

Introduction

‘I’m always surprised when I see people who have been successful . . . and they’re absolutely convinced that it’s all because they were so smart. And I’m always saying, well, I worked hard, and I’ve got some talent, but there are a lot of hardworking, talented people out there . . . There was this element of chance to it . . . of serendipity . . . [and] you want to see if you can maybe figure out how to sprinkle that stardust on other people.’

Barack Obama, 44th President of the United States of America

We all like to feel like we are masters of our own destiny – to be in control of our future, to know how we will reach our goals and ambitions. In short, we all like to have a plan.

This seemingly innate human desire to map out our future is reflected in almost every aspect of modern life. Organizations, governments and every one of us all structure our activities around plans, strategies and targets that we make. We construct routines, rules and processes – from setting the alarm clock to organizing national elections – to ensure that those plans come to fruition.

But are we really in control of our lives? Despite all of our planning, modelling and strategizing, there appears to be another factor at work: the unexpected. In fact, unforeseen events, chance meetings or seemingly bizarre coincidences are not just minor distractions or specks of grit in our well-oiled lives. The unexpected is often the critical factor, it is the force that makes the greatest difference to our lives and our futures.

Perhaps, if you have one, you met your spouse ‘by coincidence’? Or came across your new job or new flat ‘by accident’? Did you meet your future co-founder or investor ‘by chance’? Or did you

‘randomly’ pick up a magazine just to find exactly what you needed to know to solve a problem? How did such moments, big or small, change your life? How might your life have played out had everything just gone according to plan?

Wars are won or lost, companies thrive or collapse and love is found or lost all on the turn of the unexpected. Whatever our ambitions in life, whether finding business success, love, joy, or spiritual meaning, we are prone to coincidental encounters. The most mundane moment, like running into someone in the gym, can change your life.

Even in the rigorous world of scientific research, the power of the unexpected is (almost) always at play. Studies suggest that around 30 to 50 per cent of major scientific breakthroughs emerge as the result of accidents or coincidences: one chemical spills into another, cells combine in dirty Petri dishes, or there is a chance encounter between experts whose incidental conversation sparks new insights. The greatest opportunities, for individuals and organizations alike, are often a matter of serendipity.¹

So, does most success boil down to ‘blind luck’ – to success or failure brought simply by chance rather than through our own actions? No; intuitively we sense that this isn’t true either. While we recognize that the greatest turning points and transformative opportunities in our lives often seem to occur by chance, some people just seem to have more luck, and subsequently more success and joy, than others.

This isn’t just a modern phenomenon, either; the chemist and biologist Louis Pasteur thought that chance favours the prepared mind. The military leader and emperor Napoléon Bonaparte said he would rather have lucky generals than good ones and the Roman writer and statesman Seneca believed that luck is a matter of preparation meeting opportunity.

Their beliefs all reflect the idea that, while chance is a real force, there is more to life than blind luck. Indeed, the word ‘fortune’ can refer to both success and luck. Even commonplace phrases such as: ‘You make your own luck’ or ‘He’s a man with an eye for the main chance’ all point to the idea that success in life depends on an interaction – a *synthesis* – between pure chance and human effort.

What is really going on here? Are some people able to create the conditions for positive coincidences to happen more often than others? Are they better able to spot and grasp these moments and turn them into positive outcomes? Can our education and approach to work and life equip us with the most important skill of all – the ability to navigate the unexpected and make our own ‘smart’ luck?

This is a book about the interactions of coincidence, human ambition and imagination. It is a book about *serendipity*. This can best be defined as unexpected good luck resulting from unplanned moments in which proactive decisions lead to positive outcomes. Serendipity is **the hidden force in the world**, and it is present all around us, from the smallest day-to-day events to life-changing, and sometimes world-changing, breakthroughs.

However, only few of us – including many of the people you will meet in this book – have deciphered this code and developed the mindset needed to turn the unexpected into a success and a force for good. Once we realize that serendipity is not just about a coincidence that just happens *to* us but is actually the process of *spotting and connecting the dots* do we start to see bridges where others see gaps.² Only then does serendipity start happening all the time in our lives.

When this happens, the unexpected changes from being a threat to a constant source of joy, of wonder, of meaning – and of sustained success. In a world that has been running on a fight-or-flight lizard brain, in which fear-mongering, populism and uncertainty have taken over, the mindsets and contexts that we are used to are simply not working any more. Developing a *serendipity mindset* and shaping the related conditions become the essential life-skills and capabilities for ourselves, our children and our organizations.

Imagine a world driven by curiosity, opportunity and a sense of connection, rather than by fear, scarcity and jealousy. A world in which enormous challenges such as climate change and social inequality are being tackled by solutions that are bold and up to the challenge. In our fast-changing world, many of the emerging

problems are so complex that much of our future will be driven by the unexpected. Developing a serendipity mindset is therefore an evolutionary necessity as well as an opportunity to identify what makes us feel most alive so that we can develop a deeper enthusiasm for life.

Serendipity is a popular subject – millions of websites refer to it. In fact, many of the world's most successful people credit it as the secret behind their success.³ But we know surprisingly little about what specific, science-based methods we can adopt to create conditions for serendipity in our lives. And we know little about how this plays out in different contexts around the world.

