



# Whose Thoughts Are They Anyway?

How Artificial Intelligence has the ability to both assist and hinder human development

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First Published - August 2025 by StreamOn Ltd

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## About This Work

*"There comes a time when the mind takes a higher plane of knowledge but can never prove how it got there."*

A thought-provoking exploration examining the fundamental question of human intelligence versus artificial intelligence. This work challenges readers to consider whether AI can truly replicate the serendipitous, emotional, and experiential nature of human thought, or if we risk creating a dangerous loop of dependency that leads to collective intellectual decline.

Taking account of what I consider to be a unique perspective, a blend of personal observation and a deep understanding of the underlying technological and psychological forces at play, I hope to provide a crucial lens through which to view the challenges before us. This book is a necessary read for anyone who senses the unease in our digital society and wishes to reclaim their intellectual autonomy.

Through personal observations, philosophical musings, and critical analysis, this particular paper explores the unintended consequences of our increasingly connected world and the potential risks of outsourcing our thinking to machines.

Thanks for reading, and I hope you at least find some amusement along the way

*Kurt Roosen*

*Dedicated to my long-suffering wife, Sharon – the witness and editor to my life...*

## Foreword

I am a technologist, an innovator, and an advocate for both evolutionary and revolutionary change. It is from this perspective that I offer a stark warning: our relationship with technology is at a tipping point. The very tools we created to connect and empower us are, in fact, fostering an age of unthinking. This book is not against progress. Rather, it is a call to action for a more mindful and intentional relationship with the digital world. The message is urgent. We are standing at a crossroads, and the path we choose will determine the future and influence of human thought.

I have always been a technology enthusiast. I have marvelled at the power of the internet to connect us, to bring the world's knowledge to our fingertips. But over time, a sense of unease began to creep in. I noticed subtle shifts in my own thinking, a growing reliance on the algorithmic validation of social media, a tendency to outsource my memory to the cloud. This book was born from that unease, from a desire to understand the unintended consequences of our digital lives. It is an invitation to a conversation, a dialogue about how we can navigate the complexities of the digital age without sacrificing our humanity. Throughout this book, you will encounter "Albertisms" and "Kurtisms" – quotes from Albert Einstein and my own musings. These are not mere decorations; they are meant to be thought-provoking prompts, opportunities to pause, reflect, and engage with the ideas presented. I encourage you to approach this text not as a passive consumer of information, but as an active participant in this critical dialogue.

Let's get one thing straight from the outset, this is not thoughtless criticism. I've spent a lifetime in and around technology, fascinated by its potential and its power. I've been an enthusiast, an advocate, and a builder. But over time, through that lifetime of absorbing and observing, I've become something else: a concerned critic. My journey from innovator to interrogator wasn't born from a fear of progress, but from watching the subtle, almost imperceptible ways technology has begun to reshape not just our world, but our very minds. I've witnessed the slow erosion of original thought, the outsourcing of our curiosity, and the addictive pull of validation that has left us in a state of what I call "static mobility" (physically present, but mentally adrift in a sea of notifications and updates).

This paper argues that our increasing reliance on artificial intelligence and social media is leading to a dangerous decline in original thought and critical thinking. We are outsourcing our thinking, and in doing so, we are creating a vicious cycle of dependence that threatens to undermine our intellectual autonomy. As we place more trust in AI—which can only mimic the human thought we teach it—we risk losing the very ability to generate new, original ideas. If the well of human originality runs dry, how can we or the machines we built possibly progress? This technological "advance" without a parallel advance in human thinking is not just unhelpful; it's a downward spiral into real stupidity.

We are previewing a necessary paradigm shift from a passive acceptance of technology to a more conscious and critical engagement with our digital world. The world as we have created it is a process of our thinking, and it cannot be changed without changing our thinking. This book challenges the pervasive and flawed notion that technology is a neutral tool. It is a powerful force actively shaping our beliefs, manipulating our actions, and altering how we interact with one another. We will explore how to move from a state of "static mobility"—always on but mentally absent—to one of mindful, intentional use.

My target is anyone who feels uneasy about the direction our society is heading. It's for those who sense the growing tension between technology's promise to connect us and its actual effect of isolating us. If you want to understand the manipulative forces, from rampant commercialism to political disinformation, that are shaping your thoughts and behaviours, then this journey is for you. We are standing at a very busy intersection with the stop signs removed and the speed limit increased; it's time to learn how to navigate it safely.

Our love affair with technology is not a harmless flirtation. It's a dangerous liaison that I believe is slowly but surely eroding our ability to think for ourselves. This is intended as a wake-up call, a plea to reclaim our minds before it's too late. It's an invitation to fight for our diversity of thought and keep machines as our tools, not our surrogate thinkers.

My passion on this subject is born from concern. This is my attempt to spark a much-needed conversation about the unintended consequences of our digital lives. My motivation is simple: to encourage you to think for yourself. We've been handed technological implements of immense power, but we've failed to educate ourselves on their influence. We are

becoming dangerously dependent on artificial intelligence, and as we listen to what it says with increasing trust, we run the risk of not being able to train the machines anymore, creating a vicious loop of dependence that descends into stupidity. This book is a call to action to reclaim our intellectual autonomy before we forget how.

## Preface

Our love affair with technology is not a harmless flirtation. It's a dangerous liaison that is slowly but surely eroding our ability to think for ourselves. This book is a wake-up-call, a plea to reclaim our minds before it's too late. We are caught in a vicious cycle of dependence, where our increasing reliance on artificial intelligence and social media leads to a decline in original thought and critical thinking. This book is for anyone who feels uneasy about the direction our society is heading and wants to understand the forces that are shaping our thoughts and behaviours. It offers a paradigm shift, moving from a passive acceptance of technology to a more conscious and critical engagement with the digital world.

We have been given the gift of near-instantaneous access to all the knowledge in the world, yet we often choose not to use it. We have the ability to be completely mobile, yet we find ourselves in a state of "static mobility," physically present but mentally absent, our attention captured by the endless scroll of our screens. We have been given the ultimate tools for socialization, yet we are more isolated, more prone to social stereotyping and exclusion than ever before. Why do we squander these gifts? Could it be that the very technologies designed to connect and empower us are, in fact, doing the opposite?

This book exposes the fundamental tension between the promise of technology and its actual effect on our lives. We will explore how the "always-on" culture and the constant stream of notifications have rewired our brains, leaving us in a perpetual state of distraction. We will examine how social media, once hailed as a great connector, has instead fostered a culture of performance and validation-seeking, leading to a more superficial and transactional form of interaction. The stakes are high. If we continue on this path, we risk losing the very qualities that make us human: our ability to think critically, to connect deeply with others, and to create a better future. The problem isn't the technology itself, but our unthinking acceptance of it. We have become passive consumers of information, allowing algorithms to shape our perceptions and beliefs. It is time to wake up and see the unseen threat that lies behind the screen.

### ***Albertism:***

### ***Weakness of attitude becomes weakness of character***

The greatest trick the digital age ever pulled was convincing us that its tools were just that, tools. We see our smartphones, social media feeds, and search engines as neutral instruments, extensions of our own will. This is the core flaw in our current thinking, a fundamental misunderstanding that leaves us vulnerable. Technology is not a passive servant; it is an active and powerful force that is shaping our thoughts, beliefs, and behaviours in ways we are only beginning to comprehend. We've been seduced by the sheer convenience and endless entertainment, lulled into a false sense of security by the illusion of choice. We believe we are the masters of our digital domains, but are we?

This systemic blindness persists because the manipulation is subtle, woven into the very fabric of our online experiences. The tools and sophistication applied to manipulate us at a psychological level are vast, relentless, and devoid of passion or empathy, it is purely business. The combined psychology of the process makes us believe we are simply in a benign peer group of friends, all expressing our own views. In reality, we are often being fed content designed to reinforce something we already think or, more insidiously, something someone else wants us to think. We are caught in a vortex of validation, where our desire to be liked and to belong makes us susceptible to the herd mentality. Outside of the addictive elements, the choice to say "no" or even "really?" still exists, but it requires an "Emperor's new clothes" moment of clarity to escape the pull of the crowd.

The cost of this collective naivete is staggeringly high. We are outsourcing our cognitive capabilities, losing our ability to think for ourselves, to engage in meaningful conversations, and to make truly informed decisions about our lives and our society. The evidence of this manipulation is all around us, from the spread of "fake news" to the targeted precision of commercial advertising.

