# Luck

We do not choose to exist. We do not choose the environment we will grow up in. We do not choose to be born Hindu, Christian or Muslim, into a war-zone or peaceful middle-class suburb, into starvation or luxury. We do not choose our parents, nor whether they'll be happy or miserable, knowledgeable or ignorant, healthy or sickly, attentive or neglectful. The knowledge we possess, the beliefs we hold, the tastes we develop, the traditions we adopt, the opportunities we enjoy, the work we do – the very lives we lead – depend entirely on our biological inheritance and the environment to which we are exposed. This is the lottery of birth.

We meet the world primed to adopt the way of life we encounter. The society that greets us takes our potential and shapes it. Ancient Greece, Confucian China, Renaissance Italy, Victorian England, Communist Russia – across millennia of human history there has been a spectacular multiplicity of cultures, each with the power to mould us in radically different ways. Early interactions, the treatment we receive and the behaviour we observe, begin the process of constructing an identity. Gradually, imperceptibly, we are inducted into a community.

Cultural transmission is a powerful process, one that has produced both beautiful and ugly outcomes. A glance at history reveals that there is neither a belief too bizarre nor an action too appalling for humans to embrace, given the necessary cultural influences. As much as we condemn the injustices and prejudices of past societies, there is no reason to assume that, under those circumstances, we wouldn't have embraced the same values and defended the same traditions. We might have developed loyalty to any group, nation, ideology or religion, learned any language, practised any social custom, partaken in any act of barbarism or altruism.

Thinking about the lottery of birth draws our attention to a simple fact: we do not create ourselves. The very idea entails a logical contradiction. To create something, you have to exist, so to create yourself you'd have to have existed before you had been created. Whether we're talking about flesh and blood people or immaterial souls, there is no way around this simple fact.<sup>1</sup> The implications are far-reaching: if we don't create ourselves, how can we be responsible for the way we are? And if we aren't responsible for the way we are, how can we be responsible for what we do? The answer is: we cannot.

The kind of freedom that would make us truly responsible for our actions – truly worthy of credit or blame – is a dangerous illusion, one that distorts our thinking on the most pressing economic, political and moral issues of our time. Yet it's an illusion central to our lives. As we will see, examining it exposes as false a number of assumptions at the heart of our culture – ideas about punishment, reward, blame and entitlement – and demands a revolution in the way we organise society and think about ourselves and each other.

It can seem hard to reconcile the fact that we are not truly responsible for the lives we lead with the countless choices we make every day – what to eat, what to wear, whether to lie or tell the truth, whether to stand up for ourselves or suffer in silence. After all, I'm choosing to type these words and you're choosing to read them. However, the act of making a choice does little to confer responsibility. The reason for this is simple: *we make choices with a brain we didn't choose*.

No one creates their own brain. No one even really understands the workings of their brain, let alone anyone else's. Just as computers do not programme themselves, we do not 'wire' the grey matter inside our skulls. This feat is accomplished through endless interactions between our genes and environment, neither of which we control. The upshot

is that I did not choose to be me and you did not choose to be you, yet who we are determines the choices we make in any given situation.

Intuitively, we understand this. We are good at predicting the behaviour of those we know well. If a child, partner or sibling shows a drastic change in behaviour, we look for some external cause – drugs, bullying, overwork. Take the real-life case of a middle-aged married man – let's call him 'John' – who developed an overwhelming addiction to child pornography.<sup>2</sup> After several incidents of highly inappropriate sexual behaviour, as well as some time on a rehabilitation programme, John faced a stretch in prison. Suffering from increasingly painful headaches, John was hospitalised the night before he was due to be sentenced. A brain scan revealed a massive tumour in his orbitofrontal cortex. The surgeons operated, removed the tumour, and John's sexual appetite and behaviour returned to normal. After six months, however, the paedophilic tendencies returned. His wife took him back to the surgeon, who discovered that a portion of the tumour had regrown. After a second operation, John's behaviour returned to normal.

With the discovery of the brain tumour, John seems more a victim than a moral deviant – someone worthy of compassion rather than punishment. We tell ourselves that the tumour is to blame for his troubling behaviour and, of course, no one chooses to have a tumour. But what if there had been no tumour? Would that have made John more responsible? Would you feel more justified in blaming John if, say, his addiction had been the product of childhood abuse rather than the abnormal growth of brain tissue? If so, why? We no more control our upbringing than we do cell growth in the brain, and formative experiences have a profound impact on the way we develop.

In the 1950s, British psychiatrist John Bowlby showed that a child's relationship with its primary care-giver has a decisive impact on emotional and mental development. Today, it is widely accepted among child psychologists that if a child fails to form a secure attachment to a care-giver, the likelihood increases of developing a range of behavioural problems related to depleted self-worth, lack of trust in other people and an absence of empathy.

The Adverse Childhood Experiences (ACE) study, one of the largest

of its kind, looked at the long-term effects of childhood trauma on health and behaviour.<sup>3</sup> Its findings confirm what many might expect: 'stressful or traumatic childhood experiences such as abuse, neglect, witnessing domestic violence, or growing up with alcohol or other substance abuse, mental illness, parental discord, or crime in the home ... are a common pathway to social, emotional, and cognitive impairments that lead to increased risk ... of violence or re-victimization, disease, disability and premature mortality.'<sup>4</sup> The prevalence of and risks associated with these problems are greater in people who have experienced more abuse. For instance, each traumatic event in a child's life makes them two to four times more likely to develop an addiction.

