for self-destruction.

Ernst F. Schumacher, *Small is Beautiful*, 1973

The United Nations Sustainable Development Goals (SDGs) are the blueprint to achieve a better and more sustainable future for all. A key goal for governments around the world including the United Kingdom is to ensure healthy living and promote wellbeing for all people at all ages.¹ Against this backdrop, income inequality is widening, obesity, physical inactivity and psychological distress are at epidemic levels, and we have a climate emergency on our hands. In this chapter, I'm going to illustrate how the drive for continual economic growth is at odds with this particular United Nations SDG – ensuring healthy lives and promoting wellbeing. I conclude by arguing that without the necessary government regulation, the disruption caused by continual economic growth will no doubt challenge the attainment of wellbeing for all and worsen rates of psychological distress.

Capitalism is not just an economic system based on the private ownership of the means of production for profit. It's also a social system that governs how our social relationships are both organised and experienced.² In advanced capitalist nations with liberal-market economies like the United States and United Kingdom, the overarching governing ideology comprises a core set of values and beliefs centred on competition, self-interest, financial success and abundant consumption in order to achieve continual economic growth.

The defining metric used around the world to determine the success of a country's economic policy and social progress is the Gross Domestic Product (GDP). GDP is an economic measure of the market value of all the goods and services produced within a specific period of time. GDP is used by economists to

determine whether the economy is growing or shrinking (i.e. experiencing a recession). When consumers, businesses and governments spend more money, GDP goes up. This symbolises that the economy is growing. When less money is being spent, GDP goes down. When an economy is performing badly, this can lead to earnings and share prices falling and jobs being lost. Think of it like this. Buying one extra fish and chips meal at the local chip shop would boost GDP by £6, or a fraction less if some of the ingredients were imported from another country.

GDP may well indicate whether the economy is growing, but rising GDP tells us nothing about how well society is functioning. Nor does it reveal anything about the social costs of a growing economy. The problem with GDP is that it captures lots of things that are harmful to health. Junk foods, alcohol, cigarettes – consumed in excess – are all lethal to our health.³ Yet, increased sales make GDP go up. What's more, GDP doesn't reflect the physical and mental toil, or the personal safety and value sacrifices that are made by workers to earn their wages. A limitation that was pointed out by the person who introduced GDP to the world – the economist Simon Kuznets. GDP doesn't capture inequality either. Nor does GDP capture human health and wellbeing or the quality of the environment. Even more importantly, GDP fails to capture and, in many ways, completely devalues many activities which do improve our health and wellbeing – the priceless things – like walking in the park, playing outdoors, as well as educating and caring for our children, our loved ones and the community. That's because GDP recognises no value other than money.

The drawbacks to GDP have been known for some time, and while there have been some proposed alternatives to measuring progress with indicators such as the Human Development Index, the Genuine Progress Indicator and the Happy Planet Index – a suitable alternative is yet to take its place. In 1968, the president candidate Robert Kennedy made a speech at the University of Kansas where he summed up the downsides to GDP.⁴ His words on the subject largely went unnoticed at the time but they have since become famous.

Gross National Product counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for the people who break them. It counts the destruction of the redwood and the loss of our natural wonder in chaotic sprawl. It counts napalm and counts nuclear warheads and armoured cars for the police to fight the riots in our cities. It counts Whitman's rifle and Speck's knife, and the television programs which glorify violence in order to sell toys to our children. Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile.

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The current UK Government want growth, growth and more growth. But what about the inevitable social costs that this will bring. The income inequality, the disease, the premature deaths, the psychological distress and the excess waste and pollution.⁵ The economy may grow but what if more people die young? For years, governments around the world, but most notably the United States and United Kingdom, have been striving for continual economic growth (in a bid to improve living standards). Despite the many blatant canaries in the coal mine. The rising levels of obesity⁶, psychological distress⁷ and so-called *deaths of despair*.⁸

The UK Government say that the economy has been sluggish since the economic crisis in 2008. But that's not entirely true. The wealthiest in society have been doing pretty well on the whole. Better than they've ever done in fact. A report published by Oxfam in 2019 outlined how at the time, the world's 26 richest people had the same amount of wealth as the poorest half of mankind – just shy of 4 billion people.⁹ The report went on to illustrate how the number of people owning as much wealth as the poorest half of the world's population did stand at 61 in 2016 but fell to 43 in 2017 and then to 26 in 2018. In the two and a half decades leading up to 2016, the poorest half of the world captured 12 cents in every dollar of global income growth compared to 27 cents of every dollar for the top 1%.¹⁰ The United States has the highest income inequality of all the G7 nations and is growing.¹¹ While the United Kingdom may be slightly better off than the United States in this respect, economic growth has still disproportionately benefited higher income households while leaving lower income households behind.¹² Principally due to government policies making it easier for the wealthy to get richer and harder for workers to achieve better pay and conditions.^{13–15}

The economic system we have is not compatible with our biological need for belonging and relatedness.^{16,17} We know very well that our health and life satisfaction are strongly influenced by the quality of our personal relationships.^{18–20} Both in terms of friendship and solidarity. Yet, we have an economic system that works against the fulfilment of this essential biological need by opposing collectivism in favour of individualistic values.²¹ Competition is its defining feature. A consequence of this being that it divides society. It divides those that own the means of production (the elite) and the masses that sell their labour power simply to survive. It divides the various competing capitals too (i.e. companies and organisations) – whose success is greatly dependent on making enough profit to satisfy their wealthy shareholders. A goal only achievable through exploiting the workforce by means of cutting wages, increasing the working day or getting rid of secure employment contracts (i.e. zero hours contracts^{22–24}). The sort of things we know greatly affects our health.^{25–27} But there's another divide that's less frequently spoken of. It divides workers themselves. Forced to compete in the labour market for jobs and scarce resources – this creates the basis for the major social divisions, stigma and discrimination we see in terms of class, gender, race and ethnicity, which fractures society.^{28–30}

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Governments set the legal frameworks within which financial markets operate. By taking a hands-off approach, they're able to maximise market competition,

boost productivity and achieve economic growth. But when governments cut taxes (to increase incentives to work) they limit the distribution of wealth and widen income inequality. When they minimise regulation (to increase consumer choice and drive down prices) they endanger the wellbeing of workers and damage the planet. When they crush trade union power they give companies greater freedom to suppress wages. When they privatise public services they sanction underinvestment, corner cutting and minimal accountability.³¹

The UK Government in particular have been underfunding public services for years. Over 12 years to be precise. In the period between 2015–16 and 2021–22, public health grant allocations in England were cut by a quarter in real terms – equating to around £1 billion.³² Austere measures like this kill.^{33,34} Austerity's impact on child and adult health was all too blatant to see – even before the COVID-19 pandemic hit in 2020.^{35,36} Life expectancy had stalled, infant mortality was rising, more children were living in poverty, more families were visiting food banks and more people were sleeping rough.^{37–40} But the pandemic has exacerbated these formidable social issues.^{41–43}

Feeling isolated and lonely from time to time is a normal part of life. But when loneliness is long-lasting, it has an adverse effect on our psychological health and longevity.^{44–47} Loneliness is a formidable public health challenge in the United Kingdom. So much so that in 2018 the UK Government appointed a Minister to tackle this societal challenge.⁴⁸ What the government is forgetting though is loneliness is simply one of a number of inevitable outcomes to our economy's value system. Because our economic system is heavily dependent on increasing production and consumption in order to survive, our social environment emphasises the pursuit of extrinsic goals and values. Things like status, image, fame and self-advancement including financial, material and career success.^{2,49} Naturally, these are the things people aspire to achieve and pursue.

Recent evidence shows that long hours of work have become for some sections of society an aspirational status symbol.⁵⁰ When people work long hours or commute long distances in pursuit of wealth, they impact their health, impose greater 'time pressures' on themselves and sacrifice the leisure time that could be devoted to pursuing non-economic activities like connecting with friends and loved ones, volunteering or engaging in active community initiatives like parkrun.^{51–54} When people lack human contact there's good chance that they turn to social media for comfort. But while this may make them feel less lonely, it doesn't actually make them any less lonely or isolated.⁵⁵

The culture of speed and productivity has an adverse effect on human health. In industrialised and wealthy nations like the United Kingdom and United States, those that have a healthy economy – everything is geared up to be doing things at a faster rate. There's a continual sense of rapidity in these places. There is always that question of should I be doing more? In these places, dead time is wasted time and is viewed negatively. There's a kind of expectation that we should be fitting more and more tasks into our finite number of daily hours. But what about enjoying the moment – embracing each and every experience – and prioritising quality of experience over quantity? Of course, there's a sliding scale to the pace of life. This is evident when you compare the pace of life across different countries – comparing

the likes of Namibia and Copenhagen with the United Kingdom and America for example. If you were to visit Copenhagen and were to visit a coffee store you would likely sit down and embrace the social experience. You would kick back and sip away slowly. You would be in praise of slow. It's a different story in countries like the United States. In the United States, there's good chance that the coffee shops you visit have a limited number of spaces for you to sit and rest up. Coffee here tends to be served to go. Because here productivity is key. Citizens are continually on the move and move at pace. In these fast pace countries, you get a sense that there's a never-ending race against the clock – because people are constantly keeping time. Because to them – lost time is lost money.

Robert Levine captures this fascinating cultural issue in his book, *A Geography of Time*.⁵⁶ Levine details how the pressures of time urgency can lead to people feeling chronically stressed which can lead to them adopting an unhealthy lifestyle. A lifestyle comprised of convenience foods, a lack of exercise and consumption of harmful substances like alcohol and tobacco. All of which are direct risk factors for cardiovascular disease. So, there is an apparent paradox. His research has also found that suicide and psychological wellbeing are both higher in individualistic cultures compared to collective ones, which makes sense. That's because these individualistic countries provide more material comforts and a higher general standard of living that enhances the quality of life. So, what these findings tell us is that productivity and individualism have double-edged consequences. People living in faster places may well have a higher standard of living but their fast-paced existence creates the stress that leads to poorer health behaviours and poorer health outcomes. The drive for continual economic growth has also played a key role in the decline of social capital and community cohesion. An issue discussed at length in the book, *Bowling Alone*, written by American political scientist, Robert Putnam.⁵²

The Harvard Study of Adult Development – one of the world's longest studies of human life – began in 1938 during the Great Depression. The lead researcher at the time George Vaillant set out to understand what the main factors were that contributed to a healthy and happy life. Of the original 268 strong cohort, less than 20 are still alive today, all of them are now well into their 90s. The main take home message from the study has been that positive relationships keep us happier and healthier. Participants who were most satisfied with their relationships when they were 50 years were found to be the healthiest 30 years later. Such findings demonstrate that taking care of our relationships is a form of self-care and has important benefits for us in the same way taking care of our body does.⁵⁷

If we know that social relationships are beneficial for our wellbeing why then are social interactions between neighbours becoming less frequent and more and more communities becoming divided? One key reason behind the decline in social interactions in communities has to do with fast-paced individualistic cultures in high-income countries. When people in communities mix and interact regularly communities maintain a sense of cohesion. Prior to the invention of commodities such as the refrigerator, televisions, drive through restaurants, the internet and home delivery, there was no option but for people to venture outdoors on a daily basis to socialise and to acquire the goods and services they needed to meet their

basic human needs to survive. But today, it's possible to achieve most if not all of these basic needs without even leaving the confines of our homes. And when people do venture outdoors they tend to drive to and from places which further compounds this social deficit.

This is an issue because communities that are less closely connected experience less mutual trust and more social disorder which is related to anxiety and other psychological health disorders including depression.^{58,59} Evidence also shows that people are much more likely to commit suicide as social integration decreases. The pioneering work of French sociologist Emile Durkheim in the late 19th century and early 20th century showed that suicide has origins in social causes.⁶⁰ Durkheim's research revealed that the more socially integrated and connected a person was, the less likely they were to commit suicide. And current surveillance figures support this. Every year, roughly 800,000 people die from suicide.⁶¹ That's the equivalent of one person every 40 seconds.

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Non-material aspirations and intrinsic goals like the ones set out in the 'five ways' to wellbeing, are the ones that give a content life.^{62,63} But the materialistic value system that dominates life in wealthy nations like the United Kingdom crowd out meaningful values aligned to self-acceptance.²¹ Consumer society degrades people's self-esteem and self-worth. The fact of the matter is, our economic system doesn't want people to feel content and satisfied. It wants people to feel dissatisfied and inadequate. When people are content with who they are and what they have – business suffers – and the economy doesn't grow.

Forget taking notice. It's about ignoring the scientific evidence and the bigger picture. Ignoring for example that money matters a lot when you don't have any at all. But once you achieve subsistence it matters much less.⁶⁴ Ignoring, for example, the simple fact that people's health choices are heavily influenced by the conditions in which they live.^{65,66} Ignoring, for example, the fact that the easiest way to feel less stressed is to slow down. Ignoring, for example, the fact that people have social needs – ones that must be fulfilled to ensure optimal wellbeing. Despite the well-established link between social conditions and psychological health,^{67–69} it continues to be obscured from public debate. People experiencing psychological distress are rarely encouraged to figure out what's causing their psychological discomfort. What situational factors are heightening their distress? Instead, distress tends to be managed through the consumption of prescription drugs and consumer goods (e.g. luxury cars, watches and designer clothes).

Debt and prescription drugs are the sedatives of our time.⁷⁰ Over 70 million antidepressant prescriptions were dispensed in England in 2018.⁷¹ In the same year, total household debt in Great Britain stood at £1.28 trillion, of which 9% was financial debt (e.g. credit cards, loans and other non-mortgage debt; £119 billion).⁷² Their high prevalence is testament to the profound structural issues our society faces. Prescription drugs have become the main intervention to tackle psychological distress due to the power of the pharmaceutical industry, and a deep rooted medical ideology of treatment over prevention which aligns very well with the overarching economic ideology and goal of growing the economy.^{73–75} But here's the thing – antidepressants don't cure psychological pain and suffering.

And in some cases, they do more harm than good.^{76,77} That's because psychological distress can't be solved by prescription medicine (or consumption) alone. It's social medicine that's needed: proper conditions of life. Despite widening access to psychological treatment services, the prevalence of psychological disorders continues to rise in the United Kingdom.^{78,79} The rise in psychological disorders is against the backdrop of our ever-rising levels of material comfort. The rise in psychological disorders has led to widespread calls for greater investment in treatment services (e.g. psychotherapists and councillors). This is all well and good. But what about tackling the structural causes – the things actually causing all of this discomfort and distress in society?

As we discussed in the previous chapter, it's also about diverting people's attention to fear inducing information. Because fear sells.^{80,81} News headlines constantly remind us of deaths caused by war, terrorism and natural disasters, which does little to quash feelings of panic and anxiety. Instead, it heightens them, and leads to people having an incorrect, overdramatic worldview.⁸² The truth of the matter is non-communicable diseases are the biggest killer. They account for around 75% of global deaths every year.⁸³ But factual information like this is not all that attention grabbing, or hysteria inducing, so it's reported less often in the media. Governments play on our emotions too. Time and time again, they capitalise on global crises – pushing through unpalatable policies at a time when the public are distracted and at their most vulnerable. Brexit, COVID-19 and more recently the war in Ukraine are all fitting examples. Global events like these provide an excuse for government to cut taxes for the wealthy, remove regulations and shrink the state even further.⁸⁴ The sort of things we know widen all kinds of inequality.^{85–88}

Forget giving. It's about taking what you can. Over a decade ago, Nicholas Shaxson⁸⁹ exposed in his book, *Treasure Islands: Uncovering the Damage of Offshore Banking and Tax Havens*, how in the United States alone, the wealthiest citizens were avoiding paying over \$50 billion in taxes every year. Since then, there have been various reports – including the Panama and Paradise Papers scandals – bringing to light the extent of corporate tax evasion and avoidance around the world. A 2017 Oxfam report revealed that in 2015 the 50 largest US companies stashed \$1.6 trillion offshore – an increase of \$200 billion on the previous year.⁹⁰ In doing so, they deprive governments of the resources required to tackle poverty and improve the quality of vital public services and infrastructure such as hospitals, schools and public roads. Governments are also on the take – in a bid to keep the economic machine running. Perhaps in a somewhat different respect, but the logic remains the same. As a for instance, in the infrastructure act – the act that received royal assent in 2015 – maximising the economic recovery of petrol from the United Kingdom's continual shelf became a statutory duty. A decision that means any future government, regardless of its stand on sustainability, is legally bound to squeeze every possible drop out of the ground. A decision that contradicts all efforts to cut carbon emissions, tackle the effects of climate change and improve population health.^{91,92} Sooner or later governments will have to face up to the fact that demand side policies aren't enough. We need to limit the supply of fossil fuel.^{93,94}

The impact of continued economic growth on human health is a fact of our existence. But it's the inconvenient truth – the social taboo – of modern times. Nineteenth century history shows us that the most effective way to overcome the social insecurities and public health challenges that arise from economic growth is through social reform and environmental change.⁵ A strong preventive approach is needed. Disruption back then was reflected in widespread undernutrition and communicable diseases like cholera. Today, the disruption is reflected in widespread non-communicable diseases like obesity and psychological distress. For societies to achieve the SDG's, there will be a real requirement for governments to mediate the disruption caused by rapid economic growth, by way of devising and implementing policies which not only appreciate the collective physical, social and psychological impact that change brings upon citizens but to mitigate against the anxiety and insecurity caused.

Rather than focusing solely on the performance of GDP, we need a more holistic measure of social progress. Greater value has to be given to social and environmental indicators and activities not captured by GDP. Quality of life stretches way beyond how well GDP is performing. It is for this reason that we need to take stock of and measure a range of quality of life indicators at the societal level, including wealth and income inequality, life expectancy, literacy and educational attainment and other health and social outcomes like rates of undernourishment, anxiety, depression, suicide, substance misuse and crime. As well as leisure time and environmental quality indicators like congestion, noise, air and water pollution. And we need to report these as often as GDP. The purpose of development should be *human development*; to create environments that enable people to live healthy and meaningful lives.

Chapter 3

The Psychological Toll

Habits of thinking need not be forever. One of the most significant findings in psychology in the last twenty years is that individuals can choose the way they think.

Martin Seligman, *Learnt Optimism*, 2011

In future chapters, we are going to explore some of the key underpinning drivers to the rise in psychological distress and poor wellbeing in the Western world. Here my goal is to set the scene – by presenting some of the current psychological health and substance misuse trends in the United Kingdom, in order to illustrate that as a society we are not getting things quite right. I'll then show how the current short-term treatment approach to psychological distress via medication is a hugely profitable model for large pharmaceutical companies and the economy – but does not tackle the social causes of a person's psychological distress. The inconvenient truth I want you to take away from the chapter is that slowing down is among the most effective ways to feeling less stressed and anxious, but it is an undervalued option when the ultimate societal goal is to grow the economy.

The psychological toll of productivity and the resulting uncertainty, insecurity, low status, debt and stress can be seen in the high levels of depression, alcoholism, drug addiction and suicide in high-income nations like the United Kingdom. Often, the root cause of which is social disadvantage and the low social status, stigma and humiliation that result from it. The United Kingdom is considered the substance abuse capital of Europe.¹ Every year, around £40 billion is spent by the Government on drug and alcohol misuse treatment. The thing is addiction does not just have an effect on the lives of users; it effects communities and society as a whole too. Addiction impacts the lives of loved ones, medical workers and tax payers too. Contrary to popular belief, in the United Kingdom, prescription drugs are abused more often than illicit drugs (i.e. heroin, cocaine and marijuana).² Because opioids are highly addictive, people that are prescribed opioids for pain or psychological health conditions frequently develop an addiction to them. A BBC News investigation revealed that general practitioners (GPs) in England prescribed almost 24 million opioid-based painkillers in 2017 which is equivalent to 2,700 items every hour.³

Despite alcohol being legal in the United Kingdom, alcohol is the greatest substance abuse issue facing the nation. In 2018, there were roughly 7,500 alcohol-specific deaths in the United Kingdom – the second-highest level since records began at the turn of the century. Estimates suggest that over half a million people in England are dependent drinkers, but less than 20% are receiving medical treatment.^{4,5} Alcohol is a causal factor to an extensive number of health conditions including: mouth, throat, stomach, liver and breast cancers, high blood pressure, cirrhosis of the liver and depression.⁶ In England in the year 2018/19, there were over 1.2 million alcohol-related hospital admissions which accounted for over 7% of all hospital admissions.⁷ In the last two decades though, the overall amount of alcohol consumed in the United Kingdom and the proportion of people reporting drinking alcohol have both fallen, especially among young age groups.⁸ Because alcohol lowers inhibitions and impairs judgement, drunkenness has the potential to increase a person's aggression and willingness to take risks. In 2018 in Great Britain, there were almost 9,000 drink-drive casualties and almost 6,000 drink-drive accidents. Although in the long term, these figures have been progressively falling since the late 1970s from a peak of around 31,000 casualties and 19,000 accidents.⁹

In 2019, there were over 6,000 suicides in the United Kingdom. Deaths by suicide are heavily concentrated in the most socially deprived communities, where educational attainment and income levels are low.¹⁰ People living in such areas face more insecurity and uncertainty than other parts of the country. That is because they are far more likely to be unemployed, live in poor quality housing and experience loneliness due to having a limited social support network. Suicide figures are just the tip of the iceberg and do not reflect the even greater number of failed suicide attempts or new cases of depression. For every suicide, there are roughly 10 times the number of suicide attempts and over 100 new cases of depression.

Between the period 1998–2010, prescriptions for antidepressants increased by over 10% year on year.¹¹ As psychological illness has become more and more medicalised, classifications have become more ambiguous which has resulted in over-prescription. For example, people living with depression may experience a mixture of persistently low mood, decreased interest in pleasurable activities, feelings of low self-worth, low energy, poor concentration, guilt, loss of appetite, agitation or disturbed sleep and even suicidal thoughts.¹² So, there are a broad spectrum of bodily experiences which would tick the box for being 'depressed'. The thing is many people that are prescribed antidepressants have what doctors would refer to as 'shit life syndrome'. Taking an antidepressant pill may ease the emotional pain for them in the short term, but it is not going to remove the cause of their psychological distress.

So why have depression rates in the United Kingdom risen so much in recent decades? There are likely lots of reasons why. But biology is not one, just like the population rise in obesity is not down to biology. Our genes have not changed all that much in the past half century. It is unlikely to be down to ecology either. Just look at the low rates of depression among specific populations – like Amish communities. They are exposed to the same environmental pollutants as us, and

they consume similar types of foods as us too. Where we do differ though is in our social values and the way in which we live our lives.

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It is not just depression that is treated with medications. There are a whole host of other psychological disorders like attention deficit hyperactivity disorder (ADHD) – a condition that includes symptoms such as impulsiveness, inattentiveness and hyperactivity that have increased in prevalence. Between 1995 and 2008, the prevalence of ADHD drug use in children under the age of 16 increased from 1.5 per 10,000 children to 50.7 per 10,000 children – a rise of almost 3500%. In 2013, the figure was 51.1 per 10,000 children.¹³ While the increase in prescriptions of ADHD medications has occurred in all age groups and in both sexes, it is young teen boys that are most likely to be prescribed ADHD medications.¹⁴

Our lives have been transformed without us even realising it has happened. Our health, the jobs we do and the way we pay for goods and services have all undergone significant change. In the BBC documentary series *Billion Dollar Deals and How They Changed Your World*, the presenter, Jacques Peretti, tells the story of how in the late 1970s, the CEO of a large pharmaceutical company, Henry Gadsden, let slip to a business magazine that the pharmaceutical industry was missing a trick focusing all of their attention and resources on treating illness. By only treating illness, they were limiting their market, and in doing so, they were restricting their ability to generate even more profit. So, they went about reinventing illness by transforming the social norms surrounding prescription drugs. One of their strategies was to invest heavily in anti-stigma psychological health campaigns, in a bid to make more people feel comfortable taking pills to *plaster over* their psychological distress. By treating the healthy and making the taking of prescription drugs as normative as chewing gum, they have been able to medicate modern life itself.¹⁵

The BBC documentary also provides case study examples of other strategies that have been used to increase rates of prescription drug taking, including the medical diagnosis deals struck between physicians and pharmaceutical companies. Over time, some physicians have worked in close collaboration with pharmaceutical companies to lower the risk threshold that determines who is and is not eligible for drug treatment. As risk thresholds are lowered, more people become eligible for treatment. The more people that are prescribed the drug and the more people that take the drug, the more profit the pharmaceutical company is able to make.

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Today, the narrative around psychological health often misses the fact that life is one big challenge. Life can be unfair, the goalposts can move and there really isn't any guarantees. These are what psychologist Steve Peters calls the three truths of life.¹⁶ Life has always been a challenge, and it always will be. But in many ways, society has lost sight of this simple truth. The narrative tends to centre on it being abnormal to feel down. But in fact, it is perfectly normal to feel a little deflated from time to time. It is about being able to ride the waves. Negative thoughts pass. Time is a great healer. The only thing that is certain about life is that life is uncertain. Life has always been uncertain. The world will

continue to change, potentially even faster than it has done before. As the world changes more rapidly and becomes more complex, there will be a great need for us to keep up to date with new knowledge and world views. A deep understanding of history and a curiosity for the truth does not just enable critical thought; it also enables us to make sense of what is happening around us and learn from the wrong turns we have made. It is often said that those that do not learn from history are doomed to repeat it. History offers us countless examples of where this has happened.

San Francisco, a large city on the West coast of America – famous for its Golden Gate Bridge and its abandoned federal prison at Alcatraz Island – has been experiencing the traumas of earthquakes for centuries. The Great San Francisco earthquake of 1868 resulted in significant damage and a number of deaths throughout the city and was known as the ‘Great San Francisco earthquake’ prior to the 1906 San Francisco earthquake. When a big earthquake hit again in 1906, the city experienced greater damage than it had done before not just because it was more densely populated than it had been in 1868 but because it had not taken on board the lessons learned and was not anymore prepared. Throughout the century, homes and buildings continued to be built on land most at risk of experiencing earthquake. When the 7.8 magnitude earthquake hit, it killed approximately 3000 people, and almost three quarters of the city was levelled off as a consequence of the direct earthquake impact and the resulting fires it caused. More than half of the city’s population was left homeless. While the disruption and destruction of the 1906 earthquake went down as one of the most significant natural disasters in American history, the memories of the earthquake gradually faded throughout the 20th century. The city continued to develop in areas of the city vulnerable to earthquakes. But history repeated itself in 1989, resulting in deaths, injuries and massive disruption. Despite over a 100 years of history, such decisions – building in vulnerable areas – still take place to this day, especially in developing countries.

The events that have unravelled in San Francisco is a telling example of the importance of prevention and learning from our past. Learning from history is essential to our development. Humanity is where it is today by overcoming challenges and evolving. When there is a will for change, change can and does happen. There is no stronger evidence for this than history itself. To illustrate this point, let us consider two brief relatable stories. The first story relates to the work of the American Professor of biological and neurological sciences Robert Sapolsky. Sapolsky has spent much of his life studying the lives and social behaviours of baboons to better understand the physiological effects of stress on primate health.¹⁷ Sapolsky would regularly observe males behaving badly in an attempt to either maintain or assume dominance in the troop hierarchy. Females were often attacked or harassed, and internal feuds were routine. But following the outbreak of bovine tuberculosis which killed off the troop’s most aggressive males, the gender composition of the troop changed, more than doubling the ratio of females to males, and at this point, Sapolsky decided to abandon his research in Africa.

Sapolsky did eventually decide to return to Africa, a decade later, to pick up where he had left off. But when he did, it quickly became apparent to him that

dramatic social changes had occurred within the troop during his time away. Troop members now sat closer together and groomed each other more often. The dominance hierarchy still existed to some degree, but now the higher ranking baboons in the troop did not vent their anger on the subordinates as much. The knock-on effect was that life improved for low-ranking baboons. Sapolsky discovered that the low-ranking baboons no longer demonstrated the classic elevated levels of stress hormones found in other baboon troops. However, what most surprised Sapolsky was that the troop were able to maintain social harmony and a peaceful culture, despite troop composition changing following new aggressive male adolescent baboons joining the troop. Sapolsky suspects that it has something to do with the friendly attitude of the female baboons towards the newcomer males. This discovery poses a very important question concerning cultural change. If baboons can change their values and their culture, then surely humans can.

Another example of cultural change comes from the Dutch city, Amsterdam. Cyclists rule Amsterdam nowadays, but their elaborate network of safe and comfortable cycle paths and lanes have not always existed. Walking and cycling were once dangerous pastimes in Dutch cities including Amsterdam, and many people including children used to be injured as a result of taking to the streets. In 1972, for example, 3264 people were killed on Dutch roads, and in the following year, a further 450 child specific road deaths were recorded. The Stop de Kindermoord (stop the child murder) campaign which came about through the high loss of life on Dutch roads is a great example of how fierce activism can enact change in transport policy. Today, the Netherlands boasts over 20,000 miles of cycle paths, and more than 25% of trips are made by bike, rising to 60% in some cities, compared with 2% in the United Kingdom.¹⁸ The economic costs of investing in preventive measures like these in the United Kingdom and other high-income countries will no doubt prove to be an immensely worthwhile investment compared to the potential scale of future health costs if action is not taken. By failing to tackle the social conditions that underpin poor health, governments will walk backwards not forwards.

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Medication for poor psychological health is a short-term fix to a long-term problem. The pills are a way of plastering over the deeper issues in a person's life – the social roots of their psychological distress. For most people, psychological distress tends to be situational (e.g. work or home related). A person that is having a rough ride in the workplace can be happy as Larry on Saturdays and throughout most of Sunday, but come the close of play Sunday, once they are faced with the prospect of having to return to the office the next morning, their emotions start to spiral downwards. In this sense, how is it even possible for a medical practitioner like a GP to solve situational problems like these, ones brought on by toxic workplace environments? Especially given the limited time that GPs have to consult with their individual patients. The reality is they cannot.

Let us take a few moments to think of a young lady; let us call her Suzie, who is feeling a little under the weather. She has been feeling like this for a few weeks now. So, she has decided to visit her GP for some advice. When Suzie arrives at

the clinic, she relays her feelings and emotions to her doctor. ‘Doc, I’m really unhappy. I’ve been feeling hopeless and finding no pleasure in the things I usually enjoy doing. I’m always tired. I’ve been sleeping badly and my appetite hasn’t been great either’. Her GP pauses for a moment, taking time to piece the symptoms together. ‘OK Suzie from what you’re saying, I think you may be depressed. I’m going to prescribe you a course of Fluoxetine (Selective serotonin reuptake inhibitors). I’d like you to take one of these tablets each day for the next 12 weeks. We’ll see you back here at the clinic again in 12 weeks’ time’.

What we see here is an oversight of the economic and social drivers to Suzie’s distress. Of course, this is by no means a criticism of Suzie’s GP, but rather our healthcare system. Just like now, when society is experiencing a huge surge in psychological health disorders, there are calls for more treatment services. This is all well and good. But what about those structural causes? Few people are asking, ‘what’s causing all this discomfort and distress in society?’ Due to this lack of challenge, the system – one that treats the symptoms of psychological distress rather than the root of the problem – the causes of the causes so to speak – continues. What Suzie needed was some *social medicine*. She lost her job a few months back and to make things worse has just gone through a difficult breakup with her long-term partner, Paul. Because of this, she has not been socialising much at all. She has been spending lots more time on her own and has not been getting outdoors much either. What Suzie needs is a bit of social intimacy and a way back into work to restore her purpose and identity.

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Social prescribing refers to non-clinical activities that are delivered mainly by organisations in the community and voluntary sector. The aim of social prescribing is to support people to take greater control of their own health. Examples of social prescribing include volunteering, gardening, cookery and sports participation. Activities that closely align with the ‘five ways’ to wellbeing framework; connect, be active, take notice, learn and give. Activities that do not cost much money just an investment of a person’s time. But imagine widespread roll out of these approaches to improve the nations’ psychological health. How much money would they generate? Would they contribute much to gross domestic product (GDP)? Perhaps not. But they would make people healthier and happier.

Mindfulness is another activity that is closely aligned to the ‘five ways’ to wellbeing. Mindfulness is defined as a flexible cognitive state that results from drawing novel distinctions about the situation and environment. In her book, *Mindfulness*, social psychologist, Ellen Langer, suggests that to be mindful is to be open-minded, to focus on the processes rather than the outcomes and to be receptive to new information and alternative perspectives.¹⁹ Reminding ourselves to take notice of our feelings, our thoughts, our bodily sensations and the world around us is the first step to achieving mindfulness.

The treatment approach is of course a highly profitable model for large pharmaceutical companies. Treating ill health requires expensive medical procedures and drugs which often bring with them side effects that require other drugs to combat. The global pharmaceutical industry contributes greatly to the world economy, providing revenues of around 1 trillion US dollars every year.

The United States is home to some of the largest pharmaceutical companies in the world and collectively they account for roughly 40% of global pharmaceutical revenue. The value of the pharmaceutical market in the United States is estimated to be in the region of \$340 billion. In the United States, Pfizer leads in sales revenues. Between 2017 and 2020, the company's annual revenue was \$38.8b, \$40.8b, \$41.2b, \$41.9b, respectively. Pfizer received a booster shot to their revenue in 2021 largely due to a £33.5b return from the COVID-19 vaccine which increased their revenue to over £78.0b as of the middle of the year.²⁰

Tackling the social causes of psychological distress and taking a preventative approach to illness through promoting and supporting healthy lifestyles would be a big kick in the bollocks for big business since it would have deleterious effects on their profit margins. They would much prefer patching people up, in order for them to get back on the treadmill, and continue contributing to the economy. An ethos that chimes well with governments too. But as the United Kingdom's population continues to age and grows older, more and more funds will need to be ploughed into treating ill health under the current healthcare system. This is satisfying news for the pharmaceutical giants who stand to prosper on the back of increased business from the elderly, and the potential future collapse of the National Health Service in the future.

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There is a spectrum to psychological health, and we all sit along it to some degree. We all experience feeling rubbish at some point in our lives. It is part of being human. In the right context, these feelings are completely natural. Not everyone needs professional support – medical intervention. But what we all need are the tools – the skills and knowledge – ‘the know how’, to empower ourselves to manage our psychological health and wellbeing. We need to be able to ride the waves sort to speak. But when are we ever taught about these skills? In fact, when are we taught that it is perfectly natural to feel rubbish from time to time? At school, you learn how to multiply five by six, and you learn what CO² represents. But you do not learn very much about managing your personal finances. You do not learn very much about the importance of compromise, effective communication and positive social relationships. Nor do you learn much about how nutrition, physical activity and sleep influence our health, or the close interrelationship between our body and our mind, or how to regulate our emotions and reframe negative thoughts when we are experiencing a rough ride.