## Contents

- 1. Introduction**
- 2. The rise and rise of static mobility**  
How we got to the point of an “always on” society
- 3. (Un)social Networking**  
The rise and rise of social networking
- 4. Educational Absence**  
The lack of response to social networking changing the way we network and interact
- 5. Addictive Continuous Validation**  
The change in definition of self
- 6. Manipulative Commercialism**  
Use of dispersed social networking to monitor and manipulate actions for commercial and political aims
- 7. Lies, damn lies and shares**  
Fake News and the rise of influencers
- 8. Herd mentality**  
How much do we make decisions ourselves or are decisions presented to us on a plate presented as our own
- 9. Politics & Power**  
The committed minority always have a disproportionate influence – the emergence of fake news and deep fakes
- 10. Stealth Surveillance**  
The increasing capability to monitor and predict behaviour
- 11. Deep Thought**  
The implications and dangers of trying to form a replica of human thought without context
- 12. Consequences of being passive**  
The downward spiral of outsourcing thinking
- 13. The final frontier**  
Sentient thinking with no challenge and the downward spiral

## Conclusion

We are at a very busy intersection, with all the stop signs and traffic lights removed and the speed limit increased

## Key Terms and Concepts

**Appendix A: The Science of Persuasion**

**Appendix B: The Digital Detox Toolkit**

**Appendix C: A Call to Action for Educators**

# 1. Introduction

Although this writing sits in the business category, it is not intended to be an academic tome or a case study of best practice. The whole point of this writing is to encourage you to think for yourself with the aid of some ramblings that are the result of a lifetime of absorbing and observing. In essence, the point is to show what Inartificial Intelligence looks like (the clue is it looks very much like you, and me because that is where it derives from). However, much like current implementations of Artificial Intelligence, whilst I will draw my conclusions from a variety of sources I am not going to create an exhaustive list of references and bibliography, mostly because many conclusions I have drawn come from sources that I have long forgotten in detail. However, I have remembered, sometimes subconsciously, the essence of messages that probably meant nothing to me at the time, but have collided with something else, at a later date, to form an opinion.

Throughout this book, I will be drawing on moral support in quotes from a learned but very irreverent intellectual inspiration, Albert Einstein. Let us consider him a co-author (but without the royalty share). I will use the first of my supporting Albertisms here

**Albertism: "Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning."**

This means that I am going to use this book as a human version of things like ChatGPT (other AI platforms are available) which I will call ChatKHR. Have you ever looked up what ChatGPT means? Chat Generative Pre-Trained Transformer – before you read further, then plant the term **Pre-Trained** into your head as it will become more relevant as we progress. In this set of articles, instead of using a vast body of knowledge all at the same time, I am using a method of slowly acquired “hunch theory” that used to be called life experience. This is my life experience and my opinions drawn from the unique ways that those experiences have happened to me. You can agree with some or all of what I say, or you can look upon this piece of work as complete load of rubbish. However, just the fact you have read it, assigned your own experiences and opinions to it and formed an alternate version means it has served its purpose – it will have made you think...

**Albertism: "The only source of knowledge is experience."**

Winston Churchill once said that those who do not study history are doomed to make the same mistakes. In that light I will unashamedly take you on a journey through a number of decades of progress (and progress there has been) and try to point out some of the intervention points that I believe were missed to steer technological development in a more balanced manner. I will try to point out some of the, largely unseen, consequences of these omissions and the cumulative effect that these have had to dumb down capacity for independent thought, and where this could lead us into an abyss.

Once all these hidden near misses have been pulled together, I hope you will see dangers that exist for society with the potential to be driven by and for the benefit of an increasing small and increasingly opaque technical elite. These parties are acquiring real and present power because of the vast accumulation of information that they have access to, and the ability to stitch it together to manipulate and influence thinking, opinions and actions in a manner that is invisible to the vast majority of people.

This may all seem horribly dystopian but is not the intent or reality – at the moment. Technology and its progression has already had massive positive impacts and this will continue to be the case. However, it is very important that this happens in plain sight with eyes open to the potential downsides. To do that we need to maintain the capability to think for ourselves so we understand the downsides as well as the upsides and truly assess the trade-off, the risk vs reward if you like, that progress implies.

I believe that a series of events has created a disposition not to question, not to query and therefore the potential to allow things to happen simply because they are not challenged. To me it appears as if we, as a society, are hovering on the brink of a potential to be “programmed” to be compliant and influenced to the extent that we are not really thinking any more. In addition, we are not giving our consent to this movement of power because we are not being made aware that it is happening.

**Albertism: "The important thing is not to stop questioning. Curiosity has its own reason for existing."**

"In the valley of the blind the one-eyed man is king", you see I couldn't resist a reference which I knew from the HG Wells book and subsequent film "Country of the Blind" but its origins were from Erasmus (of Rotterdam) seeming dating back to about 1510 and originally in Latin. Do you see what I did then? I assembled a number of seemingly detached strands, starting from a very small snippet from a film I saw when I was a kid. I remember very little about that film, except that I think (without looking it up) that the actor was Jimmy Stewart, and he ended up pulling out his eyes with some line like "if your eyes doth offend you then pluck them out" (or something like that, as I think he was a preacher).

So that snippet, where my brain seems to have picked out the lesson of the movie without all the other details, got tucked away in cold storage for 50 years ago had no obvious use until something else sparked that set of neurons to become active and make that learning relevant. In this case, the slow assembly of information became useful as opposed to the fast assembly of detached facts with curated context alongside it that we are heading to now. Our brains are remarkable things that provide rich context to facts if we let them.

We need to constantly exercise our cognitive capability, so we should not let thoughts be done for us or manipulated as this capability for random thought as well as a mix of emotions and feelings is what makes us distinct, as humans, from the machines we build to emulate us. The context of data, and who defines that context is very important as we are all different based on our accumulated experiences. A central thinking body could just represent a limited context and bias of a small number of people as opposed to being a larger coalition genuinely independent thought and context. We need to understand and accept the differences to properly coexist and get the best out of that cooperation.

***Albertism: "There comes a time when the mind takes a higher plane of knowledge but can never prove how it got there."***

Welcome to "Whose thoughts are they anyway?" or "Vive la difference" (damn it, let another reference creep in which I thought was a French revolution saying, but actually is English in origin, it just sounded better in French, and is also the name of a Leather Bag manufacturer and a 1997 Album by Swedish indie band Eggstone – who knew?). The viewpoint being expressed here is that Artificial Intelligence can never emulate the experience and random nature of human development, it can only mimic what we teach it. But as we listen to what it says with increasing trust we run the risk of not being able to train the machines any more which creates a vicious loop of dependence that descends into stupidity.

I should have added a spoiler alert at that point but I often read books and finished the first section to find I instantly agree with the conclusions. At that point, I do not really need to read all the detail that justifies where that conclusion came from. So, this is your opportunity to jump off and look clever with this as a usable reference. But I have actually put a lot of work into the sections between here and the wider conclusion, and along the way tried to make the text informative and interesting. If you stop here, you will never know if I achieved that aim. You will also miss the journey that I go through that proves how unique we are as human beings and why we should fight hard to protect that diversity of thought and keep the machines to being our tools and not our surrogate thinkers.

***Albertism: "Any fool can know. The point is to understand"***

## 2. The rise and rise of static mobility - How we got to the point of an “always on” society

Where do we start? Well first, we have to define a trajectory. The invention of the World Wide Web was the first generally available construction that started putting disparate information together in a cohesive (and crucially searchable) format. However, the origin of a thought process that led Tim Berners-Lee to construct this within the 1980s was an 1865 book called *Enquire Within Upon Everything* which he read as a child. This initially led him to create his own paper journals, which eventually evolved into an application called Enquire, which he then developed into a work-oriented package called Tangle. At the time, this got no traction and only expanded when he then incorporated to what he would call the World Wide Web (or WWW as it became known) when working at CERN. The point of this is that this whole evolution was about organising information that was already available and making it accessible. What technology was doing in what has latterly been terms Web 1.0 is acting as a new age version of the *Encyclopedia Britannica* (go look up what that was). But, the facts were still curations from lots of existing sources and the users were consumers of information who also added additional content as they came across new references. Wikipedia is built, and developed in this manner - a form of online, openly amended, collaborative encyclopaedia.

However, in this initial form, its usage was largely within the confines of research facilities, academia and the privileged few so the next part of the project was to widen the availability. This really coincided with the development of personal computers which brought processing capability out of the corporate, academic and military enclaves of huge computer cathedrals to a willing cohort of young nerds. As a total aside, the term “Bug” supposedly came from the use of the massive computers at deployed by Grace Hopper at Harvard in the 1940’s. These used glowing valves and operated at night without window screens, so attracted moths, which then got stuck in the relay contacts and became real world “bugs in the system”. Probably true, but, it seems, not the actual origin of the term, as Thomas Edison used this in the same context in a 1878 letter “You were partly correct, I did find a ‘bug’ in my apparatus, but it was not in the telephone proper. It was of the genus ‘callbellum.’ The insect appears to find conditions for its existence in all call apparatus of Telephones.” Is this really an aside, or is it likely that the use of the term by Grace Hopper was influenced, consciously or unconsciously, by knowledge of the term in works emanating from Edison more than 70 years before. Again, let me make the point that knowledge and then intelligence relies on a uniqueness of connection that can sometimes be very random and the neurons that connect these can be triggered by things that actually have nothing to do with the thing at hand – serendipity and even emotion, plays a part in how we construct our real world view.