Most brain development takes place after birth. This is a distinctive feature of human beings. Dr Gabor Maté, a physician specialising in the treatment of addiction, argues that physical and emotional interactions determine much of our neurological growth and that addiction is largely a product of life-experience, particularly in early childhood:

[E]ndorphins are released in the infant's brain when there are warm, non-stressed, calm interactions with the parenting figures. Endorphins, in turn, promote the growth of receptors and nerve cells, and the discharge of other important brain chemicals. The fewer endorphin-enhancing experiences in infancy and early childhood, the greater the need for external sources. Hence, a greater vulnerability to addictions.<sup>5</sup>

At any moment the state of our brain is a reflection of countless forces – genetic and environmental – over which we have little or no awareness. Advances in science and improvements in technology are gradually increasing our understanding of the brain. Today we can detect and identify brain tumours; two hundred years ago we could not. Back then, John would have been held completely responsible for his actions. No account would have been taken of the effect of the abnormal growth of tissue in his brain because no one would have known about it. The default assumption would have been that an adult is morally responsible for his or her actions. As modern scientific instruments have increased our perceptual reach, our knowledge of the brain has improved. Observation and experience have taught us that a tumour can have a dramatic effect on an individual's behaviour, radically changing their personality. We have learned to attribute responsibility for abnormal behaviour to the tumour instead of to the person who happens to suffer from it. The problem with this line of thinking is that our assessment of blameworthiness is constrained by our current level of scientific understanding. A hundred years from now, with better scientific instruments and a better understanding of the brain, we may be able to detect subtle changes in the brain's neurochemistry that give rise to all kinds of behaviour which today we attribute to the 'free agency' of the individual. Neuroscientist David Eagleman writes:

The underlying cause [of a form of behaviour] could be a genetic mutation, a bit of brain damage caused by an undetectably small stroke or tumor, an imbalance in neurotransmitter levels, a hormonal imbalance – or any combination. Any or all of these problems may be undetectable with our current technologies. But they can cause differences in brain function that lead to abnormal behaviour. . . In other words, if there is a measurable brain problem, that buys leniency for the defendant . . . But we *do* blame someone if we lack the technology to detect a biological problem.<sup>6</sup>

The more we understand the brain, the more we will be able to account for our behaviour by reference to its specific features, which will be attributable to genetic inheritance and life-experience. We may be able to show that the violence and aggression of an abusive father is rooted in a particular hormone imbalance, which itself could be rooted in childhood trauma. Scientific advances will help us to view a person's choices in a far wider context, one that includes the forces that created the brain making the choices we observe. The notion of 'individual responsibility' is just a fig leaf that covers the current gaps in our knowledge.

Our understanding of the brain is still extremely limited. In one

cubic millimetre of brain tissue there are a hundred million synaptic connections between neurons. Current imaging methods rely on bloodflow signals that cover tens of cubic millimetres of brain tissue.7 The upshot, as Eagleman vividly puts it, is that 'modern neuroimaging is like asking an astronaut in the space shuttle to look out the window and judge how America is doing'.8 Though it may never be attained, a total understanding of the brain would eradicate the idea of individual responsibility entirely. But we do not have to wait for advances in science to understand that if someone behaves differently from us in a given situation, it is because they *are* different from us. We may lack the technology to identify the relevant way in which their neurocircuitry differs from our own, but the evidence of the difference lies in the behaviour. If we had exactly the same brain state and encountered the same situation then, all else being equal, we would behave in exactly the same way. This principle holds whether we are using it to explain the exceptional intellectual gifts of Einstein (which, incidentally, led him to reject the myth of responsibility) or the extraordinary moral failings of Stalin.9

Simon Baron-Cohen, Professor of Developmental Psychopathology and a leading researcher in empathetic development, suggests that when it comes to varying degrees of empathy, 'perhaps we should see such behaviour not as a product of individual choice or responsibility, but as a product of the person's neurology'.<sup>10</sup>

We do not hold someone with schizophrenia responsible for having a hallucination, just as we don't hold someone with diabetes responsible for their increased thirst. In the case of the person with diabetes, we 'blame' the person's low levels of insulin, or the person's cells for not responding normally to insulin. That is, we recognize the biomedical causes of the behaviour. Equally, if someone's behaviour is the result of their low empathy, which itself stems from the underactivity of the brain's empathy circuit, and which ultimately is the result of their genetic make-up and/or their early experience, in what sense is the 'person' responsible?<sup>11</sup>

Perhaps the biggest obstacle to seeing things this way is the intuition that, although as children we are not responsible for our identity and actions, we can choose to change ourselves as we mature and, by doing so, become truly responsible – bad habits can be broken and patterns from childhood overcome. On the face of it, this seems a reasonable claim. People can change and often these changes can be brought about very consciously – that is not in doubt – but it cannot make us truly responsible for who we are. To see why, think of a new-born baby endowed with a genetic inheritance it did not ask for and exposed to a world it played no part in creating. At what point does it become a truly responsible being, worthy of credit and blame?

The problem is that, by the time we have developed the intelligence necessary to contemplate our own identity, we are already very much in possession of one. How we think about ourselves and the world around us will already be framed by the conditioning we have received up to that point. This conditioning informs any choices we make, even the choice to rebel against aspects of that conditioning. It is still possible for new influences, encountered by chance, to have a deep impact on what we think and do, but we're not responsible for what we encounter by chance – and the influences that we consciously seek out are sought because of who we already are. As the philosopher Galen Strawson put it: 'Both the particular way in which one is moved to try to change oneself, and the degree of one's success in the attempt at change, will be determined by how one already is as a result of heredity and experience.'<sup>12</sup>

Most of what goes on in the brain is completely inaccessible to the conscious mind. Rather than its functioning being a product of consciousness, it makes more sense to say that consciousness is a product of the brain's functioning. Eagleman writes:

The first thing we learn from studying our own [brain] circuitry is a simple lesson: most of what we do and think and feel is not under our conscious control. The vast jungles of neurons operate their own programs. The conscious you – the *I* that flickers to life when you wake up in the morning – is the smallest bit of what's transpiring in your brain . . . Your consciousness is like a tiny stowaway on a transatlantic steamship, taking credit for the journey without acknowledging the massive engineering underfoot.<sup>13</sup>

When you take into account the influence of genetics; environmental toxins; the treatment we receive from parents, teachers, friends and foes; the role models we have access to; the life options available – among many other salient factors – it's clear that the machinery with which we make our decisions has been constructed by a process far beyond our control. Collectively, these influences determine the chemical make-up of our brains: the balance of hormones, the functioning of neurotransmitters, the architecture of our neural circuitry – all central to the decision-making processes that result in the choices we make. Confusion about responsibility arises because the act of making a choice blinds us to the causal relationship that links a choice to a brain, and a brain to the array of forces that shaped it.