In this ever-changing world, where the only guarantee is change, youth need the skills and the knowledge to manage uncertainty. Traditional approaches to teaching provide few opportunities or indeed encouragement for self-discovery. The reason for this has a lot to do with preparing youth for the industrial workforce. Back in the day, when most people worked in factories, factory bosses did not want or need critical thinkers; they needed workers that would keep their head down and not ask questions and got the job done. But the world today is very different from what it was then. How much more beneficial would a national curriculum be that affords pupils the opportunity to consider what their values are, what their personality type is, what they find inspiring, what things bring them joy, what activities enable them to cope with adversity, what their outlets for

frustration are, what their preferred learning style or styles are – are they a visual, auditory, kinaesthetic or reading/writing learner? Do they learn better through reading a book (reading/writing) or speaking with people (auditory), or do they learn better through observing others (visual) or giving it a go themselves (kinaesthetic)? Understanding how we learn at our best gives us the tools for self-discovery. But how often does our mass education system give these really important topics the appropriate level of attention and recognition they deserve? Arguably, what young people need most to flourish in life is a strong sense of self. Yet the relentless focus on testing and assessment can be detrimental to a young person's self-esteem and confidence.

This of course is not the wrongdoing of teachers themselves. The blame lies with the Department for Education and their national curriculum. If you were an alien and set off on an adventure a century ago in search of some outer galactic universe only to get lost along the way and return this very day, you would be amazed to discover just how little the education system has changed in the time since you had left. Children are still exposed to a didactic pedagogy – one that centres on authority, instruction and immutable facts and on right and wrong answers. Children still sit in rows one behind the other. They listen quietly and attentively and passively accept the teacher as the font of all knowledge. And we measure and assess knowledge and understanding largely in the same ways too. The national curriculum in the 21st century needs to place greater focus on learning how to learn, as well as teaching methods and skills for self-discovery. How and where to search for information and how to collate and triangulate information to solve knowledge gaps and problems? These are the skills that machines and algorithms are least likely to be able to perform in the near future. They also need to learn about history in order to appreciate the progress that has been made. History gives us perspective.

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Traditionally, psychologists and clinicians have been guided by a deficit model based on what is wrong with people, and how to deal with these deficiencies (i.e. anxiety and depression). The deficit model focuses heavily on human weaknesses and overcoming deficiencies. Of course, it is really important that psychologists and clinicians devote time to the challenges patients face, but focusing solely on deficits overlooks a person's assets and strengths and the positive aspects of human life. The health model on the other hand focuses a lot more on a person's strengths and building competencies. While it was not until the 1990s until positive psychology received the attention it deserved, the topic had not been totally neglected by all psychology scholars. Three decades earlier, the founding father of humanistic psychology, Abraham Maslow, had described 'wellbeing' with his characteristics of a self-actualised person. At the time, Maslow suggested that 'It is as if Sigmund Freud supplied us the sick half of psychology and we must now fill it out with the healthy half'.²¹

According to the World Health Organization, depression is the most costly disease in the world.²² The main treatments of choice are drugs and psychotherapy which contribute to a multibillion-dollar industry. It would be possible to deliver cheap online psychology exercise classes that would be similarly effective

as drugs and therapy. But as we have already discussed, this would not be very good for the big drug companies and psychotherapists. Nor the economy either. Drugs and therapy are about short-term crisis management. They relieve the symptoms for a brief time. Stop taking the drugs or stop turning up to your therapy sessions, and before you know it, you are back to square one. There are two distinct categories of drugs – curative drugs and cosmetic drugs. Antibiotics are curative drugs. If taken for long enough, they cure by killing the circulating bacteria because the pathogens are dead the disease does not reoccur. There are also cosmetic drugs. Cosmetic drugs do not cure; they suppress symptoms. Antidepressants and psychotherapies are temporary symptom relievers.

In his bestselling book, *Flourish: A Visionary New Understanding of Happiness and Wellbeing*, Professor Martin Seligman explains the theory underpinning wellbeing and using the PERMA (positive emotion, engagement, relationships, meaning and accomplishment) model as a framework outlines the characteristics of a flourishing person.²³ Positive psychology extends beyond the treatment of anxiety and depression to ways in which people lead more rewarding lives. The exercises are aimed at fostering optimism and resilience including the practice of gratitude. They focus on developing a person's strengths and talents rather than dwelling on their personal weaknesses. There is no doubt that these exercises do have a role to play in helping us to get to know ourselves better and can stimulate us to create new habits of thinking, feeling and behaviour to help us live more fulfilling lives. But we should not lose sight of the fact that wellbeing is a complex concept and means different things to different people. There is no one-size-fits-all approach to achieving what the Greek philosophers would call: '*the good life*'. There are different paths to take and it is for us to decide which path is best for us.

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Slowing down is the ultimate cure to anxiety. But in a frantic world, this can be incredibly difficult to do. We live longer and spend those extra years in good health, yet we are still not content and race to fit more and more things into our daily lives. Because we will live longer, we will need to work longer to fund our extra years in retirement. Surely this has to be one reason for us to slow down. But rarely does slowing down and rest get the attention and recognition it deserves. Rest is a strategy of disease alleviation and management that has been used for centuries. But continual economic growth does not think kindly of rest. GDP does not embrace slowness. Continual economic growth entails doing everything faster. Priority is placed on rapidity. That is why in today's supercharged world, most people are always looking ahead. They are thinking about the next task instead of embracing and enjoying the present. The next task is valued more and given more importance than the present. The thing is, lots of people sacrifice their health in order to make money. Then they sacrifice their money to recuperate their health. And because they are so anxious and worried about the future, they forget to enjoy the present.

Thanks to the quest for continual economic growth, human demands keep increasing while human capacities to complete such tasks within a 24-hour period remain fixed. There will always be lots of things to do. Anxieties about time famine are rife in the high-income world. The challenge for many people is finding

their right pace. In life, we come across an array of people all of whom function at completely different speeds to us. What most people struggle with is determining their own speed, the pace that is comfortable for them. When you are at the gym running on the treadmill, and you look left and notice that the person next to you is walking at a brisk pace on a moderate incline, but then you look right and the person on the other side to you is sprinting up a steep gradient. This is what society is like. The treadmill concept is a microcosm of society. There will always be someone going at life faster than ourselves. While it can be difficult, it is about looking ahead and going the pace that is comfortable for us – not anyone else.

Downshifting is a way to feel less hurried. Downshifting refers to any sort of activity that slows down your pace of life and helps to achieve a healthier work–life balance. An example of downshifting would be reducing the number of hours spent at work. Working fewer hours can lead to people viewing their job more positively. Slowing down allows for more time to be spent with loved ones. Slowing down allows for more time to be spent enjoying your hobbies. Slowing down allows for more time to be spent giving back, participating in unpaid, voluntary work. Slowing down encourages slower forms of transport like walking which improves our health and reduces our carbon footprint. Above all though, slowing down is by far the easiest way to reduce stress and anxiety.

But keeping on top of our emotions is also about managing our expectations. The reality is the simpler our desires, the easier it is to meet them, the less we are required to work and the more time we have to do the things we enjoy doing most. However, downshifting and ‘living with less’ is still very much a small trend. Downshifting can have a significant positive impact on our physical and psychological health and our social relations. But the thing is most people do not want to be living just above the minimum wage do they. They do not want to be seen as, ‘just getting by’. Doing more is viewed as better. But what about doing things better? Taking time to do things properly? Enjoying the process. Enjoying the intrinsic aspect of the task rather than the extrinsic reward. Of course, personality plays a big part in this too.

There are some activities that fit with most financial budgets. Walking instead of driving. Preparing and cooking fresh foods rather than ordering a takeaway. Eating dinner together rather than on the move. Sitting down and sipping coffee rather than gulping on the move. And spending more time with friends and family rather than in the office. While some people are much better positioned than others to slow down – resisting the urge to rush is free for us all. It just requires us to prioritise our time differently. But how we choose to spend our time is intricately connected to our economic system. The drive for continual economic growth serves as a huge barrier to downshifting at the population level. Economic growth is central to our methods of production and our standards of consumption. It is linked to success criteria in society and to individual values. In wealthy societies, success is very much measured in relation to material status, the size of a person’s salary, how big their house is and what sort of car they drive.

It is difficult to downshift and live a more sustainable existence when all of the messages in every sphere of life are extrinsically underpinned and challenge intrinsic motivations and non-material goals. Downshifting is much easier for

those with a strong sense of identity, for people that do not feel the need to communicate their worth via the things they buy and publicly display. Perhaps they have a strong identity through the job that they do. Only when the incentives around us promote a sustainable existence will it be possible to change consumerist cultural values at the population level with the view to improving population human and planetary health. There needs to be a move away from pursuing material individualism to pursuing more intrinsic non-economic activities like leisure, family and community. But in order to change social norms around consumption patterns, there is an even more important challenge – the need to reduce income inequality. As we will explore in future chapters, tackling income inequality is key because it promotes status competition which drives social anxieties and material consumption.

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Chapter 4

The Physical Toll

Let thy food be thy medicine and medicine be thy food.

Ascribed to Hippocrates, 400 BC

No longer are the vectors of spread biological agents. They are multinational corporations who manufacture disease. Corporate disease vectors implement sophisticated marketing campaigns to undermine public health interventions. Multinational corporations like McDonald's and Coca Cola are among the world's most sophisticated persuaders. Corporations spend billions of dollars to persuade people to buy their unhealthy products. Their goal is to get people to buy things that they don't need. Irrespective of whether the goods will do people good or do them harm. They aggressively market their products which play on people's fears, insecurities, addictions and primitive precognitive urges. Every year, millions of people take up smoking, develop a drinking problem or gain weight. It's insane to think that public health campaigns to undo the damage – and persuade – at a fraction of the cost – these many millions of people to quit smoking, drink less alcohol, exercise more and consume fewer calories will be effective. Rolling billions of people with unhealthy lifestyles up the steep hill of behaviour change, knowing that only a small fraction will succeed and an army of new recruits to tobacco and unhealthy food wait at the bottom is perverse.

The consumerist ethic is especially present in the global food market. Food is different from other commodities like alcohol and tobacco because it's necessary for our survival. In agricultural societies, people lived under a dark shade of starvation. As nations have industrialised and grown wealthier, food has become more plentiful and our diets have become less healthy. Consequently, there has been a huge increase in obesity and the diseases associated with it. In the 21st century, humans are far more likely to die from obesity than from starvation. But even still, there remains many millions of people around the world that are either food insecure or malnourished.¹

Body mass index (BMI) is a measure of a person's weight in kilograms divided by their height in metres squared. Adults with a BMI greater than or equal to 25 are classified as having overweight, whereas those with a BMI greater or equal to 30 are classified as having obesity. Around the world, obesity is among the leading

risk factors for premature death. In 2017, obesity was linked to almost 5 million deaths – just under 10% of global deaths. According to the World Health Organization, worldwide obesity has almost tripled since 1975. Obesity is not just limited to wealthy nations – it's a global issue. In 2016, almost 2 billion adults were classified as overweight (39%). Of these 650 million were classified as obese. Today, most of the world's population live in countries where obesity kills more people than underweight.

Rising obesity rates aren't just an adult issue. Childhood obesity rates have increased 10-fold in the past 40 years.² In 2019, 38 million children under 5 were classified as overweight or obese. Based on global figures published in 2016, over 340 million 5- to 19-year olds were living with overweight. Childhood obesity is not just a public health challenge in high-income nations. The childhood obesity problem is no different in poor countries. In Africa, the number of overweight children under 5 years has increased by nearly 50% in the past two decades. However, while obesity is a global challenge, the prevalence of obesity and the rate of increase are not consistent across countries. Wealthy industrialised countries like the United Kingdom and United States have some of the highest rates of obesity and have witnessed the greatest rate of increase in recent decades.

We hear a lot about people being obese because they eat too much food and don't exercise enough. But the question we ought to be concerned with is why they eat too much food and don't exercise enough? Overweight and obesity do stem from an imbalance between energy intake and energy expenditure. But weight gain doesn't happen overnight. While there does seem to be a strong genetic component to obesity, the thing is – the human genetic makeup can only change gradually, and the prevalence of obesity has changed dramatically in a few decades. A genetic argument would predict a slow gradual increase in obesity over time, which is not the case. There is no doubt that genes do affect individual risk of weight gain. However, it's the profound environmental changes that are shaping everybody's behaviour and making it much harder for people to maintain a healthy weight that we ought to be more concerned about, rather than biology and individual risk factors. To really understand why obesity has increased at such an alarming rate around the world, we need to understand the social reasons that keep so many people around the world eating too many calories and sitting too often.

There are many social and environmental factors that contribute to weight gain. A government report published in 2007 called the *Foresight report* highlighted the multifactorial nature of obesity.³ A person's biology and psychology and their food consumption and activity patterns all play a part but so too does the food system and physical activity environment. It is these two latter factors that have experienced the greatest change in recent decades. While physical activity and energy intake both influence energy balance, the sharp rise in obesity across the Western world is thought to be primarily driven by changes in food consumption patterns rather than changes in physical activity patterns. This is because physical activity levels have been declining slowly throughout the past century, whereas the rise in obesity has been much sharper and occurred more recently.⁴

Various aspects of our food environment shape our risk of weight gain and thus obesity. On average, people nowadays eat too much food, too often and the foods that they do eat tend to be too calorie dense. Nowadays, the marketing and sale of unhealthy food and beverage options dominates the food environment and push out healthy food and beverage options. Over recent decades, unhealthy food options have progressively flooded the market. Today, they are everywhere. They're situated in the aisles and at the checkouts of our supermarkets. They're at the checkouts of fuel stations. Even garden centres sell food in their store. We cannot escape it – convenience food is all around us. Then there's the advertising. Everywhere we look big food and beverage companies are competing for our attention and our money. In 2017, just over £15 million was spent on advertising fruit and vegetables. However, 20 times the amount was spent on advertising soft drinks, confectionary and sweet and savoury snacks (over £300 million). There is also an imbalance between the cost of healthy foods and the cost of unhealthy foods. At a time when the public health goal is to promote healthy weight, unhealthy foods are not only cheaper than healthy foods, they also experience a great deal more price discounting.

Parallel to the increase in unhealthy food availability, portion sizes have also increased substantially in recent decades. Evidence shows that larger portion sizes encourage people to consume more food. As food portions have increased in size, the public's perception of what a normal portion size is has also changed. So, on average, people now expect portions to be larger. There is also the food content and quality to consider. Globalisation for example has increased our access to fast and ultra-processed foods, which has played a key role in increasing the prevalence of various chronic diseases including obesity termed 'diseases of consumption'.⁵

Huge profits and vested interests have contributed to the rise in obesity both in high-income countries and more and more so in low-income countries. In recent years, there has been little growth in the sales of packaged and processed food and soft drink sales in high-income countries largely because of the saturation of established markets. In contrast, sales have skyrocketed in low-income countries. If we take India as an example, fast food sales increased by over 110% between 2011 and 2016.⁶ In China, for every average week that passes – there are around 10 McDonald's restaurants popping up. In the future, almost all of the growth in profits from the sale of these unhealthy foods and beverages will come from low-income countries.⁷

Fast and ultra-processed food is a perfect example of how diseases of consumption (including obesity) are closely linked to profits.⁵ Our demand for high-sugar, salt- and fat-loaded food is heavily structured and influenced by multinational food and beverage corporations. These companies use the same aggressive pricing and advertising approaches once used by Big Tobacco firms.^{8,9} They encourage people to consume foods that have limited nutritional benefit to them. The contents of these foods have addictive qualities (i.e. fat, salt and sugar) and the energy dense nature of these foods means that people can consume 'cheap' calories and feel full, rather than consuming more nutritionally rich foods. The addictive qualities of these foods are very deliberate. The social marketing campaigns of multinational corporations will often place responsibility of

consumption (buying their food) on the individual, and therefore separate food choices from the social circumstances in which they're situated. To deflect criticism, they often promote health enhancing behaviours, behaviours outside of their area of expertise.¹⁰ So here, an example would be food companies promoting the importance of exercise to maintain a healthy weight (e.g. burn off the consumed cake that we've sold you).

For the food industry, it's not a concern which methods they use to increase energy intake. So long as it's effective – it has done its job.¹¹ The food industry narrative is clear and consistent – people need to be more active and take greater responsibility for their diets. Once the food industry figured out that they could produce sugary, salt and fat laden palatable food that would entice people to consume more (resulting in weight gain) and then promote diet and exercise products to counteract the weight gain, they struck gold.

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When you're next sat on the sofa watching television, waiting for the next episode of your favourite programme to start airing – just count how many adverts pop up. Make a note of what you're being sold, and ask yourself whether buying the product would do your health good or harm? When you see the advert for an extra-large Big Mac at McDonald's you likely see nice pleasant things consistent with the images and underlying messages being shown on the screen – like people spending time together having fun. Not clinically obese patients sat in a waiting area of the hospital theatre ward awaiting gastric band surgery. Advertising is effective because the slogans are designed and implemented by some of the brightest minds around.

Big businesses would lose hundreds of millions of pounds if the government were to ban junk adverts on television. Television companies like ITV and Channel 4 would also lose out. The big tech firms such as Google, Facebook and Twitter would also see their profits and shares plummet. I wonder who the lobbyists would be for a policy like this? It would mean a ban on online advertising too. That's because if only television adverts were banned as part of the policy then this would simply push more advertising online and benefit the companies that don't pay any tax in the United Kingdom – or provide the public with any form of entertainment. The same companies that aren't overly concerned whether our future generation are clinically obese or clinically depressed to fully participate in all that society has to offer.

Obesity was once linked with prosperity, but it's now the poor who are more likely to experience obesity, whose tastes and demand for foods rich in sugar, fat and salt are being structured by big food companies, with food choices often bounded by income and market structures. The addictive qualities of fast and ultra-processed foods are deliberate. These fast foods are cheap and convenient, which makes them especially appealing to poor families who are short of time and money. The reality is, when family budgets shrink, food choices shift to the cheaper but energy-dense options. Counter to public health goals of promoting healthy eating, such as eating five pieces of fruit and veg per day, foods containing high levels of fat, salt and sugar cost less than nutritionally rich healthy options, like fruit. We have a situation now where you walk into the supermarket (or you

could order online) and can buy yourself a pizza for less than £1. But if you wanted to buy a pack of pink lady apples, you're looking at nearly three times the price. Naturally, food pricing is more of an issue for the poorest families in society. The families who are most likely to have in the last decade (due to austerity measures) lost their job or been forced to take lower-paid work, or have had their social welfare support cut. Therefore, there's much more to weight gain and obesity than personal responsibility.

The reason why government policies to tackle poor health and more importantly health inequalities – have been ineffective in the past, and will continue to be ineffective in the future (or not as effective as they could be) is that the government tend to favour strategies and initiatives that encourage people to change their lifestyle behaviours, such as doing more exercise or eating healthily. Rather than implementing policies that limit the sale and marketing of unhealthy foods, and provide safe spaces for people to walk and cycle (i.e. cycle lanes). This is often because the former is cheaper (at least in the short term) and can be implemented in a short time frame to align with electoral cycles. It's also because of our economic system. In a capitalist society like ours, all economic activity including activities that can challenge people's health – like eating unhealthy food, smoking cigarettes, drinking alcohol and driving motorised vehicles – are viewed as economically beneficial. In the eyes of the economic system, poor health and wellbeing are considered a price worth paying for economic growth. Because of this, the economic and corporate causes of obesity are not tackled, they're left untouched, and instead, people living with obesity are viewed as being at *total* fault for lacking willpower and restraint. The reality is, the fatter people become the more successful the food industry becomes, yet the more society, and the government (public purse) have to absorb the associated health costs.

Poverty and emotional distress play a big role in people's eating habits. But the public and political discourse rarely centres on what people can afford to eat, how much time they have to prepare food, and how and when they eat. All of these factors are in a sense – measures of inequality. We have lost sight of the simple fact that when people eat poorly they live poorly. Millions of people around the world – even in rich nations, subsist on an unhealthy diet, whether this is too few calories or poor-quality food sources – because they have a limited choice. It's not just about ensuring people have enough calories to eat it's about ensuring that they have the right nutritious foods to eat.

Making healthy foods more affordable, increasing the availability of healthy foods and drinks in public spaces (e.g. providing free drinking water dispensers), changing the composition of foods, reducing portion sizes, reducing marketing and advertising promoting cheap and discounted unhealthy foods. These are just some of the ways in which diets could be improved at the population level. But let's dig a little further. Let's not stop at the proximal factors to weight status, like diet. What about those medial factors? Things such as stress and anxiety. But even more importantly, what about those distal factors – the societal, economic and modernity factors? There are lots of things governments could do to improve diet quality at the population level. These are broad and varied and include things relating to the costs of food production, manufacturing and food distribution,

food taxes, pricing policies and food subsidies. But they also relate to wage structures and policies that influence household income. All those things that influence the social and economic resources that people have available to them.

Despite the United States being the richest nation on the planet it has some of the highest rates of obesity around.² We tend to ask questions like why is this person obese? But this is a totally different question to why obesity is higher in this country compared to other countries? People are heavier in the United States than elsewhere because yes, on average they eat more food, and yes, they sit in their big cars more often and for longer. But this is because they are exposed to a copious amount of food marketing and advertising, more than anywhere else on earth. Adverts enticing them to eat more food, and buy bigger gas guzzling cars, and they buy more big gas guzzling cars as a result.

Because the United States has a high rate of obesity, it doesn't feel all that unusual when you're gaining the pounds and moving up in waist or dress size because you look just like everyone else. But when we dig a little deeper, we also find that because many people in the United States live in greater fear of crime (than in other countries) they're afraid to walk about on their own and choose to drive instead. But to find the real root cause of all of this we need to dig deeper again. Behind all of these issues, lays one simple difference – the way US society is socially structured. In the United States, income differences are huge. They are bigger than most other developed nations. Such income inequality promotes status competition which in turn promotes lifestyles that symbolise individualism like driving rather than walking, cycling or using public transport.¹²

While we know that changes in the food supply and reductions in physical activity levels have led to increases in obesity around the world, rarely is it possible to observe a reversal of this process. But Cuba, a country situated just off the coast of Mexico provides a perfect case study. In the early 1990s following the collapse of the Soviet Union, Cuba experienced a period of serious economic hardship. The country's GDP fell by around 35% and their imports and exports fell by over 80%. These economic changes led to severe food and gas shortages across the country. You would think that a period of economic decline could have been a public health disaster. On the contrary, various research studies have shown that the health of Cubans actually improved during the years of the economic downturn because it forced lifestyle changes in the whole population for the better and reduced obesity and diabetes rates. However, following the economic downturn, the country witnessed a rebound in body weight which was associated with increased rates of diabetes and mortality.^{13,14}

These research studies provide powerful evidence of the potential population-wide benefits that could be achieved through changes in energy intake, physical activity and body weight. But how do we go about achieving this major public health and societal challenge? Medical treatment of people at high risk for disease can be positive, but medical treatment alone will have limited impact on mortality rates if the primary causes of disease are not dealt with. We also need to be mindful of the challenge of changing social norms. In many countries including the United Kingdom and United States, walking and cycling are regarded as low-class travel behaviours. Driving is perceived to be a higher status way to

travel around. Even though this inactive mode of travel is detrimental to health and the environment. What is more, the bigger the car and the more gas it guzzles, the more favourable it's viewed. The status issue isn't limited to energy expenditure – it applies to energy intake too. Take the practice of eating out of the home environment – dining out in restaurants, for instance. The more luxurious and expensive the restaurant is, the more favourable it's viewed – regardless of the restaurant's carbon footprint and food wastage, or how unhealthy its menu is. So, if such leisure activities are socially promoted, because status is assigned to them – how do we go about changing such social norms, to foster a healthier and more sustainable society?

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We have a situation now where the sales and profits of major multinational food companies like Nestlé soar year on year, while many millions of people go hungry, even more become obese, and in the background the environment suffers. It would be very wrong to think of the food shortages facing some parts of the world as a production issue; the resolution being a need to grow more food. Producing more food would do little to improve food security or halt climate change. Globally, over 500 calories are wasted per person per day.¹⁵ Rich nations are disproportionately responsible for food waste. In the United Kingdom, for example, households waste almost one-third of all the food they purchase each year which equates to almost 7 million tonnes.¹⁶ Every time food is lost or wasted the resources used in the production of food including water, fertiliser, land and energy and the resources that went into processing, packaging and transporting that food is also wasted.

Even though food security has improved around the world, millions of people still go hungry, and many more people are undernourished.¹⁷ Around 9% of the world's population have a caloric intake below the minimum energy requirement. While the global trend in the number of undernourished people has fallen steadily over recent decades, the total number has actually increased in recent years. In 2017, it exceeded 650 million. Just over 9% of the world's population were defined as severely food insecure in 2018. Geographically, food insecurity is most heavily concentrated in Sub-Saharan Africa where nearly one-third of the population are defined as severely food insecure. The drive for company profits drives undernutrition in food insecure poor societies and obesity in wealthy consumer societies. Some low- and middle-income countries are experiencing a *double burden of malnutrition*, with high rates of undernutrition coexisting alongside high rates of obesity.¹⁸ Evidence also shows that an increasing proportion of people in such countries are exposed to different forms of malnutrition during their life course and have the double burden of malnutrition directly. Exposure to undernutrition constrains growth and development in childhood and exposure to an unhealthy diet in adulthood leads to obesity. The result; a person that's stunted and overweight.

In some countries, food is destroyed because food prices are so low. In other parts of the world where food prices are too high, the poor literally have no option but to eat the earth.^{19,20} Rather than producing more and more food – our drive should be to reduce food loss and food waste. Food losses and waste amount to

roughly US\$700 billion in industrialised countries and US\$ 300 billion in developing countries.¹⁶ In centuries gone by, food insecurity was very much the result of unpredictable weather conditions, human conflict and a lack of pest control. While drought and flooding do still impact food production in the 21st century, global economic factors have a much stronger influence on who gets to eat which foods. In a globalised world, political and economic factors like the price of oil affect the nature of the food supply chain including the cost of foods as well as the quantity and type of foods available for consumption.

Despite some improvement in some malnutrition indicators, high rates of malnutrition continue to persist on a global scale, and insufficient progress has been made to meet the World Health Organization's 2025 global nutrition targets. Among children under the age of 5 years, 149 million are stunted, 49.5 million are wasted and 40.1 million are overweight.²¹ Growth rates are a response to socio-economic and environmental factors. Without bold actions to accelerate progress, and tackle the principle drivers of malnutrition and food insecurity, and the social and geographical inequalities affecting the access of millions to food, hunger will not be eradicated anytime soon.

Part 2

Externalities and Underpinning Drivers

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Chapter 5

Income Inequality

A nation will not survive morally or economically when so few have so much and so many have so little.

Bernie Sanders, 2015

The global economic pie is bigger today than it's ever been before. But the share of the pie is so uneven that some people in some parts of the world have at the end of the day less food now than what their ancestors would have had in the past. There was once a time when workers got paid more money as the economy grew. But not anymore. While productivity levels and the economy have continued to grow in recent decades, the average worker's pay has failed to follow the same positive trajectory. Instead, the average pay going to the top 1% of earners has skyrocketed. As the share of economic growth goes more and more to the wealthy portion of society, higher rates of economic growth are needed not just to maintain people's sense of a 'good life' and standard of living but to reduce levels of poverty as well as its societal impacts including health. We also know that to achieve economic growth requires the use of more natural resources which results in more waste and more pollution. So, the environment suffers as a result too.

Despite the rhetoric, all people are not created equal. Nor are our lives balanced with equal opportunities and resources. Of course, the fact that our lives are not equally balanced with opportunities and resources has been known for centuries. Back in the late 19th century, French novelist, Anatole France, wrote that *'The law, in its majestic equality, forbids rich and poor alike to sleep under bridges, to beg in the streets, and to steal their bread'*.¹ While the bottom half of the global income distribution has been gaining enormously in absolute terms, in Europe and North America, income and wealth inequality has been worsening in recent decades.² The trend is consistent across other rich nations too. The global top 1% have been earning twice as much as the bottom 50%. In 2019, the richest 26 people on the planet, the number that could just about squeeze into a large minibus, had the same amount of wealth as the poorest half of the world.³ But it isn't just the multibillionaires contributing to the inequality problem. The world's richest 1% hold just over half of the world's entire wealth.

Out of all the continents on the planet, Africa is the poorest. Economic growth and globalisation may well have lifted many millions of people out of extreme poverty, but the income gap between the rich and poor has widened. This issue of income inequality is no more apparent than in Africa, where a majority of the planet's most unequal countries can be found. Take a trip across Africa and pockets of modernity can be found in many of the major capital cities. They are home to multinational companies and a range of luxurious high-rise buildings. Yet a couple of miles down the road, there are many thousands of people that are dirt poor – living on less than \$2 a day. Less than a small Americano at Starbucks. The percentage of people living in extreme poverty – less than \$2 a day – has declined in recent decades, but the number of people living in extreme poverty has increased because of population growth. Such inequality is a breeding ground for crime. When it comes to crime rates, especially crimes related to human violence such as homicides, Africa is second only to the Americas. In 2012, Africa recorded 135,000 homicide deaths compared to 157,000 across the Americas.⁴

People living in poverty are subject most to the consequences of crime, the gangs, the drug dealing and the drug taking, the theft and violence. Latin America is a case in point. In countries such as El Salvador, there are on average over 50 homicides per 100,000 people each year. A murder rate almost 50 times higher than in the United Kingdom. The most unequal wealthy nations also fare worst when it comes to homicide, crime rates and other social ills. The United States experiences a similar level of crime to other industrialised nations but incarcerates more people than any other country on earth, over 700 people for every 100,000 residents. A rate more than five times higher than most other countries. Unlike the wealthy, whose bank balances are growing and are able to retreat to their gated community, the poor are in many ways trapped. For those that can afford it, gated communities offer both safety and luxury. Such communities are not only evident in wealthy nations like the United States, they are popping up across the length and breadth of Africa as well.

Parallel to these developments, thousands of people are being displaced from their homes. Either because of ongoing civil war or because of famine and consequent food shortages. But some other groups are being displaced as a result of the vested interests and practices of multinational corporations. The Dutch–American sociologist, Saskia Sassen, details how big companies have been parachuting into low-income countries to extract the resources for their commercial products – destroying the land as they go – impacting the health of the inhabitants – and once they can't extract any more, they've been leaving – never to be seen again.⁵ They move on to the next area where they extract more resources and destroy more land. These land and water grabs have contributed to a massive loss of habitat for some of the most vulnerable people in the world. All in favour of profit.

The growing demand for gated properties is to a large extent the result of a spike in crime rates. Gated communities may well offer residents more protection and reassurance compared to non-gated communities, but they have a profound adverse effect on social cohesion. As the number of these gated communities increases, not only is there greater socio-economic polarisation within cities, the

availability and use of shared public spaces such as parks and markets decline. Growing the economy without enhancing a relative and equitable degree of prosperity and living standards for everyone compounds divisions like these. The world needs a similar plan to the one drawn up in the mid-1940s following World War Two. A plan that works towards not only increasing foreign aid budgets to support the world's poorest but strives to distribute global rising wealth to equitable levels. Such a plan would have at its heart an ambition to improve things like education, transport systems and infrastructure, public health systems and healthcare not just in high-income countries but in low- and middle-income countries too.

Evidence shows that human capital – the level of health, knowledge, skills and experience in a population is among the strongest determinants of economic growth – yet investments in human capital remain extremely low in low-income and middle-income countries.⁶ Human capital matters not just for people and economies. It matters for whole generations as well as societal and global stability too. Our ever-expanding knowledge-based global economy places great demand on higher order skills. Therefore, failing to invest in human capital at the right level, especially in poor countries, will likely generate even more inequality in years to come and further intensify unrest and security risks due to basic needs, aspirations and life goals not being met.⁷

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Research conducted by Richard Wilkinson and Kate Pickett published in their books, *The Spirit Level* and *The Inner Level*, shows how unequal societies – those that have large income gaps between the rich and poor – tend to experience far more health and social problems than more equal societies.^{8,9} The more economically unequal a country is, the more unequally distributed the essential resources that support a good life are. When countries have large income differences, they are more likely to experience higher rates of human violence as well as other aspects of crime, and more people are locked away behind bars. Unequal societies also tend to experience less social mobility, trust and community life, and life expectancy is lower in these countries. There tends to be a higher prevalence of psychological distress and obesity, and deaths attributed to suicide are higher compared to more equal countries. Health in economically unequal countries significantly deteriorates the further you move down the social ladder. The social gradient in health and social outcomes is a strong reminder that income inequality effects everyone's health and way of life, albeit those at the very top. So, we should all care about inequality, even if only for our own self-interest.

Inspired by the work of Richard Wilkinson and Kate Pickett, the film, *The Divide* directed by Katherine Round tells the story of seven individuals striving for a better life in America and the United Kingdom at a time when the top 0.1% in society owned as much wealth as the bottom 90%. The film illustrates vividly how almost every aspect of our lives is governed by the level of inequality in society (i.e. gap between the wealthy and the poor) and shows clearly how economic division results in social division. It does this by reducing social cohesion and social mixing. There tends to be less social mobility in unequal societies because lives tend to be defined much more by class status which limits opportunities for social mixing. Status anxiety is also much more prevalent in unequal societies because people are more conscious

of their social position and place a high value on what others think of them. Status insecurity brings about anxious feelings and leads to people being unable to relax in social situations or worse, they withdraw from social engagement altogether.

Poor psychological health including depression is more prevalent in populations with higher income inequality relative to populations with lower income inequality. And some evidence suggests that income inequality disproportionately impacts women and low-income populations.¹⁰ There are a couple of plausible reasons for this. The first relates to the psychological response of individuals to their perceived status in the social order. Higher status anxiety is thought to be more prevalent in countries with wide income differentials because unequal societies experience more status competition and individuals, especially those at the bottom of the income hierarchy, are more likely to perceive themselves as inferior to others. The second reason has more to do with the quality of social relations in the place where the individual is living. The social capital hypothesis posits that as income inequality rises, so do the status differentials between individuals, which has an adverse effect on social mixing across groups, thereby reducing levels of interpersonal trust.^{11,12}

Because social standing means a great deal to people in economically unequal countries, you also tend to see more examples of narcissism and obnoxiousness. Rather than being modest, people will be much more inclined to flaunt their achievements and tell the world just how good they really are. Consumerism is also a defining feature of unequal countries since people feel the need to spend more often to demonstrate their worth and to overcome their status anxieties. Just like aggression and stature are the principle sorting devices in dominant hierarchies, in capitalist societies, money is the defining classifier. In economically unequal countries, money matters a great deal. As the income and wealth gap grows between the rich and the poor in rich nations, the lives people lead in these nations become even more disparate.