Connect the Dots fills this gap. Informed both by scientific research that explains how serendipity can unfold and by anecdotal accounts and inspiring examples from around the globe of how we can nurture serendipity in ourselves and in others, this book offers a framework and exercises that will help you in your quest to make fortunate surprises more likely to happen – and with better outcomes. This active perspective on serendipity – ‘smart luck’, if you will – is thus different from the ‘luck of the draw’, the ‘plain’ or ‘blind’ luck that just happens to us without effort (like being born into a good family). If you aim to shape your own future and the future of people around you – even if that future is impossible to predict – then this book is for you. It gives a holistic insight into how lucky (and unlucky) coincidences can be facilitated, leveraged and sustained – but never really emulated. It is the first comprehensive science-based methodology and framework on how to develop a serendipity mindset and the related conditions.

A serendipity mindset is both a philosophy of life that many of the world's most successful and joyful people have turned to in order to create meaningful lives and a capability that each of us can develop.

Along with conversations with individuals I call ‘serendipitors’, this book is the result of a decade of experience as a researcher, business consultant, university lecturer, co-director at the London School of Economics Innovation Lab and at New York University's

Global Economy Program, and fifteen years spent cultivating serendipity in my own life. This is an interest I have pursued as the co-founder of both Sandbox Network, a community of inspiring young people that is active in over twenty countries, and Leaders on Purpose, a global organization that brings together high-impact executives and policymakers. My advisory work with a broad range of organizations and individuals – from one of China’s largest companies to small community organizations around the world – has given me access to a diverse range of people, and the opportunity to witness serendipity in a huge range of situations and settings. Living in a broad variety of contexts, from Moscow to Mexico City, has imbued in me a deep appreciation of contextual nuances, which this book will explore.

Connect the Dots also uses my own research with colleagues at the LSE, Harvard University, the World Economic Forum, Strathmore Business School and The World Bank, as well as the latest studies in neuroscience, psychology, management, the arts, physics and chemistry. It is based on hundreds of academic papers and over 200 interviews and conversations with a diverse range of people from all corners of the world. It offers inspiring first-hand stories and experiences from individuals in all walks of life – from former drug addicts-turned-teachers in Cape Town’s impoverished Cape Flats district to a filmmaker in New York to an entrepreneur in Kenya to a waiter in London to a student in Houston and more than a dozen of the world’s most successful CEOs.⁴ While each of these stories of embracing and leveraging the unexpected is very different, as we will witness, the patterns are very similar.

A collision with fate

While I can now discuss serendipity from different standpoints, my journey into serendipity began with a personal incident in which juvenile hubris met bad luck.

At eighteen, I crashed my car into several parked vehicles at over 50 mph. Fortunately, I survived, but the cars I hit were severely damaged, as was my own. I had never believed stories about near-death experiences, but my life really did flash before my eyes in the split-second before that collision, when my car was spinning out of control and I felt absolutely powerless, certain that I would die.

In the days that followed I asked myself questions. Many questions. 'If I had died, who would have come to my funeral?'; 'Who would have actually cared?'; 'Was life really worth living?' I realized that I had been neglecting some of the most important parts of life, such as treasuring deep and lasting relationships and being proud of doing something relevant and meaningful. My narrow escape made me consider what my death would have meant in terms of lost opportunities: the people I would not have met; the ideas and dreams that I would never have explored; the (serendipitous) events and encounters that would have been missed. Thus began my search for what life was really about.

I grew up in Heidelberg, a historic and romantic city in southern Germany that, while beautiful, is a bit sleepy when you are a teenager set on exploring what life is all about. Ever since I can remember, I had always felt that I did not belong. My family moved several times, so I was often 'the new kid' in kindergarten and in school. At the football club I was 'the incomer'. My skin problems at the time were the icing on the cake.

My retreat was the coffee shop, where I started to work when I was sixteen. It was there that I began to feel I had found my tribe. Working there as a waiter taught me a lot about human behaviour and group dynamics. How people treat you if they assume that you're 'just a waiter'. It taught me the value of doing manual work from 8 a.m. to 9 p.m. without a real break. My boss was an entrepreneur, and soon I was helping him with different projects, from selling imported T-shirts to delivering cakes as soon as I turned eighteen and passed my driving test. Around that time I also started working part-time for a market research company, asking people

in Heidelberg's main street which sausage size they would prefer to buy and why. Would they be open to buying salami instead of pastрами if it was cheaper?

During my teenage years I had lots of energy but was never sure what to do with it. In order to channel it I tried to create excitement wherever possible, and I tested all kinds of boundaries. I veered between extremes: spending time with a group of left-wing activists (during my reggae-band-groupie phase) and going to night clubs, while starting to invest my wages into the stock market – my parents hesitated but ultimately gave the bank the authorization to deal with a minor. (To this day I have deep admiration for my parents, who handled my rebellious streaks with grace and understanding.) I started to spend more time on the telephone in my school's basement buying and selling stocks than I did in the classroom. I always enjoyed tapping in and out of these very different worlds – enjoyed them but never really felt at home.

Naturally, these various explorations did not help my grades. I was a terrible student – I was in the 5 per cent of the class that made the top 95 per cent possible. I had to repeat a year and I was 'offered the opportunity to change schools' – in other words, expelled. The next school I attended fortunately proved to be more embracing about my rebellious streaks.

When I turned eighteen I got my first car. I was excited – and transferred my hedonistic and over-optimistic attitude into my driving style. I probably broke the city records for the number of parking tickets accrued by one driver in a week and the number of dustbins knocked over on the way to school.

I felt in total command of my life, of my destiny.

And then, one day, I pushed too far. The car accident shattered my confidence and sense of control.