The philosopher Ludwig Wittgenstein once said, 'Philosophy is a battle against the bewitchment of our intelligence by means of our language.'<sup>14</sup> In light of this, what do we mean by 'responsibility'? It's fair to say that, with few exceptions, adults are more responsible than children. Here the word 'responsible' is a synonym for 'dependable', 'capable' or 'trustworthy', as in: 'Let her take care of it, she is a responsible adult.'<sup>15</sup> This meaning needs to be distinguished from the kind of responsibility that would make us deserving of blame, punishment, credit or reward – what we might call 'true' or 'ultimate' responsibility.

To think clearly about responsibility it is important to bear in mind this distinction. On the whole, adults are more reliable, rational and capable than children, but this doesn't make them more responsible for the way they are or for the actions that follow from the way they are. Being more capable may make us more effective at pursuing our goals, but it doesn't make us more responsible for the goals that we choose to pursue. Education, cognitive development and political freedom all increase the power we have to act on our environment, but this does not make us more responsible for what we do with that power. What we do in a given situation is determined by the way we are – and for that we are not responsible.

Another source of confusion is the difference between so-called 'voluntary' and 'non-voluntary' actions. The distinction is really between actions that reflect intentions and those that do not. If you discovered that I had intentionally poisoned someone, you would draw very different conclusions about me than if you learned I had poisoned someone accidentally. In the first case, you might conclude that I am malicious and not to be trusted whereas in the second case you might just advise me to be more careful. Intentions reveal character; accidents reveal incompetence. However, since we do not create ourselves, we are not responsible for either character or competence. The distinction between voluntary and non-voluntary actions has no bearing on questions of ultimate responsibility (although it remains extremely important for other reasons, such as assessing the risk a person may pose). To be morally accountable, it is not enough to establish someone's intent, it must be shown that they are ultimately responsible for that intent, and that, as we have seen, is impossible. A psychopath may make many morally horrendous choices, but they will not include choosing the brain of a psychopath. Malicious choices may be voluntary; possessing a brain that makes them is not.

The nature/nurture debate also has no bearing on the question of ultimate responsibility. What counts is the fact that we are created and shaped by forces for which we are not responsible, not the combination or origin of these forces. We know that our species has been shaped, moulded and modified, and our genes divided, combined and recombined, to meet the survival challenges faced by our ancestors. Who we can become has been determined by this evolutionary process. Who we actually become is determined by the interaction with the environment we encounter thereafter.

Our genetic inheritance, which limits both our physical and mental potential, is the reason we grow arms instead of wings and noses instead of beaks. It's also the reason we struggle to hold more than a few items in our short-term memory yet have no trouble recognising the face of an old friend. The basic blueprint for the stages of human development is encoded in our DNA and, since natural selection tends to standardise the design of a single species, our genetic similarities far outweigh our differences. The outcome is that any human child can learn any language and adopt any culture.

Evidence of this emerged in 1938 when a Stone Age society was discovered in the forests of New Guinea. Roughly a million people had lived in isolation from the rest of the world for 40,000 years. In spite of this, the genetic differences between a New Guinean baby and any other human baby turned out to be trivial: a New Guinean infant raised in any other human culture can learn its language, adapt to its diet and adopt its traditions as easily as any other child.

Interesting as such findings are, the question of ultimate responsibility is unaffected by the scope and limits of our biological potential. Whether we believe that people are born 'blank slates' and shaped almost completely by their environment, or in genetic determinism, which emphasises the influence of genes, or in some combination of the two (the only plausible position), the result is the same: we are the product of forces beyond our control. We do not create ourselves.

Another topic that has no bearing on the question of responsibility – even though it can often be found at the heart of debates on free will – is determinism, the idea that there is only one possible future. Whether our universe is deterministic or not, the concepts of self-creation and ultimate responsibility remain incoherent.<sup>16</sup> A choice is either part of an unbroken chain of cause and effect or it is the product of chance. Neither option leaves any room for ultimate responsibility. If every effect has a cause, then a complete explanation of any action will take us back to the birth of the universe. Even if the chain that links a choice to its cause and that cause to a preceding cause is broken, it still does not make us any more responsible. An uncaused, arbitrary event is random and a random event in our decision-making process is not compatible with any meaningful notion of responsibility. If a random event in the brain causes your arm to move, clearly the movement was not intentional.

We are not, and can never be, free from the forces that shape us. The kind of responsibility that would make us deserving of punishment or reward, credit or blame, is an illusion, a sacred myth passed on from one generation to the next with no rational basis. The impossibility of

ultimate responsibility is taken for granted when we talk about anything else in the natural world – sharks, trees, apes or amoebas – but for some reason we assume humans possess it. Aspects of our culture betray an awareness of the limits on our freedom – think of the proverb, 'There, but for the grace of God, go I' – yet, on the whole, we go about our lives, form our opinions, educate our young and organise society according to the myth of responsibility.

No scientific finding offers any support for this myth. It is hard to imagine how any finding could. On the other hand, what we do understand about human behaviour and the brain directly contradicts it. And we have a growing number of eminent psychologists, neuro-scientists and physicists to tell us so.<sup>17</sup> Still, with or without scientific evidence, all it takes is elementary logic to expose the myth of ultimate responsibility because the idea itself is incoherent, confused and contradictory. The nineteenth-century philosopher Friedrich Nietzsche called it a 'perversion of logic'. The belief that we can truly bear responsibility for our actions is, he wrote, 'to absolve God, the world, ancestors, chance, and society' – it is to believe that we can pull ourselves 'up into existence by the hair, out of the swamps of nothingness'.<sup>18</sup>

# The blame game

The idea of ultimate responsibility is buried deep in the foundations of our religious traditions, political ideologies and legal systems – implicitly assumed but rarely stated. Its existence is implied by concepts like heaven, hell, sin and eternal damnation at the heart of the Abrahamic faiths. A cosmic system of condemnation and salvation only makes sense if people deserve the fates handed down to them. The concept of karma – central to Hinduism, Buddhism and Jainism – has similar implications. For millennia, formal religions have played a powerful role in perpetuating the responsibility myth, justifying all manner of cruel and vicious punishments in this life and the next, often in stark conflict with other values central to their teachings.