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In his book, *The Great Leveler*, Walter Scheidel traces the history of inequality back to the stone age and reveals that the only forces that have been able to seriously decrease economic inequality have been those involving mass violence and catastrophe.¹³ Scheidel details how the 'Four horsemen' of levelling – mass-mobilisation warfare, transformative revolutions, state collapse and catastrophic plagues – have consistently decimated the fortunes of the rich. The two world wars of the 20th century did more to improve economic inequality than anything else in human history. Building large sums of capital takes time. It also requires peaceful conditions. Countries in the West including the United Kingdom experienced lots of peace during much of the 19th century. However, after the two world wars, heavy taxes were placed on incomes and estates and these economic sanctions made it much more difficult for the wealthy to build back their large trust funds. The human violence that contributed to balancing the books between rich and poor in the past has in most part ceased to exist around the world which is a good thing. However, the reduction of human violence does question whether a more equitable future is possible without systematic economic change.

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We hear a lot about different types of poverty, food poverty, fuel poverty, child poverty, transport poverty, period poverty and digital poverty. This ever-growing list of poverty subcategories obscures the one true problem they all have in common. It's poverty: the condition of not having enough money to live your life. To not have control over your life (i.e. lack of stability and predictability) and to not be able to participate in all that society has to offer. Poverty kills. It always has done. In 1916, more than a century ago, the American physician and pioneer in the field of public health, Hermann Biggs, stated that 'Disease is largely a removeable evil'. According to Biggs, 'Disease continued to impact humanity not because of a lack of knowledge and understanding about its causes and lack of individual and public hygiene, but also as a consequence of harsh economic and industrial conditions, congested communities and wretched housing'. Biggs strongly felt that the diseases that spring from these conditions could be combatted through better social organisation.¹⁴

But let's park employment and income to one side for a moment. And let's consider people's access to basic human needs and rights. Things like clean drinking water, sanitation and hygiene. Every year that passes, 1.2 million people die prematurely because of unsafe water sources.¹⁵ Safely managed drinking water includes water that is available when needed, free from contamination which may be sourced from piped water on premises or from public taps or protected springs. One-in-four people do not have access to safe drinking water. In 2015, around 350,000 children under the age of 5 years, many of whom were living in the developing world, died as a result of diarrhoeal diseases caused by unsafe drinking water. But in the same year, over 5 times that number (1.8 million people) consumed drinking water contaminated with faeces.

Each year, 775,000 people die prematurely because of poor sanitation.¹⁶ In 2017, deaths due to poor sanitation comprised 1.4% of global deaths. Safely managed sanitation includes facilities which are not shared with other households and where human waste is safely deposited such as piped sewer systems. In 2020, almost one-third of the world's population did not have access to improved sanitation facilities. Still to this day, around 6% of the world's population practice open defecation. The spread of infectious diseases and diarrhoea are greatly increased through the practice of open defecation.

Each year, around 700,000 people die prematurely because they do not have access to handwashing facilities.¹⁷ To put this figure into context, almost double the number of people die from being unable to wash their hands properly than die from homicide (just under 400,000 in 2017). Almost one-third of the world's population do not have access to basic handwashing facilities with soap and water. Nearly 10% of the world's population do not have access to handwashing facilities at all. Given that the world's population now stands at around 7.8 billion – that's a pretty large number of people that go without soap and water. Although these figures are improving gradually.

Rather than tackling the great challenges of our time – food insecurity, clean water for all, better hygiene and sanitation – far greater attention and investment is allocated to things like space travel, virtual reality and driverless vehicles. The focus is occasionally on improving worker's wages, but what about improving

working conditions as well? What we witness today, the drive for company profit at the detriment to the health and wellbeing of workers has very striking parallels with Victorian times. While the poor in wealthy nations may no longer work up chimneys or be exposed to a poor law sanctioning them to the workhouse, the physical and psychosocial stressors of work and the consequences of harsh working and living conditions are still apparent to see. Huge efforts are still ploughed into achieving a monster economy. Regardless of the human and environmental price paid. A minority of mankind are racing ahead to achieve significant satisfaction while many millions still haven't been able to achieve their basic physical needs (e.g. food, water and shelter). As societies become even more segregated and divided along social class and income lines, there is an inevitable potential for people to lead polarised lives and in doing so, lack the awareness and empathy for people 'unlike' them.

The 'veil of ignorance', a term coined by the philosopher John Rawls in the early 1970s, is a device for helping people to think more impartially about society's governing principles.¹⁸ According to Rawls, a socially just order, is one that selfish individuals would choose if they were constrained to choose in the absence of all knowledge about their personal circumstances. In such instances, individuals would not know whether they were wealthy or poor, healthy or sick, and they would lack all the clues as to which social group they belong to – information about their social class, their gender and their race. Behind the veil of ignorance, individuals do not know who they are. In lacking their cognitive biases, individuals are far more likely to choose a society that is a fairer one. If you had a limited understanding of who you are – you were ignorant to your social status – what would you want from society?

An easy way to understand the veil of ignorance is to imagine that you have been tasked with cutting up an apple into segments to share with a small group of friends. In this scenario, you will be the last person to take a segment of apple. You have all intentions of getting the biggest share of apple but are conscious that the only way to achieve this for definite is to cut the apple into equal segments. Of course, you could just cut one really big segment and leave the rest small. But because you're choosing last, you run the risk of one of your friends taking the really big segment and leaving you with a fraction of the amount. Your other friends wouldn't be overly impressed with you either. Rawls' veil of ignorance allows us to test ideas for fairness. Approaching tough political decisions through a veil of ignorance and applying these principles of justice can help governments to decide more fairly how society should be structured. Politicians ought to ask themselves: Would I still support this decision if I did not know whether it was going to affect me or not?

Technology and innovation may lead to more productivity and economic gains but there will still be lots of people around the world living in want and hunger. At best, absolute poverty may fall but there is no doubt that relative poverty will rise. There will be a much bigger gap between the haves and the have nots. This will bring about issues regarding status, identity, purpose and meaning. All factors that influence a person's perceived worth and psychological state. We should also be mindful of the fact that inequality drives status competition which leads to

a more anxious society, and greater consumption which has an adverse impact on the environment.

Not only do we need to reconsider the way we live, we also need to reconsider alternatives to economic growth as a way of improving living standards. The economy of today is no longer assessed in terms of its ability to generate employment and raise living standards but rather by the profits of the financial sector. Financial investments are favoured over investments in goods and services because they are more likely to provide quick shareholder return. The financial sectors' goal isn't to minimise the costs of essential public infrastructure provisions – things like transportation, electricity power, clean water and education. Its primary goal is to maximise the profits from monopoly rent.¹⁹ They want to make a quick buck then scarp – leaving the social and physical destruction for somebody else to tidy up. Most often the state.

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The history of why income inequality has risen in recent decades is a complex yet interesting one to consider. Briefly, wages have been depressed and kept low, largely due to the progressive decimation of unionisation which has seen employers reap the financial rewards. Wages have also fallen as a consequence of human labour being replaced by new machinery and technologies, as well as the outsourcing of manufacturing work to developing countries. Another less known but significant factor driving income inequality has been the progressive changes in taxation policies starting in the 1980s. The top rate of tax is 45% today but was almost 40% higher 40 years ago. According to the British–Belgian economist Gertjan Vlieghe from the Bank of England, a period of low taxes and low regulation combined with increased globalisation has widened income inequalities.²⁰ Such disparities have not only had a detrimental effect on the poor, they have had a detrimental macroeconomic effect also. These effects include very high levels of household debt and low workplace productivity due to a lack of investment from businesses. Calls have been made for higher taxes and for stronger trade unions. But there are other factors that have played a role in widening income and wealth inequalities too.

Property is the most attractive form of asset to invest in. Especially property located in the financial centres of the world, London, New York and Hong Kong. As government bond yields have declined, investment in property has risen which has inflated property prices in the major cities of Western countries in particular. Because the rents and purchasing prices of most properties in these areas are so high, the poor have been forced to move out and live elsewhere which has resulted in a kind of social cleansing.

But it's not just property that wealthy people have been investing into. People who are dependent on their savings for income such as the retired and the elderly have been investing in assets such as stocks and shares, land and gold and this has unsurprisingly inflated the value of these assets too. As the value of such assets has risen, it has enabled higher rents to be charged on the assets which have made the rich asset owners even richer and further indebted the poor. This simple process is another key reason why income and wealth inequality has grown so dramatically in recent years.

Something that has compounded this issue is the Bank of England's use of quantitative easing to encourage spending and investment in a bid to tackle the economic mess created by the bankers during the 2008 financial crisis. Essentially, quantitative easing is the process of printing money. It happens when a central bank like the Bank of England creates electronic money and in turn increases the amount of money circulating in the economy. When this happens, banks are able to lend money more cheaply which results in cheaper mortgages, and cheaper mortgages lead to inflated housing prices. Quantitative easing is also thought to result in inflation which can inflate housing prices further. The Bank of England concluded that by pushing up a range of asset prices (including shares and bonds), asset purchases have boosted the value of households' financial wealth held outside of pension funds, but holdings are heavily skewed with the top 5% of households holding 40% of these assets.

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Far more people survive and live longer today than has ever been the case before. To have around 57 million deaths each year among a global population of almost 8 billion is a pretty remarkable achievement. However, there would be far fewer global deaths if global living conditions were more equitable and more closely reflective of high-income countries; countries like Japan for example where average life expectancy is around 85 years. We know very well how diseases are both acquired and transmitted. And we have a pretty good idea of the various social, environmental and behavioural factors that make the prevalence of disease more likely. As such, much more could be done to better the survival chances of the world's poorest. Human security, which is more than the absence of violence, is undermined by the continual drive for continual economic growth. To feel secure, humans require a secure supply of nutritious food, clean water and adequate shelter. One of the many reasons why the world's poorest have failed to achieve subsistence and material prosperity has a lot to do with structural adjustment programmes in poor countries. Government funds in poor countries are seldom allocated to the all-important social and economic development projects because they're needed to repay the spiralling interest on debts to institutions like the International Monetary Fund and World Bank. In the late 1990s, for example, the total external debt of sub-Saharan Africa was in the region of £330 billion. To repay this debt fully including interest, African countries would have needed to pay more than 60% of their generated revenues from exports.²¹

It's been well-known for decades that unsustainable debt has undermined and constrained human development in the world's poorest countries. The former Secretary-General of the United Nations, Kofi Annan, once said that the failure to achieve basic needs due to the high burden of debt contributes greatly to the level of tension and social unrest across the African continent. These issues are still very apparent in the 21st century.²² As noted by the late Annan, one of the main reasons for the unrest has to do with the failure of governments in these countries to provide the necessary health, education and social welfare services that their citizens desperately require. When we think of a country inflicting violence, it's often in the context of direct violence through war. But what about the indirect, less visible forms of violence that kill more slowly through poverty, hunger and disease?

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Our economic system is a breeding ground for competition and exploitation which results in unprecedented levels of social and economic inequality.^{23,24} Operating under the ethos of individualism (rather than collectivism), the system's overarching objective is for individuals and companies to amass more resources than they need for subsistence. Once such surpluses have been built up, they're to be invested into even more production with the purpose of building up even more surplus. The quest for surplus creates strong competition over surplus distribution. Some of these struggles like the wage struggles between companies and workers are obvious to see. But there are other less obvious examples. Such as the limited surpluses that indebted low-income countries handover as repayments to financial institutions like the International Monetary Fund and World Bank as part of economic restructuring programmes.

Traditionally, capital accumulation was limited to the likes of agricultural, mining and manufacturing industries. But in recent decades, capital accumulation has expanded to finance sectors and in more recent years, it's expanded to more civic areas of society, areas such as education, transport and healthcare. Today, few areas of society are free from capital accumulation. Financial capital investment has grown significantly in recent decades. In 2021, the global holdings of Chinese stocks and bonds increased by around \$120bn largely due to an increase in foreign investors chasing returns in the Chinese markets.²⁵ Today, people with money – investors – are far more interested in speculating on currencies and equities within financial markets than they are investing their money in job-creating projects, as the former promises a much higher return on their investment. No longer are investment projects that yield small profits over long periods considered acceptable. It's about parachuting in, making a quick buck and doing one. Compared to the financial and information industries of the world, agricultural and manufacturing industries have a far lower share of world output. This is a key reason why developing countries, those that continue to have a heavy industry focus, have become relatively poorer on the global stage.

Re-evaluating our desire for continued economic growth is even more timely given what we now know. We know that the disruption caused by rapid economic growth leads to deprivation and inequality. We know that more unequal countries have lower life expectancy and score poorly on a range of social outcomes including obesity, psychological health, substance misuse, trust and community life, violence and imprisonment to name but a few. Financial capital exercises great power and influence over us all. We need to break this hold if we are to tackle the most pressing public health challenges of our time. We need governments around the world to invest in productive activities that not only lead to stable, secure and meaning jobs but improve our public services and our environment too. However, under the current economic system, strong radical leadership will be needed not just because of the small yields that investment projects like this bring but for the reason that equitable policies like these are counter to the rules of the game.

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Chapter 6

Disruption and Uncertainty

There is nothing that wastes the body like worry.

Ascribed to Mahatma Gandhi, Indian Lawyer

A critical factor that determines our health is the extent to which we have control over our lives. We all experience stress in our lives. Stress is not just a stimulus or a response. Stress is a process by which we appraise and cope with environmental threats and challenges. American psychologist Richard Lazarus notes that stress is a condition or feeling experienced when a person perceives that 'demands exceed the personal and social resources the individual is able to mobilize'.¹ In less formal terms, we feel stressed when we feel that 'things are out of our control.'

In the early 20th century, the American physiologist Walter Cannon discovered that when exposed to acute stress, the body mobilises its energy resources to deal with the threat. He called this the 'fight-or-flight response'.² During acute bouts of stress, we rapidly mobilise our energy stores. Glucose, proteins and fats are released from our liver and fat cells and these enter into our bloodstream and travel to our muscles for them to work like crazy. Our heart rate, blood pressure and breathing rate all rise so that we can deliver oxygen and nutrients around our body at the fastest rate possible. To concentrate on the task in hand, digestion and growth and tissue repair are all inhibited. Shutting down these bodily systems in the short term is helpful but over the long term it has deleterious health effects.

The problem is humans have become so intelligent that they turn on the exact same stress response for entirely psychological reasons. For instance, perceiving future risks and dangers – believing that we may be at threat or in danger further down the line. A process referred to as 'anticipation'. This way of appraising situations and life events is very different to how primates and other non-human species appraise environmental stimuli. Take a moment to picture the zebra being chased by the lion on the plains of Africa. Or the lion who hasn't eaten in days and is desperate for a kill in order to survive. It's a life or death situation for the zebra and the lion. The stress response system is brilliantly adapted for these kinds of life and death situations. It's less well adapted to deal with the anticipation and chronic stress that humans experience. During his experimental work studying lab rats, the godfather of the study of stress, Hans Selye, twiggged to the fact that the

body has a surprisingly similar set of responses to different stressors – which he called the general adaptation syndrome. But which we now call the stress response. Selye discovered that if stressors go on for too long, the body becomes exhausted, which makes people sick.³ However, what Selye didn't point out but what we now know is that there is a great deal of between person variability in the way we respond to the same stressor.

There are a range of psychological factors that need to be considered when considering stress and its effect on our health. Stress-responses can be modulated or even caused by different psychological factors. One of the key questions in the field of stress and health has been: 'Why do only some people get stress-related diseases and others don't?'⁴ It's now thought that there are two key reasons why. Firstly, we differ in the number of stressors we experience. Socially subordinate humans – people living in poverty for example are exposed to a disproportionate amount of not only physical stressors but also psychological stressors. Secondly, our psychological filters are different – that is – the way in which we appraise situations differs and we also respond (i.e. cope) to stressful situations differently too. Two people participating in the exact same life event – a long wait at the supermarket checkout, public speaking or parachuting out of an aeroplane – can differ considerably in their psychological appraisal of the situation. Some will view the situation as a challenge, whereas others will perceive it as a threat.

Our brain is calm when we're in stable environments. When we encounter familiar situations, our brain shifts to autopilot and conserves its energy. But during times of uncertainty and ambiguity, our brain triggers a threat response which requires extra neural energy and is more mentally taxing. To put this into context, let's say we've trained a rat to press a lever to avoid a mild shock. When it does, it feels pleasure in that mastery. Its dopamine levels are high and its levels of adrenaline and stress hormones (i.e. glucocorticoids) are relatively low. But say we cut the signal and the lever no longer works, anxiety sets in and the rat desperately tries different strategies to avoid the shock. Its dopamine levels are no longer high. Its adrenaline levels go through the roof and its glucocorticoid levels rise sharply too. But as coping proves elusive, the rat's hypervigilance is shortly replaced by passivity (learnt helplessness) and depression. At this stage, the rat's glucocorticoid levels are through the roof. Its adrenaline levels are elevated and its dopamine levels are at an all-time low. It is for these reasons – like rats – we crave such a strong sense of certainty and control in our lives.

In his classic rat experiments, Dr Jay Weiss of Rockefeller University revealed that what's most important is not whether the rat's response to stress eliminates the stress but whether the rat receives a signal from his environment confirming that it has acted.⁵ To illustrate this, let's say two individual rats are connected to a stressor – an electric shock to the tail. One rat is able to turn off the stimulus by tapping a lever, whereas the other rat receives the stress stimulus regardless of what it does. The rat with the lever – the one exercising 'control' – suffers a reduced stress response. Give the trained rat a lever to press even if it's not connected to the shock mechanism, and it's still helpful to them – down goes the stress-response. So long as the rat has been exposed to a higher rate of shocks previously, it believes that the lower rate of shocks that it's now experiencing is down to it having control over the situation.

In rich countries, there's a clear social gradient to health and longevity in that people who are less advantaged in terms of socioeconomic position have worse health (and shorter lives) than those who are more advantaged. People living in England's most deprived areas are almost four times more likely to die prematurely of cardiovascular disease than those living in the least deprived areas.⁶ A seminal area of research in this area comes from the Whitehall studies of British civil servants led by Professor Michael Marmot. The studies revealed a steep negative relationship (called a social gradient) between social class and health and mortality from a wide range of diseases. The researchers found that those at the bottom of the social hierarchy had the shortest lives, and spent the most years of that shorter life in ill health. The series of Whitehall studies have also showed that everyone below the very top of the social hierarchy is affected by social inequality.^{7,8} Not just those at the bottom. People in the middle of the income hierarchy have poorer health than those at the very top of the hierarchy. So, in the context of income inequality, it's not just a case of tackling poverty. Addressing the social gradient would require addressing inequality across the whole of society.

What was also unique about these set of Whitehall studies was that all of the participants in the study were employed with the civil service and had access to universal basic healthcare. So, the findings couldn't have been due to inequities in access to healthcare. The studies collected data on a range of lifestyle behaviours, including physical activity, diet, smoking and alcohol consumption – the things that have been shown to increase a person's risk of disease. But even when these lifestyle factors were accounted for, the social gradient remained. Marmot therefore concluded that psychosocial factors linked to job control are another contributing factor to the observed social gradient.⁹

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Human life is full of daily stressors and challenges and the occasional catastrophe. This has always been the case. The sinking of the Titanic, World War I, the Spanish flu pandemic, the Great Depression, World War II, the Cold War and 9/11 are just a few disasters that have taken place these past centuries. We still face some of the same challenges that previous generations faced – diseases and epidemics (i.e. COVID-19, SARS, Ebola), accidents, crime and human violence and natural disasters (i.e. earthquakes and storms). But what makes our era of living different from those that have gone before us is globalisation and the continual push for productivity, consumption and economic growth at all costs.

Globalisation doesn't just open up a country's borders to capital, goods, services and information. Borders are opened up to people too. The irony of our time – or perhaps – the hypocrisy of our time, is that citizens in high-income countries like the United Kingdom want some aspects of globalisation – the cheap goods and the cheap services. But they're not all that in favour of the import of people. Particularly, the import of workers. In fact, they're deeply fearful of them. They're not concerned with the fact that immigration benefits the UK economy, and society more generally. Nor are they mindful of the role automation has played in stripping jobs in the manufacturing industry or the outsourcing of labour to low-income countries. It's the thought that they're losing out to others, and that they're becoming even more relatively deprived which is at the forefront

of their mind. Their loss of identity and status from being made unemployed, and the greater competition for resources brought on by population growth is making them fearful of the future. Not just their future but that of their children's too – which can further fuel negative views towards immigration.

Huge social changes are taking place around the world because of the drive for continued economic growth. The new technologies that are surfacing will continue to reshape the economy, the jobs we do and the way we live our lives. Jobs are being replaced by computers and machines to speed up production and increase company profits. Jobs are being exported to other countries to save on labour costs and to increase company profits. Workers are experiencing limited job control, a limited sense of identity and purpose, and a more fluid career structure. All of which contribute to feelings of insecurity and anxiety.

The political and economic changes of the 1980s that led to a decline in mass production and growth in service industries has made for a 21st century job market characterised by higher incomes and occupational dispersion, weaker trade unions and an increased temporary, flexible, casualised, low wage workforce. The result is an economic system that promotes labour market casualisation and reproduces rising earning disparity.¹⁰ In the past couple of decades, the bulk of jobs that have surfaced in high-income countries such as the United Kingdom have been low-skilled, low-paid jobs in the hospitality and retail industries. There may be a growing share of jobs than in the past, but these jobs are less well paid and often temporary in nature. The recent boom in zero hours contract jobs promise lower costs and more flexibility for companies but offer workers limited security and few perks. There's limited training or development opportunities for them and they don't receive pension benefits or sick pay. Poor employment terms and conditions like these are primarily driven by company shareholders wanting a quick rather than a steady growth in their investment. Precarious jobs in the 'gig economy' which includes employers such as taxi company Uber and food delivery companies such as Deliveroo and Just Eat have expanded exponentially because so many households have changed their consumption patterns and are opting to order and purchase a majority of their goods online.

There's no doubt that a growing share of people will be employed in precarious work as technology advances. For people on temporary contracts, the lack of stability can be a great source of psychological stress. We'll discuss these issues more in later chapters. But the point I want to make here is the economy may prosper as technology advances. But rising GDP tells us nothing about the psychological and social costs of these technological and economic changes. When the machines are introduced to boost productivity and the workers are displaced – what impact does this have on workers and on their community?

Just like in the Victorian era, big companies are unlikely to be overly empathetic about pushing workers to exhaustion, or workers being displaced by machines – and the impact displacement will have on livelihoods and families. For them, it's about cost saving and increasing profits. They're not interested in how workers are going to cover the cost of their rent or mortgage; whether they'll have to move home and their child move school – and the adverse impact this disruption may have on their education and future life chances. Without

regulatory measures, there is great potential for workers' terms and conditions to deteriorate further – as large companies gain ever more wealth and power, with workers forced to work more intensely, for less money or for reduced job security. As the drive for automation gains momentum and more and more workers are displaced there will be a need for governments to ensure that workers receive their basic rights and freedoms. Employment legislation has been hugely effective in increasing wages and improving health and safety in the workplace. Trade unions played a pivotal role in protecting the rights of workers and communities during the height of the Industrial Revolution. Since the Thatcher and Reagan era of the 1980s, trade union power and influence has been greatly reduced. You could say it's been decimated. The need for similar social movements to protect worker's jobs and their rights both now and in the future cannot be emphasised enough.

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There's an awful lot of uncertainty and fear in the lives of poor people today. Not knowing whether they will be in work next week, not knowing where they will be living in six months' time and not knowing what the government's next austerity policy will be in the annual budget – will they lose some of their welfare benefits that they have become so reliant upon. Living in a continual state of fear and chronic stress is exhausting.¹¹ The growth of uncertainty and different types of inequality has been accelerated by policies of austerity and the gradual privatisation of public services. All over the United Kingdom, but especially in the North, examples of these precarious lives can be seen in all major cities. Poor people live on decaying blighted housing estates with few amenities. The subsidised and free public services and provisions that they are dependent on, from parks and children's playgrounds to leisure centres and libraries have either been closed down or their opening hours have reduced. Aside from the local newsagents selling energy top-up cards, lottery tickets, sweets, cigarettes and cheap booze – there are few shops and services for them to visit or places for them to visit to meet and connect with others. The removal of such safety nets has no doubt played a key role in deepening the level of social inequality across society.¹²

As the world has become more connected and technologies have advanced, disruption and change have become a constant reality for many, which has intensified feelings of fear regarding not only the future, but people's status, identity, autonomy and sense of affiliation – the universal psychological needs. What's more, our interconnected world means that we're no longer immune to events taking place in other parts of the world. Global events like climate change and the COVID-19 pandemic, and more localised affairs including the United Kingdom Brexit referendum, and wars taking place in countries such as Ukraine, Gaza, Syria, Somalia, Sudan, Libya and Yemen as well as the unrest brought on by the interests of militant groups including Islamic State and the Taliban – all collectively have an impact on human migration and increase competition for food, water and other basic resources, and as such have a significant bearing on the way of life for everyone, regardless of their position on the world map.

Constant change is happening all around us. Because humans haven't evolved to cope with such rapid and frequent life changes, it's unsurprising that we're seeing a rise in psychological disorders at the population level. When times are

uncertain it's completely natural to struggle psychologically – to feel a little anxious. Given the volatile, uncertain, complex, and ambiguous (VUCA) nature of the world we live, it is inevitable and indeed intuitive that lots of people frequently experience anxious feelings. The number of people suffering from anxiety and/or depression was estimated to be in the region of 615 million in 2013 which was 50% higher than estimates recorded almost a quarter of a century earlier in 1990. If the trend continues at its current rate, the global healthcare treatment costs in 2030 are estimated to be around US\$150 billion.¹³

Experiences of job insecurity, housing stress, and financial instability are impacting more and more people. Many of these people go to work and remain poor. For them, every day is stressful; it's a struggle to stay afloat and survive.¹⁴ As detailed in the *United Nations 2014 human development report*: 'there is a widespread sense of precariousness in the world today, in livelihoods, in personal security, in the environment and in global politics'.¹⁵ But despite these seemingly obvious social changes and vulnerabilities, there remains a dominance of medical and individual perspectives on psychological distress which distracts from the underpinning political and socioeconomic factors.¹⁶ In order to tackle the epidemic of psychological distress, we must confront the social conditions underpinning the problem. We must tackle not just the symptoms but the causes of psychological distress: poverty, income inequality, unemployment and job insecurity, housing insecurity, economic instability and social isolation. Solving psychological distress at the societal level requires long-term sustainable thinking.

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To maintain a sense of wellbeing in a supercharged world, it's essential to maintain a balance of activities in our daily lives. A broad balance of activities that bring pleasure, connections with others and a sense of achievement. It's about establishing activities that bring pleasure, then planning to and taking steps to engage in these pleasurable activities on a regular basis. Pleasurable activities may include things like interacting with nature or visiting the park, reading a book, listening to music or a podcast or watching a favourite television programme or movie. Because we feel good when we accomplish goals it's also important that we provide ourselves with opportunities to experience a sense of achievement. For example, by engaging in activities such as a challenging walk, cooking a new recipe, completing an admin task or household task, writing a blog or keeping a diary.

By very nature, we're social animals, and we crave social interaction.¹⁷ Especially interactions with likeminded people – people with similar values and interests as us. Thanks to technological progress we're now able to overcome geographical barriers. No longer are we constrained to social connections in our immediate community. We can text, audio or video call our friends, family and colleagues in all corners of the globe. Investing time in building and maintaining our social connections is one of the easiest and most effective ways to buffer stressful events. But how often do we check in with ourselves to find out what things we've done throughout the day that's provided us with a sense of pleasure, a sense of accomplishment, and connection with others? Asking ourselves questions such as did I achieve a balance of activities? Do I need to do anything differently tomorrow to strike a better balance? If so, what do I need to do differently to achieve this balance?

There are other easy and effective ways to build and maintain our sense of wellbeing. We can set a daily routine and stick to it. To give our days structure, we can wake up and go to sleep at the same set times each day, and by eating at regular set times of the day. We can incorporate activities into our daily schedule to keep our mind and our body active. We can set goals to learn new things and develop new skills. We can take notice of the world around us by being curious, asking questions and sharing ideas and knowledge. We can engage in some form of physical activity like walking or cycling. Or even better – listening to a podcast or audiobook or calling a friend for a chat while walking if we're on our own. Then, we're connecting, learning and being physically and psychologically active at the same time.

Practicing gratitude costs nothing. Going through the process of making a list of the things in life and the people in life that we're grateful for helps to connect with experiences of pleasure. Taking time at the end of the day to reflect on the things that we're thankful for helps to put things into perspective and encourages us to appreciate the finer, most important things in life. But it's also about us being realistic. Accepting what we're able to exercise control over and what we cannot control. Realising that a 'perfect' life is not achievable and that suffering is part of human life. It's also about reflection. Reflecting and establishing the things we're doing that are working well for us and the things we're doing that are not working so well for us, and perhaps harming us. It's about drawing upon the most credible information sources, limiting the negativity bias and surrounding ourselves with positive people. These are just some of the other small steps we can all strive to take to maintain our resilience during times of adversity to boost our wellbeing. And while it would be naïve to think that we all face a similar set of challenges in life, and have an equal amount of resources to exercise resilience, actively engaging in at least some of these simple steps would have psychological benefits for anyone, even during the most vulnerable and challenging of times.

So, if these simple steps are so easy to implement and so effective for our wellbeing – why do so few of us take them? In fact, why do so few of us even know about them? The thing is many of these simple steps don't contribute to GDP. And as such, our attention is rarely drawn towards them by mainstream media and corporations alike. By taking these simple steps regularly, people have reported feeling more positive and better able to get the most out of life. The 'five ways' to wellbeing – connecting with other people, being physically active, learning new skills (e.g. reading), giving to others and paying attention to the present (i.e. mindfulness) – are by in large free of charge in financial terms. Their main cost relates to the time invested. But as was highlighted in Chapter 2, the materialistic value system that dominates life in high-income countries crowds out meaningful values aligned to non-material aspirations and intrinsic goals like the ones set out in the 'five ways' to wellbeing. Society does more of what the economy values. Our economy doesn't value minimalism and the pursuit of intrinsic goals. It values maximalism and the pursuit of extrinsic goals.

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Chapter 7

Consumption and the Drive to Acquire

Frugality is one of the most beautiful and joyful words in the English language, and yet one that we are culturally cut off from understanding and enjoying. The consumption society has made us feel that happiness lies in having things, and has failed to teach us the happiness of not having things.

Attributed to Elise M. Boulding, American Sociologist

Many things contribute to our standard of living. First of all, we have our fundamental physiological needs – air, food, water and shelter – that enable us to live and survive. Then, there are additional things that add to our level of comfort: access to employment opportunities, access to affordable and good quality housing, access to affordable healthcare, access to good public transport, access to good quality education, the cost of goods and services and a safe, secure and danger free living and working environment. There is also the matter of life expectancy, as well as goods and items that were once luxuries – things like refrigerators and automobiles – which also contribute.

There is also our quality of life to consider too. Compared to living standards, quality of life is more subjective and intangible. For this reason, it can be difficult to measure and quantify with accuracy. Quality of life plays an important part in the financial decisions people make including their lifestyle choices. While everyone has their own idea of what a quality life entails – most people would tend to agree that the amount of leisure time they have – and how healthy they are, are both important factors. Some other things that influence our quality of life include the conditions we're exposed to at work, our material living conditions at home, as well as our access to and quality of healthcare and education.

People tend to use their income as a marker of their living standards because incomes are easy to measure. The relationship between a person's income and their living costs is important for several reasons, but perhaps most of all, it determines how far their money goes which in turn influences their actual and perceived standard of living. People want incomes that allow them to maintain a good standard of living and a good quality of life. If people are able to buy more things and experience more things then they think that their living standards are

improving. But in order for this to happen their income needs to keep pace with their living costs. If the cost of living was to rise at a faster rate than their wages, then their wages aren't going to go as far. They're going to have fewer bank notes in their purse at the end of the month to buy the things they want – the things they have become accustomed to having. Because we're sticklers for habituating – if we're unable to purchase the things, we've become accustomed to having, we're likely to think that our living standards are deteriorating – that we're worse off.¹ Continual economic growth and rising living standards are what people in high-income countries have got used to and, in many ways, have come to expect year on year. But the question we ought to ask is whether this is viable in the long run? For every year that passes, a boost in productivity, a boost in GDP and a boost in living standards. Is it possible for these trends to continue forever?

The capitalist economic system is dependent on increasing production in order to survive. Consumer spending provides the necessary balance to production. It's essential that people continue to put their hand(s) in their pockets and spend, otherwise industrialists and investors alike would go bust. But it's not just companies that are dependent on us putting our hands in our pockets and spending. Governments are too, because consumer spending drives economic growth. It contributes around 60% to GDP in most of the world's wealthy nations including the United Kingdom. Therefore, the things we place in our shopping basket don't just say a lot about what we value in life – they have far-reaching implications for our country's economy. And as the world becomes even more interconnected – the global economy too. Our spending patterns contribute to decisions about how much of which goods and what type of services are in demand and need to be produced most. This forecasting determines the number of workers that will be needed, what they will be doing and what skills they will need.

Lots of things influence our spending patterns including personal factors, such as our age, occupation, disposable income and lifestyle. Consumption patterns are heavily influenced by cultural and social factors – the values, needs, wants, preferences, perceptions and behaviours of the people around us and wider society. Consumption patterns are also heavily influenced by our level of confidence in the future. The level of inflation. Whether our job is secure. What's happening with house prices – are they rising or falling – is the value of our house likely to hold or rise in the near and distant future. What's the political environment like – will the decision to leave the European Union (Brexit) impact our level of disposable income. These economic factors bear a significant influence on our purchasing decisions. When economic recessions do arise, consumers tend to cut back on buying goods and services and increase their savings, especially in countries where social safety nets are weak. When this happens, governments have tended to cut taxes to increase the amount of disposable income people have available to them, or they've increased government spending to create more jobs in the economy. They've also implemented fiscal programmes to increase the availability of bank credit, or they've incentivised consumers to purchase new goods via initiatives such as car scrappage programmes. What they've done is taken steps to keep their citizens spending.

So, when did all of this spending and material consumption start? And what key societal factors have played their part? The industrialisation of agriculture

enabled the subsequent urban Industrial Revolution. Without the former the latter simply wouldn't have been achievable. Following the industrialisation of agriculture, fewer farmers were needed to work the land to feed the population. As more and more of the farm workers were released from the fields they took up jobs in emerging factories and offices in industrialising towns which intensified the production of goods at an alarming rate. But as production continued to rise at a rapid rate, supply slowly started to outstrip demand and industry was left wondering; who on earth is going to buy all of this stuff? In order to keep people spending, a new ethic needed to be born. Enter consumerism.² By teaching people a higher standard of living it became possible to increase consumption to a level equal with society's productivity and resources. The term 'conspicuous consumption' was first coined by the Norwegian-American economist and sociologist Thorstein Veblen in his book, *The Theory of the Leisure Class*, which was published in 1899.³ The term refers to consumers who buy expensive items to display wealth and income rather than to cover the real needs of the consumer. According to Veblen, conspicuous consumption results in a society characterised by wasted time and wasted money. The consumerist ethic is very much about treating yourself, living a little, spoiling yourself – even at the expense of health.