The liberation that I had felt earlier on that sunny day when I was hanging out with two close friends on Heidelberg's Neckarwiese turned into both shock at what I had done and relief that I had managed to avoid becoming a statistic. My friends and I were on our way to get some food. We had taken two cars, and I tried

to overtake my friend's. I still remember looking over at him as I passed, and him frantically waving at me and pointing to the traffic island in the middle of the road ahead that I hadn't seen. It's a vivid memory: to avoid hitting the island I turned the wheel hard; the car spun a couple of times and I crashed into a line of parked vehicles.

My Volvo's double-skinned doors saved my life. The passenger side was completely destroyed. I later learned that any other collision angle would most probably have killed me. My friend who was a passenger in the other car had initially wanted to ride with me but remembered he had left his jacket in the other car so changed his mind at quite literally the last second. If he hadn't, he would have been in that passenger seat.

I remember getting out of the car, amazed that I was still able to walk. My friends and I exchanged a few words of disbelief as we tried to grasp what had happened. What would we tell the police? My parents?

While we waited for the authorities to arrive, I sat behind the wheel, dizzy and exhausted. The police officer who arrived at the scene and surveyed the wreckage was amazed I was still alive, with no injuries apart from a light whiplash.

I wandered through the city that night, in a strange state of bitter-sweetness, not wanting to go home. I had survived, but I couldn't stop thinking: If I had died, I would probably have made my family's life a living hell. If my friend had ridden with me, I would almost certainly have killed him. How on earth had this happened? How had I let it happen?

The old proverb that 'death is life's greatest motivator' started to make a lot of sense to me. When you face death, you don't worry about how much money you have in the bank, how many cars you have in the garage, how great last night's clubbing experience was. This all becomes meaningless and you try to understand what's really there, what life really is about.

Perhaps you have had a similar experience in your own life. Or another inflection point, incremental or radical, that changed your

perspective. Perhaps a toxic relationship that you needed to break out of, an illness, or a job you wanted to leave?

The accident helped me start to turn my life around, and gave me a sense of direction. I applied to dozens of universities (given my miserable school record, out of more than forty applications only four universities accepted me). I started to channel my energy into my studies, my relationships and my work. I went on to co-found several communities and organizations focused on enabling people to live meaningful lives.

These ventures were themselves often the result of serendipitous encounters. The more active I became, the more I started seeing the patterns in my and other people's lives, and later in my research as well.

When I began my PhD research at the LSE in 2009, I assumed it would be relatively separate from the cultivating of serendipitous experiences in my personal life. The research focused on how individuals and organizations can grow and increase their social impact and meaning, which appeared quite unconnected to serendipity at first. But to my surprise and delight, the concept popped up over and over again. Many of the most successful and joyful people that I interviewed for my research appeared to intuitively cultivate a force field – a 'serendipity field' – that allowed them to have more positive life outcomes than others who started out under similar conditions.

Connecting the dots – in this case, with hindsight – made me realize that a way to combine these streams and passions would be to write a book that would encompass what I deeply believe in as a life philosophy and a more realistic model of how life really unfolds than the education system had so far provided me with.

Today, nothing makes me happier than to see the spark when two ideas or characters unexpectedly 'click' – the joy of serendipity. I have experienced it as a beautiful way to support someone as they unleash their real potential, of exploring what's possible in a world in which we could adopt many different personas and live many different lives. This is what cultivating serendipity is all

about – supporting people in their journey of exploring their most aligned possible selves.

Connect the Dots is about recognizing that we can open ourselves up to the unexpected. And it is about being prepared and free from the preconceptions that can stop us being the victims or beneficiaries of luck (good or bad). We can nurture it, shape it and make it a tool for life. In the science of serendipity, luck can be caught, coached and created.⁵ This means that we can direct our learning, skills, education and training programmes towards influencing and mastering that process.

In part this involves removing barriers to serendipity, in our own thinking process and in our lives and workplaces. We all know instinctively about these practical barriers and how they kill enthusiasm: senseless meetings, email overload, pointless memos to be written or read. But it is just as much about developing a mindset that allows us to use our skills and available resources to turn unexpected discoveries into outcomes with real value.

This is not about developing a particular competence but about nourishing a constantly evolving capability. It is about shifting from being a passive recipient to becoming an active agent of our own smart luck; about setting ourselves up to make unexpected change an opportunity for success, and finding meaning and joy. The next step is to develop the **conditions** – in our families, our communities, our organizations – that allow serendipity to be nurtured and used to create opportunities and value. This allows us to grow and harness our **serendipity field** – all the dots that can potentially be connected.

This book will guide you through the process of deciphering, creating and cultivating serendipity, step by step. It also tackles the elephant in the room: if serendipity is inherently random, how can we influence it?

In this day and age, being successful and joyful is not about trying to plan everything. In a world where we often cannot predict what will happen tomorrow, the best we can do is to embrace unexpected conditions and make the most of the randomness of

life. *Connect the Dots* is about what we can control: namely, how to cultivate serendipity for ourselves and others. This powerful mechanism for unleashing human potential demonstrates not only that (smart) luck favours the prepared but also that there are (scientifically underpinned) ways in which we can accelerate, nurture and harness the positive coincidences in our lives. We can never abolish the importance of randomness, chance and coincidence in life or in business, but this book will help you transform them from uncontrollable forces into tools you can leverage for personal or greater good. Then you will start to see and create serendipity everywhere.

Naturally, we are all busy, and few of us have the time to change our lives completely all at once – which is why the book is peppered with examples of small, immediate adjustments that will directly make a difference in your day-to-day and help you to live a more meaningful, joyful, inspiring and successful life.

I. Serendipity: More Than Blind Luck

‘Humiliating to human pride as it may be, we must recognize that the advance and even the preservation of civilization are dependent upon a maximum of opportunity for accidents to happen.’