Anyway, back to the theme, the World Wide Web concept was underpinned by a language construct, which assisted in the definition of the way that information was formatted to make it consistent and portable. Hypertext Markup Language (or HTML) is what allowed the connected part of the Web to work, taking proprietary format of closed systems and making them into an accessible system. At a great stretch as the same problem about propriety vs common standards works through all parts of business and society. It would be greatly more efficient if there was one common language we spoke, but sadly that is not something that we have been able to coordinate, but some languages do obviously dominate but actually based on influence rather than merit.

So now we had a way of indexing knowledge and accessing it remotely we actually started off by not making access very remotely at all. As the evolution came from the research labs of the world, they emulated the great libraries of academic installations and closed networks such as ARPANET (Advanced Research Projects Agency Network). This was partially because computing power was also a centralised in some very big boxes. But then the likes of Bill Gates & Paul Allen at Microsoft and Steve Jobs, Steve Wozniak & Ron Wayne at Apple ultimately released the power of processing into the world as they coalesced research from the giants like IBM and Xerox (yes Xerox, the inventors of the mouse) to give life to the Personal Computer (PC). Even more importantly, they created the operating systems that these computers ran on and hence became the gatekeepers to the PC world.

Not content with being personal, the users of these pieces of technology wanted to talk to each other (and also establish the world of hacking, but that is another book) and hence Modems (or Modulator/Demodulators) came into more prevalent use. These turned data into sound and, in the old days, squealed at us like tortured Guinea pigs as they communicated down copper phone lines that plugged into the wall. Here is the wired thing of that time, when technology moved on it did so in such small steps that you were able to keep up and hence you generally know how things worked and, in most cases how to build your own. With early PCs that what many people did build their own out of components. Now, if you were born in this century do you even know that the telephone connections into your house are more commonly fibre than cooper cables? Indeed, do you even have what you would call a telephone in your house – it is just broadband right?

So, while the operating systems started to develop like DOS (Disk Operating System) that had Windows built on top (by the way, I preferred Digital Research GEM (Graphics Environment Manager) to the challenger Microsoft Windows, but then I also preferred Betamax over VHS...) and the emergence of all sorts of weird terms like bootstrapping. This then allowed people to think about how to use the computing power and the communication and the organised information system all together which needed interfacing or UI (User Interface) software to pull all of this into one place – and so began the browser wars. Netscape was one of the initial leaders on this but Mosaic, Explorer, Safari and Firefox all started in a similar timeframe. These gave you an ability to access the World Wide Web and decipher HTML without having to know how it was being done – browsers became (and remain) your window into the information world.

It may seem that this is becoming a little rambling, but we are still sticking to the theme that this collection of randomly collected thoughts are what allow me to form conclusions – so stick with it and all will become clear.

I have reached the point where browsers were starting to dominate how we viewed information, but the next evolution was then how to search it. Search Engines then developed with great names like Ask Jeeves and Yahoo! (with the exclamation mark) and these gave us the first ability to ask questions and get answers. This was the dawn of us beginning to communicate with data, in a very limited manner, but that was similar to the way that we communicate with each other. One other development was happening in the background. A wave that was to become a tsunami of mobile communications. Telephones shed the shackles of cables going into walls and started to communicate through the air and computers did the same thing with the advent of Wifi, and to a lesser extent Bluetooth. Having said that I went to an awards ceremony a few years back and Josh Widdicombe, who was comparing, made the point that we had evolved away from the phone that was connected to wall by a cord to our wonderful mobile devices. Yet the first thing we do when becoming immobile for any length of time, is go on an obsessive search for a power socket to reconnect our devices back to the wall again – clearly phones have an affinity to walls...

### ***Albertism:***

***As a human being, one has been endowed with just enough intelligence to be able to see clearly how utterly inadequate that intelligence is when confronted with what exists***

Mobile phones had their own parallel evolution even though they shared the microprocessor base of the PC. They started with very limited functionality, but at the time, we didn't know that. A phone was a thing to make calls on and it was miraculous enough that you could do this, first bolted into cars (as they were so big) and then just walking around. Then they started to do other things, the most significant step being SMS (Short Message Service that we now call "texting"). With a limit of 160 characters, (apparently this limit was chosen as it is the size of an average sentence and at the time we were concerned about bandwidth) this was a plain text messaging service. The significance of this was that we were using mobile devices to communicate simply using data. After that, we added ground-breaking applications like being able to play Snake on phones.

Back in the World Wide Web we were evolving into not just looking at data but interacting with it. Thus arrived the commercial goliath that is e-commerce, where we use the Internet to gain information to then go on and complete transactions like buying things. When this was combined with the ability to form communities, to converse and share in

what would become social networks such as Facebook and wikis, blogs and video platforms such as YouTube and Flickr then became known as Web 2.0 (though the inventor of Web 1.0, Tim Berners-Lee disagreed, dismissing this as jargon, a challenge often associated with Internet evolutions). This led to a connection, which became known as Surveillance Capitalism.

Surveillance Capitalism, first coined as term by Soshhana Zuboff, refers to the ability of search engines to see what people were searching for and direct their activity in such a way that would generally lead to a sale. In its basic form, this is a type of highly personalised directed advertising. This did become (and has remained) a huge industry, dominated by the big players, Facebook and Google, who manipulate the direction of information as a source of revenue, giving preference to companies that subscribe. It can be said that this activity created these vastly successful companies, which set the scene for venture capital parameters being around mass access to people more than anything else. There is one other thing that this implied. People's own data being used to manipulate their actions. The big tech companies quietly justified this on the back of their search services and social media being free. This created an implied contract where the service is provided in return for access to the data of your usage and activity. This contract is one that is obvious (if you trouble to think about it) but has never really been made totally transparent.

One more thing had to connect into place to make this embedded consumerism mainstream. The iPhone, launched in 2007 (yes not that long ago really and only 14 versions of it since), brought into life the era where the mobile phone became properly smart and able to run complex applications using a screen interface that made use simple and intuitive. The mobile was to become the ubiquitous way of connected with the internet and all its interactions, to the point where there are almost twice as many mobile phones in the world as there are people. Google followed this success by developing an operating system to compete with Apple, called Android, much the same way as Microsoft had done with Windows competing with iOS.

What we had now were all the elements of connection, searching, purchasing, socially interacting and a mass of other interactive functions, which were always on, always accessible and always accumulating data on your activities. The world truly has become switched on and connected and the reactions of society to this was to increasingly put the convenience that this created above any other interests. What would have been unthinkable just a decade before in a device being able to pay money out of your account just with a touch, now became a mainstream use. Constantly streaming our lives such that every action, every meal, every emotion is shared with complete strangers all over the world, would have previously raised significant concern. Now this is done routinely, but voluntarily.

Technology has become a natural element in our hand that we use to great effect. But, the purpose of this lengthy preamble to this point is to show that the knowledge of how this has developed is what creates enough skepticism to put this into proper perspective. I am constantly going to talk about risk vs reward. The point is that you need to have both sides of the story to be able to properly assess the balance, and often it is not in the interests of the people presenting their online products to you for you to be given that perspective.

### 3. (Un)social Networking - The rise and rise of social networking

Albertism: "Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution."

What can I say about Social Networking? Our increasing ability to communicate is what drives innovation and change. The advent of the railways brought a social mobility that created unprecedented change and progress and mobile phones in particular have accelerated that trend by a huge degree. This wave of communication and connectivity is very different though.

In the past we transported our existing social interactions and broadened those same social interactions to a wider circle as travel became possible. The same was true of the technology platforms that ultimately became the social media giants we know today as Facebook, Twitter, et al. Their original intent was to use the data mobility that had become accessible to the global masses, and formulate a way for them to use that connectivity to communicate. The world was opened up to each other in easy byte sized chunks in a manner that was unfettered, easy to use, global and, even more importantly, instant.

On the face of it, this is quite a compelling proposition. Information is able to move around peer groups and interested parties across the world at lightning pace. The ability to bypass control of the narrative has positive effects in places where censorship and oppression exists – the "Arab Spring" was ultimately a success of this type where the sentiment and the "news" could not be suppressed and the ability for likeminded people to communicate that sentiment was truly astonishing. However, let us consider the other side of this communication revolution – who and what defines the difference between censorship and protection or truth. The problem with an open communication platform is that not all people are equally just and noble in their cause and an open system is susceptible to abuse.

I will go on to talk about so called Fake News in more detail later on, but the issue is that when you communicate in real time like this you can say anything you like, true or false, altruistic or abusive. The speed of movement means there is very little chance to intercede where the motives to do so are appropriate. The success and reach also brings the danger of proliferation of inappropriate (or even dangerous and manipulative) messages to a remote audience that is far beyond what you would ever have been able to reach in the past. You are able to do this without the filters of proximity to the target, or even identification. Avoiding censorship normally does require anonymity, but that same anonymity creates the ability to abuse. This is one vicious circle that Social Media creates, but not the only one...