Advertising is the educative, activating force that's been extremely skilled at bringing about such changes in consumer demand. Often, people don't feel the need for a second car unless they're reminded forcefully of the fact. The need for a second car has to be created in the mind by making people realise the advantages a second car will bring them.⁴ In the words of David Foster Wallace: *It did what all ads are supposed to do: create an anxiety relievable by purchase.*⁵ It would be criminal to cover the topic of advertising and consumer culture without acknowledging the pioneering work of the godfather of public relations and advertising, Edward Bernays. Bernays was the nephew of Sigmund Freud, the godfather of psychoanalysis. Bernays' book, *Propaganda*, published in 1928, hypothesised that by understanding the group mind, it would be possible to manipulate people's behaviour without them even realising it.⁶

In the late 1920s, it was unthinkable for women to smoke in public. To test his hypothesis, Bernays set about launching, arguably, his most famous public relations campaign ever, aimed at convincing women to smoke. At the time, women were fighting (rightfully so) for equal rights. Equating smoking with challenging male power and fostering a feeling of independence was central to his 'Torches of Freedom' campaign. Bernays' campaign eliminated the social taboo against women smoking in public. In the United Kingdom today, just under 7 million people smoke cigarettes, which equates to around 16% of men and 13% of women. But it wasn't just cigarettes where Bernays left his mark. At the time, the Beechnut Packing Company was not doing all that well with the sales of its key meat product: bacon. Bernays twigged that physicians play a key role in what people eat and set about asking a range of physicians whether they would recommend a light breakfast or a hearty breakfast. Responses to the survey were overwhelmingly in support of a 'hearty breakfast', which paved the way for Bernays to persuade Americans to ditch their buttered toast for a 'hearty'

breakfast of bacon and eggs. An article was published in newspapers, and the all-American breakfast was born, with a huge spike in sales of bacon.

Prior to psychological principles underpinning sales, products were sold and purchased based on their utility characteristics. Back then, purchases were heavily driven by a person's needs. Rather than their wants. For example, let's say my feet are getting wet because I didn't own a pair of shoes, then, there's a real need for me to buy a pair of shoes to keep my feet clean and dry. This makes sense. But once I do own a pair of shoes I'm no longer a worthwhile target for the shoe companies. Because shoe wise – I have all that I need – my feet are clean and they're dry. What Bernays was able to do was to connect consumption with emotions. Buy this car – it won't just get you from A to B – it'll get you a hot chick too. Buy this dress – it won't just shield your body – it'll make you feel sexy too. By tapping into a person's emotions, it doesn't matter how many dresses they purchase and own, there's always going to be that desire for them to buy one more to feel that bit sexier.

The diamond industry can be credited for delivering some of most successful advertising campaigns of all time – promising people that diamonds are valuable because they are rare – and creating the belief that 'a diamond is forever.' The thought that diamonds are rare is as big of a myth as Father Christmas. What makes diamonds valuable and expensive is market demand. Throughout the 19th century, the De Beers company have effectively maintained a monopoly on the global diamond mines and in doing so have been able to stockpile diamonds, limit supply and drive up demand and costs. By releasing only enough diamonds to meet annual demand this gives an illusion to consumers that diamonds are exceedingly rare, and the seemingly-limited supply inflates the price people are prepared to pay for them.

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Nowadays, we're spoilt with infinite choice of what to buy because there are so many companies competing in the market to make a profit. While some choice has benefits – too much choice can be paralysing and anxiety inducing. To illustrate this point, let's say I'm in the house. I've chopped some apple and I think, I could do with some yogurt to go with this apple. So, I decide to walk to the local supermarket to buy some yogurt. When I arrive and eventually find the dairy aisle at the back of the store, the number of yogurt options available to me is endless. Reading the yogurt tub labels, I learn that some yogurts are fat-free. Whereas others aren't. Some yogurt labels say low fat and others are 95% fat free. Some yogurts come in 500 g containers and others come in larger 1 kg containers. Some yogurts are natural style and others are thicker Greek style. Some yogurts are plain flavoured and others are flavoured strawberry, raspberry, lemon, vanilla, coconut and cookie dough. I really am spoilt for choice.

I then take it upon myself to just scan the traffic light labelling on the tubs. How many calories, how much protein, how much saturated fat, how much sugar? Then I notice in the corner of my eye the more expensive high protein options further down the aisle. Some are on sale and others are heavily discounted due to their limited sell by date. I'm stood there contemplating all sorts of things, the price, the size, the flavour, the freshness, the calories, the fat, the sugar and the

protein content. I just wanted some yogurt to coat my apple. But now my head is spinning. There are so many choices for me to make that I'm feeling a little overwhelmed. I'm really struggling to decide which yogurt to pick. This is why as consumers we tend to select the products we usually buy, or the ones recommended to us – not even noticing the majority of other products competing for our attention.

What I'm experiencing in the yogurt isle is the paradox of choice. It makes sense to think that it's a good thing to have such an array of purchasing options available to choose from. But in reality, choosing from a broad range of options actually requires much more effort to decide and can leave us feeling unsatisfied with our choice afterwards. The decision making really does eat into our time – and it can even lead to us not making any decision at all. In his book, *The Paradox of Choice: Why More is Less*, American psychologist Barry Schwartz⁷ details how unconstrained choice leads to paralysis and perpetual stress. According to Schwartz, 'Learning to choose is hard. Learning to choose well is harder. And learning to choose well in a world of unlimited possibilities is harder still, perhaps too hard'. If I only had to choose between the natural and Greek style yogurt, it would be much easier for me to know which option I prefer, since I can easily weigh up the pros and cons of the two. As the number of choices increases, so does the difficulty of knowing which option is best for me.

What Schwartz's research has also revealed is that the paradox of choice carries the greatest consequence for people that are maximisers. Unlike satisficers, maximisers are concerned with making the best choice instead of simply making a choice that they're happy with. The central argument of Swartz's thesis is that by eliminating choices, we can greatly reduce the busyness of our lives and the resulting stress and anxiety we experience. For him, the rapid explosion in choice spanning our individual, working and family lives has paradoxically become a problem for us rather than a solution.

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If life satisfaction and happiness are built on the acquisition of commodities and wealth and level of consumer choice, then you would think the latter part of the 20th century was an extremely happy and content time for people living in the Western world. Today, people in high-income countries have more material wealth than ever before. They visit more places than ever before. Aeroplane travel is commonplace and affordable for many, and lots more people own a car giving them greater independence over where, when and how often they travel outside of their immediate community. The cars we own have radios. They have heated seats. And they're able to direct us with great accuracy to the places we want to visit. Modern transportation systems also enable us to travel places quicker than ever before allowing us to complete more tasks and experience more things each and every day. The houses we live in provide us with more comfort than ever before. Aside from all those indoor bathrooms – just think of all the household appliances that make life that bit easier. We have central heating systems to keep us warm. Washing machines and dryers to clean and dry our clothes. Fridge freezers to store our fresh food. Dish washers to clean our dirty crockery and cutlery. Vacuum cleaners to clean them thick comfortable carpets. Microwave

ovens to warm up our food. Kettles to boil water in no time. Electric lamps to see things and read after dark. And electric fans to keep us cool in the summer months.

Communication technology is better than ever before. We can communicate with whoever we want whenever we want. We have flat screen televisions in each room of the house to keep us entertained. We have personal computers and laptop computers, digital cameras and mobile phones – enabling us to keep record of our most cherished memories. We eat a more varied diet than ever before. We earn more money than ever before – allowing us more freedom than ever before. Yet, despite all of this extra stuff and broader choice, according to the data, the latter decades of the 20th century didn't experience a boom in happiness. In fact, many people increasingly complained of personal problems during this period. Psychological disorders were also rising among adults and among teenagers.^{8,9} For example, twice as many young people reported frequent feelings of depression or anxiety in 2006 than in 1986. Moreover, overall happiness levels haven't increased in line with economic growth. This is likely due to the fact that as average incomes have risen, so too has the bar in terms of what's considered 'customary' in society – due to the growth in incomes generally. We've all gravitated to a higher level of *having*.

After travelling the world interviewing rich, unhappy people, psychologist Oliver James explains in his book, *Affluenza*,¹⁰ how there is an obsessive, envious, keeping-up-with-the-Joneses virus spreading across the Western world which is resulting in anxiety and depression among millions. Some of the antidotes to the virus James says is to look inward rather than outward. To be a shepherd not a sheep, and to not see life as competition. To embrace family, and to not watch too much television. On the surface, these antidotes seem simple enough. But are people's internal motivations and hard-wired psyche strong enough to overcome the external influences of the capitalist economic system? Vance Packard's 1950's book on advertising, *The Hidden Persuaders*, details how in a society in which people have what they need, the advertiser's job is to create false needs.¹¹ Social norms have evolved since Packard published his seminal book. Back then people wanted goods because they were useful and made life that bit easier. But now people want them to enhance their social status and to feel better about themselves. In the words of German sociologist Erich Fromm – we have evolved to a state of 'having'.¹²

We hear a lot about cutting the public deficit. Programmes of austerity in the United Kingdom have been advocated for the past decade. But how often do we hear about or talk about the nation's extreme levels of private debt – the type of debt the economic system encourages. Cheap credit was at the heart of the 2008 financial crash. The cycle of living beyond our means continued after the crash. Following the crash, the answer was to dish out even more credit – more money. People's spending addiction was not cured but instead – fed. And then the machine was fed some more. Brits are among the most indebted population on the planet, with consumer debt standing at around £1.5 trillion in 2015. The Bank of England put household debt pre-COVID-19 pandemic at 123% of total household

income.¹³ Around a fifth of this household debt is attributed to consumer credit. The remaining four fifths is attributed to mortgage debt.

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Globalisation is the process by which people, companies and governments around the world are integrated. As the world becomes more integrated, goods can be produced more cheaply and the cost of moving these goods across country borders is also reduced due to greater global competition. Innovations also spread more quickly which further contributes to economic growth. Globalisation has created a global market economy based on competitiveness and individualism. Commodification is a central tenet of globalisation. Today, pretty much every aspect of modern life – from the family and education system, to labour institutions, can be bought and sold, subject to market forces, with prices set by demand and supply. No longer do we have a market economy, we have a market society. Market values have penetrated every aspect of life; from education and healthcare to the judicial system and even family life.

In his book, *What Money Can't Buy: The Moral Limits of Markets*, Michael Sandel, details just how today, pretty much everything is up for sale.¹⁴ Let's say you want to attend a congressional hearing but for whatever reason you just don't have the time to stand around outside in a queue – don't worry, you can get somebody else to stand in the line for you. For a small fee, around \$50 per hour a standing line company will hire somebody, sometimes a homeless person to reserve you a spot in the queue. Of course, the line standers themselves are paid a much smaller fee – typically no more than \$20 per hour.

Better again, let's say you're sent to jail in the United States for committing some crime and when you make it to your cell you think, this really isn't for me. The amenities are below par, they're unacceptable. Don't worry. You can pay in the region of \$80 a night for a prison cell upgrade, which will get you a clean, quiet cell, away from the cells of the non-paying inmates. Another example of where market values have penetrated public life is the military. Many countries now outsource war to private military contractors. In Afghanistan for example, private contractors outnumbered US military troops. Some people will ask, well, what's the issue with having a market society? One striking issue is that when important aspects of public life are provided for by the state and the community, then money matters very little. Money matters a lot in high-income countries because pretty much all things, including important aspects of public life are up for sale. Because of this, those that don't have money are very much socially excluded. Social exclusion – the inability to participate fully in society isn't captured by our current measure of economic policy performance: GDP. The competitive nature of our economy and the failure to account for or represent the degree of income inequality in society are core reasons why social exclusion continues to persist on a grand scale.^{15,16}

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Chapter 8

The Rat Race: Keeping Up and Getting Ahead

Comparison is an act of violence against the self.

Iyanla Vanzant, *Forgiveness*, 2013

As well as having control over our lives, we also want to be able to engage in all that society has to offer. For humans, life satisfaction extends beyond satisfying basic needs for survival. On top of satisfying basic needs – there are other socially specific needs and expenditures that are essential for inclusion in society. Humans need to feel like they have enough. They need to feel that their contribution to their community and society is worthwhile. Humans crave for a sense of worth. They want to uphold their dignity and lead a life free of shame. In *The Wealth of Nations*,¹ published over 200 years ago – Adam Smith pointed to the social-inclusion role of a linen shirt in 18th century Europe:

A linen shirt . . . is, strictly speaking, not a necessary of life. The Greeks and Romans lived, I suppose, very comfortably though they had no linen. But in the present times, through the greater part of Europe, a creditable day-labourer would be ashamed to appear in public without a linen shirt, the want of which would be supposed to denote that disgraceful degree of poverty which, it is presumed, nobody can well fall into without extreme bad conduct. Custom, in the same manner, has rendered leather shoes a necessary of life in England. The poorest creditable person of either sex would be ashamed to appear in public without them.

Owning a decent pair of shoes and a linen shirt used to be considered customary in order to fit in with society and hold your head up high. Some people would even steal clothing to preserve their dignity and respectability. Still to this day, the drive to be seen to *have* continues. But nowadays keeping your dignity extends way beyond owing a linen shirt and a pair of leather shoes. You still need the linen shirt, but in high-income countries you also need to be seen driving a

new car, having a 50-inch high-definition television, going on an exotic summer holiday abroad, having an iPad and the latest smartphone, as well as being able to decorate your home in style. It's also about being able to maintain the good looks – the young face, the sparkling teeth and the plump lips. The anxiety and shame that results from being seen to go without is a principle reason why so many people go to great lengths to collect an inexhaustible range of consumer goods. Tim Jackson author of the book, *Post Growth: Life After Capitalism*,² summed it up well when he said that 'we've been persuaded to spend money we don't have, on things we don't need, to create impressions that won't last on people we don't care about'.

So where does this drive and desire for more and more things come from? As humans we're fascinated by our social position in relation to others – friends, contemporaries as well as colleagues at work. Humans don't like to be left behind. The feeling of not being able to keep up and the feeling of loss of dignity and respect is awful. When we compare unfavourably to others, our brain triggers a threat response – similar to when things feel out of our control – which stimulates the secretion of cortisol and other stress-related hormones. From an evolutionary perspective, our social position has greatly influenced our chances of survival. In the past, higher status in dominance hierarchies resulted in a broader choice of mates and greater access to food resources. And this still holds true today. The difference being that dominance isn't the primary status game anymore. Nowadays, status is disproportionately aligned to economic success and financial power – because these are the goals and metrics that our capitalist economy values most. Will Storr notes in his book, *The Status Game*, that 'status remains a fundamental human need'.³ People have a strong desire to achieve economic and material success because in many respects these metrics determine their social rank and thus, how they're viewed by others in society.

But it's not just that people want more things, they want more things than others, who at the same time want more things than others too. This drive to acquire more than others fuels an endless rat race. The relativity of human wants makes them insatiable. The more things people want, the harder they need to work to earn the money to acquire them. Our economic system plays on this insatiability. Lots of psychological experiments have shown that people are happy to be poorer provided that their relative position improves. Imagine you come across an advert for a new job at another firm that's offering more money for the same type of job that you're currently doing. The salary is £40,000 which is £10,000 more than the salary you're on in your current role. The thing is, in your current role most of your colleagues earn £10,000 less than you. In the new job, you would be earning around £10,000 less than your colleagues. Even though you'd be £10,000 better off in absolute terms, in relative terms, you'd be taking a financial hit. What do you do? Do you stay or do you go? The evidence suggests that most people would rather stay and lose out on the pay rise.⁴

We don't just compare our income with that of other people we compare our income with what we ourselves have become used to. Because of this constant self-reflection, we feel the need to be running the same speed or faster otherwise we feel as though our standard of living and our quality of life is either stagnating or worse still – in decline. This is what is known as the hedonic treadmill. So, a

person's satisfaction with their income and the things they have is dependent on how they compare with some norm, which is dependent on two key things. The first relates to social comparison; what other people earn and have. The second relates to habituation; what we have become used to earning and buying. An extreme example of just how much relative income and wealth matter more to feelings of satisfaction than absolute income and wealth – consider the story of the Russian peasant whose better-off neighbour owns a cow. When God asked the peasant how he can help him, the peasant replied, 'kill the cow'. But the link between relativity and satisfaction is nothing new. The link was highlighted in the late 19th century in Karl Marx's seminal work *Wage Labour and Capital*,⁵

A house may be large or small; as long as the neighbouring houses are likewise small, it satisfies all social requirement for a residence. But let there arise next to the little house a palace, and the little house shrinks to a hut. The little house now makes it clear that its inmate has no social position at all to maintain, or but a very insignificant one; and however high it may shoot up in the course of civilization, if the neighbouring palace rises in equal or even in greater measure, the occupant of the relatively little house will always find himself more uncomfortable, more dissatisfied, more cramped within his four walls.

Once upon a time, a man's social standing was largely secured through earning enough income to safeguard his family. Putting a roof over the family's head and providing a warm meal and being able to put a good shirt on their back. But with the growth of consumerism and the parallel higher living level norms – no longer is one linen shirt enough. Today mass-produced goods like cars have become necessities of life. To be seen to go without threatens a person's dignity. In the 1950s, going without a car was pretty normal as very few people owned one. But today going without a car is used as a symbol of poverty, it's considered abnormal. The same can be said for summer holidays. In the past, few people took a vacation abroad, but today not going abroad is frowned upon. Holidays nowadays can cost more than a second-hand car. Some families will save up the entire year and in some cases get themselves into debt, just to take that 2-week vacation abroad. For some, the high monthly repayments are a price worth paying in order to avoid the embarrassment and shame of going without. For them, a vacation abroad is a way of maintaining their self-respect and social standing.

However, the most expensive commodity of our time isn't a family holiday. It's the family home. Because living in a deprived neighbourhood is the geographical reality of social exclusion – we take on huge mortgages and excruciating levels of debt to avoid this. The second most expensive commodity of our time tends to be the family car with some luxury vehicles costing in excess of £500 per month to lease. While it may not be necessary to fork out this amount of money each month – in automated car dependant societies like ours, people are to a large extent indirectly forced to own at least some car since going without one socially excludes them from a lot of what society has to offer. But as we'll discuss in

greater detail in later chapters, our economic system benefits greatly from society being car dependant. To continually grow – the economy needs continual production and consumption. In this case, continually selling more private vehicles. And more petrol and more diesel. And more road tax and more insurance premiums. Not to mention all the repair jobs on these vehicles. It all contributes greatly to the GDP. Hence why high-income countries are set-up well for the car rather than pedestrians or cyclists.

Just like the rare genetic condition – Prader–Willi syndrome (categorised by excessive eating excessive eating and gradual development of morbid obesity) – our economic system needs us to keep feeding the growth machine if it's to expand credit. Even if this means citizens getting into financial difficulty. In 2019, the year before the COVID-19 pandemic hit, UK residents owed a total of £1,640 billion. An increase of almost 50 billion on the previous year. And the beast continued to grow during the pandemic.

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Going to great lengths to fit in with the norms of society is not anything new. Humans are after all social animals, and they've evolved over millennia to act in a way consistent with the status quo. Humans have a drive and desire to connect and belong to supportive communities.⁶ Once they're accepted into these groups, they do all they can to rise to the higher rungs of the group hierarchy. And there's good reason for this. Not least to survive and reproduce, but to also experience better conditions of life. Receiving praise from our troop gives our lives both meaning and purpose. This is why we care so much about our position in relation to others and do all we can to keep pace with change and our evolving economic and digital environment.³

As a for instance, the principle way of communicating with somebody used to be to write them a letter and send it to them by post. Then technology brought along the telephone, and we were able to speak to loved ones from the comfort of our own living room. Then we got the mobile phone and shortly after that we got the internet, and now we can communicate with people around the globe from pretty much anywhere we like – either by texting them, talking to them or video calling them. Each of these technological developments greatly improved a person's ability to keep in touch with friends, family members and colleagues. More recent digital developments have improved our ability to learn new things and access a broader range of entertainment. Those that have been unable to keep up with these developments either for affordability reasons or availability barriers have not just lost face, they have in many ways been *left behind*.

It's no secret that technological innovation intensifies if not reproduces social and geographical inequalities.⁷ This happens because new needs and desires are created regarding the speed of communications. Just take the recent COVID-19 pandemic as an example. The pandemic revealed the need for (super) fast broadband network – which has to a large extent become a normality, and indeed, a necessity. Not only for white collar workers to be able to work remotely, but also for people to seize job opportunities and take advantage of the ever-growing number of online services. As the digitalisation of the economy and society accelerates further, and more and more services move online, owning the latest

digital devices, having access to the internet and having the skills and competency to use them will become even more essential to prevent being digitally excluded and left behind.

Feelings of low social status, feelings of being left behind, feelings of being unable to engage in all that society has to offer. They result in a continual sense of stress and anxiety. Take being unemployed for example. It results in a life of many hardships – a life comprising a disproportionate share of physical (i.e. material) and psychosocial stressors. These stressors have a profound direct and indirect impact on our health. Stress affects every bodily system. From the cardiovascular, gastrointestinal and endocrine system to the reproductive systems.⁸ A continually high heart rate, rapid blood pressure and elevated levels of stress hormones don't just take a direct toll on the body – they take an indirect toll on the body too through their ability to influence our lifestyle behaviours. When people are chronically stressed they're much more likely to engage in consolation spending by way of consuming alcohol, tobacco or indeed other health damaging substances as a way of coping and managing their distress. They're also far less likely to sleep well or exercise regularly. And they're more likely to reach for the convenience foods. Therefore, stress can have a double impact on our bodily health.^{9–11}

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In high-income countries like the United Kingdom, people are healthier, live longer¹² and have more leisure time than their ancestors.¹³ This extra leisure time can be spent in lots of interactive and enjoyable ways. Listening to music on a smartphone, reading on a tablet device, streaming films and documentaries on high-definition television or talking on Skype with friends and relatives in different time zones are just some of the many pleasures that screen technology gives us. Despite these pleasures, we hear a lot more about the negative impacts of screen use on our psychological health. Particularly our self-esteem. But are we lacking a proper sense of perspective? Is there a deeper issue at play? For me, the deeper issues are ones of status seeking and materialism rather than screen use per se. In previous chapters, we've briefly discussed how and why advertising is bad for our physical health. But it's not just our physical health that's impacted by advertising. Our psychological health takes a big hit too. The advertising industry and social media distort our psychological needs by promoting status competition which drives social anxieties and material consumption.

People size themselves up against others all of the time. They're forever playing status games. They always have done and always will. Whether it's based on them being richer, having a better job, a bigger house, a more luxurious car, a more luxurious watch, being better looking, stronger or smarter. Hierarchy's are all around us – with people varying in their social standing. Occupational class has long been the primary indicator of social standing – 'What do you do?' the saying goes. In years gone by, when people lived in small villages everyone knew each other and knew who had and didn't have much wealth. Everyone knew their place in the social hierarchy. But in a globalised world, local knowledge tends to be limited, so first impressions count much more.

When people come and go and don't know each other that well, they're much more able to define themselves by the things they have and the things they do. The car they drive, the clothes they wear, the exotic holidays and fine dining experiences. It's not so much the comforts afforded by the goods acquired but rather the status and recognition that these goods symbolise and achieve when publicly displayed.¹⁴ Regardless of the criterion we use we experience an intense emotional response when our perceived status goes up. Our dopamine, serotonin and testosterone levels all rise which makes us feel happier and more confident. But when our perceived status is low and threatened, we secrete more stress hormones which can be damaging to our health and longevity.¹⁵ For these reasons, we have a strong desire to increase our status and go to great lengths to protect it.

Robert Sapolsky's research with primate communities has revealed that higher status baboons not only secrete less stress hormones than their subordinate peers – they're healthier and live longer than them too.¹⁶ Humans have more social supports than baboons, exist within less linear hierarchies than them and can overcome their low status by belonging to multiple hierarchies. A low rank employee for example may well be the captain of their local football team. Humans simply choose the hierarchy that's most important to them and best defines them. Despite these social differences, the work of epidemiologist Michael Marmot – documented in his book, *The Status Syndrome*, illustrates how having a higher social status doesn't just make us feel good – it brings very real lasting health rewards for us too.¹⁷

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In a materialistic world where possessions and status are everything, being content simply isn't any good for business or the economy. In his book, *Reasons To Stay Alive*, Matt Haig speaks about how today's world is set up to depress people and make them feel inadequate.¹⁸ For our economic system to thrive it needs us to be vain, miserable and insecure. In the same way, junk foods don't provide our body with the nutrition it needs – junk values like materialism aren't any good for our psychological needs – they distort them. Advertisers promote junk values. Not only do advertisers play on our sensitivity to social comparisons and our fear of feeling less worthy, they offer us products as the solution to the sense of inadequacy they've created. In the United States, the average person is exposed up to around 5000 advertising impressions every day. The fact that UK advertisers spent over £15 billion on digital advertising in 2019 – an increase of over 15% on the previous year is a fitting example of just how effective advertisements are at delivering results. The more money that's spent on advertising the more materialistic people become^{19,20} – and the more materialistic people become, the less satisfied they become with themselves.²¹ Children are especially sensitive to advertisements because they're more emotionally vulnerable than adults.²²

The thing is, screens aren't necessarily the main issue. Screens like other technologies tend to be morally neutral. It's the way in which screens are used and the content that's transmitted through screens that's the issue. television, internet and social media are just some of the screen mediums used by advertisers to spread status norms. Imagine seeing an ad on television telling you – you're fine just the way you are. You look good. You're fun to be around. You have enough stuff. You

don't need any more. Be yourself. An ad like this would encourage people to pursue their intrinsic values not their extrinsic values. They would compare themselves less with others and spend less money on the things they don't need. For the advertising business, this would be disastrous.

Nowadays, consumer advertising is everywhere. In newspapers, on billboards, on the television, on the radio and on the internet. Advertisements telling us what we're lacking in our lives. But advertising is not the only thing that exacerbates people's anxieties and insecurities. On top of advertising, there's the different forms of social media. Social media is the ultimate status game. It's a slot machine for connecting with like-minded others and earning status. When users comment or post an image they're judged by others and they await the number of replies, likes, retweets and followers. All of which serve as badges and symbols of status. And as Will Storr³ explains, just like a gambler never truly knows how the slot machine will pay out, users don't quite know what reward they'll receive for their contribution to the game. And because the prize changes every time, it creates a compulsion to play. And here's the thing, in order for users to keep what they have and to earn more connection (followers) and more status, there's a constant need for them to keep playing along – feeding the slot machine. This is just one of the many reasons why the success of social media has grown so fast so soon.

Since social media promotes mass comparison, it's also very effective at playing on people's anxieties and promoting feelings of inferiority. How many followers do I have on Twitter? How many retweets did my Twitter post get? How many likes did I get today on Facebook? More contemporary social media platforms like Instagram and Snapchat centre on image sharing. Images are powerful forms of communication and influence. Not only do images tap into our emotions, they grab our attention easily and our brain processes them much faster than words. Wealth (including false wealth) and conspicuous consumption are easily advertised through social media. The utility of social media is that it enables multiple status symbols to be shared simultaneously – with images often ascribed to what people have and what they do with their time. It's the extreme positive ends of these criteria that are displayed – with platform users' attention drawn to the tangible rather than the context. Platform users see the person wearing the Rolex watch driving the Range Rover car into the sunset. Not the recent family bereavement or the long-term debilitating health condition. All may appear well on the outside. But this tells users nothing about their internal psyche.

With the advent of social media, social hierarchies can be displayed around the clock. Nowadays, there's so many status games that people find themselves engaged in. Social media users can self-promote themselves and compare themselves with whoever they want, whenever they want, from wherever they want. For some users, not even the leisurely run escapes self-promotion anymore. Gone are the days of slipping on the running shoes and heading out for a quick jog to clear the mind – unbeknownst to anyone else. It's about sharing these experiences with the digital world. Nowadays, it's about enabling the GPS tracker and running app on the smartphone. Taking a mid-run selfie. And then updating the social media status and running time on completion. For some users, it's not so much the intrinsic satisfaction and cathartic nature of the run itself but rather the

number of likes they receive from their followers that counts. But the self-promotion extends way beyond the leisurely run. The people they're meeting, the food they're eating, the clothes they're wearing, the places they're visiting, the job they're doing. It's all shared. All in the hope of praise and recognition. Some users even promote how productive they are in the workplace. The long hours they've been working – and how burnt out they are as a result. But surely, isn't there more to life than work?

It wouldn't be unreasonable to suggest that the widespread exposure to multiple status games, and the constant competition and materialistic goal seeking that this brings, which breeds status anxiety (and feelings of inferiority and insecurity) – due to not being able to keep up – has at least played some role in the rise of psychological disorders like anxiety.^{21,23} Perhaps even more so among young people given that adolescence is a period of increased vulnerability for low self-esteem due to changes in biology and physical appearance, and the development of beliefs, values and identity.^{24,25}

However, it's not just advertising and social media we ought to be concerned about. There is so much other noise around us. What about the continual barrage of negative information we receive on news platforms? The news stories about civil wars, natural disasters and the acts of human violence happening around the world. Or all the cooking programmes scheduled each and every hour of the day involving Michelin star chefs. The irony being that the meals are so far removed from reality – in that a sizeable portion of the population are surviving on convenience foods and sourcing their meals from food banks. They're not thinking about venison, asparagus and quinoa. They're struggling to afford a loaf of bread. Why not educate and support the population to prepare and cook healthy meals that involve few ingredients at a low sustainable cost? For instance, what's up with beans on toast if you're a little short of time and money? Although, I guess this wouldn't be all that creative and status inducing would it? It's not quite *Instagrammable*.

Also, what about the array of conflicting information we're exposed to? The research telling us that coffee is good for us. No, hold on, another study published today says coffee is bad for our health. Don't have that glass of wine. No, hold on, wine is good for us. A study published yesterday suggests that people that sip a moderate size glass of red wine, not white wine, it has to be red wine, reduced their risk of heart disease by 23%. Or the Twitter headlines promoting the incredible health benefits of going for a run, followed by another headline the next day suggesting running is deadly. Then there are others that differentiate between the benefits of undertaking different modes of physical activity. One day the headline reads aerobic exercise is better than weight training for health, and the next day a landmark study finds weight training is critical to health and longevity.

We have an abundance of information at our disposal – both in print and electronically. Which is in many ways a sort of autodidact's paradise. We're able to access information far easier than we've ever been able to before – thanks to digital and screen-based technology. But while there has never been a better time to self-educate, contradictory information is everywhere. It's all around us, and this contradiction and mixed messaging can lead to confusion and panic for some

more than others. The challenge nowadays is deciphering which information is and isn't credible. We need to teach teens how to interact with these technologies in a healthy and fulfilled way. They need to understand the value of technology, as well as its potential drawbacks. They need to understand that it's simply not possible to be 'top dog' in all social hierarchies. They should strive to earn their connection and status from playing a hierarchy of multiple games. Since it can be a big risk attaching too much of our identity to any one game. Because, if the game fails, so does our opportunity for connection and status. It's about giving their best – and it's about choosing and pursuing the status criterion that's best for them.

Screens are built into every aspect of our lives, and we'd struggle to function without them. Like it or not, they're here to stay. We tend to focus on the negative aspects of screens and forget the pleasures screens have given us. Like all technology – used in the wrong way screens can be damaging for individuals and society as a whole. When it comes to screens and self-esteem – it's the screen content such as advertising that's the issue. Advertising does to our minds what air pollutants do to our lungs. It's a source of psychological pollution. Only regulatory measures can change culture, behaviour and health on a grand scale. Some of the great public health problems of the past and present have been tackled or at the very least reduced, through regulatory measures. Cholera was tackled through the sanitary movement. Smallpox was eradicated through vaccination. And despite the significant rise in car ownership – car-related fatalities have remained relatively low thanks to regulatory measures. Regulatory actions are now being considered by the UK Government to restrict the online advertising of unhealthy foods and beverages in a bid to tackle childhood obesity. We need similar restrictions for advertisements transmitting other junk values.

However, the issue goes much deeper than simply advertising and advertising bans. There are other deeper cultural forces that cause so many citizens to work long hours and spend more money than they can afford in order to participate in a consumption competition with others.²⁶ Not only do we live in an unequal society and indeed world,²⁷ which promotes status competition and in turn drives social anxieties and material consumption. We have an economic system that actively promotes competition, self-interest, abundant consumption and material success. In doing so, it prioritises economic growth at the expense of human wellbeing.²⁸ Hence, why we see more and more products coming to market and being used as social communicators of material success. The financial and societal costs of pursuing identity through consumption are profound. Until a better balance is struck between the work and spend cycle – not only will there be a high level of lifestyle-related diseases like obesity in society, there'll also be lots more people suffering from the status syndrome as well.

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Chapter 9

Working Harder and for Longer

The labourer seeks to maintain the total of his wages for a given time by performing more labour, either by working a greater number of hours, or by accomplishing more in the same number of hours. Thus, urged on by want, he himself multiplies the disastrous effects of division of labour. The result is: the more he works, the less wages he receives. And for this simple reason: the more he works, the more he competes against his fellow workmen, the more he compels them to compete against him, and to offer themselves on the same wretched conditions as he does so that, in the last analysis, he competes against himself as a member of the working class.

Karl Marx, Wage Labour and Capital, 1849

Like every other instrument for increasing the productivity of labour, machinery is intended to cheapen commodities and, by shortening the part of the working day in which the worker works for himself, to lengthen the other part, the part he gives to the capitalist for nothing. The machine is a means for producing surplus-value.

Karl Marx, Capital, 1867

The workplace can be a key symbol of status, but it is also a primary source of chronic stress for many people around the world, and it is the place we are turning our attention to next. The pursuit of economic growth and greater productivity in the workplace is a driving force behind automating the workforce around the world which is not just displacing workers but creating a casualised, low wage workforce too. I want to show in this chapter how the technological advancements that have occurred these past decades have not resulted in a dramatically shorter working week for workers, as previously envisaged, but rather, created a stress inducing – health damaging – ‘always on call’ culture.