Friedrich Hayek, winner of the 1974 Nobel Prize in Economics,
The Constitution of Liberty

Serendipity: a brief history

When King Giasfer, ruler of the ancient country of Serendip (an Old Persian name for Sri Lanka) became concerned that his three sons were too sheltered, privileged and unprepared for the challenges of ruling the kingdom, he decided to send them on a journey on which they would learn some important life lessons.

In one tale, the princes come across a merchant who has lost a camel. From observations they have made during their journey they describe the camel so well that the merchant believes they must have stolen it. The merchant takes them to the emperor, who asks how they could possibly have given such a clear description of the camel if they had never seen it. They explain that they knew the camel was lame because they observed tracks showing the prints of three feet and a fourth being dragged, and that they knew it was carrying butter on one side and honey on the other because flies had been attracted to the butter on one side of the road and ants to the honey on the other side of the road, and so on. Suspicions that the princes might have stolen the camel – given their detailed description of it – are rebutted when another traveller enters to say he has found a camel.

The princes did not yet know that a lame, honey-bearing camel

was missing when they made their observations. But when they learned that one was missing, they connected this information to what they had observed earlier – they *connected the dots*.

In 1754, the British writer and politician Horace Walpole wrote to a friend about an unexpected discovery which he compared to the story of the three princes. In doing so, he coined the word *serendipity*, describing the princes as people who ‘were always making discoveries, by accidents and sagacity, of things they were not in quest of’. Thus, the word entered the English language, and while it has been reduced by many to mean simply ‘good luck’, it is clear that Walpole had spotted its subtler meaning.

There are other definitions of serendipity, but most demarcate the phenomenon as chance interacting with human action, leading to a (usually positive) outcome – which is the definition I use here.¹ This action-focused perspective allows us to understand how to develop a space that we can control in which serendipity can happen – a **serendipity field**.

By definition, serendipity is not controllable, let alone predictable. However, there are tangible, achievable ways to develop the conditions in which serendipity can happen and to ensure that, when such potentially transformational coincidences occur, we can recognize them and grab them with both hands. Serendipity is about seeing what others don’t, about noticing unexpected observations and turning them into opportunities. It demands a conscious effort to prompt and leverage those moments when apparently unconnected ideas or events come together in front of you to form a new pattern. Put more plainly, it is about connecting the dots.

From volcanoes to world champions

On a sunny Saturday in April 2010, an erupting Icelandic volcano with an unpronounceable name (Eyjafjallajökull) entered popular culture after its resulting ash cloud had grounded thousands of flights across most of Europe. That same morning, an unknown

number popped up on my phone. On the line was a stranger, who started speaking self-confidently:

‘Hi, Christian. We don’t know each other yet, but a mutual friend gave me your number. I’d like to ask you for a favour.’

Sitting at brunch after a long night out, I was still a little sleepy, but none the less intrigued.

‘Ahm, tell me more,’ I replied.

This is how Nathaniel Whittmore, an entrepreneur and blogger, entered my life. Nathaniel explained that his flight from London to Southern California had just been cancelled, and that he was stuck in London along with many of the attendees of the Skoll World Forum, a major annual conference for social entrepreneurs and thought leaders held at Oxford University. Most of them did not know many people in London, and had their schedules cleared. ‘So why not organize an event to bring them all together and make the best out of the situation?’ he asked. By then, Nathaniel had already written an email along those lines to the TED team,² whom he had briefly met a few years earlier.

Within thirty-six hours, Nathaniel organized the first ever – and probably last – ‘TEDxVolcano’ conference, a spontaneous version of the popular TED conference. With absolutely no budget, over a weekend, and with few direct contacts in London, Nathaniel turned a challenging situation into an event with 200 top attendees, hundreds on the waiting list, speakers including eBay’s first president, Jeff Skoll, and a recorded livestream watched by more than 10,000 people.

While this was amazing in its own right, the two questions that occurred to me were 1) How did he do this? and 2) What can we learn from it?

Nathaniel, like all of us, had encountered something random and unexpected in his life – in this case, an unforeseen and unplanned-for period of time in London. But he had the sagacity – the perceptiveness, the creativity and the energy – to turn it into something positive. Most of us may not have seen the potential trigger for serendipity in such a situation. Nathaniel realized not

only that exceptional people were stuck in London, but also that their experiences could be great stories to tell in the context of TED. And where many may have been deterred by the lack of resources, he used his enthusiasm and negotiation skills to convince a local co-working office to donate space for the event, used Sandbox, the innovation community I co-founded, to recruit volunteers and enlisted top people like the former executive director of Google.org (Google's charitable arm), Larry Brilliant, to give extemporaneous talks. Nathaniel's ability to connect the dots produced a world-class event with no budget within one and a half days, in a city where he previously had a limited network. This precis is only half of the story, to which I shall return later in this book, but the important point to make here is that encounters such as these happen more often than we realize.

Take Dr Nico Rose, a German organizational psychologist who was on a business trip in 2018 when he ran into former world heavyweight champion boxer Wladimir Klitschko in the gym of a Boston hotel. Though he had gone to the gym simply to battle jet lag, a weary-eyed and befuddled Nico nevertheless immediately recognized Klitschko, one of his idols. He hurried back to his room to fetch his phone, planning to ask for a selfie if he could do so without disturbing Klitschko's training routine.