#### ***Albertism:***

***The only way to escape the corruptible effect of praise is to go on working***

So, let us consider the social part of social media. This is where the use has developed beyond the capability to extend communications and has driven social change. In face-to-face communications, we bring a part of our peer group and ourselves into a "conversation" and mix what we might call news with gossip to paint our picture of the world. The important thing here is that we know whom we are talking to and about, and there is a good chance that we share the same values and context to this dialogue – there is a form of self-limiting accountability if you have to face the person you are talking about.

Once you remove that proximity, you do not really know the context of some gem of information or have any terms of reference as to who (or indeed what) they are. This makes the sharing of information ultimately unpredictable and possibly dangerous. As people, we would avoid places that make us feel unsafe or uncomfortable because our instincts alert us to these, the dark streets, the run down neighborhoods. In the virtual world, none of these cues are available to us, nor are the assessments of people who have access to us – we largely open ourselves up the world with abandon, with our protective barriers removed. The bullies in the schoolyard can now exist anywhere in the world and can remain anonymous or can pretend to be some (or something) they are not.

Now let's make this even more complex as an interaction. Within our physical peer groups, we establish our self-worth in many ways. We assess ourselves amongst our peers intellectually, physically and emotionally to check how we are doing. This has carried into the social media world in a very surreptitious manner. What started out as a general "liking" of interesting items posted for people to see, has now become a commentary on your life from a peer group you cannot see

and cannot relate to. The number of “likes” has become part of the measure of self-worth in modern life. Using the amount of attention this implies has become an addictive component of social interaction, but this amplifies the attention and approval that you would, in the past, have sought from a small group of acquaintances and family, into a global competition for attention. This leads you down a path of opening up more of your life and interactions than you would in the past and the competition engenders sensationalism and mis-truth in a bid to garner the views that you feel define your value. Yet another downward spiral, especially when combined with trolls who create a purpose to remotely undermine your self-worth just for kicks.

Then onto the real killer factor, that of the accumulation and use of information. As we are encouraged to add more and more potentially trivial content into the social media platforms in a bid to be seen above the noise, we unwittingly create a body of information which, when all stitched together, form a very intricate profile of ourselves. This does not just include where you are and what you are doing, it builds up a picture of likes, dislikes, political sexual and racial persuasion, and more importantly, it builds a picture of your habits and predictive actions. This is the saleable information that social media platforms collect which is now the implied “payback” for the free services that are provided to the consumer. The problem is that this information is made available to third parties and not just for the more inane use of directing to adverts for products that you might like. Social profiling can be used in targeted political campaigns, or more sinisterly can be used to assist in perpetrating a crime, by knowing your weak points.

I did once listen to a pitch for a company that, perfectly legally, monitored Facebook for people who were posting items about having a bicycle related accident. A bot would then engage with them in a conversation along the lines of “this happened to me, isn’t it terrible” which would go on for a few days, pulling in more information that the individual had willingly put onto their profile to augment the conversation. Then the topic would move onto the accident claim company that the person the bot was pretending to be purported to have used to get compensation, and recommending them. On the one side of the conversation was only the bot, which was using information that you supplied to look at your vulnerabilities to lull you into a false sense of security. I hasten to add that I did not invest on personal moral grounds, but the technology was clever, bit nowhere near as clever as it is now.

So combine all these, global anonymous reach, an addiction to posting increasing content to allow profiling information, and the ability to mask the fake person or news or post behind any fictional persona. In doing this we have allowed social media to create a new type of society - one that is information hungry but detached, which can promote global good and personal misery at exactly the same time. Unfortunately, as we shall come onto, we are more inclined to see the good and the aspirational that influencers promote (for a fee) than the dark side that is hidden by those who have a lot to gain by doing so.

This all sounds very dark, who could really suspect the altruism any platform that promoted the baby shark song to viral proportions – right? Things like this are not really about use or not use, they are about being informed about the upsides and downsides and to be aware of the risk and work to that. Ignorance, in this case, is not bliss; it is a potential road to invisible manipulation.

So we are about a quarter of the way through this book now and what have we learnt so far? Firstly that we have been given a number of gifts, that of access to all the knowledge in the world, but quite often we don’t use it, bizarrely because sometimes it is too easy. Being given the ability to be completely mobile and have used this a reason to stand still and not “look up”. And we have been given the ultimate ability to socialise in combination with the other two, but have socialised less and even suffered more social stereotyping and exclusion than we had before. You have to wonder why it is that we increasingly squander the gifts that we are given to us in a way that makes things worse for us as humans. Could it be that things are being created increasingly, not with humanity in mind, but actually with the perspective of replacing humanity?

We have done this in the past, we introduced trains to revolutionise travel, mechanised farming, and introduced computers. I also read a recent article that made a compelling case for shifts in society being linked to changes in the supply and type of power, but let’s leave that for another day. The difference before is the speed of change. Whereas change in previous eras spanned generations, which gave time to adapt, now quite radical changes happen inside lifetimes. All the things that happened so far have happened in my adult lifetime which means I have to adapt very quickly because the transition is rapid not gradual. This ever-changing world is very exciting but also very challenging – we are not giving ourselves enough time to absorb the implications of one wave of innovation before another wave sweeps through and supersedes our previous

thinking. This means that we can be building propositions on a foundation of sand, where we have not given enough time for something to bed in before we build something on top just assuming that the path that we are taking has been previously validated. Hold that thought a little, we are going to add some other elements to this mix...

#### 4. Educational Absence - Missing in action

So how does adaption, progress and change really work? The key actually is education. We can adapt to any change as long as we are aware of it and need to be led through that change in an open and transparent manner. Given the radical manner and pace at which change happens, we have an obligation to change the Victorian view of education as being a “factory” type system where the learning outcomes are predicated by age. We need to embrace the fact that learning, and the educational system that goes with it, is not a thing that has a starting and stopping point, but instead is a continual and lifelong process.

##### ***Albertism:***

***Education is what remains after one has forgotten what one has learned in school***

One of my great heroes in the educational space is the late Sir Ken Robinson. If you want a bite sized view of educational paradigms then go look at his RSA animated talk “RSA Animate – Changing Education Paradigms”. Breaking away from all the “Albertisms, here is a couple of “Kenisms” for you to think about

“You create your life, and you can recreate it too. In times of economic downturn and uncertainty, it’s more important than ever to look deep inside yourself to fathom the sort of life you really want to lead and the talents and passions that can make that possible” even more profound “We live in worlds that we have forged and composed. It’s much more true than any of the species you see. I mean, it seems to me that one of the most distinctive features of human intelligence is the capacity to imagine, to project out of our own immediate circumstances and to bring to mind things that aren’t present here and now”

These quotes are almost 15 years old we have still no reacted to these “heads-up” statements. Think about the two messages are evident here as they align with the theme of this entire book. First, we need to think about what we want in life and be proactive in the manner in which we achieve that and secondly that we need original thought. If we “outsource” these items to what we are calling “Artificial Intelligence” then we are abdicating ourselves for both self-enrichment and, even more importantly, original thought. It is original thought from which Artificial Intelligence as we current know it is drawn, so if the supply of original thought dries up, then how do we, or society as a whole progress. Technological advance without taking human thinking forward alongside it cannot possibly be ultimately beneficial for human kind.

Albertism: “Most teachers waste their time by asking questions that are intended to discover what a pupil does not know, whereas the true art of questioning is to discover what the pupil does know or is capable of knowing.”

So what should we be teaching and when. The very simple answer is that we should be teaching people of all ages to think critically. Technology always has to be put firmly into its place as an assistive toolset. That doesn’t mean you have to understand the toolset and be able to recreate it, but you should be aware of its context, how to use it and its limitations. Even more importantly you need to be aware of the risks that are involved so you can intelligently balance its use. The same applied to data.

There is a book authored by Ian Gilbert called “Why do I need a teacher when I’ve got Google”. That appears to be a fairly challenging title, and as such I saw it on many a Head Teachers desk over the years. However, the premise of it is not about challenge of the teaching profession, it is much more about the changes in their responsibilities as the world changes around them. Really, the purpose of mainstream education is not to create masses of administrative staff or factory workers as that is not the reality of today. Education should be to prepare children for the world they are growing up into, but that challenge is that this world is now changing faster than the current educational timescale we allocate to teach within.

##### ***Albertism:***

***It is the supreme art of the teacher to awaken joy in creative expression and knowledge***

Therefore, as the book states, the responsibility is to teach children how to use the current tools and how to assess future tools. Within that is to teach children how to question, critique and how to tell the difference between good or bad data and facts. In short to be critically thinking. On top of that, I would add that creativity has to be encouraged but expectations managed. Just as we used to tell aspiring young footballers that not every one of them would go onto be a professional and

playing at the highest level, not everyone can become an influencer (or is that true?). But, in every sense, just being a passive user of systems that are designed to be addictive and manipulative just pays into the hands of the people who wish to manipulate.