Crude formulations of the myth also occupy a prominent position in popular culture. It has been given a huge boost by the growing 'self-help' movement, whose blend of materialistic values and pseudo-spirituality has fostered a multibillion-dollar industry. One of its chief exponents, Deepak Chopra, perfectly embodies the synthesis. Boasting clients from Madonna to Hillary Clinton, the appeal of Chopra's message to the affluent and aspirational is not hard to discern: 'People who have achieved an enormous amount of success are inherently very spiritual . . . Affluence is simply our natural state.'<sup>19</sup>

Perhaps the most successful branding of the idea came with Rhonda Byrne's hugely popular book and film, *The Secret* (2006). In it we are introduced to what Byrne claims is a universal natural law – the law of attraction – which states that 'like attracts like', and that we can change our situation by changing our thoughts. Desirable outcomes such as good health, wealth and happiness come to those with 'positive' thoughts and feelings. And, by implication, undesirable outcomes come to those with 'negative' thoughts and feelings. Even natural disasters costing thousands of lives, the book claims, can be traced back to the negative thought patterns of the devastated communities. Byrne quotes a Dr Joe Vitale: 'If people believe they can be in the wrong place at the wrong time . . . those thoughts of fear, separation, and powerlessness, if persistent, can attract them to being in the wrong place at the wrong time.'<sup>20</sup>

This view of human freedom is at the extreme end of the ideological spectrum, but these attitudes are influential and pervade our culture. Take, for instance, the growing problem of obesity. In a 2005 study, Abigail Saguy and Rene Almeling looked at 221 newspaper, medical and book sources and found that, while two-thirds cited individual causes of obesity, less than a third gave any mention to structural factors such as geography, longer working hours, the fast food industry or reduced income. Revealingly, the tendency of the sources to focus on personal responsibility increased when discussing particular social groups: 73 per cent of articles mentioning the poor or people of colour blamed obesity on bad food choices, whereas in articles that did not mention these groups, the figure dropped to only 29 per cent.<sup>21</sup>

Raj Patel, in his book on the food industry, *Stuffed and Starved* (2007), shows that this approach ignores important realities. Poor neighbourhoods, while boasting a higher concentration of fast food restaurants,

have on average four times fewer supermarkets than affluent areas. In other words, people of colour and the poor live in environments that are far more likely to result in obesity. By contrast, richer, whiter areas are more likely to provide access to healthier, fresh, nutritious food, lower in salt and fat. Patel writes:

[M]any choices have already been made for us by our environment, our customs, our routine. Choice is the word we're left with to describe our plucking one box rather than another off the shelves, and it's the word we're taught to use. If we're asked why we use the word 'choice' to describe this, we might respond 'no one pointed a gun to our head, no one coerced us' as if this were the opposite to choice. But the opposite of choice isn't coercion. It's instinct. And our instincts have been so thoroughly captured by forces beyond our control that they're suspect to the core.<sup>22</sup>

Our food choices have been restricted and shaped before we ever really think about them. Consumption habits, like all habits, are shaped by forces 'beyond our control'. In the case of food, they are formed at an early age and are lifelong – the \$10 billion spent annually on marketing food to children in the US is clearly a long-term investment.<sup>23</sup> The ideas, values and images we encounter in our environment shape our dietary habits. A striking example is Fiji, where, in 1990, eating disorders were unheard of. In 1995, television was introduced, mostly from the US and packed with advertising. Within three years, 12 per cent of teenage girls in Fiji had developed bulimia.<sup>24</sup>

Today, those wishing to control their weight are offered a different strategy in *The Secret*: 'If you see people who are overweight, do not observe them, but immediately switch your mind to the picture of you in your perfect body and feel it . . . Attracting the perfect weight is the same as placing an order with the catalogue of the universe. You look through the catalogue, choose the perfect weight, place your order, and then it is delivered to you.'<sup>25</sup> Byrne's writing verges on the comical but her message is symptomatic of a powerful trend. *The Secret* reached the top of the *New York Times* bestseller list, where it remained for 190

weeks. It has been translated into fifty languages and has over 20 million copies in print.<sup>26</sup>

A modern secular manifestation of the responsibility myth is found in the promise of 'The American Dream' – that anyone can become rich and those who do, deserve it, whereas those who don't only have themselves to blame. Its roots can be found in classical liberalism, the intellectual forerunner of today's dominant political ideology, neoliberalism. The tendency to hold individuals ultimately responsible for their lot in life was emboldened in the late nineteenth century by the emerging doctrine of Social Darwinism, drawing its inspiration from Darwin's theory of evolution.

According to this view (which was not held by Darwin), individuals, groups and races are subject to a law of natural selection so that inequalities of wealth and power between groups can be explained as products of biological differences – imperialism and colonialism can be viewed as a form of evolutionary progress. In other words, it is natural that the weak perish, while the strong grow in power. Its most vocal American advocate, William Sumner, asserted that 'the drunkard in the gutter is just where he ought to be' and that 'the millionaires are a product of natural selection . . . They get high wages and live in luxury, but the bargain is a good one for society.<sup>27</sup> At a time when governments are simultaneously cutting taxes for the rich and welfare for the poor, it is clear that, although the language may have changed, the ideas of Social Darwinism are alive and well.