The ideal moment arose when Klitschko's manager entered the gym and spoke to him in German. Nico gathered that the pair did not know where breakfast was served in the hotel. He took the opportunity to explain to them how to get there, got his selfie, and off they went to do their separate workouts. When they had finished, Klitschko was looking for the elevator, so Nico walked with him and they chatted further. At the end of their time together, Klitschko asked Nico to introduce him to the corporate university where he worked for speaking opportunities. In turn, Nico told him about his upcoming book, for which Klitschko ended up agreeing to write the foreword.

Did Nathaniel expect to encounter an ash cloud? Did Nico expect to bump into his idol? Did either expect to organize a global

event in London or find a writer for their book's foreword from one of the world's foremost sportsmen in a hotel gym in Boston? Certainly not – but both had laid the foundations for such an event well in advance.

Does success really come down to 'luck'?

A lot of life makes sense only when you look at events in the rear-view mirror; we tend to connect the dots *in hindsight*. When we do so, we often turn random life choices and chance happenings into a convincing and logical story that we tell others.

Which one of us hasn't presented their CV as if their life was, in fact, a very coherent, rationally organized plan? In truth, we might not have had a clear plan for our careers at all. The reality was almost certainly different, often driven by coincidences and accidents, by an unexpected idea, encounter or conversation.

But what if we can learn to start to connect the dots not only with hindsight but also with foresight? What if we could prepare the ground ready to take advantage of these coincidences, creating a field where they could germinate and thrive? What if we knew how to nourish and cultivate them? And, most important, what if we could make sure they flourished into better outcomes?

While few of us can engineer a seismic event or a meeting with a superstar, we can, by being attuned to opportunity, shape an outcome that develops and takes advantage of serendipitous conditions.

What we often fail to realize is that successful people have often not just 'been lucky', even when it appears that a chance event has played an important role in their achievements. In fact, successful people have often, either consciously or subconsciously, done the necessary groundwork to create the conditions that have brought them such 'luck'.

It's not only the Richard Bransons, Bill Gateses, Oprah Winfreys and Arianna Huffingtons of the world who are lucky and

who can set up equally lucky environments for others – all of us can nurture serendipity for ourselves and for others.

Serendipity is everywhere

It's true. Inventions such as Nylon, Velcro, Viagra, Post-it notes, X-rays, penicillin, rubber and microwave ovens all involved serendipity. Presidents, superstars, professors, businesspeople – including many of the world's leading CEOs – credit a large part of their success to serendipity.

But serendipity isn't just a guiding force in great scientific discoveries, business achievements or diplomatic breakthroughs. It is present in our everyday lives, in the smallest moments and the greatest life-changing events. Imagine that your neighbour hires a scaffold tower to cut down some overhanging branches in her garden. You spot her working away and suddenly remember the loose tile on your roof. It's not serious, so you weren't going to bother fixing it, but hey . . .

You pop outside, start chatting with her and help her drag away the branches. You invite her in for a beer, and next thing you're using the scaffold to help you fix your loose tile. (Before you've drunk the beer, of course!) What's more, while you are up there, you realize the guttering is loose and about to fall. It's too big a job for you, but now you know you need to hire some professionals to fix it – which might well have saved someone in your family from an injury had it fallen down at the wrong time.

Perhaps you were in a similar situation recently yourself?

It's the kind of thing that happens all the time. We might not recognize it as serendipity, but it has all the key characteristics: a chance event appears in our lives, we notice it, pay attention to it and link it to an unrelated fact that we're also aware of. We connect the two and then follow through with a bit of determination, leading to a solution to a problem that often we didn't even know we had.

Even love may be said to be the child of serendipity. I met almost all my romantic partners in coffee shops or airports, often because of a spilled coffee or a laptop that needed to be watched, sparking a conversation that unveiled common interests. Many of the most famous love stories – including that of Michelle and Barack Obama, who met when a young and impossibly tardy Barack joined Michelle’s law firm and was allocated to her as a mentee – were born out of the unexpected. (And, as we will see later, tenacity is often crucial in turning potential serendipity into a positive outcome: when Michelle kept Barack at bay by suggesting that, as his adviser, she was not supposed to date him, he suggested he would be ready to quit – there was some back and forth and the rest is history.)

If you’re in a relationship, how did you meet your partner? Even if you met them ‘randomly’, it probably was not blind luck. That would imply you had no role in it at all. It may have sprung from a chance encounter but you spotted a powerful connection, an empathy, or a shared outlook, and crucially you worked at it. You nurtured the connections, you found ways in which you complemented and inspired each other. You took a chance event, grasped it and worked at it.

That was not just blind luck. It was serendipity.

Types of serendipity

Every case of serendipity is unique, but research has identified three core types.³ All involve an initial serendipity trigger (something unexpected), but they differ depending on the initial intent and on the outcome.

It comes down to two basic questions:

Were you looking for something already?

and

Did you find what you were looking for, or did you find something entirely unexpected?

So, what are these three types of serendipity?

Archimedes serendipity: an unexpected way to solve the problem we wanted to solve

Archimedes serendipity occurs when a *known problem* or challenge (e.g. a broken bathtub, or trying to get a dream job) is solved, but the solution comes from an unexpected place. Take the story of when King Hiero II of Syracuse asks the Greek mathematician Archimedes to find out whether a goldsmith has substituted silver for some of the gold meant for the king's crown. The crown weighs the right amount, but how can anyone ascertain whether it is made of pure gold? Unable to find a way to solve the problem, a flummoxed Archimedes heads for the public baths to relax and idly watches the water level rise and pour over the side as he lowers himself into the tub. And then – eureka! – he realizes that a crown mixed with silver, which is lighter than gold, would have to be bulkier to weigh the same. Therefore, when submerged in water, it would displace more water than a pure gold crown of the same weight.