Productivity is a core feature of our economic system, and it is a key driver to the historical changes and ongoing changes in the workplace. A useful way to view productivity is to imagine a worker's output per hour. When the worker churns out more output in an hour, the company's capacity rises due to the company's cost per unit falling. The company is able to make more profits because it is producing more goods or more services. Governments hold productivity in high regard because it enables economies to grow without damaging the country's inflation rate. In order to boost productivity, workers need the tools and the technologies to complete tasks more quickly, and they need the know-how to complete these tasks at a faster pace. Productivity is concerned with things like how many customers get through the Tesco checkout in an hour. How many haircuts can the barber at TONI&GUY manage in the hour? Productivity is based on measuring quantity of output per head, not quality of output per head. Productivity may increase, but this does not necessarily mean wages keep up. As workers have become more productive and efficient, they have not reaped the rewards they deserve. In 1965, employees of America's largest companies earned around 20 times less than the bosses. Fifty years later in 2016, the disparity in pay between employees and bosses was 15 times greater – employees were now earning 300 times less.

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Automation has been around for centuries – with notable changes coming in the Industrial Revolution. Looms for cloth weaving were traditionally operated entirely by hand. But during the Industrial Revolution, cotton mills witnessed the rise of automated mechanical weaving looms, which enabled the mass production of textiles, without the need of skilled weavers to operate them. Naturally, such innovations were not well received by the skilled weavers. But there have been other subsequent periods too when humans have been anxious about the impact of technology on jobs and livelihoods.

When containers were introduced to the UK shipping industry in the late 1960s, it dramatically reduced employment opportunities for dockworkers. Within a decade of their arrival, around 80% of all relevant UK trade was being moved in containers. Because container ships can only be docked in deep-water ports, containerisation also led to the shipping industry becoming much more concentrated. While some suitable locations prospered from containerisation, many older ports were unsuitable and declined dramatically. London – one of the world's leading ports at the time – was among the worst affected by the advent of the container. The East London port areas lost some 150,000 jobs between the mid-1960s and 1970s. There was also displacement of workers in the warehouses and manufacturing industries located near ports due to the associated development of rail and road networks that were needed to transport containers around the country.^{1,2}

Even horses have not been able to escape job displacement. Think back to when horses were relied upon to do all the heavy lifting of daily work, pulling carriages and delivery carts, brewery wagons and city vehicles. But it was not just the horses that lost out when the car arrived; the peripheral industries that supported them were decimated too. As the horses vanished, so did the jobs that

relied on the horse industry, the horse breeders, the stable keepers, the blacksmiths, the street cleaners, the veterinarians, the streetcar operators and the farmers who grew grain and hay. In the late 19th century in the United States, it is estimated that just under 14,000 companies were in the business of building horse carriages. Twenty years later, this figure fell to less than 100 companies.³ But as the horse industry collapsed, another industry surfaced – the automobile industry. Ironically, workers in the automobile industry are facing the same prospects the horses faced a century ago. They are being displaced by more productive machines.

For industrialists, improvements in machinery and technology increase productivity which decreases the cost of production and drives up profits. This enables companies to supply goods and services at lower prices. Lower prices lead to increased consumption. Sometimes, new factories and industries emerge on the back of increased profits although these new business ventures often take time to materialise. During this time, what do the poor do for work? The lack of jobs and workers' desperation to secure work places downward pressure on workers' wages. Like all other commodities – when there are too many workers in the system, wages fall and want of work rises which places the workers at increased risk of poverty and starvation and the consequent diseases that arise from it. We see this today with the lowest paid and least meaningful jobs taken on by the most desperate in society.

Analyses by Oxford Economics found that up to 20 million manufacturing jobs around the world will be replaced by machines by 2030. They also estimate that if robot installation was scaled up by 30% worldwide, this would boost global gross domestic product (GDP) by \$5 trillion.⁴ The effects of job losses to machines will vary greatly across countries and between regions within countries. Job losses will also be industry sensitive. Lower skilled workers and poorer local economies will be disproportionately affected.⁵ The Office for National Statistics analysed the jobs of 20 million people in England in 2017 and concluded that just over 7% are at high risk of automation.⁶

Jobs in agriculture, manufacturing and warehousing that comprise many routine tasks have so far experienced the greatest displacement by machines. Supermarket checkout assistants have also borne the brunt of automation. The Office for National Statistics revealed that over 25% of supermarket checkout assistant jobs disappeared between 2011 and 2017. For now, jobs that do not involve many routine tasks and those that require a high level of creativity and a high level of emotional intelligence will be the hardest to automate. Medical practitioner and care roles and higher education teaching professional roles – these occupations will be among the least likely to face automation in the immediate future. In the United Kingdom, there are currently around 100,000 vacancies in social care work, alone. Given our progressively ageing society, there is going to be an even greater demand for workers in the social care sector in the future. There are a few other things that will influence whether jobs are automated or not. For instance, will it be cost-effective for companies to automate the job? It may well be possible for some jobs to be automated but if at a higher cost than what it would be for a worker to complete the tasks involved, then it is not in the

company's financial interests. Labour market dynamics and the availability of skilled workers are also determining factors.

One thing that automation has done is to improve safety across the workforce.⁷ Since the introduction of the Health and Safety at Work Act in 1974, fatal and non-fatal injuries have fallen by 85% and 58%, respectively. But while technology has brought some benefits to the workplace, technology has also brought some risks mainly relating to precarious working conditions but also via its creation of an 'always-on' organisational culture which impacts employee health and wellbeing. And there is potential for these things to intensify as large companies gain even greater power and workers are prepared to work even longer hours and for less money out of desperation to secure stable work.

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History shows that technology has led to the creation of other industries and has in the long term improved living standards overall. However, what is often forgotten is the lag – the time it takes between jobs being displaced and the new jobs surfacing. Sometimes, this delay can take as long as a generation, the result being a total decimation of community. The economic historian, Robert Allen, used the term 'Engels pause' when describing the first half of the Industrial Revolution.⁸ Although productivity increased during the first half of the Industrial Revolution, workers' pay stagnated which increased economic inequality. We are still seeing signs of Engels pause today – arguably to a greater extent – with the highest paid bosses in some of the biggest companies in the United Kingdom receiving a pay package that is over 1,000 times the median salary of a full-time worker.

Deindustrialisation has been a universal feature of economic growth among all rich nations, but it is the United Kingdom that has experienced the largest decline in manufacturing employment. Today, less than 10% of the employed population in the United Kingdom is engaged in manufacturing jobs as compared to around one-third in the 1960s.⁹ In England, industrial decline dates back to at least the 1960s, but deindustrialisation was accelerated during the Margaret Thatcher and Ronald Reagan era of the 1980s. Over four million manufacturing jobs have been lost in the industrial heartlands of England since the late 1970s. While manufacturing job losses have occurred across all parts of the United Kingdom, the share of these job losses has not been evenly spread across the country and has fell disproportionately on the middle and older age male population. A sizeable majority of whom have in many respects been left behind; unable to or unwilling to keep a footing in the labour market – either because of their low qualifications or skills, low-grade work experience, poor health or due to their age.¹⁰

Poverty is without doubt the greatest determinant of health, and it is well established that deindustrialisation and the resulting unemployment has been a principle driver of long-term poverty. The effects of deindustrialisation have been felt by individuals, families and whole communities. Many of the workers that lost their job during the 1980s have remained unemployed and have endured a life of deteriorating health. When a person loses their job, they do not just lose income and independence, they lose their identity and status and their purpose in life. For many of these displaced workers, everyday living brings with it a high level of

stress and anxiety. Each day is marked by a poor-quality diet, a reliance on second hand clothing, inefficient furniture and heating systems, an inability to participate in active forms of social life, as well as a reliance on passive forms of social contact through watching television which is both monotonous and socially isolating and above all, fragile money management where even the most minor of crises such as a broken appliance cannot be fully accommodated for.

In the past, there has always been a need for cognitive skills. Cognitive skills were needed to keep ahead of the emerging and evolving machines. But during the next phase of Industrial Revolution – the fourth phase – it is predicted that humans will no longer have the cognitive upper hand on artificial intelligence and machines. We will soon reach the point where machines are able to process more information, more quickly, more cheaply and with far fewer errors than people.¹¹ Machines will also be able to complete these sophisticated tasks around the clock. There will be no such thing as a working time directive – restricting machines to work in excess of 48 hours per week on average. There will be no such thing as terms and conditions, or sickness pay, holiday pay or maternity pay. There will be no employee bonuses or golden handshakes at retirement. There will be no need for companies to pay into employee pension pots either. The productivity gains and financial savings for companies will be immense.

This next wave of industrialisation will cut through white-collar work as it has cut through blue-collar work. Today, in post-industrialised countries, educational attainment is the primary indicator of social standing. Failing to acquire a university degree not only places you at a lower social standing than those that do; in many ways, it restricts you in the job market too. The pool of university graduates is larger and more diverse than it has ever been before. But while there may be more kids from working class backgrounds going to university and acquiring a degree, are there any meaningful, secure, well-paid jobs for them? What you study and which university you study at is more important than ever. Opening up the opportunity net is to a great extent a token gesture. It is a token gesture because it is still the students that attend the research intensive – most prestigious institutions – that go on to secure the stable, well-paid, prestigious jobs. To add insult to injury, as well as facing a limited job market, these graduates are carrying around with them a staggering volume of financial debt.

It is not uncommon to hear people in the United Kingdom talk about jobs being robbed by ‘foreigners’ – people born outside of the United Kingdom. But in truth, in most cases, production has tended to be outsourced to other countries, often poor countries where wages can be kept low and workers can be exploited more easily. Companies also outsource to external agencies to cut staffing costs. When American Airlines outsourced their ticketing counter services to an outside agency in the early 1990s, the ticketing agents were issued with a take it or leave it offer. Some ticketing agent jobs were turned into temporary posts, whereas some other workers who had previously earned \$40,000 were offered their same job back for \$16,000.

In her book, *No Logo*, Naomi Klein explains how the big transnational corporations of the world control more than one-third of the world’s productive assets but account for only 5% of the world’s direct employment.¹² Moreover, in the seven-year period between 1990 and 1997, the total assets of the world’s 100

largest corporations experienced tremendous growth – increasing by almost 300%. However, despite the almost threefold increase in total assets, the number of employees on the corporation's books increased by less than 9%.

Similarly, in the late 1990s, Levi Strauss and Co decided to shake up the company when its revenue dropped from \$7.1 billion to \$6.8 billion in the year following 1996. In the first instance, the company decided to close 11 plants which resulted in over 6,000 workers being laid off. But the first round of closures was not enough for the Levi's directors, and they announced another round of closures the following year. In just over two years, 16,000 workers had been laid off. The rationale for the closures centred on the company wanting to focus more of their attention and resources on branding, marketing and product design in order to meet the wants and needs of their customers. The irony is, around the same time, the company's chairman Robert Haas received an award from the United Nations in recognition of making life better for his employees.

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Among other things, the 1980s can be remembered for its favouring of finance over manufacturing, its sweeping away of regulations, its outsourcing of public sector jobs and its relentless pressure on companies to reduce labour costs. Since the acceleration of deindustrialisation in the 1980s, the UK job market has also been dealing with the effects of a range of external factors ranging from rapid technological change to high levels of immigration. Globalisation has led to a shift of jobs to poorer developing countries which has placed additional downward pressure on wages.

In his book, *The Precariat*, Guy Standing speaks about a class of individuals – 'the precariat' who have limited long-term job prospects and are unable to secure a consistent work identity.¹³ They are living a precarious existence. They have no sense of career. They are holding down temporary jobs, engaged in short-time labour, most of whom have no assurance of state benefits or the perks received by others such as pensions, paid holidays or sickness insurance. Coupled with their lack of meaning and lack of autonomy in the workplace, their relative pay is falling too. As the automation project intensifies, there will be more people with jobs rather than careers. No longer will people work in Fords for 40 years and retire with a hefty lump sum and an attractive pension package. They will experience multiple job changes across their working life which will mean more frequent periods of disruption.

The precarious nature of work is not only an issue witnessed in traditionally defined blue-collar jobs. White-collar jobs are being hit hard too. Take academia, for example, and the range of fixed term positions lasting one year – at best two. During their short-term contract, researchers work way beyond their 35-hour weekly contract to impress and demonstrate their worth to faculty. Not only is there a high expectation for them to publish their research findings in the most prestigious journals, bid for research income to secure their future and engage in a range of other administrative duties. There is also an expectation that they provide a stellar student experience to ensure a high student retention. And as the number of students enrolled on degree courses rises year on year, not only are the researchers expected to teach more lessons and supervise more students, they're

expected to assess more and more assignments – often in areas outside of their specialism. What's more, as the expectations around student support and student experience continue to rise this further adds to academic workload. So nowadays, securing a long-term future in academia is no mean feat. If at interview, you are unable to illustrate with explicit examples the extent to which you are 'job pissed', you are going to struggle to fit the bill.

Income inequality will rise as more and more jobs are replaced by automation and artificial intelligence. As technology advances and GDP rises, we may all benefit in absolute terms, but the gap in relative income and wealth will widen. Discussion tends to centre on income and wealth alone, but humans also strive for purpose and identity. Universal basic income has been the subject of much debate in the United Kingdom in recent years. Universal basic income is a modest regular payment to a person to help them purchase the necessities for living and ensure basic security.¹⁴ While universal basic has some merit, we must not forget that people seek more than material comforts. People seek status and identity, and they seek meaning and purpose in life. Universal basic income may enable displaced workers to purchase the physical necessities of life, food, water, warmth and shelter, but how do you tackle the psychological toil of widespread unemployment?

Today, companies are doing all they can to achieve much more with less. Take Blockbuster and Netflix for example. At its peak in the early 2000s, Blockbuster, the American-based provider of home movie and video game rental services, employed over 80,000 workers worldwide and was worth an estimated \$5 billion. In 2020, Netflix employed just under 10,000 workers and had an estimated net worth of \$40 million. This is not an isolated case either. Kodak, the company famous for inventing the first ever digital camera, employed more than 140,000 people at the height of power. Today, the company is bankrupt.¹⁵ Instagram, the new face of digital photography, sold to Facebook in 2012 for \$1 billion and at the time employed just over 10 people including the two founders – Kevin Systrom and Mike Krieger. Where did all those jobs go? In 2014, there were four million driver jobs in the United States – 3.1 million of which were truck drivers. That represents 2% of total employment. Once vehicles become automated and there is no need for truck drivers or taxi drivers, what will all of these workers do to secure a living?

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In his book, *Dying for a Pay Check*, Jeffrey Pfeffer explains how people do not have to work down a coalmine, on a construction site, in a chemical plant, or at sea on an oil rig to face a health deteriorating workplace.¹⁶ The indoor workplaces of white-collar workers can be much more stressful and health damaging than that of manual blue-collar environments. There are various health and safety regulations in place to protect against physical exposures in the workplace. But what about those psychosocial exposures? The ones that take a toll on the mind. Shift work, insecure work, night time work, working long hours, low job task control and high job demand, limited social support and connection with colleagues and pressures to work more productively. These are just some of the psychologically damaging workplace exposures that many workers face.

In pretty much all jobs, it is about doing more and more work in less and less time. When we work longer hours, we do not just become more unproductive and error prone and less satisfied with work, we become chronically stressed too. As we discussed in Chapter 6, chronic stress has both a direct and indirect effect on our health. When we are working to capacity, we are less likely to engage in the lifestyle behaviours that benefit our health, like exercising. We are less likely to take time to prepare food from scratch which leads to us developing unhealthy eating habits. The time we spend sleeping and the quality of our sleep are both compromised, and we are more likely to consume substances that are damaging to our health, like alcohol, tobacco and other types of drugs, as a way of dealing with the stress and psychological pain we are experiencing.

Our social relations are also impacted because we are more likely to isolate ourselves from the outside world. It is not just our friends and family that we fail to make time for either – we bypass interactions with our neighbours as well. A consequence of this is that people lead door to door lives. From the house to the car to the office to car to the house – barely seeing or physically interacting with any of our immediate neighbourhood environment. The irony is, today, many communities have online Facebook groups, but how often do the users interact with each other face to face? Nowadays, many people are in many ways in a state of being physically alone yet digitally together.¹⁷

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In the early 20th century, there was a common thought that as people got richer and became more financially secure, they would be able to afford more of the things they wanted and needed and would in turn work less. People have indeed got richer, but have working hours fallen? The data suggest not. So why are so many of us working so hard? Money is of course one reason. We all need to earn a living to pay for the necessities of life. Another reason is to do with people wanting to own more things. And the more things people aspire to own, the more they have to work to earn the money to purchase them. However, it is also to do with 21st century work being desired much more for its own sake and not just for the income it brings. Nevertheless, while work is for some people a source of identity and status which brings them satisfaction, the evidence suggests that in general, most people, if given the option, would prefer to work less hours than they do now.

Overwork and underwork are both key sources of stress. It is possible to alleviate these combined social problems by progressively moving to a shorter working week. So, working a four-day week rather than a five-day week. It is an idea that has been recently trialled across the United Kingdom. The prediction is that the workplace intervention will have a positive impact on company productivity and worker wellbeing as well as the environment. If it can be evidenced that workers are more productive working over four days, then companies are likely to be in support of such a change. Because it achieves the main goal: boosting the big P. Productivity.

Companies will do all they can to boost worker productivity. Essentially what they are after is a job pissed culture. Nowadays, there is a requirement for workers to be 'logged on', all of the time. Digital and communication technologies have

enabled workers to be connected to the workplace from the comfort of their living room sofa. Checking emails late into the evening and answering phone calls around the clock have been made possible by the advent of emails and smart phones. While these technological advances may well have boosted the big P for companies, a drawback for workers is that they are constantly making decisions between their work and their leisure time.

Companies are a lot more open to flexible working these days (certainly following COVID-19) because they have cottoned on to the fact that worker productivity while working remotely from home tends to be better than when they are office-based. While there are some obvious perks for workers working from home, a consequence of this remote approach to working is that unless workers are disciplined, they can find themselves literally working all of the time. The extra workload brought on through companies downsizing and restructuring and laying off workers (to boost profit margins) has only added to worker overload. There is a lot more work to be done (or expected to be done) in most jobs. And due to the precarious nature of many jobs and the fear of redundancy, workers are prepared to put in the extra hours to demonstrate their commitment and their worth.

In a knowledge-based economy, the human mind is vital to production and innovation. To grow and indeed survive, our economic system needs the human mind to be functioning well. It needs workers to be psychologically and emotionally engaged, and it needs them to be resilient to the stresses and strains of everyday working and family life. Failure to do so is a threat to productivity, which is a threat to the economy. It is an attack on the GDP. This is why companies and governments alike have become increasingly interested in wellbeing initiatives to help workers cope with the consequences of a health damaging workplace.¹⁸

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In years gone by, it was the wealthiest in society that enjoyed the most leisure time while the poorest in society worked the longest hours. The picture is somewhat different today. The highest paid among us tend to work the longest hours. There are a couple of explanations for why this may be. The first reason could be because people in high salaried roles are expected to be highly productive. Or it could be because high salaried jobs are harder to come by and because they are more competitive in nature than lower paid jobs, they are more liable to 'presentism'. But it may also be due to higher paid jobs being more purposeful, meaningful and enjoyable than poorer paid jobs which leads to people in these high-paid roles shifting their attention from unenjoyable non-work-related tasks to enjoyable work-related tasks. Taking time off can also be costly if you are paid large sums of money for the hours you work.

It is Friday afternoon. You are in the office sat at your desk, and the clock is about to strike five o'clock. You have two options. You either stay on a little later at work to complete a couple more tasks – write another section of your report or complete the next section of a grant application. Or you could clock off and return home and go for that walk or game of golf you have been looking forward to all week. You cannot do both. If your materialistic values are greater, you will

likely stay in work for a little longer. If your health and wellbeing needs are greater – then you will be off like a flash. You will be on the first tee in no time. It is not that materialistic individuals do not care about their health and wellbeing. Some will and do. After all, all behaviours are normally distributed. But as materialistic values develop and grow, other values, like health and wellbeing, naturally get displaced. And this happens regardless of how often people tell themselves otherwise.

The danger of overwork should not be underestimated. For many years, Japan has wrestled with the issue of ‘Karoshi’ or death from overwork.¹⁹ A recent study by the World Health Organization and the International Labour Organization found that 745,000 people died in 2016 from either ischemic heart disease or stroke as a direct result of having worked over 55 hours per week.²⁰ After the 1973 oil crisis triggered widespread workplace restructures, reports emerged of worker fatalities, most often from heart failure, stroke or suicide. Most victims worked long hours – sometimes 60 or 70 hours per week or more – in the lead-up to their deaths.

When a person’s time is up, and they are lying there thinking about what else they would like to have achieved in their lifetime – how many people do you think wish that they had worked a little harder during their career? For those in careers such as academia, how many of them do you think wished that they had published a few more peer-reviewed journal articles or submitted a couple more grant applications for research funding. People strive for these extrinsic goals, but this is inconsistent with what people really have regrets about. People’s regrets are much more likely to be about their intrinsic achievements rather than their extrinsic achievements. Regrets about not having spent extra time with their friends or their families. Regrets about not having devoted extra time to the kids when they were growing up. All those times they returned home late on a Friday evening after promising them that they would visit the local park for a kick about. If you were to take a stroll around the local cemetery, how many of the gravestones do you think have written on them: Jimmy Smith, 1940–2024, top fella – over 100 peer-reviewed publications – cited 10,000 times. No, they likely read, Jimmy Smith, 1940–2024, beloved Father, Husband and Friend. These are the things that people are remembered for – their relationships – and how they made people feel.

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Boosting productive is the buzz word across all job sectors and professions. If we take academia as an example again, it is all about being more productive. Universities are not just after more and more high-quality research publications and more and more research impact – they also want more and more bums on seats. They want to churn out an ever-growing number of graduates. And there is good reason for this. For every student that enrolls onto an undergraduate degree course in England, (at the time of writing) that is an extra £9250 per year for the university. Over three years, that is almost £30,000. And that is not to mention the additional cash up for grabs from international students and through rented accommodation offered by the university. I am all for improving access to higher education and better educating society but not under such a perverse ethos.

Students may gain knowledge and greater life experience by going to university, but they also accrue a staggering amount of debt. Debt that many will not be able to afford to pay back.

Universities are pivotal to the knowledge economy both through research and education. In going to university, students do not just inject cash into the economy (through tuition fees), they also invest in their human capital, and in doing so – boost the well-educated and highly skilled workforce pool that the economy, and indeed the country, needs to fully participate in a rapidly changing, increasing competitive and interconnected world.

Because of the marketisation of higher education (i.e. academics providing a commodified service [education] to students in a competitive market), we now have a situation where a proportion of graduate students in the United Kingdom are shackled with around £50,000 worth of debt once they have completed their university studies. Many of these graduates are faced with limited job prospects because the pool of graduates is so large. Often, they are forced into low-skilled job roles, roles that a degree education is not necessarily essential criteria for. There are some graduates that decide to enrol onto a master's degree programme, taking on even more debt, and a smaller number, but more than people would think, go on to pursue a PhD.

The total number of higher education students stood at over 2.3 million in the year 2018/19. In that same year, around 350,000 postgraduate students were undertaking a taught programme and around a further 100,000 were undertaking a doctorate research programme (i.e. PhD).²¹ You have to ask though – where are all the jobs for these Doctors of Philosophy? Academic inflation has been happening for years, and the ever-growing pool of PhDs has led to harsh competition in the academic sector and frustrated ambitions. Producing more and more graduates in a restricted job market is simply perverse. The irony is that as more and more students achieve a degree, its status is eroded and the value in which it is held falls, both in a symbolic sense and financially. The lack of opportunity and ever-increasing level of competition for jobs for graduates at the finish line is one key driver to the epidemic of poor psychological health among university students.

Business criteria, not education or the public good, drive what marketised universities now do. Following the COVID-19 pandemic that swept across the world, various higher education institutions in the United Kingdom proposed a raft of academic redundancies. Redundancies at some institutions were not even driven by cost saving – they were due to concerns over low staff productivity and research quality. Following consultation with members of the University and College Union, academics balloted in support of action short of a strike – which meant that they were going to work to contract and were not going to undertake any additional 'voluntary activities'. But isn't this what they should have been doing in the first place? Working to contract. The metrics used to judge who was getting the chop comprised things such as publication citations and the amount of grant income obtained in recent years. What struck me as being pretty ironic was that some of the academics that were taking a stand – by giving up their voluntary activities – had been contributing to the higher education job pissed culture in the

first place – working above and beyond – thereby making their fellow colleagues appear unproductive and ‘less able’ in the eyes of senior management.

But here is something else. What was even more strange was that the proposed redundancies in one of the institutions occurred in the Faculty of Health and Life Sciences. This particular faculty, according to the Research Excellence Framework assessment, conducts world leading impactful research on the social determinants of health. Not only do they study the health impacts of unemployment and precarious working conditions, their vision is to positively impact the health and wellbeing of society. The irony.

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For John Henry Newman, the ideal university is a community of thinkers, engaged in intellectual pursuits not for any external purpose but as an end in itself. Higher education today however is very much about engaging in intellectual pursuits for external purposes. As well as the grant income, the peer-reviewed papers and the citations, it is about the research impact and the media attention it brings. Essentially, it is all about raising the profile of the institution. There has become a great need for institutions to showcase themselves and prove their societal relevance and impact as the number of institutions has risen, and the competition for research funding and top research talent has become even greater. Profile raising was very visible during the COVID-19 pandemic when institutions around the world were in a battle to discover the vaccine first. University of Oxford, Imperial College London, Liverpool School of Tropical Medicine – they were all at it. But it was not just the vaccine they were interested in getting their hands on; they wanted the media attention too. They wanted the world to know what their researchers were doing, and they wanted their researchers’ voices heard. Public health academics, modellers, virologists and scientists – they were all getting their say on the radio and during prime-time television interviews on shows such as *Good Morning Britain* and *BBC Breakfast*. The goal of the universities was to boost researcher visibility.

The productivity culture in our society is so profound that even academics researching the adverse effects of long working hours and chronic stress on health do not adhere to what they teach and study. This has a lot to do with our economic system emphasising productivity and consumption and financial and career success. These goals socialise people into believing and feeling that they never have enough, which means that there is always a condition to their contentment and thus a continual sense of dissatisfaction. But in academia, it is not so much about not having enough financial or material success (i.e. consumer goods) – but rather not having enough of the status symbols that signify success and esteem in what French Sociologist, Pierre Bourdieu, would call their ‘field’,²² high-quality peer-reviewed research papers, for example. I can tell you something many academics do not have nowadays – downtime.

Different status games adopt different rules and different symbols of success. Until society is set up to promote and value our intrinsic values – the things that the outside world is less able to see – lots of people will continue to live in a permanent state of status anxiety and dissatisfaction. That is because working more and consuming more is not the solution to problems of reality.

Chapter 10

The Drive for Productivity Drives Physical Inactivity

Parents are told to turn off the TV and restrict video game time, but we hear little about what the kids should do physically during their non-electronic time. The usual suggestion is organized sports. But consider this: The obesity epidemic coincides with the greatest increase in organized children's sports in history.

Richard Louv, *Lost Child in the Woods*, 2010

Physical inactivity is among the most formidable public health challenges of our time.¹ Not only is regular physical activity key to achieving and maintaining a healthy weight (alongside a balanced diet), it provides a range of psychological health benefits too. In the United Kingdom alone, physical inactivity is associated with 1 in 6 deaths and is estimated to cost the United Kingdom over £7 billion annually. The World Health Organization² recently revealed that physical inactivity is on the rise, and predicted that globally, there will be around 500 million new cases of preventable non-communicable diseases between 2020 and 2030 if physical inactivity levels remain the same. But why? What's driving this formidable public health challenge? For decades, there have been a countless number of empirical studies, reports and news headlines like these informing us of the scale of physical inactivity – but not the underpinning reasons why. What's currently missing from this particular public debate is a recognition of the elephant in the room – economic growth. Therefore, in this chapter, I set out to illustrate how physical inactivity is in many ways an economic issue. I conclude by arguing that if the priority really is to address physical inactivity at the societal level then the metrics we use to define social progress will need recalibrating.

Incentives drive human behaviour. They always have done, and always will. Back in the hunter gatherer era, there was a need to undertake physical activity in order to survive. We needed to be able to move about to collect food and water, secure shelter and if needed – escape from predation. Fast forward a few thousand years to the Industrial Revolution. And again, being able to undertake physical activity on a daily basis was essential to getting by and surviving. Perhaps in a

somewhat different way, but the logic remains the same. The Victorians didn't have the luxury of motorised forms of transport so they walked or biked around. There were no washing machines, dishwashers or vacuum cleaners – so there was no choice but to expend energy completing essential household chores. Work back then didn't entail being sat at a desk staring at a computer screen – it was full on physical graft.

Just like today, productivity was key to boosting company profits, so it was the most physically able – the fittest that were selected for work. They were selected because they were able to get more work done. The physically unfit were, therefore, at a great disadvantage. But as society has deindustrialised and become more of a knowledge and service-based economy, the necessity to undertake physical activity at work has gradually diminished.³ Physical activity wasn't a choice back then – it was a necessity. It isn't today.

While being physically active in our leisure time can boost our fitness and add extra years to our life,⁴ the reality is, most people are less concerned about the future than the present, and in today's economy – there's a far greater demand for 'able minds' not 'able bodies'. The fact of the matter is, workers are no longer selected or rewarded based primarily on their physical ability. In a knowledge-based economy, cognitive ability matters much more.⁵ Most people used to earn a wage through physical toil. By selling their physical labour. Today, most workers earn their wage through mental toil. On top of this, due to technological advancements, it's very possible for people to acquire food and water, travel around and lead a fairly prosperous life without having to engage in much physical activity. Therefore, the incentives to be physically active are far different today than they once were. In high-income countries and more and more so in middle- and low-income countries, physical activity simply doesn't have the same pull or requirement in everyday life as it used to. This is one of the key reasons why globally, physical activity promotion is so difficult.

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There's another very important point to this public health challenge. One that's closely linked with our appraisal of time and value of physical activity. It entails a powerful metric that's used around the world to measure economic health and social progress. Say hello to: GDP. It doesn't tell us much about whether income or health inequalities are rising, whether physical activity, obesity or mental health trends are worsening, or whether the quality of our environment is deteriorating. But it does tell us whether more goods and services are being produced and consumed. And that's what matters when the defining goal is to grow the economy. Irrespective of the social costs.

So, what has GDP and the drive for productivity got to do with physical inactivity? Well, firstly, physical activity level declines in the occupational, transportation and household domains are driven by economic and technological factors which are underpinned by the requirement for greater productivity.⁶ Whether it's the introduction of machinery to manufacturing, cars displacing active forms of transport or the surge of energy-saving devices around the household – every effort has, and continues to be made to bring to market 'novel'

consumables designed to save time – which by very nature reduce the requirement for human movement.

The widespread culture of productivity and need for speed (at all costs) has an adverse effect on physical activity in two other defining ways. Firstly, in post-industrial wealthy nations like the United Kingdom and United States, everything is geared up to be doing things faster. There is a continual sense of rapidity in these places. There is always that constant question of should I be doing more? There is an expectation that time is used constructively and not ‘wasted’, which fuels the need and desire for people to travel places faster, and leads to negative cultural assumptions around slower forms of transport, like walking and cycling.⁷ Secondly, the time pressures that are created through people pursuing ever more productivity, wealth and career success can also lead to negative cultural assumptions about rest and play, including active forms of leisure, such as exercising.⁸

Just think of the discussions taking place among UK politicians recently. The United Kingdom scores poorly on productivity they say. For our country to be more prosperous, we need workers to work harder.⁹ But surely working harder or for longer would negatively impact a person’s health,¹⁰ as well as their motivation, capability and opportunity for leisure time activity. The last thing on most people’s mind when they’re physically tired or mentally drained is to exercise more. What’s more, leisure time activity may well be the most beneficial kind of activity for our health,¹¹ but there are financial and geographical barriers to participation,¹² and it’s not something we’ve evolved to do. We’re hardwired to undertake incidental daily physical activities – not intentional bouts of exercise at the gym.¹³

It’s also worth remembering that physical activity, not sport, nor exercise is by very definition a non-economic activity. Monetarily, it costs little. Walking is by far the easiest and most convenient form of physical activity that can be incorporated into everyday life and maintained in the long run. Walking benefits our health in so many ways – physically, psychologically, cognitively and emotionally.^{14,15} For me, walking is the answer to tackling many of our formidable public health challenges – from physical inactivity, obesity and mental health to climate change. But the truth of the matter is, monetarily, it’s free to undertake. So, from an economic perspective, certainly where industry is concerned, it’s far more lucrative if people drive to places than walk to them. Yes, the economic costs of congestion are huge (\$87 billion in US 2018¹⁶), and thousands of people are injured or killed on roads around the world every year,¹⁷ but consumption means everything to the economy, and it’s this that’s valued most and pursued. To continually grow the economy means to continually build more roads, and continually sell more private vehicles, fuel, road tax and insurance premiums. They all contribute greatly to the GDP. This is why contemporary society is well set up for the car rather than pedestrians or cyclists.

We ought to also remember that while physical inactivity may well cost governments, and their respective economy’s a sizeable amount of money (~£7 billion/year United Kingdom), consumer spending has a much bigger bearing on GDP – contributing around 60% in wealthy nations (e.g. GDP ~£2.2 trillion UK 2021). The economy values only what it needs. Money. The activities it doesn’t

need – the non-economic ones like walking – hold little value. In the leisure time that people do have available to them, it makes more sense (economically) for people to consume goods and services that contribute the most to GDP. Even if this leads to physical inactivity levels going up. Physical inactivity in the eyes of the economy is a price worth paying for economic growth.¹⁸

In the long term, a more active population may well place less strain on the public purse. But the long-term welfare of the population is often of little interest to the parts of it that want their shareholders dividends to soar. Because the economy can't grow when people are content with who they are and what they have – it's heavily dependent on industry creating new tastes and new desires. The automobile industry intensely advertises comfortable cars that seduce people to drive rather than walk or cycle. The visual media and tech industries intensely advertises screen technologies and devises (e.g. televisions, tablets, smart phones) that seductively entertain people and, in most cases, keep them seated.

In recent decades, active leisure time behaviours have been progressively replaced with sedentary alternatives,¹⁹ which suggests that people value these activities more.²⁰ One reason why sedentary alternatives like tablet and smart phone use are so pervasive is because they satisfy multiple human needs. Enabling access to the digital world, they offer users the opportunity to learn and make sense of the world around them, bond with like-minded people, defend their beliefs and experience feeling and raise their social status. We're evolutionary programmed to maintain our social status because it makes us feel good.²¹ Digital technologies are specifically designed to satisfy such needs but to also manipulate user behaviour. As more users are 'engaged' online for longer, tech companies get to collect, store and analyse even more personal data which brings greater financial rewards. In today's information-driven economy, data is the new gold.²²

Arguably, leisure time physical activity holds little value at the population level because it's not considered that much of a status symbol or marker of 'success'. Potentially due to it rarely receiving the media coverage and promotion it deserves – from businesses and governments alike. For instance, when was the last time you came across an advertisement with the message: do you want to feel less stressed and hurried and clear your mind? Do you want to improve your general health and wellbeing? Have you considered walking in nature?^{14,15}

How we chose to spend our time is intricately connected to our economic system. GDP doesn't value slowness. Nor does it value non-economic activities like walking in the park or cycling to and from work. Our economic system also drives the social norms that underpin success criteria in society and individual values which in a capitalist economy are very much measured in relation to material status. Slowing down (to partake in leisure time activity) and living a more sustainable existence (partaking in active forms of transport) is challenging when the messages in every sphere of life are extrinsically underpinned, and challenge intrinsic motivations and non-material goals like active forms of transport or a physically active lifestyle. Intuitively, downshifting is much more achievable for those with a strong sense of identity and the financial means to do so.