Political scientist Charles Murray writes: 'I want to reintroduce the notion of blame, and sharply reduce our readiness to call people "victims".'<sup>28</sup> His concern lies more with the 'youngster who is studying hard, obeying the law, working hard, and taking care not to have a baby' than with the 'youngster who fails in school, gets in trouble with the law, does not hold a job, or has a child without being able to care for it'.<sup>29</sup> He also writes, 'The standard to which I hold myself, and which I advocate for other commentators on social policy, is: do not apply a different moral standard to strangers – including poor strangers – from the standard which applies to the people one knows and loves.'<sup>30</sup>

This is dangerously simplistic. When moral evaluations of behaviour

are made, this view places a high value on equality of criteria – 'we should apply the same moral standards to everyone' – but ignores the inequalities that gave rise to the behaviour under evaluation: a blatant double standard. In a partial concession, Murray claims that 'even if it is true that a poor young person is not responsible for the condition in which he finds himself, the worst thing one can do is try to persuade him of that'.<sup>31</sup> This is an extraordinary statement. Knowledge, not ignorance, is what empowers us. What freedoms would have been won if slaves, serfs and exploited labourers had blamed themselves for the degraded condition of their existence? What rights, wages and government assistance would the poor have secured if their explanations of inequality had been restricted to personal failings? Understanding the source of our problems – individually and collectively – is a crucial step on the path to solving them.

A vast amount of intellectual effort has been expended by theologians and philosophers to 'make the world safe for blame'.<sup>32</sup> Many thinkers have taken up the task; none have succeeded. Much has been said about the social utility of blame, our instinct to hold people responsible, and the different forms blame can take, but no argument or evidence has been produced that gives us any reason to suppose that people are truly responsible for their actions. In light of bad behaviour, we may justifiably withdraw trust, express disapproval, feel upset, cut ties and, if it safeguards the welfare of society, support measures such as fines and imprisonment, but none of this requires that we apportion blame. The belief that people are blameworthy finds no support in science or logic and ignores the most basic truths about human beings. It is an anachronism held in place by instinct, tradition and fear.

The myth of responsibility also has great political utility. As legal scholar Barbara H. Fried writes, 'enthusiasm for blame is not confined to punishment. Changes in public policy more broadly – the slow dismantling of the social safety net, the push to privatize social security, the deregulation of banking, the health care wars, the refusal to bail out homeowners in the wake of the 2008 housing meltdown – have all been fueled by our collective sense that if things go badly for you, you've got no one to blame but yourself'.<sup>33</sup> The more responsibility

that is laid at the feet of individuals, the easier it is to justify the many inequalities in our world. If addicts, sinners, refugees, prisoners, the homeless, the obese, the unemployed and the poor can be blamed for their condition, there is little obligation to help them.

If we believe that each person bears ultimate responsibility for their lot in life, it is far easier to justify discrepancies in power, wealth and opportunity. If the rich deserve their privilege and the poor their destitution, perhaps things are as they should be. As Herman Cain, former Republican Party presidential candidate, declared: 'Don't blame Wall Street. Don't blame the big banks. If you don't have a job and you're not rich, blame yourself.' <sup>34</sup> But no behaviour occurs in isolation. Every choice is the result of heredity, experience and opportunity. Billionaire Warren Buffett recognises more clearly than most the decisive role of luck: 'Most of the world's seven billion people found their destinies largely determined at the moment of birth . . . [F]or literally billions of people, where they are born and who gives them birth, along with their gender and native intellect, largely determine the life they will experience.'<sup>35</sup>

As soon as we place human behaviour in the wider context of cause and effect, a framework that takes into account the steering power of genes and environment, the decisive role of luck in our lives becomes obvious. Simply to exist is extraordinarily lucky, the odds are so incredibly small. Over 90 per cent of all the organisms that have existed on this planet died without producing offspring.36 The fact that you're reading this means that every one of your ancestors, since life on Earth began, escaped that fate. Luck continues to dominate after birth. A baby born in Japan is fifty times more likely to reach its first birthday than a baby born in Angola.<sup>37</sup> An African-American infant is twice as likely to pass away in its first year as a white American child.<sup>38</sup> From 1990 to 2015, the number of children who died before their fifth birthday mostly from preventable diseases - is roughly 236 million.<sup>39</sup> And if we make it into adulthood free from abuse, violence, neglect, war, famine, malnutrition, physical or mental illness, extreme poverty, debilitating injury, or the loss of a parent or sibling, we are luckier than most.

The abilities and capacities we possess can also be chalked up to good fortune. Whether we have the brain of an Isaac Newton or the speed of a Usain Bolt is really a matter of chance. What's more, the psychological tools to make the most of our opportunities and talents are themselves down to luck. Confidence is key to taking advantage of opportunities – to embarking on an ambitious task or showing resilience in the face of setbacks and failure. Yet our levels of self-belief are highly sensitive to the treatment we receive in childhood, and for that we are not responsible. Be it patience, innovation, concentration, creativity, perseverance or self-control, no capacity is equally distributed across the population. Walk into any classroom and you will find some children who can sit happily for hours studying and others who find it unbearable, some who are brimming with self-belief and others undermined by self-doubt. Different brains have different capacities and, as we know, no one chooses their own brain. Whether we are the star pupil or a dropout, disciplined or distracted, motivated or lazy, is ultimately a matter of luck.