***Albertism:***

***Common sense is nothing more than a deposit of prejudices laid down in the mind before you reach eighteen***

I have seen school policies that looked upon Social Media as a bad influence and hence the reaction to this was to ban it in schools. In my opinion this was a cruel abdication of responsibility. If there is something which has a profound effect on the thought processes and wellbeing of the population going forward, then this needs to be put into context at as early a point as possible. This has not been isolated to technology. Until recently, we largely ignored mental health issues in our youth and the way that this leads to peripheral actions such as self-harm, eating disorders and addiction. The reality is that things like social media are intertwined within this whole pattern of problems. We need to put all of these things into correct context and give people a knowledgeable fighting chance rather than abandon them to a fight they do not even know they are participating in.

We need to people to both critically think and be creative to their own ends. Staring at our youth but right through society people need to be aware of the motivations and methods of the things that are working around them. “Sales” always inspires a degree of manipulation, but it is very different selling by brand aspiration as compared to the type of subconscious manipulation or the accumulation of information to predict emotional triggers that current online sales imply. Even more disturbing is when fictitious events or dialogues are created specifically to illicit specific emotions or reactions. This is what we need to prepare people for, and education should be doing that – I go back to the statement that the intent of education is to prepare people for life and the choices that they will be asked to make. It is harder to predefine that path now, so there needs to be a focus on the “soft” adaptable skills that we allow people to adapt with confidence and not simply rely on what they are being told or to accept the position of being excluded from a technological world.

## 5. Addictive Continuous Validation – What the world needs now...

Now we are getting to sound a bit weird – what does this actually mean? Well think about the way that we have been setting ourselves up. We are now ultra-connected and have become addicted to that connection and being online all the time and immediately responsive. We react immediately to the “ping” of our phone regardless of what we are doing at the time, and we feed that frenzy by putting pictures of every action online to inform our social circles in search of likes and instant recognition. Do you remember the last time you ate a meal without taking a picture of it first? There is a poem called “Look up” by Gary Turk that is definitely worth a read:

“I have 422 friends, yet I am lonely.  
I speak to all of them every day, yet none of them really know me.  
The problem I have sits in the spaces in between.  
Looking into their eyes, or at a name on a screen

I took a step back and opened my eyes  
I looked around and realised.  
That this media we call social is anything but  
When we open our computers and its our doors we shut

All this technology we have, its just an illusion  
Community, companionship, a sense of inclusion  
But when you step away from this device of delusion  
You awaken to see a world of confusion

A world where we’re slaves to the technology we mastered  
Where information get sold by some rich greedy bastard  
A world of self-interest, self image and self promotion  
Where we all share our best bits but, leave out the emotion....”

All sounds very profound but is actually reality. Behind all of the great things that we have ever commercially developed, lies a potential dark side that we have to defend against. This is generally done through regulation and legislation to protect the vulnerable - those who would have difficulty in understanding the risks that they were taking in being involved in a particular activity because of its complexity – think around Gambling or the Financial Services or Healthcare Sectors as areas where there are interventions to force organisations to make their propositions, and the associated risks, visible.

The “Internet” has generally escaped this. Partially because one of the precepts of the internet was “free speech” and universal access, and that has a valid rationale. However, for many this means that regulation is associated with what they see as censorship. In addition, there is a general feeling that the internet community will police itself, that the volume of the “crowd” will be self-regulating and moderating. That may have been true at the beginning, but as soon as you get concentrations of influence in anything, then you introduce commercial bias. As soon as the social media and search platforms became a bit component of the Internet (essentially Web 2.0), then the opportunity to use scale and influence for manipulation was vastly increased. It has taken us the best part of 20 years for that to become generally observed.

All the aspects of the internet are fantastic things that we should embrace and push forward, but to do that we have to be aware and consenting, not manipulated into positions by holding the carrot of technology in front of us and when we embrace this we get unwittingly caught by the barb of commercialism.

Social media in particular is designed to be addictive, it is designed to tap into emotions that make you feel good when you are recognised, albeit by faceless and sometimes not even real people. We now have a generation of people that are not just addicted to these likes, they gauge their entire self-worth by them. They have role models of their world (“influencers”) placed in front of them to create aspirations that are unrealistic in a very cynical commercialised game that is very one sided.

We have then let people enter this sophisticated, one-sided game without telling the rules, left alone explaining how they work. We have allowed a set of dependencies or addictions to develop with no controlling mechanisms, because the problems were sitting behind a thin veil of positive advantages. It must be good for people to communicate and share – right?

***Albertism:***

***All that is valuable in human society depends upon the opportunity for development accorded the individual***

The problem going forward, is that this we are continually building large structures on this foundation of sand. If we develop AI on top of this platform of delusional and manipulated self worth without due consideration, the potential is for greater manipulation, bias and dependency on technology to tell you what you should do, think and feel. The additional element is that, whilst social media may “invent” people, there are also some real ones sitting on the other side of the virtual fence.

With AI there may be none and its will become increasingly difficult to tell the difference. The problem is that the difficulty in telling the difference will not because the agents you are interacting with are more like people, with all their flaws built in, but because they will have learnt how to manipulate the real people better to understand how to allay fears and doubts to make you believe them. Years of accumulated knowledge has opened up our hopes and fears and the reactions to other people.

We need a sea change in education which establishes the benchmarks of the way that systems interact with people, and the downsides to social manipulation at scale. Starting with the trolls and moving to the more benign but affecting actions, we need to teach how understand those interactions to control both your interaction and their ongoing effect for better and more “human” interfaces. We need to get a number of people away from their addiction before reengaging them in a more controlled manner

***Albertism:***

***Two things are infinite: the universe and human stupidity; and I'm not sure about the universe***

## 6. Manipulative Commercialism – How to sell snow to Eskimos

The last couple of instalments have been getting a bit heavy, not filled with the anecdotes of the earlier writings, so let us lighten things up a bit. Let us start with the premise that I absolutely believe in commercialism. To do many good things in this world you need to have money to back it up. However, I also believe that we all have choices about how we spend that money, and increasingly that should not be solely about individual or corporate or Government gain. The rise of ESG has illustrated that there is now actual value in its own right to making things better because you want to and you can. Put another way, I believe there is a shift to the aim of being comfortable enough to not have to think just about yourself or your personal survival, but instead to be aware and empathetic in a wider context than your own bubble.

This is what then makes me consider what might be called, “rampant” commercialism. This goes beyond money itself and is more about status and demonstrating that you are better than someone, or something, else. What amplifies this is that people and organisations that display these type of characteristics band together.

So look at the stock exchanges around the world. Originally, they were ways to raise money for a company by selling a proportion, which then gave someone a share of the profits – simple really. Now that is nowhere near as simple. Distributable profits are actually a minor element in the story of a company - it's more about growth and potential. This focus on the marketing side of the company is now a core measure. How many customers you have, regardless of profitability of those customers is a driving force. Skype is a very good example of this. Before disappearing into the Microsoft Empire, Skype was sold in multi-billion dollar deals a couple of times, despite never making a profit (indeed it did not even charge for most of its services) but its inherent value was the customer base, which it could sell something to.

Think about that – the core value of the organisation was the number of people it had access to market things to.... (sorry, we are getting heavy again – yes someone figured out how to make money appear from thin air – I need to learn that trick...) On the other side of the coin there has been real value derived from the search engine and social media giants from knowing what people are doing and directing advertising to them. This has real tangible value in that the “click-through” they create are billable events – tiny amounts but at great volume. So other organisations are paying them for the access plus the insight to target markets to sell products. For the sellers of this information they are selling that “targeted” mantra as better “bang for your buck”, for the purchaser of the access they are telling the story of using some else's access to market.

### **Albertism:**

**Try not to become a man of success, but rather try to become a man of value**

So what about the consumer in this. Big companies will contribute to the greater good by paying tax (sometimes), employing people (until this finds technical efficiencies to replace them) and contributing profit to pensions via fund managers (that will also be taking their own profit along the way whilst also decreasing the values of shares by expressing “disappointing performance” of those assets normally in terms of growth). The “real” person on the street is something of a pawn in this. On one side, it is their data that the search engines and social media use to harvest data from – in that, they have direct access to people and their habits and aspirations and use that to target advertising. Social media is also about capturing the same, but with the added parameter of sentiment – they are not limited to knowing what you do, they know, to some extent, how you feel.

This is not new, this is what all of these big internet systems are designed to do – it is their business model. Yet I have come across many intelligent people recently who really did not understand that this was the way that Google made money, by selling analysis of your data. They also did not realise that an organisation could pay to move up the search list, or appear on the first page of a search for a particular word, or to be in the adverts at the side of a search page or you can pay companies to help you be seen (Search Engine Optimisation, or SEO). I find it hard to believe (but it is true) that such a substantial number of people still believe that the big companies are giving us these services because they are being altruistic and that things like search engine results are random and fair.