While there have been some proposed alternatives to measuring social progress with indicators such as the Human Development Index, Genuine Progress

Indicator and Happy Planet Index – their widespread adoption by governments appears unlikely anytime soon. If our goal really is to have a more physically active nation and indeed world, then the incentives and metrics we use to define social progress need recalibrating. Only when the incentives around us promote physically active lifestyles and sustainable ways of living will it be at all possible to change consumerist values, lifestyle and transport behaviours and population health. Physical inactivity is to some extent a time issue. But ultimately, it's an economic issue we have on our hands.

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It's not just adult life that's affected by the continual drive for productivity, consumption and economic growth. Children are affected in many ways too. Unfortunately, too many to discuss in this book. But one childhood effect we have got space to consider in this chapter is the changing nature of childhood and more specifically children's leisure time. For many years, I had wondered why on average children aren't that physically active, and more specifically – why they don't play outdoors much anymore. Partly because this was a core focus of my PhD research.²³ I struggled to put my finger on why for a long time. But one day when I was out cycling, the penny dropped. There's no money in it. It's a non-economic activity. Just like visiting the local park for a stroll is a non-economic activity. They're both free activities. No wonder they're not actively promoted or endorsed by mainstream media, corporations or governments alike.

In the past 40 years, the distance children are permitted by their parents to freely roam from their home has progressively declined and is estimated to be almost one tenth of what it was in the 1970s. Data from England show that in the early 1970s, almost 90% of primary school children travelled home from school alone, yet in 1990, this proportion was 35%, and in 2010, it stood at only 25%.²⁴ A similar intergenerational decline has been observed in other high-income countries too, including the United States, Australia and New Zealand. Data from the United States show that the prevalence of outdoor play among children has declined by around 40% in the past 20 years.²⁵

In order to understand the present, it's important for us to consider and understand the past. When I was a child not so long ago, children would play outdoors for the vast majority of their leisure time. We would leave home in the morning and play outdoors all day long. As long as we were back before dark and didn't roam to certain places, we were left to our own devices – we were free to roam. We didn't have mobile phones or GPS trackers. We didn't have the internet or online chat room accounts. Nobody was able to reach us all day. Yet we were fine. At the time, no children had PlayStations, X-boxes or iPads. But they did have friends – lots of friends. As children, we would make up games with what we had. We would find a patch of grass, take off our school jumpers and use our school jumpers as goalposts for a game of football. We would walk or cycle to our friends' houses. And we would walk to and from school because it was literally around the corner from where we lived. The thing is we had lots of opportunities to play, explore and interact with the natural environment with little or no restriction or adult supervision.

Nobody ever really questions why childhood has changed so much; why children don't play outdoors anymore or why so few children walk or cycle to school. For me though, these are really important questions. Especially where children's health and wellbeing are concerned. These leisure time and transportation-related behaviours reflect our current social and economic climate.

Both activities, playing outdoors and walking to school are free economically, just like using the local park is free. From a business perspective, there simply isn't any money in either of them. Rather than promoting free health enhancing activities like outdoor play, parents are instead encouraged to purchase console games to keep their child entertained. Or to enrol them in structured extra-curriculum programmes which come at a financial cost. Moreover, rather than walk or cycle to and from school many children are driven by their parents in order to protect them from the other cars on the school-to-home route.²⁶ Perhaps if a walking school bus service was implemented, one which charged parents a fee to supervise their child on the school commute, there may be greater uptake. Perhaps? But what would be the driving factor to this increased uptake? Would it be the extra layer of supervision providing additional perceived safety and reassurance for parents? Or would it be the change in social norms – whereby that's the thing to do – pay for your child to walk to school. Who knows?

There have been so many social and environmental intergenerational changes that have contributed to the decline in outdoor play among children. As a consequence, it's difficult to pin point the main driving force behind this particular societal change. Parental fears regarding children's safety is of course a key factor. Heightened safety concerns have a lot to do with the increased child-related crime awareness stemming from 24-hour global news coverage as well as the significant growth in vehicular traffic on public roads. The consequence being a much more risk-averse culture. As fewer and fewer children play outdoors, outdoor play becomes de-normalised and less attractive for children with nobody to 'play out with', and it also heightens parental fears surrounding children's safety. Despite the hysteria from the media, tragic events like child abductions are incredibly rare things to happen, especially in the United Kingdom. This is why they make news headlines. In the United Kingdom, there are currently around 12.7 million children under the age of 16 years. While the number of police recorded child abductions in England and Wales increased by around 7% between the years 2017/2018 and 2018/2019, there were only around 1,200 police-recorded offences that year (including completed abductions [where a child is actually taken] and attempted abductions). Action Against Abduction estimates that between 10 and 20% of all reported abduction offences involve child victims.²⁷

It may also be the case that children have fewer suitable outdoor areas to play nowadays which reduces their opportunity and motivation to play outdoors. Indeed, a majority of communities have experienced a reduction in green space owing to increased housing development and privatisation of public spaces.²⁸ Evidence shows that living in a greener environment is positively related with physical activity²⁹ and health and wellbeing.^{30–32} Given such evidence, it is now thought that exposure to green space is a fundamental human need.³³

On top of these adverse built environmental changes, there have been changes in family structure, and as we have explored in previous chapters, due to a waning in collectivist values – communities have experienced a decline in cohesion and trust too. Perhaps these factors have also played a part. For instance, in the past, a much greater proportion of mothers would be present in and around the household all day round – enabling them to keep a watchful eye over their child's movements. At the same time, there was a strong sense of community. Neighbours would 'look out' for each other's children – providing an extra layer of perceived protection compared to the present day – thereby placing parents at greater ease when their children played outdoors. The high presence of other children playing outdoors was another reassurance for parents due to children not being alone (i.e. safety in numbers).

Modern technology is also likely to have played a key role in shaping children's leisure time pursuits. Children's leisure time and in particular their attention has been greatly commodified by television channels, computer games, internet search engines and social media platforms.³⁴ And while these digital devices do bring some educational and social benefits, they promote physical inactivity rather than traditional forms of active recreation including outdoor play. Our materialistic and risk-averse culture has created an environment that actively supports and, in many ways, promotes leisure time screen use because it reduces parents' safety fears with children remaining visible indoors. Against the backdrop of this confinement and outdoor play deprivation, rates of childhood obesity and psychological disorders are rising rapidly in the United Kingdom.^{35–37} The burden of which falls disproportionately on children living in deprived neighbourhoods.^{38,39} Such compelling evidence suggests that children's needs aren't being met, and that pressing cultural changes are needed to create an environment that meets those needs. Failure to do so will no doubt result in future health and societal costs.

It costs nothing to promote health enhancing non-economic activities and cut back children's sedentary activities and their programme of extra-curricular activities. But the problem of cutting back and slowing things down goes beyond the cash saving – it has more to do with cultural values relating to productivity and consumption as well as the social expectation that children maximise their human capital investment to secure a solid footing early in life – to give themselves the best opportunity to achieve career, financial and material success in adulthood.⁴⁰ If children, who are our future, are to be freed from such a mindset, then aside from rewriting the structures governing the economy, the workplace and the education system, there has to also be a complete change in the conception and philosophy of childhood. A childhood comprising more freedom, more discovery and more opportunity for participation in non-economic activities – activities that are initiated for personal contentment and pleasure. Activities like unstructured play. A childhood that doesn't watch the clock – but places an emphasis on doing things slowly and properly. Every child ought to be free to be a child.

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Chapter 11

Walking Is Great for Health But Not Capitalism

Walking is man's best medicine.

Ascribed to Hippocrates

Physical activity is our greatest health asset. Yet we are progressively shifting to a world without human movement. In almost every domain of our daily lives – during leisure time, at work, when travelling and within the household – incidental movement has to a very large extent been socially engineered from it. We hear a lot about behavioural intervention programmes aimed at increasing physical activity. But the reality is we have all been part of one big interconnected intervention designed for us to sit more and move less. It is the technological advances and the environmental changes that have had the biggest impact on our activity behaviours.

It has been known for some time that physical activity benefits our health. Some of the earliest scientific evidence of the protective value of physical activity was published almost 70 years ago by Professor Jerry Morris comparing bus drivers with bus conductors and desk-based workers with postmen in the postal service.¹ For most people, the easiest and most convenient forms of physical activity that can be maintained in the long run are those that can be incorporated into everyday life – like walking. Walking is free. It can be undertaken around the house, at work, as a form of transport and during leisure time – either alone or with friends and family. Not having the right equipment and not being able to access leisure facilities are barriers to exercise and most sports but not walking – few resources are needed, just some comfortable footwear. Walking expends energy regardless of the pace and distance people walk – so, it is an effective way to regulate energy balance. Walking is also positively related to cardiovascular health. It is not just the physical benefits walking brings either.² When we walk, our brain slows down which gives us time to think, clear the mind and tap into our creative selves. Some of our best ideas and memories come to light when we are out and about walking. Walking in nature can bring even more health benefits.³

Walking like all other human behaviour is influenced by cultural and environmental factors. Walking levels tend to vary quite a lot across countries not because some countries have the 'walking gene' and others do not. It is because the way of life and the environments that people are exposed to differ in different countries.⁴ There is no mistaking that industrialisation and the development of labour-saving devices have increased productivity and prosperity and bettered human health.⁵ The thing is they have also made for a more sedentary, yet faster and stressful pace of life, with greater time pressures for us all. These time pressures fuel the need and desire for people to do things faster and get places faster too.⁶

Nowadays, few jobs require physical labour, and around the house, pretty much all chores can be taken care of with the flick of a switch. Not only has the growth of cities resulted in people working and shopping further from home, it has also forced them into using motorised rather than active forms of transport to overcome their longer commutes. The average daily work commute in the United Kingdom is now around 1 hour.⁷ Aside from nudging millions of people towards inactivity, the dispersed city has exposed us all to poorer quality air and traffic related injuries and placed a financial burden on us too. Not only do we work more hours to be able to afford to drive the cars we like – we do so to pay for the leisure facilities that we use for exercise which could instead be achieved through commuting actively.

Despite walking being a way to feel less hurried – walking from place to place tends not to be valued for the experience itself but rather a means to an end – a way of getting somewhere. For most people, walking from place to place is seen as 'dead time' – time they resent losing. In high-income countries like the United Kingdom where there is an expectation that time is used constructively and not 'wasted', this can lead to negative cultural assumptions about rest and play as well as slower ways of travel, like walking.⁸ When people drive to the gym, park next to the entrance, take the lift to the gym floor to then walk on the treadmill – they are not thinking about the health, economic or environmental costs. It is the time saving, immediate convenience, privacy and comfort that driving to the gym gives (over walking and public transport) which take precedent over the longer term consequences. There is also the issue of car culture. Cars symbolise identity and hold far more status over walking as a means of transport. Larger, more luxurious cars like SUVs carry higher status than smaller cars, and people strive to own them and be seen driving them, even at the gym. Sales of these larger cars continue to rise even though they pollute more than smaller cars and contribute to many more pedestrian and driver deaths.

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Regulatory reform is a country's most powerful mechanism to change culture and health behaviour. The ban on smoking in public spaces, seat belt use in motor vehicles, vaccinations against infectious diseases and sanitary reform in the Victorian era are just some of the great public health achievements of the past. Reducing car dependency could be the next big public health advance.⁹ In the United Kingdom, everyone is exposed to a dispersed car-dependent environment. The way people respond to distance is predictable. Most people will walk to a

corner shop if it is less than half a mile away. If it is further away, they generally would not. They will drive. For people living in the suburbs, owning a car is now in many ways a precondition for social inclusion. It is an absolute need for them.

Land-use policies shape the way neighbourhoods are built and the way people travel.¹⁰ Walkable mixed-use neighbourhoods that feature a variety of uses and locate stores, jobs, schools and transit stations within walking distance of where people live reduce people's reliance on needing and using a car. Mixed-use neighbourhoods are also a good way to maintain neighbourhood safety. Evidence shows that when other people are present in public spaces, people feel safer as there are more eyes on the street and the greater footfall can stimulate social cohesion and social capital.¹¹ Another way to incentivise people to walk more is to slow down vehicle speeds on roads. Local councils have the powers to lower speed limits in residential areas to 20 miles per hour – we know that these policy measures reduce pedestrian casualties, especially among children.¹²

Policies like this do not just make neighbourhoods feel more walkable and safer for walkers either; they discourage people from believing that the car will get them from A to B quicker than other modes of transport like the bus or train. However, for these policies to work – for people to reduce their reliance on the car – there is a need for complementary transport policies that make it easy for people to access public transport by foot and get from A to B just as quick as the car. It is also about ensuring driver costs reflect the impact caused to pedestrians, cyclists and wider society. Currently, the car tax system in the United Kingdom does not reflect the fact that it is not cars themselves that are the problem but rather car trips. Drivers are not incentivised to drive less.

In the United Kingdom, drivers pay a one-off tax fee each year regardless of the number of trips they make and the distance they travel. Aside from fuel costs, financially, you might as well drive and drive. And this is what lots of drivers do. The focus instead should be on the marginal costs – the price drivers pay for one extra trip. Externality charges are an effective way of incentivising drivers to first consider the inconvenience they cause to others, and second, where possible, switch to other modes of travel. Take the London congestion charge for example. Following its introduction, private car use in the city fell, and there was less congestion on the streets with commuters switching their mode of travel to bike or public transport.¹³ The UK Government are currently considering implementing additional externality charges to road users such as road pricing and clean air zone schemes which is a promising step forward.

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The car is by far the most advertised commodity in rich countries which normalises driving in these countries, making it a normal part of everyday life, even for the shortest of journeys. Because of this, walking has ceased to exist as an everyday normal activity for the masses and has become a sort of 'exercise' that public health agencies struggle to effectively promote. Any government campaign to reduce car use in favour of walking would most definitely be lobbied against by the big car and oil companies who have huge locked-in capital and enormous advertising and marketing budgets that dwarf public health campaigns. In reality though, these companies are far more likely to receive government protection

than challenge because of the central role they play in the world economy.¹⁴ For example, national oil companies control over \$3 trillion in assets and produce almost all of the world's oil and gas. Let us say that the Government were to run a campaign encouraging the public to walk more and drive less, and car companies were to stop their advertising and lobbying for car-centric infrastructure, would the public still have a strong preference for their modern suburban lifestyles? The lifestyles that symbolise individualism, status and productivity and necessitate car use. Probably.

So, while we do need better walking infrastructure in the United Kingdom – walking more often is equally as much about people slowing down. It is about cultural change. A short visit to contrasting cities like New York and Copenhagen illustrates just how much culture dictates the pace of life and way people travel.¹⁵ Because governments set the incentives for society's behaviour – the only answer to get people driving less and walking more is through regulation. Until the Government prevented people from travelling around unnecessarily to reduce the spread of the COVID-19 virus – most people have tended to ignore their advice to drive less. The Nobel Prize winner for economics, Milton Friedman, famously said that 'Only a crisis – actual or perceived – produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around'.¹⁶ In recent years, there has been much crisis and great change. During the COVID-19 lockdown and in the years that have followed, lots of people have slowed down and struck a better work–life balance, allowing them to reconnect with their surroundings more. If ever there was an opportunity to entrench walking into our daily lives and shift society to a more active and sustainable one, this must be it!

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The thing is cars have not always ruled the roads. The roads used to be shared by everyone. Back then, nothing travelled faster than 10 miles per hour. People were able to cross the road wherever and whenever they wanted because traffic was slow moving which meant that it was easy to avoid being run over. But when the car arrived, crossing the road became a lot riskier. As the number of children and adults being injured and killed by cars increased, there were calls for tighter controls on cars, and some were calling for cars to be banned. Of course, this was not good news for the increasing number of car users or the car manufacturers and car dealers. Not only did these three parties want more road space, they wanted the right to be able to drive faster too. But to achieve these goals, a cultural transformation was needed.¹⁷ So, they decided to form an allegiance, calling themselves: Motordom – and embarked on a number of public relations campaigns aimed at claiming ownership of the road for the car. Roads were to be re-imagined as places for cars not pedestrians. The car industry effectively introduced the idea of the crime of 'Jay walking' – crossing the road in the wrong place – which continues today.¹⁸ However, what is important to realise is that such a grand social change – switching from a pedestrian-based society to a car-dependent society – simply would not have been possible without substantial Government investment in road infrastructure.

Contemporary society is well set up for the car because governments present and past have invested heavily in an extensive network of arterial roads. We have thousands of fuel stations selling fuel at low prices, and there are millions of acres of parking space available for motorists to use for no extra charge. All of these factors contribute to people favouring driving rather than walking, cycling or using public transport. We know that our behaviour is strongly shaped by environmental design. In the words of Winston Churchill, 'We shape our buildings and afterwards our buildings shape us'.¹⁹ The way in which some neighbourhoods are constructed means that for some people, owning a car is vital in order to access essential services to meet their basic needs. Up to now, educational campaigns have been the favoured approach to persuading drivers to change their commuting behaviour. In the same way, safety awareness campaigns have been the favoured approach among the car industry and their lobbyists to improve road user safety. Such campaigns place the responsibility of road safety on pedestrians and cyclists rather than on motorised vehicle users themselves. While the automobile industry does to some extent promote the use of cycling helmets, road safety training and seat belt use in motorised vehicles, it is very unlikely that they are ever going to advocate for car free neighbourhoods or the investment and promotion of public transport and other sustainable modes of transport like walking and cycling. To do this would be like pissing into the wind.

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Road traffic accidents are a significant cause of death and disability around the world. They claim more than 1.3 million lives every year, result in around 50 million injuries and are the leading cause of death for people under the age of 30. Over 90% of global fatalities on the roads occur in low- and middle-income countries.²⁰ Road traffic accidents were very common in the early days of motorised transport because it took time for other road users to adapt to the presence of the car. All of the great gains in improving driver and non-driver safety on public roads have happened because of legislation such as the seat belt law road safety act – not education campaigns.

Speeding is a major factor in road traffic injuries and fatalities. Speeding was a factor in 29% of all traffic fatalities in 2021, killing over 12,000 people or an average of over 30 people per day.²¹ Why is it that so many people struggle to slow down and adhere to the speed limit? To win the war on speed, there is a need to look beyond proximal factors and consider our whole relationship with speed. With driving, as with life, one key way to slow down is to do less, since a packed schedule is the primary determinant of the hurry virus. Take, for example, the delivery drivers working for companies like Amazon who have openly admitted speeding due to tight delivery schedules.²² Companies actually give drivers a telling off if they are not going as fast as they want them to. That is because, for the time being, productivity in jobs like these cannot be increased all that much by replacing workers with machinery or algorithms. To increase profit margins, companies are dependent on placing extra pressure on workers – regardless of the impact the extra workload and exhaustion has on worker wellbeing or the wellbeing of other road users.

Big companies may well benefit society by generating employment opportunities and paying taxes. But their continual desire for profit is in direct competition with many public health goals. Indeed, one colossal challenge to improving the population's health is the fact that efforts to prevent poor health, especially the likes of obesity, diabetes, cardiovascular disease and respiratory diseases, go against the economic interests of big multinational companies. The UK Government have pledged to increase the number of children that walk or cycle to school to bring down congestion on public roads and curb rising levels of childhood obesity. They have also pledged to curb rising levels of childhood obesity in other ways, by restricting unhealthy food marketing on television in a bid to reduce children's intake of unhealthy foods. Here is the thing though, car and food companies have a different agenda.

Car companies are driven to increase household car ownership because this increases company profits. But when household car ownership rises, this leads to even more traffic on our roads and can result in fewer children walking between school and home. In high-income countries, what we have now is a social trap. Influenced by the many cars on the school-to-home route, parents opt to drive their children to school as a form of protection not least from the air and noise pollution but from the other cars too. The clogged-up traffic and the parked cars on narrow street pavements only add to parental safety fears. Collectively, these factors work against efforts to promote and support walking and cycling to and from school.

There are also countless ways food companies undermine public health campaigns and messages promoting healthy eating. For instance, while efforts are being made to promote and support healthy eating through education campaigns, there is an ever-growing availability of addictive unhealthy foods high in salt, sugar and saturated fat being sold in high streets across the country including the shops lining the streets near schools. These same unhealthy foods are specifically marketed to young people on billboards and the sides of buses on the home to school commute.

This aggressive marketing of junk foods leads to increased consumption of these foods which leads to an increase in the associated negative health impacts. However, as well as impacting health directly, big food companies to some extent impact health indirectly too. Take the paying of taxes for example. It is no secret that big food companies go out of their way to avoid paying the right amount of tax so that company profits are higher for shareholders. But when big food companies do not pay the correct amount of tax, there is less public funds available (from tax) which means that there is less money in the public health purse for maintaining and improving things like schools, transport systems, community housing and public spaces. The perverse thing is despite the wealthy gaining greatly from the economic system and indeed the public purse (through for example road infrastructure and research and development funding), they are not receptive to the idea of paying their fair share of tax, the taxes which fund the public services that offset the health and other social costs that the sale of their products have contributed towards.

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Having defeated the traditional public health problems associated absolute poverty and squalor, new environmental threats have arisen in high-income countries. In the 21st century, air pollution is among the greatest

environmental risks to our health. Air pollution kills around 7 million people every year. That is almost double the number of people that died as a result of COVID-19 between the beginning of 2020 and the summer of 2021.²³ That is, every year 7 million people die because of air pollution. It is not just something that happens now and then. It is a recurring public health issue. We are all exposed to air pollution. We are exposed to air pollution in the places where we live, the places where we work and the places where we spend our leisure time. However, air pollution is not necessarily a new public health challenge. Air pollution has troubled the United Kingdom for decades. The Great Smog of the early 1950s was a period of severe air pollution in London. It lasted almost an entire week and resulted in over 4,000 deaths.²⁴ Here is the thing though. The cause of air pollution then was the coal industry. Whereas now it is driven by the widespread use of diesel and petrol motor vehicles. Urbanisation and the increasing use of motorised vehicles has exposed us all to more harmful air pollutants. Air pollution is a big public health concern because it increases everyone's risk of cardiovascular and respiratory diseases and a range of cancers. It is also a risk factor for childhood asthma and poor lung development too.

We have a deep understanding of the primary sources of outdoor air pollution. Transport is among the main factors, especially emissions from road vehicles. But emissions from trains, shipping and aircraft also play their part, as do the emissions from our homes and manufacturing industry. But let us not forget the food system's contribution to air pollution and climate change. Food production accounts for about 25% of global emissions. It is worth highlighting that the food system and the petroleum industry are very closely connected. That is because the food system relies heavily on fossil fuels and on the motorised transport system to get foods to market. Before foods and finished goods can be transported to markets and sold to consumers, raw materials have to first be transported to workers in factories. Big food companies (and non-food companies) prefer to set up factories in low-income countries (than high-income countries) because they are able to capitalise on the available cheap labour which results from the limited health and safety regulations in these countries. Here is the thing though – the foods and finished goods that are made in these low-income countries have to be shipped back to high-income countries because the wages are too low in low-income countries for them to go to market for the workers to buy.

It is not just cheap labour that big companies are after. They are after cheap oil too. That is because business is built on making a profit, and companies make a profit when they are able to sell their finished goods for more money than it costs them to produce and deliver them to market. Oil prices determine the transport costs of companies. When oil prices are low, companies are able to increase their profits because production costs and the costs of transporting finished goods to markets are cheap. It is not just company profits that fall when oil prices rise; traffic volumes fall too which does not just place less demand on our roads; it places less demand on our health services too because fewer road collisions occur. Epidemiological studies show that when oil prices have risen in the United States and United Kingdom, there has been a subsequent decline in road deaths.²⁵

It would be wrong to totally dismiss the many benefits that motorised transport provides individuals and wider society. Car ownership brings independence and autonomy and enhances our quality of life. But who pays the price for the road traffic collisions that kill thousands of people around the world every day including children and the many more that survive but are permanently disabled? Who pays the price for congestion? Who pays the price for wasting people's time? Who pays the price for the motorised vehicle emissions that cause air pollution? The air pollution that results in cardiac and respiratory diseases and the tens of thousands of deaths. Who pays the price for the other health consequences of motorised transport, the physical inactivity costs and the costs of obesity, type 2 diabetes and heart disease? Who pays the price for the harm inflicted on the environment? It certainly is not the big oil corporations that pay the price. The ones that benefit the most from widespread motor vehicle use. The likes of Sinopec Group, China National Petroleum, Royal Dutch Shell, Volkswagen, BP, Toyota, Exxon Mobil, Chevron and General Motors to name just a few.

Annual revenue for these individual companies easily exceeds US\$100 billion. This makes them more profitable than some countries. Based on data published in 2019, Saudi Aramco – a national petroleum and gas company – was estimated to be worth £1.5 trillion (\$2 trillion).²⁶ To put that figure into perspective, if Saudi Aramco were to have country status, they would be among the top 10 wealthiest countries in the world. They are richer than countries such as Italy, Brazil and even Russia.

Given what we now know about the sources of air pollution and the damage that it does to our health, there is an obvious need for society to scale back. The technology fixes promoted by the transportation industry to cut down carbon emissions are not going to be anywhere near as effective as environmental interventions that ensure a safe and comfortable walking and cycling experience. Electric cars may produce fewer emissions than fuel-powered vehicles, but what about all those additional emissions that are released when the new electric car is being manufactured? It would actually save more energy and cut down on emissions if people were to simply stick with their old car and use it less often.²⁷ There are a range of measures that could be put in place at the societal level to tackle air pollution. First of all, air pollution could be reduced by reducing motor vehicle congestion and the density of motor vehicle traffic on roads which could be achieved through creating low emission zones, expanding public transport and improving pedestrian and cycling infrastructure to support and encourage people to walk and cycle more often. But if we dig a bit deeper – what is really underpinning each of the above issues is people's appraisal of time, people's desire to get places faster and do things faster. The need for speed and productivity underpins the motor vehicle speeding, the road congestion, the air pollution and the physical inactivity. They are all intricately connected.

For sure, physical activity behaviour and walking patterns in particular are complex and influenced by a broad range of factors (including individual, social, environmental and policy).^{28–30} That being said, greater attention remains centred on examining and highlighting the proximal individual determinants of physical activity (e.g. biological characteristics, perceptions, motivation) rather than the

distal factors – societal and economic factors like capitalism and modernity.³¹ Dumith and colleagues³² examined physical inactivity data from across 76 countries and found that physical inactivity levels were much higher in more economically developed countries. One reason this trend exists in high-income countries like the United Kingdom is because productivity is heavily promoted and intensely pursued. A clear limitation to this overarching economic goal is that it challenges public health strategies and initiatives aimed at promoting physical activity across a range of different domains including leisure time, transportation, occupational and household related activity.

Walking is by far the most convenient form of physical activity that can be incorporated into everyday life and maintained in the long run. Not only does walking provide many health benefits,^{33,34} it has the potential to tackle many of our other formidable global public health challenges including obesity, mental health and climate change.^{35,36} But what we ought to remember is – monetarily – it is free to undertake. In the same way the economic system does not value reading a library book, the practice of mindfulness or volunteering our time, it does not value walking for transport or for leisure purposes either. That is because from an economic perspective as well as a status-enhancing perspective (which we will cover in the next chapter), it is much more lucrative if people drive their luxurious car to places than walk to them, outsource their housework, gardening and dog walking to someone else, have a non-labor-intensive job, and in the leisure time that they do have available to them – partake in commodified forms of leisure which afford status.³⁷ Either as spectator or participant. Even if this leads to physical inactivity levels going up.

This is one reason why governments including the UK Government continue to invest so much in building and maintaining roads and refrain from enforcing the essential environmental changes that would support walkers as well as cyclists and reduce car dependency.^{38,39} It is also why billions of pounds are spent on advertising every year by the automotive industry, and why environmental policies to tackle climate change and create low-traffic neighbourhoods are intensely lobbied against.^{40–42}

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Chapter 12

The Success Game Drives Productivity and Consumption

Researchers find our reward systems are activated most when we achieve relative rather than absolute rewards; we're designed to feel best not when we get more, but when we get more than those around us.

Will Storr, *The Status Game*, 2021

The common belief is that higher incomes result in greater consumer choice and an improved quality of life. If subsistence needs are to a large extent met in high-income countries – would acquiring more consumer goods and services enhance our material comfort all that much? Would having a bigger house with one more toilet, or a larger faster car or one more exotic holiday each year boost our quality of life all that much? What about our health? Would these extra goods and services enhance the environment's wellbeing? The additional heating required to warm the larger house, the additional fuel consumption and extra emissions from the larger car; what about all those additional emissions ejected into the atmosphere from the extra aviation miles too? What about the debt that's taken on to foot the bill for these extra goods and services? And the extra hours that have to be worked to repay the bank loans. To what extent do these factors really enhance our wellbeing? Money matters a lot when you don't have any at all. But once you achieve subsistence it matters far less.¹ This concept is what is known as the law of diminishing marginal returns. It's not just money that has diminishing marginal returns, pretty much all commodities do. In a dispersed car-dependent society for example, owning a car is in many ways important, but owning another wouldn't necessarily increase a person's life satisfaction that much.

If the global population were to increase their living standards to a level consistent with a median income then global GDP would need to be around 300% higher than it is now. One suggestion to tackle climate change has been to introduce a global emissions tax. But for this to work, strong collaboration would be needed between nations around the world. For example, support would be

needed from the world's main oil and gas producers, the likes of Saudi Arabia, United States and Russia. In a similar sense, taxing corporations for their emissions and tackling the problem of tax havens would also require strong collaboration between nations. Some countries may stand up to corporations but what if others do not? Without strong consensus – without everybody reading off the same page, corporations will simply relocate their offices and factories to countries with the least restrictive tax policies. The power is currently in their hands.

The greenhouse gas emissions caused by human activity will inevitably lead to more intense storms, flooding and landslides, more heat waves and droughts which will collectively cause more frequent and more intense crop failures and famines which will cause even more population displacement and premature death. Concurrently, humans are using up an incredible amount of the earth's raw materials – too much for them to be fully replenished; too much water, too many minerals, too much energy. Although extraction is not consistent across countries. If all humans behaved in a way consistent with the average American we would need almost 10 planets to resource the global population. It's not just humans that depend on their living environment for the energy and materials needed to sustain life – all organisms do. We all require plentiful access to clean air, clean water and nutritious food. Increases in life expectancy have resulted from improved access to these basic necessities. But lack of access to these basic necessities continues to be a significant cause of human mortality in the 21st century.

The flooding caused by heavy rainfall kills hundreds of people and displaces many more thousands around the world. The effects of which are compounded by the poor infrastructure in these low-income countries which is a breeding ground for infectious disease. Displacement due to ecological breakdown is not a new thing. It's been happening for thousands of years. Indeed, the development of agriculture and the establishment of settled societies was largely the result of climatic changes. But the difference today is that, we have the scientific knowledge that was absent back then. We know the causes of these environmental challenges and could prevent them or at least significantly reduce the human impact. However, there's not the political will to do so. The UK Government (and others) feel that economic growth is more important.

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What we have today is a linear economy. One that adopts a 'take-make-waste' approach to resources. In such a system, value is created by producing and selling more products. The end point of the system being waste – lots of it. The process looks something like this; we collect raw materials, transform them into products, sell them to consumers who use them for a short period before throwing them away and the products are never used again. Recently, there have been calls for a more circular economy – an economy that places waste reduction at the heart of everything it does. In such an economy, products and materials would be kept in use, waste and pollution would be designed out and natural systems would be regenerated.²

The Green New Deal – another plausible idea that's been tabled to tackle climate change could also have the added benefit of tackling other social and economic challenges like insecure work, income inequality, the housing crisis and

workforce automation. The core goal of the deal would be to reduce carbon emissions by transforming the way in which we generate our power – switching from electricity power to renewable and zero-emissions power, as well as making our agriculture, manufacturing, housing and transportation industries more energy-efficient. To achieve such a goal would require the creation of millions of secure, meaningful and well-paid jobs in clean energy as well as currently under resourced public sectors that support people live healthy lives. In sectors such as education, public transport and healthcare.

There are definitely merits in these calls for action to limit the planet being further impacted by excess waste and carbon emissions. But why aren't we discussing more fundamental questions? Questions like why people in high-income countries especially, keep buying and wasting more stuff? Or why the carbon footprint of most people is rising? The answer of course is related to economic growth. The system's constant drive and need for productivity and consumption to survive. GDP may well grow but what about the environmental impacts? Data from the World Bank's World Development Indicators database clearly show that as global GDP per capita has increased so too have global trends for air pollution.³ The wealthiest nation on earth, the United States, uses up a considerable proportion of the world's primary resources to supply a fraction of the world's population. If the United States achieved great results in terms of life expectancy, population health, peace and harmony, then it would be plausible to label the country as 'efficient'. But we know that this is not the case. Compared to other wealthy nations, the United States scores much worse on a range of social outcomes including life expectancy.

When most people hear the phrase 'we need to reduce the pace of economic growth', they see it as an attack on their living standards. They don't see it as a call to slow down. They don't see it as an opportunity to connect with others more often, to give a helping hand to others more often, to step back and take notice of what's going on around them more often, or to dedicate more time to learning new things or being physically active more often. All the things that enhance their health and wellbeing. Ironically, spending and consuming less requires time. Time to do the research around cheaper goods and services. Time to prepare and batch cook the fresh food. Time to take the slower forms of transport. We pay for convenience. Learning also requires time. We are heavily reliant on other people's expertise for pretty much all of our needs. Indeed, our supreme ability to share ideas and work together for the common good is partly the reason why the human species has been able to survive, thrive and evolve. To really understand a subject, and to discover the truth, you need time. Time for ideas to develop and time to explore dead ends. In a fast-paced society, most people simply don't have this time. Or perhaps, they prioritise their time in a different way. This is perhaps why people tend to bury their head in the sand and fail to question what's really happening around them or why they're feeling the way they do.