Decades of research have revealed the impact of early experiences on the development of our innate capacities. For instance, children from lower-income families with less-educated parents enter school far behind their wealthier counterparts in language skills. The amount of time our care-givers spend conversing, reading and playing with us – and the quality of those interactions – all makes a difference to our development. Stanford psychologists have shown that two-year-old children from poor families may already be six months behind in language development.<sup>40</sup> By age four, children in middle- and upper-class families hear in the region of 30 million more words than children from families on welfare.<sup>41</sup> A study conducted by the Scottish Centre for Social Research (SCSR), which tracked the abilities of 14,000 youngsters, found that by age five, children with degree-level educated parents are, on average, a year and a half ahead of their less privileged counterparts in terms of vocabulary and around thirteen months ahead on problem-solving.<sup>42</sup>

A life-journey depends on a wide range of unpredictable factors. Variations in genes and experience do not need to be large to have an impact on the paths we take. Small variations can have significant repercussions, setting in motion events that result in completely different outcomes. In chaos theory, this is known as the 'butterfly effect'. With a slight tweak in starting conditions, the man who dies at twenty-five from a drug overdose might have lived to hug his grandchildren. The woman who wins the Nobel Prize in Literature might, with a small change in early circumstances, have spent her life as a housewife never to discover her talent. When we hit a crucial fork in the road – whether or not to steal, cheat, retaliate, take a risk, quit a job, revise for an exam or remain in an abusive relationship – apparently trivial variations can make all the difference, nudging us one way or another. At decisive moments, an attentive friend, an inspiring book, a caring teacher, a strong role model, a smiling stranger, even good weather or a long night's sleep, may be enough to prevent us making a costly error.

Some people defy every expectation, achieving remarkable things in the face of adversity. It is tempting to view such lives as evidence that we can, after all, be the masters of our own destiny, but to do so would be a mistake. Forces beyond our control determine the resources – psychological, physical and material – at our disposal to carve out a new path, and these resources, along with countless other twists of fate, ultimately determine how successful we will be in our attempt. For every unlikely success story there are countless people of equal potential who died in poverty and obscurity due to the crushing force of circumstance. Just because the odd person wins the lottery does not mean the game isn't rigged for everyone else to lose.

By casting off the defunct ideology of credit and blame, we can get to work on understanding the deeper roots of behaviour: familial, genetic, economic and political. This is a necessary antidote to the lazy belief that the buck of responsibility stops with the mystical 'free agency' of the individual. Such thinking is reminiscent of primitive attempts to construct theories of the natural world. In order to explain why some things rise and others fall, Aristotle spoke of how 'bodies' move to their 'natural place': apples fall because it is in their nature to fall; steam rises because it is in its nature to rise. Such wordplay serves only to conceal our ignorance. Just as for falling apples and rising steam, there are reasons why people behave the way they do, reasons that take us far beyond the will of the individual.

Our talents, attitudes, inclinations and opportunities are the products of forces we do not control. Debate still rages over the relative importance

of biological and environmental factors but the responsibility myth has been debunked and, with it, the grounds for credit and blame.<sup>43</sup> It may be intuitively compelling, flattering for the fortunate and expedient for the powerful, but ultimate responsibility is a myth, an irrational dogma that causes great harm to many people.

Luck has been the decisive force in the life of every person who has ever lived. And, be it good or bad, nothing we do makes us more or less deserving of the luck we receive. If ultimate responsibility is an incoherent concept, the notion of desert – that we can be truly deserving of reward or punishment – also loses meaning. If we are not truly responsible for what we do, then what we do cannot make us more or less deserving of pain or pleasure, suffering or joy. Punishment and reward may serve important pragmatic functions, providing incentives for the kinds of behaviour we want to cultivate in society, but that is a separate issue – one to be explored in the following two chapters.<sup>44</sup>

I should add that there is another use of the word 'deserve' that is not affected by these views on responsibility. A frail old lady on a bus deserves a seat more than a healthy young woman. A single mother of three deserves a state subsidy more than a multi-million-dollar corporation. Why? In each case, it is clear who has the greater need. The word 'deserves' in these examples is just another way of saying 'has greater need for'. In the same way, if you are exhausted and I am well rested, we might say that, of the two of us, you deserve a holiday, not because you have worked harder – though that might be one reason why you are exhausted – but simply because of your greater need. As we will see, a needs-based system of rewards is the only one that passes the test of fairness.

# A dangerous idea?

Is it dangerous to expose the myth of responsibility? According to philosopher Daniel Dennett, 'Deeming that nobody is ever really responsible for anything they do is step one on the way to a police state that medicalizes all "anti-social" behavior, and that way lies the Gulag.<sup>45</sup> He also warns that it could 'rob us of our dignity' and reduce our inclination to engage in moral behaviour. Are these fears legitimate?

That an idea may be used to serve destructive or oppressive ends tells us very little about its truth or value. There is always a battle to decide who will interpret important ideas, to determine whose interests they will serve. In the heat of such conflicts, ideas are stretched, twisted and mangled as the stakes increase. A case in point is the theory of evolution, which revolutionised the way we think about our species and the natural world. Exploring this revolution in *Darwin's Dangerous Idea*, Dennett writes:

From the moment of the publication of *Origin of Species* in 1859, Charles Darwin's fundamental idea has inspired intense reactions ranging from ferocious condemnation to ecstatic allegiance, sometimes tantamount to religious zeal. Darwin's theory has been abused and misrepresented by friend and foe alike. It has been misappropriated to lend scientific respectability to appalling political and social doctrines.<sup>46</sup>

If Darwin's idea can be used to justify 'appalling political and social doctrines', should it be ignored, suppressed, obfuscated or publicly discredited? Dennett thinks not: 'There is no future in a sacred myth. Why not? Because of our curiosity.' The only way to protect what is of value 'is to cut through the smokescreens and look at the idea as unflinchingly, as dispassionately as possible'. Facing up to Darwin's dangerous idea shows that 'what really matters to us - and ought to matter to us - shines through, transformed but enhanced by its passage through the Darwinian Revolution'.47 Dennett's reasoning can equally be applied to the 'sacred myth' of individual responsibility. If it were to be widely rejected, society would need a conceptual revolution to adjust to its implications. As we will see, understanding the limits on our freedom has the potential, just as with the theory of evolution, to provide a 'transformed but enhanced' perspective on what matters most in our lives. Darwin himself rejected the responsibility myth and believed that 'This view should teach one profound humility, one deserves no credit or blame for anything' and 'nor ought one to blame others'.48

Before exploring what this transformation might look like, it is important to recognise that the belief – tacit or explicit – in ultimate

responsibility comes with its own dangers. It has been used to justify the cruellest of acts, lending bogus credibility to notions of sin, retribution and 'just deserts'. It vindicates feelings of entitlement and strengthens the impulse to blame and punish. Recent research has demonstrated empirically the ugly attitudes associated with this way of thinking.