But why does this systemic blindness persist? We are seduced. The convenience is intoxicating, the entertainment relentless. We are lulled into a false sense of security by the illusion of choice. Consider a simple, everyday example: how many of us have found ourselves watching whatever movie happens to be on a terrestrial channel, complete with

commercial interruptions, even when we have access to a streaming service with that very same film available on demand? The reason is simple: a decision has been made for us. It requires less effort to passively accept the pre-selected option than to actively choose for ourselves. This small act of acquiescence, repeated thousands of time in different contexts, trains us in the habit of passivity. We believe we are in control, but more often than not, we are simply going with the flow that has been engineered for us.

This isn't just about entertainment choices; it's about a sophisticated machine of "rampant commercialism" that operates on a deep psychological level. This machine is vast, relentless, and devoid of empathy—it is purely business. Let's look at a few examples:

- **Predictive Power:** Walmart once correctly deduced a teenager was pregnant before her own family knew, based not on obvious purchases, but on a subtle combination of seemingly unrelated items like a change in washing products and the purchase of a larger handbag. They sent her targeted coupons, revealing the pregnancy to her parents. This case illustrates the incredible power of data accumulation and inference to predict and influence our most personal life events.
- **Manufacturing Desire:** The market dominance of aspirational luxury brands like LVMH, L'Oréal, and Dior isn't accidental. They sell goods we often don't need but are conditioned to want. This desire is cultivated through a constant barrage of messaging that links their products to status and a life we are encouraged to covet.
- **Political Manipulation:** The same channels used to sell us handbags are used to sell us ideologies. The political "soundbite" and controversial content are designed for maximum engagement, where the accuracy of the message is often less important than the sentiment it evokes. Deep fakes and anonymous sources have become potent weapons for those who wish to undermine democratic processes, be they domestic political parties or malicious external actors.

The cost of this collective delusion is immense. The freedom of information that was meant to enfranchise us has been weaponized against us, and we have not been educated on how to defend ourselves. We are systematically losing our ability to think critically, to question what we see and hear. Our capacity for meaningful, nuanced conversation is eroding in a sea of outrage and simplistic narratives. As a result, our ability to make truly informed decisions about our own lives, and the future of our society, is being dangerously compromised. We have become trained to believe, not to question, and that is a vulnerability we can no longer afford to ignore.

Therein lies the crux of the problem that ties in with everything we have observed to date in this sequence of articles – that if we do not understand now how we interact with a set of tools that are embedded into our lives, how can we hope to understand the infinitely more complex world of AI. AI has the ability to increase the automation of decision making that can have profound implications. This can be ultimately beneficial but unlike the use of our data in the past, this can be more invasive. Therefore, now is the time for openness and transparency to prevail. The technologists have to take the step of bringing an understanding to the masses of the way things really work, not at a highly technical level, but to bring forward the effects that result from active and passive actions have on each of us. Now is not the time to abdicate from transparency, but instead to embrace it and capture the sentiment to advance in a positive and empathetic way.

## 7. Lies, damn lies, and shares - Fake News and the rise of influencers

So, we have connected together all of our little worlds of information into one amorphous mass. We have become ultra-connected and always on. We have chosen to broadcast everything that we do to everyone else and then we have allowed (knowingly or not) a load of third parties access to those patterns of usage so that they can establish profiles of what we are and what we do. What is left to leave open to potential abuse you would think?

However, this is where we get into the realm of Marketing 4.0. It seems everything has to have a version number. The premise of marketing 4.0, as I have mentioned before, is to not market directly at you, but instead to market through your peer group. Now this is not a new method of marketing. Friends saying that a restaurant is good, or a food critic in a newspaper saying the same, have been a recommendation route for marketing for eons. However, in the past, these recommendations were ascribable, they were either from people you know or from institutions or public figures that had a reputation or trust to maintain.

### ***Albertism:***

***Whoever is careless with the truth in small matters cannot be trusted with important matters***

Then this began to evolve. As the internet expanded, then so did sites that aggregated information. So emerged useful apps like trip advisor and lonely planet (others are available of course) that will amalgamate the opinions of many people who are giving what we believe to be personal views from experiencing the product itself. This gave us an insight into what we saw as the “good the bad and the ugly” of something we were seeking to experience, from a viewpoint that was similar to our own.

However, a bit like the validation of self that developed out of social media, this approval of experience became a necessary part of the buying or using experience. Outside of the online versions of critics anonymous, everything that sold, particularly online, required feedback. We then became addicted, not to likes related to us, but likes related to the things we aspire to purchase. Sellers became quite obsessive about garnering these opinions, and they became so important that some unscrupulous parties invented positive feedback to promote a wholesome view of their product that was not actually true. Moreover, therein lies the problem....

### ***Albertism:***

***The secret to creativity is knowing how to hide your sources***

Whist we could see and knew our friends before, we are now in a world where our concept of online “friends” is much looser. In reality we accept “friends” in social media because it increases our numbers more than because they are actually people that we know or genuinely want to interact with. So we constantly let people into our social circle when we really have no reliable means of knowing who they are and whether they are genuine or have an ulterior motive. This makes us very vulnerable to manipulation by people making something look good to extract money or other things from us. How do we know who to trust on the Internet – how do we know things are real? The answer is that we can’t with any certainty, but the worrying thing is that the commonly held thought is that this access we give to people that are trying to con us is a reasonable price to pay for the benefits of access to all the real people that come with these connections. Again, how would we know? Statistically, I wonder how many people on the internet that we converse with are actually real. I did not want to guess the numbers on this so turned to Statistica who estimate that in January 2023, some 4.76 billion people (or 59.4% of the world’s population, use social media. Statistica then goes on to say that Facebook, as the largest social media platform with 2.59 billion users, estimates that 4-5% of its accounts are fake. So even by their estimates, that is between 103-129 million accounts. That is many users that could be liking and friending you then recommending something that they have just bought to entice you to do the same.

### ***Albertism:***

***In the middle of difficulty lies opportunity***

Now, this move to peer influence in purchasing decisions did not go unnoticed by the marketing and advertising professions. Their reaction to this was to create personalities specifically in this space and hence the age of the influencers came into being. Fueled by the “like” mentality, this created a breed of individuals who did enough noticeable things that they accumulated a following. This may actually have stemmed from other media such as reality shows etc, but once this online

following was significant enough then posts that related to products become “celebrity” endorsements. Even more interesting is that this “influencer” status can, in itself become a profession. Going and doing things and then talking about it can generate a self-perpetuating aspirational following, which makes the cult of celebrity even stronger.

In this situation we probably do know who they are and we do know that they are real people, but we have no idea of their real knowledge, what qualifies them to endorse or even if they are endorsing without any genuine use of the endorsed item. Now, I hear you cry, that can happen in good old traditional advertising, where celebrities are wheeled out to endorse a splash on lotion or beauty product “because they are worth it”. But the difference there is that they would be celebrities for another reason, and hence, like our friends, they would have something to lose from a false claim. In the new world the celebrity status from the endorsement itself and the scale can be such that any issue will be lost in the masses of silent people. This world is all about statistics, and statistics and numbers never lie - right?

Let us think about all the things we have discussed so far in this series. The issue here is not the principles themselves (although falsehoods are falsehoods and should not be encouraged) but rather what happens when lies are given a hearing in the ultra-connected scaled world that we have created. A lie can be created, distributed, actions taken on it, and closed down in the blink of an eye. Whereas, in the past, we had time to react and recourse to do so, now this often does not exist. That is based on the assumption that we even spot the lie, or, indeed care?

So in a way we have weaponised opinions and laid ourselves bare to the problems that exist when there is no real way to judge validity and no real accountability associated with bad actors (and I don't mean a certain beach based lifeguard ensemble in red swimsuits). Anyone see a problem with that?

If you can't yet see the combination of events that over a couple of decades have contrived to put us in a weak position to determine our own course, then you have already been sucked into the problem. I go back to the need to critically think, and to question things, not just for the sake of being obtuse, but because that's the way we learn. When we stop learning we stop being...

***Albertism:***

***Any man who reads too much and uses his own brain too little falls into lazy habits of thinking***

## 8. Herd mentality - How much do we make decisions ourselves or are decisions presented to us our own

### ***Albertism:***

***Few people are capable of expressing with equanimity opinions which differ from the prejudices of their social environment. Most people are even incapable of forming such opinions***

That's a cool start, I have learnt a new word from a quote – “equanimity” so now I will have to think of a context to use that in some other way – the value of continuous learning and application. There is absolutely no reason or agenda to doing this, I am just doing it because I can. In the same way, this seemingly meandering tome (another cool word) that I have been taking you through is just a little beyond the halfway point, so as with every good drama series it seems time for a bit of a summary.

In this sequence of events that I am portraying, we have put the sum of our knowledge in an accessible form onto a thing called the Internet, we then found better ways to access it through search engines, then made it mobile so it was in our hands all the time, then layered onto that the ability to buy things, then added (un)social media. At this point we pause a little to make a point. We now have people addicted to accessing to all of this, but in the background have connected a very powerful lobby into the mix – we have unleashed advertising on an unsuspecting public in a subliminal manner.