Take for example the issue of consuming fast food on a regular basis. In the context of health and wellbeing, the drawbacks to consuming fast food extend way beyond the poor nutritional quality of the food, and the sluggish lethargic feelings experienced afterwards. When you choose not to prepare your meals from

scratch and instead order a takeaway meal to be delivered to the house, you miss out on a range of health and wellbeing benefits. First, just think about the extra activity the body gets from the walking or cycling to the shops to purchase the fresh produce, and the extra stimulation the mind gets from taking notice on the way to and from the shops. Add to this the health benefits of the positive social interactions that can take place with other people along the way. When you return home with the shopping, there's also the food chopping and meal preparation to consider, as well as the process of cooking the food and the achievement of serving up the meal to be consumed. If this is a new meal, then there's the learning experience to consider too, all of which contribute to a sense of pleasure and achievement and positively influence our wellbeing.

In a similar sense, why don't we take the very simple steps to reduce our overall energy use – making simple changes to our daily routines that would contribute to combatting climate change? Easy steps like turning off the lights when they're not needed. Or layering up and turning down the central heating system. Or buying energy-efficient home appliances and insulating our homes effectively. These small steps don't just save the planet, they save us money too. So why is it that we often fail to do the obvious and make that rationale choice? I've come to realise that one reason has to do with people simply trying to get by. They're just doing their best to keep their head above water and survive. Indeed, there are lots of people that are suffering from what the sociologist Elise Boulding termed 'temporal exhaustion'. This temporal exhaustion leads to a total disregard for future generations. When somebody is continually mentally out of breath from dealing with the present, they've no energy left for imagining the future. But if the great challenges of the 21st century including climate change are to be fully tackled then individuals and politicians alike will need to ditch their short-term thinking and instant gratification habits.⁴

A rationale response to the obvious climate and environmental problems we are facing would be to alter our individual and collective behaviour. We would use up fewer raw materials and less energy. We would live and work closer together and travel shorter distances. We would place a higher priority on experiences rather than consuming and disposing of stuff. But despite the strong evidence regarding the required actions to overcome these current environmental challenges, most people and nations have failed in changing their ways. And a sizeable majority remains ignorant to the problem. Parallel to the public's apathy, oil companies and other carbon emitting industries are doing all they can to reduce the credibility of climate science. Firstly, they suggest the climate crisis is unfounded. And secondly, they suggest that changing our ways will damage our prosperity and result in hardship for us all. The simple fact of the matter is, if we want continual economic growth we're going to get continual environmental degradation. You can't have one without the other. When we produce more and consume more things there is inevitably going to be more air pollution, more noise pollution, more deforestation, more plastic waste, more biodiversity loss, more water pollution and more water scarcity.

Part of the reason we're making little progress in this particular sphere of life – especially in high-income countries, is because of the economic status game. Will

Storr explains in his book, *The Status Game*, how humans crave status and that human life is essentially made up of a series of status games.⁵ He suggests that to reach the top, humans use a combination of three methods: dominance, virtue or success. The societal debates we all experience and participate in to some extent or other are in part a status competition. Take the debate on climate change for example. There's a continual battle of status beliefs. The underpinning beliefs of capitalism and self-interest versus the underpinning beliefs of social justice and collectivism. For me, one key reason why limited progress is being made to cut carbon emissions and tackle climate change is because the success narrative – wealth and material consumption – is much stronger than the altruistic virtue narrative of social justice and morality. There's no doubt that we all contribute to climate change in some form or other. But naturally some people inflate the problem much more than others. That's partly because they're locked in a rival status game, one that their identity is closely attached to. It's who they are. They've developed a sacred belief that they ought to be behaving in this way.

In order to be accepted by the group they want to belong to, and in order to reach the top of that group, they need to be seen displaying the necessary symbols of success. Which in high-income countries are the symbols that denote economic success – income and wealth. However, what we have to remember is, within this overarching 'success' status game sits various other mini status games, such as the house game, the car game, the holiday game, the fashion game and the restaurant game. In addition to many others of course. And it's these luxury symbols that are conveyed to denote a person's economic prestige and their level of success. The thing is, they all have the potential to degrade the environment in some way or other. And collectively, they hamper efforts to cut carbon emissions and tackle climate change – a movement that's essentially an altruistic, virtue status game. Think of it like this. The bigger the house – the more furniture it has within it, and the more heating and electricity it uses up. The larger and more luxurious the car – the more gas it guzzles and the more pollution it emits into the atmosphere. What we ought to remember is that those that are most locked into the success status game are more likely to elevate material values over non-materialistic values. Take the avid luxury car driver as a for instance. They're playing a status game that rivals that of the avid cycling commuter. They're believing, behaving and living their life by completely conflicting sets of values. And because of this – they're choosing to claim status in differing ways.

The advertising propaganda that disseminates the symbols of the 'success' game – luxury cars, large well-decorated homes, exotic holidays and fine dining experiences – and conveys the message that the only value in life is to have more commodities, or live like that rich celebrity, only compels such beliefs and values. Just take advertising by the automotive industry as an example. It has been incredibly effective at capitalising on the success status game by playing on people's insecurities – encouraging them to fork out vast sums of money on luxury sports cars. The sort of cars that achieve accelerations of 0–60 miles per hour (mph) in under five seconds, and have the potential to reach speeds greater than 200 mph. But let's consider the rationality of such a purchase. In the United Kingdom, road users are restricted by law to travel at a maximum speed of 70 mph. Although, in most cases, they're restricted to

travelling at much lower speeds in and around the city. So, in this sense, it's baffling to think that a car that can reach such high speeds is ever going to benefit our lives in any meaningful or practical way. But for some people it does. It benefits them psychologically. Their car may well be a high polluter – but it represents their identity and their commitment to the rules and symbols of their status game – the car game – thereby allowing them to get along with (connect) and get ahead of (earn status) the people they most want to relate to.

What we do with our time and what we choose to spend our money on has impacts on our own health and happiness and on the planet's health too. Every day we make decisions that place value on our time, our health and the environment around us. So, in many ways, the economic system that so many of us are beginning to question and complain about will only be changeable by us changing our values, our behaviours and more specifically, our consumption patterns. We ought to be questioning and changing our own individual behaviour, by eating less meat, using less energy, cutting waste, walking more and driving less, reusing, repairing and buying second-hand products, recycling and buying locally for example. As consumers, we've become accustomed to purchasing goods that are cheap in price. And companies do all they can to meet this consumer need. This is one key reason why jobs are cut and outsourced to low-income countries, and why there is so many lorries on our roads and motorways. They're supplying goods from countries with the lowest wages. So, when we complain about high unemployment and congestion on our roads we should be cognisant of the fact that we play some part in what's happening around us. So, as well as pointing the finger at big food companies (and other companies) we ought to be pointing the finger at our consumption patterns too.

We have an economic system that promotes and endorses not what's right and wrong, and socially just, but what's productive and profitable. Money is how the score is kept. And when people adopt these values and these behaviours, the economic system prospers as a result. By understanding the limits of our economic system, we can make society not only healthier, and more socially just, but more sustainable too. Rather than more productivity and growth, it's health and wellbeing that need to be central to the economy. Our focus needs to be on promoting healthier products and services. More emphasis needs to be placed on the implementation of programmes that tackle the root cause of our public health problems. Tackling car dependency, for example, would benefit our health, society and the environment. It would solve several public health challenges. Fewer people would travel by car, and because of this, fewer people would be injured on the roads. There would be less noise pollution and less air pollution, which would reduce people's risk of developing respiratory diseases. We would see more people speaking to each other on our streets because of the increase in footfall, and there would be an improved sense of safety because there would be more *eyes on the street*. If ditching the car means a more active society, safer and healthier environments and stronger communities, then there is little to lose and much to gain. Motorised traffic blights our cities in the way open drains blighted Victorian towns. Getting cars off our roads could be our next big public health advance.

We've already covered some of the main drivers to the consumption choices people make and why people behave in the way they do; they strive to connect with others – to be accepted by and belong to a group, and to move up within the ranks of the group – to gain status within it. People's behaviours are in many ways driven by the game's rules and its symbols of success. Economic systems built on individualism and collectivism award their prizes of connection and status for very different values and behaviours. Economic success and financial power are what our capitalist economic system measures which drives how citizens (game players) are viewed. It's the key indicator of social status. Values such as individualism, productivity, consumption and financial success are promoted and rewarded. In an economic system built on collectivism, other values would be advocated and rewarded. In crude terms, the climate change activists are being assessed on metrics of virtue, whereas the non-climate change capitalists are being assessed on symbols of material success – the house, the car, the holidays. They're both locked in a status game, one that their identity is closely attached to. They're simply wanting to connect and move up. They believe that they ought to behave like this in order to connect and move up. They're just playing by the game's rules to acquire the symbols of success.

Our capitalist market economy is heavily focused upon the drive to acquire and the achievement of success. In order to get along and to get more ahead there's a need to be more competitive, more individualistic and more materialistic. The sort of things that go against collectivist values. If as Paul Lawrence and Nitin Nohria argue in their book, *Driven: How Human Nature Shapes Our Choices*,⁶ that humans have an innate drive to acquire and get ahead – then, the role of government in the 'success game' is even more essential if the goal really is to achieve a well-functioning, equitable and sustainable society. Rather than a society where there's no regulation at all – one that enables large profits to be accumulated in the hands of a few, and the economy to grow, and societal rewards to be distributed with increasing unfairness. We'll need Government to adopt a more prominent refereeing role, one that enforces greater taxation and regulation, for example to ensure more fairness and justice in the status game.

In order to illustrate this point, we're going to turn our attention in the next section to the past. History has shown time and time again that the environment shapes our health, yet great focus remains placed on lifestyle change alone, as a way to improve health and reduce health inequalities. Drawing upon examples from the Victorian era and the early 20th century, we will first investigate the population health advances that have been achieved through government regulation and welfare reform. Armed with this understanding, we will be in a much better place to examine the limits of our current (costly) short-term treatment approach to health improvement. The *sticking plaster* approach as I like to call it. At this point, it should be clearer to see how only a long-term population preventative approach – through government regulation and through improving the environments that surround us – will be effective at halting and turning around at scale, population health challenges such as the obesity and mental health crises. We can then devote our attention to investigating some of the measures needed to restore the balance between economic growth and public health to achieve a healthier, fairer and more sustainable society for all.

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Part 3

Making Better Use of History and Scientific Evidence

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Chapter 13

The Environment Shapes Our Health

You can't connect the dots looking forward, you can only connect them looking backwards.

Steve Jobs, Stanford Commencement Address, 2005

Geography may not be destiny. But it certainly influences how we ourselves shape our lives. Where we live shapes our education, which shapes our potential earnings as an adult, which has a huge bearing on our own health and the health of our children. Being born in a rich country benefits our health in two very important ways. Firstly, we're far more likely to survive at birth if we're born in a rich country. Secondly, being born in a rich country means that our income will be more than 70 times greater than the poorest countries.¹ The travel writer Lawrence Durrell captured the interrelationship between human beings and their environment in his 1969 book, *Spirit of Place*: 'My books are always about living in places, not just rushing through them. As we get to know Europe slowly, tasting the wines, cheeses and characters of different countries you begin to realise that the determinant of any culture is after all... the spirit of place'.²

The United Kingdom has benefitted greatly from its location on the world map. Europe's location gave birth to the Enlightenment and later the Industrial Revolution. Europe's climate lends itself well to cultivating crops. Europe's climate also makes it possible for people to work all year round. In the winter months temperatures do fall, but they remain warm enough for people to work outdoors, and cold enough to kill the circulating germs. Europe's good harvests led to an abundance of food which could be traded which created trading centres and towns, and enabled people to dedicate more of their time to developing new ideas and technology, rather than farming.

Compared to other parts of the world, Europe had few deserts, frozen waters, volcanoes or earthquakes, and it doesn't experience all that much flooding either. Europe's rivers are long, flat and navigable which make them ideal for transporting and trading goods. The rivers in Europe tend to flow into a variety of seas and coastlines to the North, the South, the East and the West. And they have an abundance of natural harbours which is not only good for trade but provides an ideal setting to establish a Naval force. In addition to its effect on agricultural productivity and the transportation of goods, people and ideas – geography also affects the prevalence of disease. Take infectious diseases for example, many of

which including malaria are endemic to the tropical and subtropical regions of the world. The existence of continual widespread disease and high infant mortality limits a nation's economic performance by significantly reducing worker productivity.³

When we think of the prosperity of nations varying enormously, it's easy to think of these differences solely in financial terms – due to having more or less money. However, while this of course has some merit, as we've just seen, there are a range of geographical factors that hold poor underdeveloped countries back. But rarely do we hear about their plight being underpinned by inequalities in things like agricultural technology (i.e. harvesting crops and domesticating animals), the presence of precarious landscapes (i.e. deserts, jungle, swamps, flooding), inadequate infrastructure and trade potential (i.e. education, communication, industry, navigable rivers, harbours, natural resources, raw materials, oil, trees, ship building, navy), as well as a high risk of disease (i.e. mosquitos and malaria). Although the plight of poor countries may well have a lot to do with their physical geography and lack of infrastructure, it's also a consequence of their political and economic institutions.⁴

Poor health does not strike randomly. Stand outside any doctor's surgery and you will witness the full effects of a harsh life. A life comprising a disproportionate share of physical and psychosocial stressors. If you want to live a long and healthy life – don't be poor. Good health stems from the home, we live in and our neighbourhood surroundings. Our health is inextricably linked with the foods we eat, the air we breathe and the safety of our streets. One of the strongest predictors of life expectancy is our home postcode. That's because much of what influences our health is contained within our immediate social and physical environment.

The Industrial Revolution led to many big upheavals in society. One of which was urbanisation. Urbanisation resulted from the desire for secure work and better wages. As more and more people moved to the towns, they gained in some ways – more food, better clothing, more goods to buy. But they also suffered greatly in the filthy slums of the cities and the harsh treatment endured through factory work. This rapid expansion of populations in cities created mass public health problems. There was widespread overcrowding in houses and the insanitary living conditions made towns a breeding ground for diseases like cholera, typhus and tuberculosis. Consequently, not only did living conditions deteriorate, life expectancy fell for a period of time too.

The social differentiation of neighbourhoods within cities results in a clustering of poor health in poor neighbourhoods. This issue is as true today as it was two centuries ago. Poor people are constrained to live in the least aesthetic areas – areas where wealthy people who have choices do not want to. Back in the 19th century, poor areas were the last to obtain vital public services – services such as clean water, sewage disposal, hospitals and transport infrastructure (e.g. paved roads). In the 19th century, the streets were awash with sewage and cities stank. The wealthy could afford to pay night soil men to remove waste in their local area, but they didn't want to pay extra taxes to improve the sanitary conditions in

poor areas as well. The result was rampant infectious disease that left thousands of people to die young, especially, the poor.

At the time, the laissez-faire governments believed it was not their responsibility to pass laws to improve the living conditions of the poor – laws that would improve housing and sanitation systems, and provide a clean water supply in poor areas. They believed that the poor's living conditions were their own responsibility – they thought poor people were to blame for the conditions in which they lived. Because only wealthy people had the vote at the time, it was their views and their views alone which influenced political decisions. But when Edwin Chadwick published his report on *The Sanitary Condition of the Labouring Population of Great Britain* in 1842⁵ illustrating just how bad living conditions were among the poor – perceptions towards the poor started to change for the better. Chadwick concluded that the poor's poor health was not solely due to their idleness, but was instead the result of the dirty air, polluted water, slum housing, inadequate sewage provision and poor diet that they had to endure. The findings of the report shocked public opinion – as I suppose they still would today – and Chadwick was fiercely criticised.

The government introduced the 'Public Health Act' in 1848 to encourage local authorities to improve conditions in their area. However, the law was only compulsory if the death rate exceeded 23/1,000, and many local authorities chose not to implement changes because of the increased cost to local ratepayers. It was not until 1875 that the law was enforced and became mandatory. Every town was appointed a medical officer, and structural improvements started to be implemented to ensure the provision of clean drinking water, and removal of all refuse from houses, streets and roads. It was likely the stench emitted from the raw sewage flowing through streets that drove politicians to eventually sanction the work to put sewage underground.

The enhancement of environmental health services which included things like the supply of clean water, the provision of sewers and the removal of refuse all played a considerable role in improving the health of the industrial town's inhabitants. The work of Joseph Bazalgette through the building of London Sewers did more to improve population health than any other public health policy during the 19th century. As a result of these environmental changes, mortality figures in towns improved markedly, and waterborne diseases such as cholera and typhoid gradually disappeared. However, while such improvements did suppress death rates – much still needed to be done while the working-class population were poorly fed and poorly housed.

There has been great debate as to whether standards of living improved or got worse during the Industrial Revolution, especially among the poorest in society. Negative changes in human stature among the poor suggest that inequalities in income and subsequent living standards did decline during this period. Another contributing factor to widening inequalities in mortality rates during this period is likely to be tuberculosis – an airborne disease linked with social disadvantage. The poor were overworked, they maintained a poor-quality diet, and lived in poorly ventilated, damp, dark and overcrowded housing – all of which increased their susceptibility to contracting all sorts of infectious diseases.

The environmental changes brought on by the sanitary movement were actioned because the wealthy understood that if they wanted to protect themselves from disease then they would need to do something about it – they would need to improve the living conditions of the poor working class – the source of the disease. But it wasn't until the beginning of the 20th century that the Liberal Government decided that the state had a key role to play in improving population health. Only then did attitudes towards the poor, and the living conditions of the poor really start to improve at scale. Some of the key pre-events leading up to the state playing a role in public health were the work of Charles Booth and Seebohm Rowntree. In 1889, Booth published a report documenting the large number (35%) of Londoners living in absolute poverty. A couple of years later in 1901, Rowntree reported that half of the population of York were living in poverty. The Boer War was taking place around the same time (1899–1902) and a third of those who put themselves forward to fight were rejected on health grounds.⁶

The social investigations of Charles Booth and Seebohm Rowntree at the beginning of the 20th century further highlighted that poverty and poor health are intricately connected through inadequate nutrition, poor housing and insanitary living conditions. These issues, they revealed, stem from both a lack of education and income. Because poor people didn't earn enough to secure a decent standard of living – they got sick more often and they died young. This growing understanding that people cannot pull themselves out of poverty by themselves, led to the introduction of various social welfare reforms. After the turn of the 20th century, there was a flurry of public health policies introduced by the Liberal Government aimed at improving the living conditions of the poor. Free school meals for children from poor families gave children one good meal per day (1906), school medical inspections enabled health visitors to keep an eye on children's health (1907), the Old-Age Pensions Act removed the fear of old age (1908) and the introduction of minimum wages in certain industries provided many poorer workers a living wage (1909).

The famous cartoon from 1909 illustrating David Lloyd George as the 'philanthropic highwayman' shows him taking money from the rich to help pay for old age pensions. In 1919, at the end of World War 1, the then Prime Minister David Lloyd George promised to create 'a land fit for heroes to live in' and announced a new Housing Act plan for councils to build 500,000 new homes within the following three years. While only 200,000 homes were completed within this time, many of those that were built provided families with electricity and running water and contained a bathroom, indoor toilet and private garden. Within the two decades that followed, over one million council houses were built across the United Kingdom.⁷ Improved public hygiene and housing and the arrival of cheap food from abroad were just some of the ways in which lives improved around the turn of the 20th century. New forms of self-respect and meaning were also established in this period. Urbanisation, for example, was linked with higher education and self-improvement, and the nature of a person's work – whether they were skilled or unskilled denoted respect and status.

Government failure to tackle these social determinants of health is holding back health improvement aims in many parts of the underdeveloped world. The

determinants of underdevelopment and poverty are broad and varied – spanning things such as geography, climate, over-population, wars and migration as well as inadequate education and healthcare systems. But on top of these challenges, the poor underdeveloped countries of today face the same challenges the sanitary reformers faced during the Victorian era – poor sanitation systems and a lack of access to clean water. These are the leading causes of poverty in developing countries, mainly because they cause premature mortality. Sustainable development in poor countries will not be met without the necessary sanitary education reforms and infrastructure improvements needed (i.e. pipes and pumps to deliver clean water, and toilets and sewage systems to reduce the need for open defecation), and while rich nations like the United Kingdom are cutting aid spending.

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Science also made great leaps forward in the 20th century. The discovery and subsequent application of antibiotics resulted in dramatic declines in death rates and serious ill health arising from infection. The Scottish scientist Alexander Fleming first discovered penicillin in 1928. The later development of vaccines against various infectious diseases including diphtheria, polio, measles, mumps and rubella resulted in a pioneering shift towards disease prevention. But it was Edward Jenner who actually pioneered prevention when he introduced vaccination against smallpox in 1796 to eradicate disease.⁸ The high-survivorship that rich nations like the United Kingdom and the United States have been able to achieve is largely down to their capital-intensive investments in public health and medicine. But while medicine is no doubt important to bettering health and longevity, it's important to recognise that medicine requires a lot of cash. Cash to cover the cost of the researchers and their laboratories. Cash to cover the cost of medical equipment. Cash to cover the cost of building new hospitals and then running them around the clock. The nurses, doctors, surgeons, pharmacists and domestic services staff – their salaries all add up. Most rich nations spend around 10% of their GDP on healthcare services. But will this investment be economically sustainable, and will it be enough as the global population ages and continues to grow?

Many of the great gains in health and wellbeing and improved longevity predate the arrival of scientific medicine. Such gains came about through improvements in nutrition which resulted from advances in agricultural productivity. As previously highlighted, they also came about through improvements in hygiene and sanitation which resulted in better living conditions.⁹ For example, it became apparent in the 18th century that both air and water carry danger which can lead to disease. The English epidemiologist John Snow concluded in 1848 that the disease – cholera – was transmitted by water which led sanitarians to separate systems for the delivery of water to houses and for the removal of sewage. The sanitation movement which led to water filtration and chlorination, and safe sewage disposal, as well as pest control and public education relating to personal and food hygiene, did more to reduce mortality rates than anything else in history. This is why the German physician, Rudolph Virchow (often referred to as the founder of social medicine) contended in the mid-19th century that: 'Medicine is a social science, and politics is nothing else but medicine on a large scale'.¹⁰

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If history has shown time and time again that our environment shapes our health, why is it that great focus is still placed on health education and lifestyle changes as a way to better people's health and reduce health inequalities? Of course, what people eat, how much they exercise, whether they smoke and how much alcohol they drink have a bearing on their health. But what drives these lifestyle behaviours, and matters much more is the circumstances in which people are born, live, work and age – the 'social determinants' of health.

The living standards of all people including the poorest in society have continued to rise throughout the past century. In high-income countries like the United Kingdom you will search far and wide to find somebody using a privy for a toilet or using a tin bath to bathe. Pretty much all households have a toilet indoors and a bath or shower to get washed in. What's more, very few households lack the essential customary consumer goods of our time – a fridge and freezer, a washing machine, a television and a mobile telephone. Compare this way of life to that of 19th century England. In 1848, for example, when 300,000 impoverished Irish immigrants descended on Liverpool following the Irish potato famine – they were forced into living in dark, damp, cramped cellars. Cellars which had earth floors and no ventilation or sanitation. As many as 16 people would live in one room.¹¹ Yet, while the poor of today may have better living conditions and more material possessions than the Victorian era, they share with the poor of the past a lack of control over their own lives and a fundamental inability to fully participate in all that society has to offer. As we explored in previous chapters, these psychological factors are key drivers to chronic stress and poor health.

The fact that the environment shapes people's lives and their health has been known for an extremely long time. The belief and indeed understanding in the balance between man and his surroundings, and the causal relations between environmental factors and disease is most clearly evident in the Hippocratic book, *On Airs, Waters and Places*,¹² written around the fifth century BC. In 1842, Edwin Chadwick's *Report on the Sanitary Condition of the Labouring Population of Great Britain*, highlighted how the ill health of the poor was not the result of their idleness but of their terrible living conditions. In his semi-autobiographical novel, *The Ragged Trousered Philanthropists*,¹³ written over a century ago, Robert Tressell explained how the poor health of the hero of the book, impoverished painter and decorator Frank Owen, could not be solved by medicine alone. It was social medicine that he needed,

The medicine they prescribed [Frank Owen] and which he had to buy did him no good, for the truth was that it was not medicine that he – like thousands of others – needed, but proper conditions of life and proper food.

And over 70 years ago, Sir William Beveridge, the architect of the British welfare state, called for action to tackle the root causes of poor health: poverty, low education, unemployment, poor housing and other public health issues, such as malnutrition and inadequate healthcare. There is no denying that great progress has been made since the work of Chadwick, Tressell and Beveridge. Far

fewer people in the United Kingdom experience the absolute poverty, squalor and overcrowding they described. But the fact remains: the profound health inequalities between rich and poor that have been highlighted throughout the past century – most notably in the Black Report,¹⁴ which was published over 40 years ago – remain today.

In 2020, a baby boy born in wealthy Kensington, London, can expect to live over 10 years longer – and nearly 20 more years in good health – than a baby boy born in relatively deprived Kensington, Liverpool. Today, a proportion of children in the United Kingdom still live in absolute poverty. They lack sufficient nutritious food and their families rely on food charity. They don't have a stable, decent home and are exposed to damp, excess cold and dangerous levels of carbon monoxide. The proportion of people sleeping rough is also rising. Beveridge saw employment as the solution to poverty, yet the number of people in in-work poverty is close to 4 million, and a growing number of jobs are part time, low paid or temporary.

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The solution to poor health is to prevent it from happening in the first place. But rather than taking a preventative approach and fostering healthy lives through bettering the environments and conditions in which people live, national health services, such as the UK National Health Service (NHS), are primarily set up to treat the symptoms of poor health. Essentially, the United Kingdom has a National Disease Service. It's an incredibly good one, but the primary drive should be to prevent these expensive-to-treat chronic health conditions arising in the first place. Unfortunately, the big loss in public-health grant funding for local councils in the United Kingdom in recent years is testament to the Government's continued focus on treatment. The public health education campaigns that do exist encourage people to move more, eat healthier and limit alcohol consumption. They disregard underlying economic factors and neglect the fact that many people simply don't have the same opportunities or resources to be as healthy as others do. The economic basis of poor health is all too relevant today given the increasing return of diseases of poverty and the emergence of devastating new epidemics such as COVID-19.

The reality is that people's health choices are heavily influenced by the conditions in which they live. Whether they have a job that's safe, secure and decently paid, and one that gives them control, flexibility and meaning. Whether they're able to afford a well-heated, well-lit, stable home in a safe area. Whether they have the money, time and resources to buy and cook healthy food and have an active lifestyle. Whether they have a walkable community that provides access to green space and essential services. Lifestyle is also important for health, but lifestyle behaviours have causes and these causes have causes, too. It's these wider determinants of health that affect our health most. That the most deprived areas experience almost 10 times as many child pedestrian fatalities than the least deprived areas is a fitting example of how – still to this day – where you live can kill you.

Policies that positively improve the social and economic conditions in which people live, learn, work and play improve health for large numbers of people in

ways that can be sustained over time. If we know that the social and economic environment shapes our health so much, why is so little being done to build on the gains made this past century?¹⁵ If we know that physical neighbourhood attributes contribute greatly to our health – why are we not investing greatly in our physical environment? Ensuring access to green spaces and community and recreational settings. Improving the walkability of our neighbourhoods. Ensuring wide sidewalks so that people can walk along the road safely. Ensuring bicycle lanes are present in neighbourhoods so that people can cycle along the road safely. Improving the design and aesthetic elements of our communities – good lighting, trees and benches for people to use. Removing exposure to toxic substances and other physical hazards. Ensuring that there are essential shops and services accessible to us all by foot. Ensuring that everyone has nearby access to job opportunities as well as health, education and transportation services. We ought to be making strides towards improving these physical determinants of health.

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Violence comes in various forms. Violence can either be direct through homicide and war. Or it can be indirect through inequality, poverty, hunger and disease. These latter forms of violence kill at a slower rate and are much less visible than direct forms of violence. Yet the overall result is the same. Poverty limits a person's ability to escape premature death. In *The Condition of the Working Class in England*, Friedrich Engels coined the term 'social murder',¹⁶ when describing the conditions created by the wealthy elite in the 19th century which inevitably led to the early and 'unnatural' death among the poorest classes in society. George Orwell echoed similar themes when describing the shocking living conditions of England's industrial north in *The Road to Wigan Pier*.¹⁷ Dwellings were poorly built and kept in poor condition. They were damp, cold, poorly ventilated and extremely crowded with multiple families occupying separate rooms. While only a fool would suggest that the living conditions of the Victorian era persist in England today, 'social murder' does. Indeed, the persistent lack of political attention applied to tackling the social determinants of health can indeed be considered *social murder*.

The close link between the environment and health could not have been any more apparent than during the COVID-19 crisis. During the height of the pandemic, significantly higher infection rates were recorded among socially disadvantaged populations such as those living in poverty. Liverpool a highly deprived city in the North West of England experienced some of the highest levels of COVID-19 infections and deaths in the country. But when the high infection rates in Liverpool were shared in the news, the public heard nothing about why infection rates were higher among poor communities. And why poor people faced an increased risk of catching COVID-19? The reality is, poor people don't have the luxury of working from home. They're far more likely to have a job that's public facing, and their lack of job security means that if they don't go to work – they don't get paid. They are also at an increased risk of transmission due to living in more densely populated communities, and overcrowded multi-occupancy households thereby limiting their ability to self-isolate if they need to. As well as an increased risk of exposure and transmission to the virus, poor people are

more likely (than their wealthier counterparts) to have pre-existing health conditions – obesity, hypertension, diabetes, asthma, chronic obstructive pulmonary disease – owing to a long-term exposure to adverse living and working conditions and chronic stress. So, when poor people did contract the COVID-19 virus, it's no wonder that they were less well equipped to be able to weather the storm.¹⁸

There is no doubt that policies have a far greater impact on who lives and who dies than any pharmaceutical drug, health insurance or surgical treatment. The government policies of today are nowhere near as harsh as the poor laws of the 1800s. But the parallels are still there see.¹⁹ The government make decisions which imply the value of human life all of the time. Every day in fact. Policies of austerity are a fitting example. Austerity is one big social experiment. Policies like this heavily determine which people in society will be exposed to the biggest health risks. In their book, *The Body Economic: Why Austerity Kills*, David Stuckler and Sanjay Basu detail the human cost of austerity.²⁰ They show how austerity – reducing social spending and increasing taxation impact health in two key ways. The first they call the 'social risk effect' which relates to the indirect health effects felt through increasing unemployment, poverty, homelessness and other socio-economic risk factors. The second mechanism, termed the 'healthcare effect' has a more direct effect on health. Health effects are felt through the budgetary cuts to healthcare services which reduce health coverage and restricts access to care.

In science and academic research, randomised controlled trials are used to evaluate the benefits and harms of health service programmes and medical treatments. Prior to any medical trial commencing an ethical review board is expected to approve the proposed programme of research or treatment to ensure that what's being proposed will 'do no harm' to those taking part. If government policies like austerity were rigorously reviewed in a similar way to randomised controlled trials – there is no doubt that ethical review boards would have recommended that they were discontinued long ago. In fact, they wouldn't have even been approved to implement them in the first place. What amazes me is the fact that a majority of the public – accept that the government – specifically departments of the government; medicine and public health, have a key role to play in helping people prevent and overcome the effects of illnesses caused by novel communicable viruses like influenza, varicella (cause chickenpox), measles, mumps and meningitis. But the public, not all of the public, but a fair proportion of the public, think very differently when the causes of illness are the commercial determinants of health. Policies that restrict the promotion, and thus, consumption of tobacco, alcohol and unhealthy convenience foods and disincentivise the use of sedentary modes of transport (i.e. private car use) – the things that are detrimental to our health – aren't quite as palatable.

Companies exert influence on the population's health in four defining ways.²¹ First, they market unhealthy commodities which enhance the desirability and acceptability of unhealthy commodities. Second, they lobby against government policies and public health interventions aimed at protecting the population's health such as plain packaging on cigarettes and a minimum drinking age for alcohol. Thirdly, their corporate social responsibility strategies including

encouraging consumers to exercise more often deflects attention away from the adverse health effects of alcohol, smoking cigarettes and eating foods high in salt, sugar and saturated fat. And finally, their extensive supply chains help to amplify company influence around the globe. Intuitively, as more and more people are exposed to more and more consumption choices, the breadth and depth of corporate influence is expanded.

There are broad ranging views as to what an appropriate level of government intervention should be to protect the public's health. Tension exists between individual freedom and the protection of the most vulnerable members of society. In broad terms, on one side of the argument you have the minimalists. The people that are hostile to state intervention within the personal realm and advocate for legislative measures to uphold our individual freedom. Then, on the other side of the argument are the interventionists. The people who advocate for government intervention to influence resource allocation and market mechanisms including regulations, taxes, subsidies and monetary and fiscal policy. The kind of people that are highly in favour of social justice – like Jeremy Bentham – the advocate of utilitarian ethics. The aim of which is to improve society as a whole – or put another way – achieving the greatest good for the greatest number.

Governments imply how much human life is worth in many subtle ways. The amount of government funding applied to healthcare and health research for example. The amount of funding applied to education, and the amount of time devoted to physical exercise in the national curriculum. The amount of money applied to free school meals. The amount of restriction placed on advertisements promoting harmful substances like tobacco, alcohol and unhealthy convenience foods. The amount of funding applied to green spaces, public parks and leisure facilities. The amount of funding applied to building roads and road safety and traffic calming measures like speed cameras, restricted speed areas and road markings for cyclists and pedestrians. Every time these economic decisions are made, assumptions are made about the price of human life.

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The Bengal Famine of 1770, one of the greatest catastrophes in modern times, is a fitting example of when profit has taken precedent over human life. Ten million people, a third of the Bengal population, is thought to have died as a consequence. A combination of drought, war and exploitative tax revenue policies of the East India Company crippled the economic resources of the rural population which led to great famine among the people of Bengal. A century later, the Irish potato famine resulted in one million deaths either from starvation or disease, and by 1855, a further 1.5 million people had been forced to emigrate. Between 1921 and 1922, nine million people died in the Soviet Union when the Lenin Government failed to act quick enough to the drought that led to mass crop failures. And between 1958 and 1962, over 10 million people died across China as a result of Mao Zedong's attempt to cut food imports and increase grain production and exports by modernising the agricultural industry.^{22–24}

But then, there are other times in history when the effects of food shortages have not been so catastrophic for the population. The Dutch hunger winter which occurred near the end of World War 2 is a fitting example of a famine averted. In

response to Germany seizing the country's food, the Dutch leaders took it upon themselves to ration the short remaining food supply to adults and children. The period of history demonstrates that provided resources are divided up and distributed equitably, serious sustained food shortages don't necessarily result in famine and high mortality. Yes, overall mortality, tuberculosis and malnutrition rates did rise, and the poor were impacted most – but overall, the Dutch survived a half year long famine with few long-term effects.