This type of serendipity is common in our personal lives as well as in organizations of all sizes. What is natural for entrepreneurs – they often change course based on random encounters or unexpected user feedback – also occurs in the biggest of companies.

David Taylor, CEO of the multinational consumer goods company Procter & Gamble, told me in an interview that he likes it when an approach changes, because it opens up possibilities that his team did not envision before. In his words: 'It still solves the problem we wanted to solve, but it does it in a different way than we thought of. You can't plan all that, but you need to have an idea of what you want to try to solve. There is a magic in this, and it often happens when you have access to different sets of experiences, of people who fall in love with the problem and are open to the unexpected.'

One of the first serendipitors we will meet in this book is Waqas Baggia, now a sales consultant at Mercedes-Benz Canada. Canadian by birth, he had moved to the UK with his wife, who was studying law there. They then moved back to Toronto, and he was working in

retail until he found something in his field, having previously worked in the UK at Jaguar Land Rover as a technical recruitment consultant. He had applied and progressed through half a dozen interviews at different companies, always failing to make the final cut. His friends kept asking him why he worked so hard, 'It's just retail!' they'd say. But Waqas's principle is that whatever he does, he does properly. One day he was helping a customer with his usual professionalism and enthusiasm. Impressed, the customer asked more about Waqas and his background, and Waqas told him that he was doing this job until he could find a position in luxury automotive sales. The customer just happened to be the General Manager of a Mercedes-Benz dealership, and offered Waqas an interview. Waqas subsequently became the first sales consultant the dealership had hired without automotive sales experience – and they created a training programme specifically for him. Waqas's strong work ethos and enthusiasm paired with the customer's lateral thinking led to this unexpected advancement of Waqas's career.

Post-it note serendipity: an unexpected solution to a different problem from the one you wanted to solve

Post-it note serendipity occurs when you examine a particular problem but stumble across a solution to an entirely different or even previously unrecognized one. Your journey goes off in a completely different direction but still gets you to a pleasing destination. Take the idea of Post-its. In the late 1970s Dr Spencer Silver, a researcher at 3M, the consumer goods company, was trying to discover a stronger glue. What he actually got was the opposite – a substance that didn't stick particularly well. But this weak glue was perfect for a new product line that 3M called Post-it notes.⁴

Another example comes from a multinational nutrition and chemicals group, which was struggling to sell a coating for picture-frame glass that pushes the light through the glass – thus preventing it from reflecting. The product worked well, but the company

couldn't find a market for it. The project manager was about to abandon the idea when a chance interaction with a colleague from another division sparked the notion that the technology could be highly effective on solar panels, which need to absorb as much light as possible. This unexpected solution to a different problem than initially imagined – fuelled the solar business unit at the company. We will see later why the company's CEO was right when he said: 'Someone else will say: "This is pure luck." But that's serendipity.'

In our openness to unexpected solutions that solve emerging problems, we often end up in places we could hardly have predicted. Peter Agnefjall, IKEA's CEO between 2012 and 2017, told us in an interview how he would have laughed at us had we told him five years ago that IKEA would own wind farms and solar-power installations. 'But when I look back, that's what we do now, right?'⁵

Thunderbolt serendipity: an effortless solution to an unexpected or unrealized problem

Thunderbolt serendipity happens where no search or deliberate problem solving is underway. It follows something entirely unexpected, like a thunderbolt in the sky, and sparks a new opportunity, or solves a previously unknown or unattempted problem. We often fall in love this way, and many new ideas and approaches emerge from this type of serendipity.

When Olivia Twist (name changed) was young, she moved into her first apartment and found a strange object in a kitchen drawer. She showed it to one of her friends, who explained that it was a radiator key, used to let out unnecessary air from the apartment's radiator, so keeping it running efficiently. Olivia had no idea there was such a problem or that such a thing as a radiator key was necessary, but when the weather started to turn and it got cold in her apartment, she bled her radiator using the key and her apartment got warmer. The chance discovery of an unexpected object,

together with the curiosity and will to learn what it was and how it worked, led her to the solution of a problem she did not even know she had.

Sofar Sounds, a global movement that reimagines live music events, was invented under comparable circumstances. When Rafe Offer, Rocky Start and singer-songwriter Dave Alexander went to see indie rock band Friendly Fires live they were annoyed by other concertgoers nearby who talked over the music and stared at their smartphones. Struck by the realization that the days when people attending a show focused solely on the music were long gone, in 2009 they decided to organize an intimate gig in Rocky's front room in North London, with Dave performing his songs to a small, hand-picked audience.

They repeated the living-room experience in other parts of London as well as Paris, New York and other cities, and received requests from people around the world who wanted to host similar events. Sofar (an acronym of 'songs from a room') Sounds was born. By 2018 Sofar Sounds had hosted more than 4,000 intimate gigs in people's homes in more than 400 cities around the world, partnering with companies as varied as Airbnb and Virgin Group.

What had started as a conversation prompted by an annoying encounter had evolved into a magical experience – combining the intimacy of a living room with the intensity of a live concert.

But not everything fits a category

Any effort to categorize serendipity will always be slightly subjective, and some examples will combine elements of one or more of the three types described above. If you have a serendipitous moment, don't waste time trying to work out which type it was. Indeed, the temptation to categorize is one of the things that can kill serendipity stone dead.

So while the core of active serendipity is constant – connecting

the dots between unexpected or apparently unrelated events or facts – a lot of serendipitous events defy such efforts at categorization, including some of the greatest examples.