Adverts have always manipulated sentiment. The older ones of us will remember the Martini adverts that were entirely focused around the “beautiful people” and worked on your aspiration to be part of this clique, even though you were probably never going to be. It played on your aspirations and associated a purchase to this utopia. What is different in this iteration of advertising is that the consumers are feeding those aspirations into the advertising machine. Therefore, instead of advertising becoming a thing that is pushed into the ether, will stick to a proportion, and be ignored by the rest, things can be very focused and individualised to appeal to everyone almost individually, but not make it seem that way. We have increased access to people’s lives, thoughts and aspirations at an unprecedented level and then provided an access platform that allows targeted items to arrive in people’s hands instantaneously.

However, we have not quite stopped at that point. Platforms that are coordinating all this activity have very sophisticated algorithms that assess vast amounts of information and not only form conclusions but also define strategies that take advantage of human traits including aspiration (that we have already mentioned) but also aspects of addiction and that need to be included and liked. People want an impossible combination of being part of the herd but also being individual or “special” and the systems pander to and exploit this fact with ruthless effect. Curated access to focussed information is big business. Have you considered that Facebook (or Meta) is a vast company with huge multi-billion revenues, but its core business does not make any content it just distributes things created by someone else and then uses that information to analyse behaviour and patterns that it sells to focus advertising – that is its business model. To some extent the same is true of Google, Twitter (or X – I wish they would all stop changing their names, if we all did that they would be fed up with us because that would ruin their analytical data), YouTube, Instagram et al. Think carefully about that. Billions upon billions of revenues are generated not to produce anything at all, but instead to open the public up to advertising.

### ***Albertism:***

***Information is not knowledge***

Let's just consider a few examples of this. In terms of our aspirational values, LVMH (I had to look them up as well), L'Oréal, Hermes and Dior are all in the top 8 of companies in Europe by market capitalisation as at time of writing. These are all aspirational companies that make goods that we often do not need but we do want. In terms of understanding the power of accumulated information and inference, Walmart were sued for breach of confidence in the US when they sent a pack of discount vouchers targeted at a newly pregnant 15 year old which revealed this to her parents. How did they know? Not because of an obvious product purchase but because of a combination of a larger bag and a change in washing products – nothing directly related to pregnancy, but instead a selection of items that showed a high probability of this being the case. And then, we come to influencers....

We have discussed how the need to be liked can be addictive, and the fact that aspirations are fed by people who lead lives we want to live and use products that we think we want. They can create a virtual herd that we follow and react to and once you are caught in that vortex it is very difficult to escape. The tools and sophistication that is applied to manipulating us right down at the psychological level is vast and relentless and devoid of passion and empathy – it is purely business. That, in itself

is not a problem, as long as we understand what is happening and apply skepticism to the process. The combines phycology of the process makes us believe we are simply in a benign peer group of friends all expressing their own views, when in fact we are being fed things that reinforce something that we are thinking or that someone else wants us to think. That all sounds very bad and Orwellian (go look him up, visionary he was, but he was not great at picking dates is all I will say), but what does remain in all this is choice. Outside of the addiction elements of what is going on here, we can say no – or at the very least say “really?” if we can escape the herd mentality that gives us an “Emperor’s new clothes” moment.

To understand that reference you need to read the 1837 Hans Christian Anderson fable of that title. Following through the enquiring mind reference thoug, I knew the Hans Cristian Anderson bit as I read it (on paper) when I was a child and remember Danny Kaye playing him on the screen. But Wikipedia went on to tell me Andersen's tale is based on a 1335 story from the Libro de los ejemplos (or El Conde Lucanor), a medieval Spanish collection of fifty-one cautionary tales with various sources such as Aesop and other classical writers and Persian folktales, by Juan Manuel, Prince of Villena (1282–1348). Apparently, Andersen did not know the Spanish original but read the tale in a German translation titled "So ist der Lauf der Welt" ("That's the way of the world"). The point is, it is actually interesting to know the route and source of something that is going to influence you, and it is an illusion that social media gives you the real picture of that – it gives you want it wants you to see – or more precisely, what it thinks you want to see.

#### ***Albertism:***

***If you can't explain it simply, you don't understand it well enough***

As a slightly prophetic final point, I was listening recently to the tragic tale of parents who lost their children to self-harm that was promoted by what their children found on the Internet. They pointed out (and I hadn't considered this before) that once you express even the slightest interest in something (and self-harm or suicidal thoughts may be part of this) then the algorithms will set into motion to feed that interest which takes you further and further down the rabbit hole. That is an Alice in Wonderland reference for those of you who don't know. On top of this (and again I had not thought this one through either), the volume of unregulated data on the Internet means that you can always find information that will back up any theory that you have or any prejudice you may (or indeed may not) be inclined to. Put these two things together and with the additive nature and the virtual herds and there is a very dangerous set of circumstances, that are increasingly combined in ways that we never envisaged.

Back to the point though. All this technology and capability can be very good. Being directed towards things you are interested in can help feed the hungry mind and help make finding things much easier. But this should remain as a tool over which you have some control, rather than abdicating responsibility for your own thoughts and feelings to organisations or people who may have ulterior motives. Following the herd has some advantages, unless it is a herd of Lemmings.

## 9. Politics & Power – What is the price of freedom of speech?

And now we are really starting to get to the crux of the problem. We have laid out in the previous sections a sequence of events that at best are a series of evolutionary steps, or at worst are a global manipulation. If you switch briefly into another world, that of Finance and Money Laundering, this might be viewed as “layering” a means by which you lay a trail that is hard to follow. But let’s take the middle ground here, and assume that we are not all living under a huge cloud of conspiracy, but instead we are somewhat hapless victims of a manipulation of opportunity. That being the case, what is that manipulation? Well what we have detailed so far, is a commercial manipulation – finding ways to encourage you to buy and being right there to take advantage of the situation as it develops (or as it is developed) for you. Despite the fact this touches your aspirations, your self-worth and your place in the “tribe” this is a manipulation that is leading you to a commercial outcome. It may be that some of the side effects of that could be and are very damaging and addictive, but the motives are commercial nonetheless. Is that good? Not really, but there is a twisted logic to it and within it there is obviously some value. We should never lose fact of the advantages that all this technology has brought us – the whole point of this series of articles is to open up eyes to the balance that needs to be properly understood, the yin and yang of technology.

Just a slight interlude here, I went through most of my life thinking the yin and yang was about balance, light vs dark and all that. It turns out that is a bit wrong. It is more accurate to represent it as a balance created by cause and effect. Think of it in terms of a shadow will not exist without there being sunlight...

But, back on track, what is the next development of this virtual spinning of reality? Well it is actually the changing of perception of reality and this has a very different purpose – to create and consolidate power....

### ***Albertism:***

### ***Memory is deceptive because it is coloured by today's events***

At this point, I am going to quote directly from Matt Tiabbi, ex-rolling stone reporter and now editor of “Rocket” on the independent platform Substack, who made this statement at the US select committee about the so called “Twitter Files”

*“The original promise of the Internet was that it might democratize the exchange of information globally. A free internet would overwhelm all attempts to control information flow, its very existence a threat to anti-democratic forms of government everywhere. What we found in the Files was a sweeping effort to reverse that promise, and use machine learning and other tools to turn the internet into an instrument of censorship and social control. Unfortunately, our own government appears to be playing a lead role.*

*We learned Twitter, Facebook, Google, and other companies developed a formal system for taking in moderation ‘requests’ from every corner of government: the FBI, DHS, HHS, DOD, the Global Engagement Center at State, even the CIA. For every government agency scanning Twitter, there were perhaps 20 quasi-private entities doing the same, including Stanford’s Election Integrity Project, Newsguard, the Global Disinformation Index, and others, many taxpayer-funded.*

*A focus of this fast-growing network is making lists of people whose opinions, beliefs, associations, or sympathies are deemed “misinformation,” ‘disinformation’, or ‘malinformation’. The latter term is just a euphemism for “true but inconvenient.” Ordinary Americans are not just being reported to Twitter for ‘deamplification’ or de-platforming, but to firms like PayPal, digital advertisers like Xandr, and crowdfunding sites like GoFundMe. These companies can and do refuse service to law-abiding people and businesses whose only crime is falling afoul of a distant, faceless, unaccountable, algorithmic judge.*

*Some will say, So what? Why shouldn’t we eliminate disinformation? To begin with, you can’t have a state-sponsored system targeting ‘disinformation’ without striking at the essence of the right to free speech. The two ideas are in direct conflict. If there’s anything the Twitter Files show, it’s that we’re in danger of losing this most precious right, without which all other democratic rights are impossible.”*

We have to absorb that a little. These are not my words or completely my sentiments, but this idea that disinformation is endemic and hiding behind a veil of freedom of speech is one that is a little hard to shake. Even without such coordination and all the conspiracies about institutions that come with this, we have already talked over and over again about how the ability to access lots of people at the same time gives unprecedented access to people or bodies with even relatively limited

access to resources. Then put the huge access to resources that can come with large organisations or unscrupulous state actors and we have a powder keg of manipulation against which people have been increasingly disarmed by removing their natural scepticism.