To measure how strongly people identify with the idea that the world is just – that good things happen to good people and bad things happen to bad people – psychologists use the 'Just World Belief' scale. A person who scores highly on this scale strongly agrees with statements such as 'By and large, people get what they deserve' and 'People who meet with misfortune have brought it on themselves'. Another measure used is the 'Right Wing Authoritarian' scale, which asks how strongly people agree with statements like 'The established authorities generally turn out to be right about things, while the radicals and protestors are usually just "loud mouths" showing off their ignorance' and 'Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways of sinfulness that are ruining us'. Those who score highly on this scale are more willing to submit to authority and more likely to feel hostile towards those who do not.

Psychologists Jasmine Carey and Del Paulhus found that a strong belief in the responsibility myth correlates with high scores on both scales. Their work is part of a growing body of empirical research which strongly suggests that, as our belief in the myth strengthens, so does our tendency to blame victims, advocate harsher punishments, submit to those in power, and perceive extreme economic inequality as fair and just.<sup>49</sup> Perhaps it is the promotion of the myth – rather than its rejection – that risks the return of 'the gulag'.<sup>50</sup>

A series of studies published in *Psychological Science* found that when people's belief in ultimate responsibility was diminished – through exposure to arguments against free will or scientific findings about the brain – they became less punitive.<sup>51</sup> Such evidence suggests that dispensing with the responsibility myth would actually be conducive to ethical behaviour rather than an impediment to it, and be an important step towards compassion rather than a rejection of morality. After all, if we are not responsible for our achievements and failings, we are all on an

equal footing: ultimately, no one deserves more joy, happiness or freedom than anyone else. This does not oblige us to treat everyone in the same way, but it does demonstrate that the deprivation experienced by some and the privilege enjoyed by others cannot be justified on the grounds that each group deserves what it gets. From this perspective, we discover a sturdy foundation for equality, empathy and compassion.

It would be immoral to ignore just how much luck is involved in moral behaviour itself.<sup>52</sup> Actions that we regard as unethical are – like any behaviour – ultimately a product of formative conditions, which is why those who lack compassion for others are no less deserving of it themselves. Nevertheless, there are times when it is difficult to be compassionate. Invariably, when we suffer at the hands of someone else, there are powerful and complex emotions to work through before compassion is a viable response – and for some of us, in certain situations, it may never be within our grasp. Recognising this is itself a requirement of compassion.

It can be hard to forgive ourselves for the pain we cause others. Yet there is evidence to suggest that doing so is important for our physical and, especially, our mental health.<sup>53</sup> Feelings of self-loathing, it seems, exacerbate cycles of destructive behaviour. As the saying goes, 'hurt people hurt people'. We should never forget that the world marks us before we have a chance to mark it. This perspective invites us to look beyond our own guilt and failings to the systemic and cultural basis of our identity. Perhaps a broader perspective can help to break cycles of self-destructive behaviour. What is done cannot be undone: the important question is always 'What will be done next?' <sup>54</sup>

We are rooted in our environment and depend on its offerings no less than a tree whose health is inextricable from the sunlight, air and soil that surround it. We, too, begin as a seed whose growth and development depend on its environment. Our capacity for happiness, confidence, ecstasy, empathy, love and hate, is not of our own making. None of this means that we cannot change, learn and grow, or that making the effort to do so is unimportant – on the contrary, it is essential – but it does mean that the extent to which we succeed in our attempt, relative to others, is not something for which we can take

credit. Just as the tiny seed that grows into a giant redwood cannot take credit for its height, we cannot take credit for what we become. In an important sense, our achievements are not really *our* achievements. We are notes in life's melody, not its composer.

To deny that we are truly responsible is not to deny the possibility of principled and ethical behaviour. We do not need to hold a person responsible for some admirable trait to value what they are. We treasure the vivid colour, elegant shape and aesthetic beauty of the rose without imputing any responsibility to it. The same is true for all of nature in its complexity and magnificence – including human beings. Why should we need to hold Nina Simone responsible for her genius to treasure what she created? Why do we need to hold Martin Luther King responsible for his courage to revere what he achieved? To expose the myth of responsibility is not to deny the existence of inspiring and admirable human attributes; it is simply to view them as gifts of nature in the same way that we view the splendour of a sunset. Such beauty is meaningful and uplifting in itself.

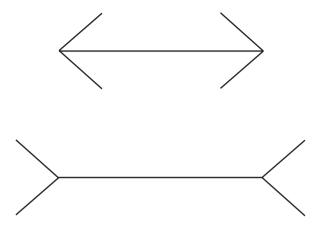
Perhaps what Dennett and others really fear is that by doing away with the responsibility myth we will encourage 'irresponsible' - thoughtless or even reckless - behaviour, that we will have less reason to be caring, conscientious, respectful and dependable. This fear is misplaced. Values motivate us to act, not belief in ultimate responsibility, credit or blame - and values are the product of a wide range of complex forces. Einstein may have rejected the myth of responsibility, but this did not stop him dedicating his life, with vigour and passion, to unlocking the mysteries of the universe, campaigning against the proliferation of nuclear weapons and arguing for a fairer society. There is no reason to think that exposing the illusion of responsibility will undermine the determination to meet our needs or achieve our goals. It does not diminish the cherishing of loved ones, the thirst to learn, or the outrage we feel at injustice. As I will explore in the final part of this book, it is in the pursuit, creation and experience of what we truly value that we discover our deepest freedom.

There is another benefit to exposing the myth of responsibility: doing so highlights the fundamental importance of questioning. If we are not responsible for the way we are, if we are not the authors of our own identity, then who or what is? Awareness of just how susceptible we are to forces beyond our control gives us a compelling reason to investigate those forces and, if necessary, transcend their influence. This is important. If democracy is to have any meaning, and the dangers of centralised control are to be averted, it is essential to have a questioning citizenry.