During the COVID-19 pandemic, there were several claims by politicians that we were 'all in it together'.²⁵ But it became blatantly obvious that we were not all in it together.²⁶ Premature death, poor health and a reduced quality of life have always been more common in deprived communities. The COVID-19 pandemic starkly exposed how these existing health inequalities are strongly associated with an increased risk of falling ill with an infectious disease like COVID-19. As the long-term effects of COVID-19 were slowing starting to materialise the UK Government was calling for a levelling up agenda. But its first thought was to end the £20 increase to universal credit payments which was introduced to support low-income households manage the extra adversity brought by the pandemic.

Evidence shows that a country's ratio of health and social services spending is closely linked to a range of important health outcomes including life expectancy and infant mortality.^{27,28} However, while genetics and quality healthcare do play some role, it's the social and built environmental factors, and resulting lifestyle behaviours which have a far greater impact on the health of a population.²⁹ Meaningful change in our world's health may come less from investing in medical care than in addressing the social determinants of health. We all benefit from ensuring diseases like COVID-19 are eradicated. Hopefully a positive outcome to come out of the COVID-19 pandemic is the importance of co-operation and the need to fund global health and support the most vulnerable in society.

We still invest heavily in research and development in areas that don't necessarily require a larger evidence base. Could we not use the money allocated to these types of research and development projects in wealthy nations to solve current global challenges? Our focus should be on sharing out the available resources more equitably – sharing them with the 1 billion people that currently live on less than \$1 each day. But to achieve such a goal would require us adopting a different kind of economics and in doing so adopting alternative measures to social progress.

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Chapter 14

Thinking Long Term

The paradox of short-term thinking is that it often ends up being more damaging and more expensive than longer-term thinking.

Roger Spitz, *The Definitive Guide to Thriving on Disruption*, 2022

Prevention requires time, time to engage in health-enhancing leisure activities, time to prepare and cook good quality nutritious food, time for good quality sleep, time to meet friends and family.¹ In a supercharged hectic world and in capitalist nations – especially where individualism is promoted and is rife – instant gratification and quick fixes make up the defining narrative. Do it now. Do it now. Do it now. Productivity and rapidity are central facets of modern life in these places.² We would sooner text a friend than talk to them over the phone. We would sooner pay for goods and services on the credit card – indebting ourselves – instead of saving up the cash first. We would sooner pay more money for a fast boarding check-in at the airport even though the plane is not leaving the runway until all passengers have boarded the plane. We would sooner take weight loss tablets instead of eating well and moving more often. We would sooner warm up a processed rubbery burger in the microwave in 2 minutes instead of boiling fresh vegetables on the stove to make soup. We would sooner engage in a quick 10-minute high-intensity interval training session at the gym or at home instead of taking a leisurely walk in the park. Even when it comes to drinking alcohol socially, it tends to be about getting intoxicated sooner rather than later, although drinking behaviours do vary across cultures.

There is no doubt that culture affects our perception of health and illness, our attitudes and beliefs about the causes of illness and our approaches to improving health. The more thriving a country's economy is the faster its tempo. Time in these high tempo places is sold for money. Ironically, the newly developed technologies that increase productivity do not provide society with more leisure time; they just lead to people doing different types of jobs and work.³ The new technologies may reduce some kinds of work, but they increase other kinds of work too – causing great disruption along the way. The irony is the more time-saving devices that are available in society, the more time pressed people feel. The extra time that is saved from using the time-saving devices is not used for relaxation but rather used to do more things.

As we live longer and spend more years in good health, this presents us with an opportunity to trade off paid work for leisure.⁴ However, while this would have benefits for the individual, slowing down does not count as a gain in our current economic system. In fact, slowing down, resting and recuperating are the antithesis of capitalism. If we are to build a healthy, socially just and environmentally sound future for ourselves, we need a new kind of economics. The continual focus on growing the economy means businesses produce more (than society needs); therefore, households need to consume more, and in order to consume more, they need to work more. There is no let-up to the production and consumption.

The main societal institutions including health and medicine serve the aims – and indeed conform to the ideas, values and goals of the economic system. We have a health system that favours patching over the symptoms rather than tackling the underpinning causal issues. This ideology serves the interests of capitalism. Selling persons unhealthy foods and then fad diets or medical cures to combat weight gain is way more lucrative than investing in preventative health-care. Counter to logic and despite their marginal effect, there remains a strong belief that health services and intervention programmes are more important and more effective than they actually are. A person's economic and social circumstances and their built environment have a far greater influence on their long-term health and chances of survival than any kind of medical service or treatment they receive. This is why the biggest contributor to tackling infectious disease has been through improvements in things such as housing, clean water and sanitation systems and working conditions. These types of widespread structural measures that reach and benefit the whole population are also the most effective way to tackle non-communicable diseases – diseases like obesity.

However, the public rhetoric around improving people's health and reducing health inequalities still places overwhelming emphasis on tackling just the proximal factors to ill health (including obesity) such as unhealthy lifestyles (i.e. poor diet, lack of exercise). These causes of ill health are given much more attention and regard than the medial and distal factors to ill health – the 'causes of the causes' – which are known as the social determinants of health. These social determinants are influenced by local, national and international distribution of power and resources; they influence not only people's lifestyle and health directly but also indirectly through stress and the physical, social and personal resources (i.e. income, education, housing, transport) people have available to them to meet their basic needs and achieve their life goals.

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One of the main debates and sticking points in medicine and healthcare relates to whether the scarce resources should be allocated to individuals or society in general. Should we prioritise treating sick people or dedicate more resources to preventing ill health in the first place? The fact that only around 5% of the UK National Health Service (NHS) budget is spent on preventive activity is testament to the priority and value the Government places on treatment rather than prevention,⁵ even though there is a strong scientific evidence base showing that much of ill health can be prevented, and prevention is crucial to improving the health of the nation.⁶

For a long time, targeted behavioural intervention programmes have been seen as the go to, to combat many social ills like obesity. Their aim is to educate overweight people about the risks associated with being overweight and to support them to change their activity and eating behaviours. Essentially, they are aimed at coaching them into better health habits. There are lots of problems with this approach though. Firstly, what happens after the intervention has come to an end, once the support is taken away and the participants return to the living environments that contributed to their weight gain in the first place? There will of course be some people that benefit from programmes like these. They may lose weight during the programme and possess the motivation to maintain this weight loss in the long term. But only a handful or so. These maintainers are incredibly rare according to the available evidence. They are the tail end of the normal distribution. What we tend to see is a revolving door. People that participate in programmes like these do well during the programme only to gain weight once the support mechanisms are removed.

Another thing to bear in mind is that even when programme participants do successfully change their high-risk behaviours (e.g. inactivity and unhealthy diet) and improve their health, new people continue to enter the high-risk population to take their place. So, even when high-risk people are supported to lower their risk, limited change happens to the overall distribution of poor health in the population. Why so? Because the intervention programme has done nothing to influence those societal factors that contributed to the problem (i.e. poor health) in the first place. While the individual-based approach may occasionally have some benefit for the targeted individuals, it only has a limited effect at the population level – because it does not alter the underlying causes of poor health. Such an approach also requires continuous and expensive screening processes to identify the high-risk individuals. The population-wide approach seeks to promote healthy behaviour to achieve an overall lowering of the health risk in the entire population. The potential gains are comparatively extensive, but the effect on each participating individual may not be very significant.

If we use obesity again as an example; often, people living with obesity are seen as a separate entity to the population in which they are living. In fact, people living with obesity are the tail end of a population's distribution. The proportion of people living with obesity in a country is a function of the average body mass index (BMI) of that country. To understand the real determinants of obesity prevalence, you have to study the characteristics of populations rather than the characteristics of individuals. The appropriate question to ask is: why do some countries have a higher prevalence of obesity than others? Take the United Kingdom and Namibia, for example. The overall variation of BMI in the United Kingdom and Namibia includes the effects of genetic variation. However, the way in which the whole population BMI distribution is shifted up or down in different countries reflects differences in the country's way of life. Differences in obesity rates between the United Kingdom and Namibia reflect differences in the way of life between each of these two countries.

Because health is socially determined, individual health can only be changed by changing societal norms.^{7,8} For a country like the United Kingdom to reduce

the proportion of people living with obesity, it would have to reduce the whole population's exposure to the things in society that contribute to weight gain. To reduce the prevalence of obesity in the United Kingdom, we would need a range of measures to bring down the energy intake and increase the energy expenditure of most people in society. To reduce obesity rates in the United Kingdom, we would all need to eat more healthily and move more often. It cannot be emphasised enough – obesity is not solely a personal shortcoming – obesity is largely an environmental problem.^{9,10} The reason why dieting tends not to work in the long run for most people is because eating and moving patterns are heavily governed by the food and transportation environments, and individual diets leave both of these underpinning drivers untouched. When people diet, society remains car dependent and the commercial determinants of obesity, the production, supply, marketing and sale of energy dense foods that are high in fat, sugar and salt stay the same.

Food manufacturers have conducted experiment after experiment over the years to figure out which combination of ingredients appeal to our taste buds best. We are programmed to like foods rich in sugar and salt because in the past, these tended to be scarce. When food was scarce, we took what we could, when we could. Companies pack in lots of salt and sugar in foods to enhance the taste of them, and trans fats are added to enhance their shelf life. Lots of people consume heavily processed, highly calorific foods because they are cheap and taste nice. Trans fats are banned in some countries but not in the United Kingdom. It is wrong to pin all of the blame on the big food companies because it is governments that are responsible for allowing food companies to fatten people up. What you have to remember is that food companies are operating in an incredibly competitive market. If their food and beverage products do not appeal to the masses, then you can guess what will happen – yes, their competitors will profit, and they will go to the wall.

Governments to a large extent set the incentives for the public's behaviour. Regulation is the only way to solve this externality. Regulations on food standards will ensure that all companies play by the rules. The Government can advise people to eat healthily as much as they want but without tackling the root causes; changing the incentives through regulation, there is little hope of the masses switching to healthier foods. We are heavily reliant on governments acting on and tackling the social as well as the environmental problems we face.

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People gain weight when they eat too many calories or do not expend enough of them. But this is only part of the story. As we have discussed, there are many social factors that influence the number of calories people consume and the number they expend. Food choices, for example, are heavily determined by factors such as geography, climate, culture, economics (i.e. price and affordability) and social class (i.e. tastes and distinction). In our consumer-driven world, overconsumption is legitimised and – to a large extent – promoted. The food industry expends a lot of resources creating more attractive and more palatable food properties and uses clever and sophisticated marketing strategies to promote them. But, as we have discussed the food industry cannot be held fully responsible

for the obesity epidemic. The food industry is operating within a wider political environment that demands continual economic growth. The causal problem of obesity lies with our wider political and economic environment, a system that demands continual economic growth to achieve profit, wealth and employment opportunities.

Overconsumption is not limited to food – people are encouraged to buy too much of everything. That is because almost all companies are out to make a profit. The automobile industry designs, produces and markets comfortable cars with built-in entertainment systems, satellite navigation systems and heated seats that seduce people to drive rather than walk, cycle or take public transport. The visual media and tech industries invest heavily in designing, producing and marketing screen technologies and entertainment devices such as televisions and console games designed to keep people seated rather than active. And these various platforms are used to advertise and market all of the other products and services available to us – often ones that we do not need and do not do us much good. However, what they do – is increase the profit margins of the company and in doing so boost gross domestic product (GDP). Behaviour change programmes underpinned by motivation and self-determination are simply not strong enough to resist the forces of our economic system. In most cases, people know what they need to do to limit their weight gain (move more, sit less and eat healthily), but they struggle to translate their intention into action. Such a struggle can only be lessened – at scale – by redrafting the rules and value systems that govern modern life – from the economy and the workplace to urban design and healthcare.

There is no doubt that obesity shortens life expectancy.¹¹ The number of people that are severely or morbidly obese is rising rapidly. Bariatric surgery is considered an effective treatment for improving the health and quality of life of people living with severe obesity. Women account for around two-thirds of weight loss surgeries although the gender imbalance is reducing. Weight loss surgery has been shown to reduce the onset of type 2 diabetes and increase life expectancy among morbidly obese patients.¹² Almost 4 million people in England are eligible for weight loss surgery, but according to the most recent figures, only 6,627 people underwent weight loss surgery in the period 2017–18.¹³ One argument for weight loss surgery relates to the savings that could be made on NHS prescriptions, daily blood glucose monitoring and disability benefits once patients return to work.¹⁴ But while weight loss surgery appears to be a clinically effective and cost-effective intervention for obese people compared with non-surgical approaches¹⁵ – shouldn't the primary focus be on preventing people from reaching a clinically obese level in the first place?

The favoured interventionist treatment approach also overlooks why there is a social gradient to obesity, and why people with obesity have either been eating too many calories, sitting too often or not moving enough. It overlooks things such as how these unhealthy behaviours give comfort and social status to that person. And how psychological factors such as stress, depression, anxiety and comfort eating play a role in weight gain. The reality is behaviour change is much easier when a person is in control of their life – when they have a good emotional state. The main focus here has been inactivity, unhealthy eating and resulting obesity.

But the same can be said about other public health challenges like smoking, alcoholism and substance misuse.

These behaviours like obesity are socially patterned. The poorest in society are at highest risk of experiencing drug use disorders including smoking and alcohol dependency.¹⁶ Take Jimmy, for example. He is unemployed. He lives in a deprived community that has a high rate of unemployment on top of widespread alcohol and drug addiction. Jimmy identifies that he has a problem with alcohol and is enrolled into a 12-week alcohol rehabilitation programme. Jimmy manages to remain alcohol free during the programme when he is living in a supportive environment surrounded by like-minded people exhibiting shared goals. But once the programme is complete, Jimmy returns back to the same community and living conditions that contributed to his drinking problem in the first place. Surrounded by these same exposures – the unemployment, the insecurity and the marginalisation due to his financial circumstances – he is back drinking regularly in no time.

In focusing all of our attention on those at risk of poor health and treating those at risk of poor health, it does little to the distribution of health across society. Indeed, we see this in many spheres of social life. But by taking a preventive approach and shifting the social norm in a positive healthy direction as with other public health challenges such as smoking – we may more likely see a positive population level change in health behaviours and health.¹⁷

When I worked at a leisure centre gym some time ago, I used to witness the same thing year on year. Once the third week in January arrived – the point after Christmas when most families had consumed all of the unhealthy food and beverage supplies in their fridge, freezer and cupboards, you would witness a huge influx of new gym members at the leisure centre. The gym inductions were relentless – back to back in some cases. Often the faces were familiar. In many cases, they had completed a gym induction before. If not at our gym, you could pretty much guarantee that they had completed one elsewhere. Most of them had a decent idea of how the gym equipment worked, and this rattled the cage of quite a few of them. Given that so many of the new gym members had not only completed a gym induction before, but had either held a gym membership at our leisure centre or another one in the past but had since quit, is testament to the difficulty many people have adhering to their exercise goals and maintaining a physically active lifestyle.

Anyhow, my point is that you would see these same faces most days for about a month. Then they would simply disappear. They would run out of steam. They had taken on too much too soon. They had run before they could walk. It was not just January though when gym visits were through the roof. The June and July months were pretty hectic too, with lots of customers keen to burn off a few extra pounds in a bid to achieve that perfect beach body for their annual trip abroad. These people were fully immersed in what I call: the yoyo lifestyle. One month they are on track. The next they are not. The next month they are back on track. The next they're not.

Weight gain does not happen overnight. It is a gradual process over days, months, weeks and even years. Gaining weight is easily done. If you gain one pound of weight every month for one year – that is an overall weight gain of almost one stone. But while it is easy to put the weight on, it is certainly not easy getting the weight back off and keeping it off. That is because changing our physical activity and eating behaviour requires different kinds of motivation. Physical activity requires energisation. It requires us to create an impulse and respond to cues – going for that early morning run when the alarm clock rings. In contrast, healthy eating requires a great deal of self-control. It requires us to resist those impulses and cravings, to avoid purchasing and consuming certain foods by not responding to the cues around us. When it comes to attempts to lose weight, most people tend to bite off too much too soon. People start with good intentions, but few people succeed in maintaining the behaviour change required for weight loss and weight maintenance.

Take Jane, for example. She is 42 years of age. Her diet is not all that healthy; she does not exercise much, and she likes a couple of glasses of wine each night – especially on Fridays following a tough week in the office. It is January and after a binge over the Christmas break, Jane has decided to knock the drinking on the head in support of dry January. She has also decided that she is going to eat healthier and walk more often too. The thing is while eating a little healthier and moving a little more may be two small achievable changes for the healthy individual, for Jane – it is a total lifestyle transportation that is needed. It shall require ditching the takeaway meals, preparing her gym bag and her lunch the night before work, scrapping the snacking before bedtime, getting to sleep on time, having breakfast at home rather than the bacon sandwich from Greggs on the way to work, ditching the cake in the office, eating her prepared lunch meal at work and visiting the gym after a tough day at work. And then sustaining this new healthy lifestyle. No wonder Jane is struggling to keep things up two weeks down the line.

A key way to build and maintain healthy habits is to focus on creating a new ‘healthy’ identity first. Forging a new identity is key to behaviour change because our behaviours mirror our identity. When we change our behaviour and sustain it in the long run – what we actually do is change our identity. If our goal is to lose weight and maintain it over time – then it pays to focus our energy on changing our identity – rather than simply setting performance or appearance-based goals (e.g. losing a specific amount of weight). What we really need to do is live healthily, for example, by striving to be that person that prioritises their workout and moves about wherever and whenever they can (i.e. identity-based goal). We prove to ourselves that we are exhibiting this (healthy) identity by walking daily, exercising three times weekly or ditching the car when we can.¹⁸

We develop habits because our brain likes to save effort and conserve energy. There is a three-step process that underpins our habits. First off is the cue which tells our brain which habit to use. Once the correct habit has been selected by our brain, we implement the most appropriate physical, psychological or emotional routine which results in some sort of reward. Through repetition and practice, the three-step process becomes automatic and cemented in our psyche.¹⁹ Once a habit

is born, the brain is able to stop working so hard and is able to direct its attention to other tasks. Unfortunately, the brain is unable to differentiate between good and bad habits. To the brain, they are considered the same thing. The bad habits we develop lay dormant ready and waiting for the right cues and rewards to come along.

This underpinning psychology helps to explain why so many people around the world find it incredibly hard to change their physical activity and eating habits. When we develop an early morning routine of hitting the snooze button to lay in bed for an extra half hour, instead of going for that early morning run. Or when we use the McDonald's drive through on our way home from work – these behaviour patterns remain in our head. However, what is important to remember is that we can take control over the three-step habit loop. By tinkering with the second step of the cycle – creating new routines, it is very possible to force those bad tendencies into the background.

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The famous Stanford marshmallow experiments conducted by Professor Walter Mischel in the 1960s on kindergarten children later revealed the power of delayed gratification. In Mischel's experiments, the child was first taken to a private room and asked to sit down on a chair and a marshmallow was placed on the table in front of them. Mischel told the child that he was going to leave the room for a short while, and when he returned, he would give them a second marshmallow if they had not eaten the one on the table while he was gone. But if they did decide to eat the marshmallow on the table before Mischel returned, then they would not be given a second marshmallow. While the initial research findings made for good humour – with some children leaping to eat the first marshmallow as soon as Mischel closed the door – it was not until the follow-up studies were conducted that the most surprising and enlightening findings were discovered. In the follow-up studies, the researchers discovered that the children that were willing to delay gratification (waited to receive the second marshmallow) went on to achieve higher SAT scores at school, they developed better social skills, they reported lower levels of substance abuse and obesity, and generally higher scores in a range of other life measures, including a better response to stress.^{20,21} The series of longitudinal experiments has proved that the ability to delay gratification at a young age is critical for success in health, work and life in general.

The work of Mischel has shown that by harnessing the power of executive function and self-control strategies such as self-monitoring and journaling, we can improve our ability to not only resist impulses but achieve our short- and long-term goals too. In today's society, you do not have to look very far to observe short-term thinking and an inability to delay gratification. From buying now on a credit card and facing the debt consequences further down the line to preparing a sandwich the night before work to eliminate the need to purchase unhealthy convenience food the following day. The good news is that these cognitive set of skills are teachable, especially early in life. But as well as possessing these cognitive control skills, we also need the motivation to do it – we have to want to change. But this is where education comes in. Surely, aren't these

the types of skills and qualities that we should be teaching as part of the national curriculum?

Change at a societal level takes time. There is a theory to suggest that it takes around 30 years for a paradigm shift in a society's values, beliefs and behaviours. As new people are born and the elderly die off, there is an opportunity for a transition in society's values. This is why educating the youth of today with meaningful values is so vitally important if we are to achieve a paradigm shift in societal norms. But if we are to achieve this goal, radical changes are needed in our education system. At the heart of the education system there needs to be a transmission of ideas of meaningful values. Ideas of know how are no good on their own. How A plus B equals C, for example. Children need to understand why things are the way they are. And what can be done to improve their lives and flourish. Children of today experience more and more tuition than ever before. Their knowledge and understanding are assessed more frequently and more stringently than ever before, and they are exposed to a wealth of information.

But are they any better able to deal with the world around them? Can they foster and maintain positive social relationships and resolve conflict easily? Are they able to express themselves clearly and confidently? Do they know where to search for and acquire credible information? Do they know how to filter and triangulate these often ambiguous data sources to make sense of the world around them? Are they able to manage adversity and bounce back effectively after a failure? Are they any more resilient psychologically and emotionally? Have they identified their outlet for frustration? Do they know where to look to find comfort? Do they know what they want?

Our educational system needs to be more relevant and forward thinking. We need an educational system geared around developing and refining 'softer skills', skills such as creativity, critical thinking, communication and collaboration. The focus has to shift to softer skills for two critically important reasons. The world is changing rapidly, and it will continue to do so as new technologies emerge. Children of today will not be doing the same job with the same employer for 40 years. They will hold down multiple jobs across the life course. In a fast-changing world, children of today will need to be agile learners. Not only will they need to embrace change, they will need to learn new skills quickly – in order to adapt effectively. This means that they will need to know where to search for credible information. They will need to know how to filter and triangulate these different information sources in order to make sense of and navigate the complex world around them.

Secondly, and arguably most importantly, we know that psychological health problems such as anxiety and depression are worsening, and suicide rates are already rising among young people. As new technologies emerge and add more volatility, uncertainty, complexity and ambiguity to the world, there is strong potential for psychological health to suffer even more. The ability to manage adversity and bounce back from life challenges will be more important than ever. Therefore, our educational system needs to do much more to support young people to build resilience. Wellbeing needs to be at the heart of the school curriculum. Greater emphasis needs to be placed on the resources we have available

to us to alleviate stress and maintain wellbeing. Having the ability to manage their emotions would not just help young people learn quickly; it will ensure that they are well prepared to work effectively within a rapidly changing economic world.

Reflection and introspection foster self-awareness and an improved understanding of our core values, our life goals, our purpose and our identity. Reflection is also a self-regulatory tool to understand and manage our emotions and behaviours. Reflecting on our assets, our strengths, our successes and our achievements, and what we are grateful for is a powerful way to stimulate positive emotion. Doing so cultivates optimism and challenges a habitual pessimistic style.²² We need to share with young people the importance of reflection and in particular why it is important to consider the past. Not just to learn but to prevent ourselves from being fooled into thinking that progress has not and is not being made.

History is such an incredible resource. But how often does the average person look back and take time to reflect and appreciate not only their achievements but also the small incremental gains that humans have achieved? As a society, we rarely reflect on our own or humanity's achievements. We tend to avoid reminding ourselves and, in particular, children about the miseries and brutalities of the past. The major lesson of history is that things change. Humanity has achieved a lot. But we could be doing a whole lot better. Just look at the COVID-19 pandemic. Millions of lives were lost during the pandemic, but many more millions of lives were saved due to the medical advances of the past century. Turn back the clock to 1918, the year the H1N1 pandemic – the Spanish flu hit – the most severe pandemic in recent history. Around 500 million people – one-third of the world's population are estimated to have become infected with the virus, and at least 50 million people died worldwide.

Anybody that has spent some time wandering around a Victorian cemetery will know that gratitude should be the defining feeling of our time. Back then, it was not uncommon for families to lose half a dozen children within a short space of time due to the rapid spread of infectious diseases like diphtheria. Just take a moment to picture the suffering of a not so uncharacteristic family in the Victorian era. The Jones family named their first daughter Emma. She died. So, they named their second daughter Emma. She died too. They had a third daughter, and she was named Emma. Emma lived until her late teens, but she died during childbirth. Stories like this connect us to the past. It is essential that stories like this are shared with the young. If it was not for stories like this, children would grow up not knowing their ancestors' life experiences and struggles or realising their privileges. By reflecting upon and understanding the past, we become more self-aware. We are more able to appreciate the present, and we are more likely to look forward with hope and optimism for the future.

Chapter 15

Conclusion

Education is the most powerful weapon which you can use to change the world.

(Nelson Mandela, Speech at Madison Park High School, Boston, 1990)

Economic growth has improved living standards and longevity around the world, but it has also given birth to new threats and challenges. The 21st century has conjured a range of social, environmental and economic disruptions for humans to tackle. A challenge for humanity in the 21st century will be the realisation of the incredible impact that behavioural, social and environmental factors have on our own health and the health of others.

Economic growth may well have contributed to lifting many millions of people around the world out of absolute poverty. But the continued pursuit of economic growth year on year is polluting our bodies; it is polluting our minds and it is polluting our planet. Income inequality, obesity, physical inactivity, psychological distress and environmental destruction are just some of the prices we pay for continual economic growth. They are the ‘collateral damage’. Despite our understanding of these impacts and the ways in which to prevent them, little political action is being taken. We are living through a time of great scientific understanding and technological advancement. But despite the scientific community knowing a great deal about how best to invest, improve and protect human health and the environment, we have another sector of society striving to gain from some others’ misery.

Under our current capitalist economic system – to achieve growth – industry needs to produce more goods and services, and households need to consume more to offset supply. In doing so, households need to either work more hours or work more productively. It is all about more. More speed and more consumption. Aside from the additional stress from being overworked – you have also got the issue of rising income and wealth inequality and the subsequent high levels of insecurity and social evaluative threat (one of the most health damaging forms of stress) that these contribute to society. Whereby a person’s dignity is threatened through not being able to parade the goods that society expects them to own. The

big house and fast car, the designer clothing and fine dining experiences and the exotic holidays. It is not so much about whether you are going on holiday, but rather where you are off to – Benidorm or the Bahamas?

A key limiting factor to our current economic system is that it benefits a minority. Nowadays, economic growth contributes to income inequality rather than boosting prosperity for the poorest and enlarging the middle class. There is not much trickling down of money anymore. As was the case throughout the early portions of the 20th century, there is now a growing polarisation of the lives people live. The jobs they do, the income they receive, the homes they live in, the food they eat, the lifestyles they lead. The thing is, despite the rhetoric, economic growth does not always benefit society or result in improvements in people's standard of living or quality of life. That is because the way in which the fruits of growth are shared, matters. It matters a lot. When gross domestic product (GDP) rises, the gains made are not always channelled towards the most in need or the most effective health enhancing or sustainable projects. Projects that improve the wider determinants of health, education, housing, transportation, living and working conditions. Essentially, projects that enhance the physical, social and economic contexts in which we live. The things that enable us to live healthy and meaningful lives; they directly and indirectly shape the nation's health.

The profit and growth that companies experience does not lead to workers being paid more. Instead, companies use the extra funds to pay dividends to shareholders, buy back shares to increase share value or – in some cases – invest in research and development or technologies in the hope of generating even more profit and wealth for the company – often but not always – off the back of health damaging products or services. Society continues to invest heavily in discovering new things – creating new knowledge and new technologies. But what about the social challenges we have not tackled yet? Like ensuring good health and wellbeing for all and tackling challenges linked to absolute poverty including undernourishment, basic sanitation and water shortages. Surely, this ought to be our main priority? In many respects, humanity has all that it needs. It is not more economic growth that the world requires to solve these challenges. But rather, more equitable distribution of the existing abundant resources both within and across countries.

We live in a world characterised by constant change and uncertainty. A raft of people even in high-income countries live in constant fear of the future. For how long will their job be secure? For how long can they live in their home and afford to pay their bills? What impact will being displaced from their home have on them and their family? Through the welfare state, the Government has the ability to reduce the precariousness in people's lives and protect them from its consequences. Yet, the application of the precautionary principle to public health, 'to do no harm', is something the UK Government has chosen to overlook in recent times when they have embarked on programmes of austerity – cutting back on public spending.

We know from history that without effective political responses to welfare and environmental problems, society suffers. Society experiences more deprivation, more disease and more preventable deaths.¹ If the UK Government and

governments in other high-income countries do not seriously commit to the precautionary principle and remain reluctant to implement the necessary policies and environmental changes needed, then there is no doubt that rates of obesity, physical inactivity and psychological distress will continue to rise, income and health inequalities will widen and the environment will be degraded further.

There are a multitude of ways governments can ensure a fairer share of the economic pie and support the health, wellbeing and sustainability agenda. By raising minimum wage legislation, implementing more progressive tax policies and not cutting taxes for the wealthy, they can maximise the distribution of income and wealth. By not scrapping workplace and environmental regulations, they can protect the wellbeing of workers and the environment. By not crushing trade union power, they can ensure companies have limited freedom to exploit workers and suppress their wages. By investing in public services and maintaining green spaces in urban areas, they can ensure residents have somewhere to be physically and socially active. But for this to happen, there needs to be political will across all parties to want to achieve an equitable, healthier and sustainable future for all. Because these are not short-term projects, but rather, long-term ones.

However, to ultimately tackle the great public health challenges of our time requires a different kind of economics. We know that what the economy values, society does more of. What it does not value, society does less of. This is why reorganising the goal of the economy is so essential to improving social outcomes. We are lying to ourselves if we believe that the formidable public health challenges of our time can be solved simply by mobilising more resources. Whether that is more economic growth or more research. The public health problems are blatantly obviously to see. There are plenty of canaries in the coal mine. Yet economic growth is seldom discussed and remains the elephant in the room. Aside from the psychological toll caused by the disruption, economic growth promotes income inequality which not only challenges people's attainment of basic needs but compounds status competition, which in turn drives conspicuous consumption, which leads to excess waste and environmental degradation. Its continual quest for productivity and consumption is also a key driver to rising obesity and physical inactivity trends around the world. It is delusional to think that it is at all possible to achieve a healthier or indeed sustainable future without changing our production and consumption patterns. Our economic system requires an urgent parachute.

Our current use of GDP on its own tells us little about how well society is functioning. Nor does it provide a true picture of population health and wellbeing or sustainability. GDP may well increase as a result of innovation and technological advancement, but what about the resulting class unemployment and the psychological and social impacts of these social changes on individuals and wider society? We therefore require a more holistic measure of social progress. A new type of capitalist economy whose goal is to maximise human wellbeing would prioritise humanity and the environment over money. An economy like this would serve human ends and goals and would have social good at its core. It would prioritise: collectivism over individualism, quality over quantity, cooperation over competition, conservation over destruction, working less over working

more, travelling slower over travelling faster and consuming less over consuming more. It would shed light not just on progress towards social and economic equity but on physical and mental health and environmental quality too.

By changing the goal of the economy, and thus the priorities of society, there is potential to change the narrative (i.e. social values and norms) and in doing so, change behaviour at the societal level. If the pursuit and attainment of health, wellbeing and sustainability were the overarching goals of the economy and thus society, rather than just economic growth per se – then our government policies, social systems and social norms would place high value on these goals. They would promote and endorse what's healthy and sustainable rather than what's productive and profitable – and because of this more citizens would pursue the former over the latter because health, wellbeing and sustainability would be how the score is kept; respect and status would be awarded to citizens for displaying altruistic rather than self-interest values and behaving in healthy and sustainable ways.

Growing the economy has become a higher priority than protecting and improving the health of all. Therefore, restoring the balance between economic growth and public health has to be a fundamental priority of our time. For future generations to experience the public health gains of past centuries, we will require new policies, new ways of thinking and new ways of behaving. The purpose of our economy and the metrics we use to determine economic and social progress push society away from long-term public health goals, like the ones detailed in the National Health Service's optimistic Long-Term Plan.² They challenge the necessary prevention measures and actions needed to improve health and wellbeing for all. There is no doubt that changing the purpose and goal of the economy is by far the most effective way to change societal norms and improve population health at scale.³ Nevertheless, with the right education and environmental nudging, meaningful social changes are still possible through Government regulation.⁴ The drastic decline in single-use plastic bags at supermarkets⁵ and the widespread use of face coverings during COVID-19 are cases in point.

Challenging mainstream thinking and discourse should not be seen as an easy task to achieve. In fact, shifting the narrative and changing the economy's primary goal from the pursuit of growth to one geared towards health, wellbeing and sustainability will be very difficult and will no doubt require widespread public support. But there is hope. History shows us that economic reform has happened before. It was only four decades ago that the then Prime Minister, Margaret Thatcher, set about changing the economic and social outlook of the United Kingdom. Her vision was to '*change the heart and soul*' of the British people through economic policy; lowering taxes, cutting regulation and slashing public spending.⁶ The fact that economic reform has happened before provides reassurance that it can happen again. However, economic reform this time around has to be underpinned by a different set of values in order to benefit the many not just the wealthy few. We will require grassroots social movements to stimulate and drive political action. And we will all have to play our part in some way or other, including you.

We can contribute to the cause by talking about the alternative ideas presented in this book with friends, colleagues, students and family members, especially

young people. In doing so, we will not only help to spread the counter message to challenge the entrenched but misguided narrative that improved health, wellbeing and quality of life in a nation is dependent on economic growth; but also ensure that individualistic and materialistic values and the pursuit of material wealth become less normal among these social groups. Armed with this information, more people will realise that the purpose of development really should be human development; to create environments that enable people to live healthy and meaningful lives.

My hope is that after reading this book, you have a broader perspective of how capitalism and specifically the relentless pursuit of economic growth impacts our health and wellbeing. You are more interested in the subject, imagine alternatives, see how things can be better and realise the simple steps we can all take to enhance our sense of wellbeing and contribute to transformation at a time when social and economic change is greatly needed.

The world has speeded up enormously. But the body has its own rhythm. It cannot be sped up. And it does not want to. Because speeding up is stress inducing and health compromising. Without health, there is no wealth. Do not forget this. Be mindful that suffering is part and parcel of human existence. It is about remembering to appraise situations realistically – accepting what can be changed and what is out of our control. Taking time to reflect and to take notice. To appreciate how far humanity has come and how well we have it now. It is about being mindful of the negativity bias that is played out around us. High-income countries in the Global North have achieved a state of abundance. We are doing well on the whole. Most people are living well. But many more millions could be living much better. It is about being thankful for what we have. It is about lifelong learning, staying socially connected, prioritising giving over receiving and embracing experientialism over materialism. It is about engaging in activities that engage our bodies as well as our minds, activities that bring us pleasure and provide us with a sense of achievement. Physical activity is our greatest health asset – remember to use it well.

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