One such case – and one that transformed the world for the better – was Alexander Fleming’s discovery of penicillin. The story is well known and is taught to schoolchildren as a model of a medical and scientific breakthrough, but here’s a brief reminder.

Fleming was researching the bacterium staphylococcus – various forms of which can cause a huge range of human infections, some of which can be fatal. One morning in 1928 he returned to his laboratory in the basement of St Mary’s hospital in London and found that one of his Petri dishes containing samples of the bacteria had been left uncovered on a windowsill. But something unexpected had happened – a blue-green mould was growing in the dish. Even odder, in the space around the mould the original staphylococcus bacteria had disappeared.

The mould was *Penicillium chrysogenum*. Thus was penicillin discovered as an agent that would kill certain bacteria. From this discovery emerged the entire science of antibiotics, which has saved millions upon millions of lives. (Serendipitously, the mould that in the end allowed the dramatic upscaling of penicillin production was discovered by Mary Hunt, a laboratory assistant at the US Northern Regional Research Laboratory, who came across a ‘golden mould’ that yielded dozens of times more penicillin than Fleming’s.)

The key features of serendipity are all here in this story.⁶ An accidental contamination leads to a mould, which turns out to be a life-saving drug. But which type of serendipity is this? The answer depends on what we think Fleming was trying to achieve. In one sense any medical research scientist is looking, if only indirectly, for medical treatments, and Fleming found one. On the other hand, he almost certainly wasn’t looking for antibiotics – no one had conceived of such an idea.

Whatever type of serendipity this was, it began with a trigger (the accidental contamination of a Petri dish), but the critical moment is

Fleming's reaction. Rather than curse his own sloppiness for leaving the dish exposed and throwing it in the bin, he was curious. He showed the dish to colleagues and carried out further research. Others followed over many years – and so began the long process that turned an accident into life-changing medicine.

While penicillin was discovered by accident, it would be wrong to dismiss Fleming as 'just lucky' and argue that human agency had no role in this breakthrough. Crucially, Fleming made the key decision to connect the dots – what's known as 'bisociation'. It may have taken years to reach fulfilment, but had Fleming not had the right mindset to make that association, the green mould contaminating his Petri dish would have remained just another forgotten laboratory mishap. In fact, the antagonism between mould and germs had been observed decades earlier, but nobody had paid proper attention to it. Could millions of lives have been saved had serendipity played out earlier?⁷

Leverage the unexpected

Serendipity is not just something that *happens to us*, it is a phenomenon with distinct features, and each of those features can be nurtured in our lives. For us to really understand serendipity and to be able to see it not as an external force but as a magical tool we can use, we need to look more closely.

To do this, based on existing research we can identify three interconnected core characteristics of serendipity:⁸

1. A person encounters something unexpected or unusual. This could be a physical phenomenon, something that comes up in conversation or one of countless other eventualities. This is the serendipity trigger.
2. The individual links this trigger to something previously unrelated. She *connects the dots*, and so realizes the potential value in this apparently chance event or

meeting. This linking of two previously unrelated facts or events may be called the bisociation.

3. Crucially, the value realized – the insights, the innovation, the new way of doing something, or the new solution to a problem – is not at all what is expected, and not what someone was looking for, or at least not in the form it appeared. It is **unanticipated**.

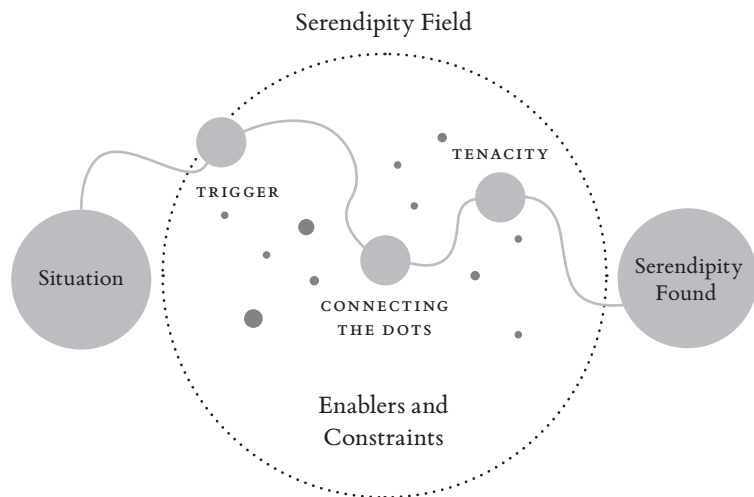
While surprise and chance are important, they are only the beginning steps. What's also needed is someone who is capable of understanding and using that chance finding. That means creatively recombining events, observations or fragments of information based on the (unexpected) recognition of a meaningful link. Often contributions come from connecting two utterly unconnected ideas that were previously regarded as 'strangers to each other'.⁹

Serendipity is about the ability to recognize and leverage the value in unexpected encounters and information.¹⁰ Thus, it can be learned and facilitated at every step. We can develop a **serendipity mindset** – the capacity to identify, grasp and wield this powerful force.

While a particular chance encounter is an event, serendipity is a process. Surprise and/or chance are important – but only as a first step. The essential second step comes from being able to understand and leverage the unexpected observation. We need to see links or bridges where others see gaps. And it often takes sagacity – being able to filter and see the value – and the tenacity to see it through.¹¹

If we do not see the serendipity trigger or its potential connections, then we can miss serendipity, and there are many potential coincidences that could have happened but never did. We might encounter a potential prompt (such as running into Wladimir Klitschko or a potential love interest), but if we don't connect the dots, it will be serendipity missed.