It is no coincidence that the majority of Sudanese are Muslim, the majority of Thais are Buddhist, and the majority of Italians are Catholic. (In each case the figure is close to 90 per cent.) Our entry into this world may be arbitrary, but the world that greets us is not. Numerous forces vie for our attention and loyalty. Our minds are a battleground for competing ideas. The outcome of this battle determines who we become and the society we create. But the forces that win out are not necessarily the ones that serve us best. Over the course of human history, countless people have been conditioned to defend oppressive ideologies, support destructive regimes and believe downright lies. It once served the interests of monarchs to spread among their subjects the idea of the divine right of kings, just as it served the interests of colonialists to spread the idea of racial superiority. Today, it serves certain interests to spend billions of dollars a year marketing fast food to children, at a time when child obesity is a major public health problem.

Although the ideological, cultural and religious labels that divide us are not inherent in our nature, history suggests that the capacity to identify with them for arbitrary reasons is. This capacity enables the easy transmission of bias, prejudice and ignorance from one generation to the next. If we are to expand our freedom, we need to question our beliefs and values and the forces that brought them about. Why do we hold the beliefs that we do? Why have we formed the habits that we possess? And, crucially, whose interests do they serve? Questioning the religious, economic, social and political paradigms of our time is as urgent as it has ever been. To shape identities is to fashion the future – but what future are we creating? Today the world is scarred by war, extreme inequality and environmental devastation. If we're to create an alternative future, we can't just reproduce the thinking that shaped the past.

Look at these two lines.



If you are familiar with the Müller-Lyer illusion, you'll know that though the bottom line appears to be longer than the top one, both lines are equal in length. Psychologist Daniel Kahneman writes:

To resist the illusion, there is only one thing you can do: you must learn to mistrust your impressions of the length of lines when fins are attached to them. To implement that rule, you must be able to recognize the illusory pattern and recall what you know about it. If you can do this, you will never again be fooled by the Müller-Lyer illusion. But you will still see one line as longer than the other.<sup>55</sup>

For many of us, the psychological experience of making choices feels incompatible with the idea that we are not truly responsible. However much we ponder the philosophical arguments and scientific findings, it may not be possible to overcome this feeling. The illusion of responsibility persists, like an optical illusion, even when it has lost intellectual credibility. Perhaps this is not a problem. We are what we are and must work with what we have.

The experience of an illusion may persist but our beliefs about it can change and our response to it can be modified accordingly. As Bertrand Russell put it, 'A hallucination is a fact, not an error; what is erroneous is a judgement based upon it.'<sup>56</sup> This holds for the cognitive illusion of ultimate responsibility. The perennial debate over the existence or non-existence of 'freedom of the will' is fuelled by the cognitive illusion that we make free choices. The fact that the notion of a truly free choice has never been coherently formulated has had little impact on the vigour of this debate. Although we may never be able to break the illusion completely, we can prime ourselves to respond differently by developing our understanding of freedom and responsibility. On issues of real significance we can inform our judgements with a more intellectually and morally defensible perspective, one that takes account of the fact that our will is conditioned, not free. The roots of behaviour go far beyond the will of the individual to encompass the economic, political, familial and cultural conditions from which it emerges.

The philosopher Thomas Nagel wrote that to 'acquire a more objective understanding of some aspect of life or the world, we step back from our initial view of it and form a new conception which has that view and its relation to the world as its object. In other words, we place ourselves in the world that is to be understood.<sup>57</sup> As we contemplate what we are and the forces that have shaped us, we do just that: we view our beliefs and values, loyalties and prejudices, assumptions and affiliations, not as free choices, but as outcomes of a complex process whose roots predate our existence. Taking this perspective, adopting this 'objective attitude' – which is really just an exercise of the imagination, like putting yourself in someone else's shoes – exposes the arbitrary nature of many aspects of our identity. It provides a rationale for questioning the inevitably flawed maps of reality we hold in our heads, and weakens our ties to the labels, traditions, habits and beliefs that commonly define who we are, at least enough to question, evaluate and reflect on them.

The attempt to view our identity and world from new and challenging perspectives is part of a process that has the power – over time – to profoundly change the self being viewed. It provides a potent antidote to the worst excesses of arbitrary identification; to the sorts of narrow, entrenched, dogmatic worldviews that drive us to kill and die for flags, symbols, gods and governments whose connection to us is no more than accidental.

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Fatalism is the view that our fate is predetermined, by the gods, the stars in the heavens, or some other external force. It is the belief that destiny is inevitable and that making our own deliberations, choices and actions is largely pointless. To be absolutely clear, this is not the argument being made here. Yes, luck plays a decisive role in all of our lives but neither this fact nor anything else in this chapter implies that we are powerless. This book is not an exercise in submissive resignation. The point of identifying our limitations is to give ourselves the best chance of transcending them. It is through understanding the way we are that we increase the possibility of being as we wish to be.

Later chapters will return to these arguments in various ways, exploring the long shadow cast by the myth of responsibility over politics, economics and the wider culture - and asking how society might look if it escaped this shadow. As we will see, a great deal depends on our capacity to cultivate a more accurate understanding of ourselves and each other. The notion that we are somehow truly responsible for the way we are and what we do has led to absurd beliefs and cruel policies. It legitimises the claim that people deserve the privileges they enjoy and the punishments they receive. It promotes the view that the fates of the prosperous and the poor, the celebrated and the reviled, are merited. It offers a tacit yet powerful endorsement of inequality and oppression. To expose the responsibility myth is to expose these pernicious ways of thinking and place a powerful tool in the hands of those fighting for a fairer allocation of wealth, power and opportunity. It is also a significant step towards creating a more compassionate world, in which the impulse to blame is overcome by a desire to understand, and feelings of entitlement give way to humility. By shattering the myth of responsibility we give ourselves the best chance of expanding the freedom that is available to us, personally and politically. The more we understand the effect the world has had on us, the more we can control the effect we have on the world.