Imagine all the possible times – the missed hits – where serendipity might have happened, but we were too blind to see them (or saw them but did not act)! Perhaps you had a situation in your life



recently where it would just have needed a small nudge to do something but you didn't – and felt afterwards that there 'could have been something'? This is why it's crucial to develop our serendipity mindset.

We can also influence the conditions for serendipity, for example by restructuring our organizations, networks and physical spaces. A serendipity mindset together with nurturing conditions provides the fertile soil for a serendipity field that we can grow and harness.

The figure here illustrates the process and the emerging serendipity field. (Please note that this is a simplification; often the trigger and connecting the dots happen simultaneously, and there are 'feedback loops' – as we explore later, initial outcomes can amplify the occurrence of more (or less) serendipity.)

From chance and randomness to serendipity

In my work as a researcher, community-builder and entrepreneur I often hear people say things like 'Wow, it was such a coincidence

that such-and-such happened!’ But once you start connecting the dots in hindsight, it becomes clear that this is not strictly true. These lucky accidents often occurred because someone or something had laid the groundwork. As we have just seen, although science and luck would seem to be odd bedfellows, serendipity itself is at the very heart of much scientific research.

Take the field of combinatorial chemistry, where manufacturing coincidences are at its very heart: tens of thousands of chemical compounds are created simultaneously and then sifted for valuable new uses. In essence, combinatorial chemistry involves creating thousands of accidents and being ready for any one of them to be a breakthrough opportunity. The chemists who identify new drugs are really good at setting up these experiments, and by getting the right approaches and people in place they make it more probable that ‘coincidental’ discoveries happen – and that when they do, they are being spotted and grasped. By definition they cannot know the outcome, or when exactly it will happen – but they can be relatively certain that *something* will happen.

Qualitative research methods such as ‘grounded theory’ similarly look not for statistical patterns but for the surprising or unexpected insight.¹² In that respect, researchers do have a lot in common with Sherlock Holmes.

With the many political, social and environmental changes the world is currently facing, the unexpected shapes much of our future. Among other things, it threatens the survival of organizations. Companies such as the world’s leading white goods company, Haier, deal with this by ‘disrupting ourselves before we get disrupted’, in the words of its CEO Zhang Ruimin. The company built an appreciation of the unexpected into the core of its organization. Who would have thought that Chinese farmers would use Haier’s washing machines to clean their potatoes?*

This mirrors the experiences of one of the world’s leading

* When Haier’s representatives learned that farmers used their machines in other ways than they had envisioned, they quickly adjusted the machines to be

financial service companies, whose CEO shared with me his approach of sensing their way through the future: ‘Don’t for a minute go away thinking that this is all some master plan. It just kept happening along the way, and we seized it.’ He and his team simply provided a vision, culture and practices that helped give a sense of direction, and allowed the rest to emerge, often in unexpected places and in unexpected ways. They helped develop a serendipity field for the people they work with.

In my research into what makes individuals and organizations fit for the future, one insight has come up again and again: it turns out that many of the world’s leading minds have, often unconsciously, developed a capacity to cope with the unexpected. For Tom Linebarger, CEO of Fortune 500 company Cummins, cultivating serendipity is at the core of what he does – he considers it an active rather than passive approach to leading during uncertainty.

Some will ask (and I have asked myself), ‘Is serendipity still serendipity once we take a more active role in it?’

The answer is a resounding yes, because that is the precise difference between serendipity and just plain, blind luck. Cultivating serendipity is first and foremost about looking at the world with open eyes and connecting the dots. It is not just about being in the right place at the right time and having something happen *to* us – but rather a quality or process in which we can be actively involved.

Thus . . .

Serendipity is active, ‘smart’ luck that depends on our ability to spot and connect the dots. The three types of serendipity we explored above are all based on a serendipity trigger. Developing

able to cope with the additional dirt that the potatoes produced (and which overwhelmed the normal machines).

a serendipity mindset helps us see the trigger, connect the dots, and develop the tenacity necessary to focus on and influence valuable outcomes. We can also influence the different enablers and constraints of serendipity, such as communities and companies. In combination, this allows us to create what I call a serendipity field – all the dots that could potentially be connected by ourselves or by others. To create more meaningful accidents – and to make more accidents meaningful. But where do we start?

2. Becoming Attuned: Breaking Down the Barriers to Serendipity

‘Life is what happens to us while we are making other plans.’

Allen Saunders, American writer, journalist and cartoonist, 1957

Each term, as part of my teaching I play a game with my incoming students. I ask them, ‘What do you think is the probability that two people in this room of sixty people have the same birthday?’

Usually, the students estimate anywhere between 5–20 per cent. That makes sense – there are around 365 days in the year, and so logically, our tendency is to divide sixty (people) by 365 (days). So essentially, a very low probability that there are two people in the room that have the same birthday.

I then ask each student to briefly state the day and month of their birthday. I ask the other students to shout out ‘Here!’ whenever they hear their own birthday. Students usually are shocked when after approximately ten or so students having announced their birthday to the class, the first ‘Here!’ daringly comes out of a corner.

Then another one, and another one. In most sessions of around sixty students only, I’ve been surprised to find that three to six birthday pairs emerge.

How is this possible? Is it magic? No, it’s pure statistics. It is an exponential rather than linear problem: each time a student mentions their birthday, there are many potential ‘pairs’ that could happen. Student No. 1, for example, has fifty-nine other people who could potentially have the same birthday as they do; student No. 2 still has fifty-eight potential people with the same birthday