This also brings another argument to the fore when connected with Freedom of speech, and that is anonymity. In the US, when freedom of speech was written into the constitution, this was at a time when that speech pretty much had to be face to face, but you certainly knew who said something. That was really the point of the protection, to prevent persecution because of what you wanted to express. Now we are in a very different world, where it is entirely possible to express an opinion and for that not to be attributed to you at all. We permit anonymity because there are some very legitimate reasons why anonymity can be important, to prevent the persecution, bias or discrimination that can result. But these needs manifest themselves in lots of different ways in different places in the world. The state itself has a different attitude to freedom of speech and their own actions related to that. But the “internet” applies a global ruleset to this.

What this actually means is that we have a mechanism to distribute unattributed material to a very large audience, without validation or tangible attribution, that can be good, bad or completely fictitious, but being badged as the truth. For the sake of perceived freedom of speech we allow freedom of distribution in a way we have never done before. Imagine in the pre-internet age that we enshrined in law that freedom of speech meant that everyone was entitled to have an article about whatever they wished published in every newspaper, without being identified who they were – but this is, essentially what we have now. At a very personal level, this is what allows “trolls”, the “Dark Web” and hate or harm sites to operate. We have let that happen under the banner of free speech, because we are wary of filtering becoming censorship. We do not know who we would trust to determine what is good and what is bad, so we allow people to determine this for ourselves. We do not believe that legislation designed to protect us will actually do so, and it is that that particular failure in trust is what leaves open a door to abuse by people who want to exploit the system, for whatever reason.

The net effect of this plays out amongst a populace that, for commercial reasons have been “trained” to believe, to not question and be sceptical. In a twist of irony, the freedom of access and information that should have enfranchised our populace, has become weaponised against it and we have not been trained to defend ourselves against this embedded weapon. Children can be trolled, encouraged to self-harm, and radicalised, all by people or organisations we allow to be faceless. Are we sure we have the balance right here?

If you take nothing else away from this series of articles, it is the point that we have failed to educate people to think for themselves and question what they see and hear, in a way that we used to naturally, and we need to bring that back into balance. We also have to consider segmentation of use rather than ubiquitous rulesets. There should be a way for people to socialise, but with people that are known and have validated identity. If people choose to be anonymous, then that needs to be in forums (Britannica historically defines a Forum as a “multipurpose, centrally located open area that was surrounded by public buildings and colonnades and that served as a public gathering place”) that makes this clear. Mixing the two mixes the good and bad into the same place in a way we would never do in person. We have to give people the option to know and be aware fully of what and who they are interacting with, be that individuals or corporates or Governments

### ***Albertism:***

***Great spirits have always encountered violent opposition from mediocre minds. The mediocre mind is incapable of understanding the man who refuses to bow blindly to conventional prejudices and chooses instead to express his opinions courageously and honestly***

And then AI enters this marketplace and this amplifies two capabilities that can be layered onto the weakened defence structure we have already created. Firstly, it gives compute capability to the masses. For good reasons we have democratised technology and access to it, but also unleashed its dark side at the same time. What was now only available to a select few, is now available to all and capabilities can range from analytics through (and this is the scarier part) to generation.

The ability of AI to generate, or to take information and use this as a basis to create something new is a fascinating element to AI that opens up a huge number of doors to analytical thought. It can create combinations of elements in the blink of an eye that would have taken more passive tools (or humans) decades to achieve, even if they had seen the patterns in the first place. This is already having massive implications in things like medicine, where it is looking at genetic patterns and solutions to anomalies, including new drugs and treatments. However, the same technology can be applied to taking elements of

what exist and regenerating them in a new format. This means that it can emulate something but in a new way – and hence we have “deep fakes”. It is now entirely possible to take original content (pictures and videos) and adapt them to appear or say something completely different and it is entirely believable. So, onto a generic population that already had its skeptical antenna switched to low power, we introduce the capability to create content that appears real but is actually not. Even for those that do have a skeptical instinct, they have to consider almost everything to be untrue – the large well we had of available information has suddenly become poisoned.

Added on top of this, we now have a new element, political manipulation. In the political world of the “soundbyte” where a message is delivered quickly and sharply through “channels”, sometimes the accuracy of what is being delivered is less important than the underlying sentiment. Content that is controversial gets views and people absorb prior to the filter being in place. Deep fakes and then the anonymity of the source is a gift to those who wish to manipulate the political system and the thought patterns of the populace that form the voting community. Unfortunately, this influence can be from all sources. It can be legitimate political parties that seek to undermine their opponents, or by malicious external influences that are trying to manipulate an outcome in a competitive jurisdiction.

We have opened ourselves up to manipulation in the most important aspect of our lives, our determination of who should have power over our existence through our democratic process. Somehow we need to correct the balance, and we can do this through the top via regulation and legislation, or from the ground up via education and awareness. In reality it should be both, but I would argue that we have not really begun the educational aspect of this with any seriousness yet. The core of democracy is not a voting franchise, it is about understanding what you are using for and why. If we don’t think this through in the modern world, but instead cling to old principles of the way the world used to work, then actually we could be manipulated out of being relevant quicker than we think. It is always true that a committed minority have an ability to disproportionately influence an outcome in anything that we do – that’s because the majority of us are pretty passive and willing to go with the flow. As a simple example of this, how many of us watch the film on a terrestrial channel, complete with the interruption of adverts when we have that same film in a streaming service or on a DVD (not going to explain what they are to a younger audience). The reason is that something has been selected for us – something else has made the decision. On that note, as a light entertainment item, but with an intriguing backdrop to manipulation, go watch the film WALL-E

**Albertism:**

***Any intelligent fool can make things bigger and more complex... It takes a touch of genius – and a lot of courage to move in the opposite direction***

## 10. Stealth Surveillance - The increasing capability to monitor and predict behaviour

Are we really living in a world where unpredictability is an asset? It would seem that, in some senses, the answer to that is yes. The UK, as a democracy, is purported to have the highest density of CCTV capability in the world. GCHQ, is one of the most sophisticated communications surveillance capabilities in the world. How should we view that? Well now let's think beyond what might be called the "traditional" or "analogue" methods of communication and communicating and the combined intelligence about what we do, where we go, how we react to events (think "likes" and "dislikes"), what we buy, what we aspire to, our hopes and fears, our anxieties, our allegiances, our social makeup, our political views. All of these can be, and are, combined to observe you in a manner that is unparalleled in human history. But although this might be a little disturbing in itself and very "Big Brother" (and not the TV show but the Orwellian leader of the totalitarian state of Oceania in the novel Nineteen Eighty-Four) But, it doesn't end there.

It all very well looking at what you do in the past and present and analysing that to make you accountable for your actions – so crime detection and anti-terrorism uses spring to mind, as we want the protection that this provides. However, even in that context, as well as the items that are required to meet the aims of this protective umbrella, there is a vast amount of data that is collected that is inconsequential to the aim, but very consequential to individuals. This is the basis of a very fine lined debate on privacy. Think about video doorbells and dashcams and the peripheral vision (and hearing) that these have. Walk down an urban residential street now and have a conversation along the way and it is likely that this will have been picked up and recorded across any number of seemingly innocent domestic doorbells. Now is that a problem? After all, you are in "public", so this is the very definition of not being in private? The point is that, in normal, old fashioned circumstances, you would have been able to see who was around you and had the potential to listen, unless they were being particularly furtive. Perhaps even more significant, is that you would consider that only snippets of your conversation would be overheard (sorry for the diversion but to Overhear – can you therefore Underhear?) as the participants alter and therefore any context is difficult to follow.

Now I am not suggesting the doorbells conspire in this manner, but the capability certainly exists when you have stored data, to stitch a large number of seemingly disparate sources to make a much bigger and more coordinated picture (or soundtrack). Even more so if you consider the potential for these devices and their storage to be hacked (in my aim to educate and encourage the questioning mind – where did the use of the Hacking term come from? "One who gains unauthorised access to computer records" had come into use by 1975, actually pre-dating the Internet by many years. But the origin seems to stem from a slightly earlier tech slang sense of "one who works like a hack at writing and experimenting with software, one who enjoys computer programming for its own sake," reputedly a usage that evolved at Massachusetts Institute of Technology in the 1960s)

But, back to the central point, certainly, what you need to consider is when a large number of devices are under the same control, the ability to piece together things in a very spooky manner exists. I will leave a thought hanging in the air – Siri, Alexa, Google (and others) listen all the time and we carry these around with us everywhere on our mobile phones and invite them into our homes. And still it doesn't end there...

### ***Albertism:***

***Small is the number of people who see with their eyes and think with their minds***

It is one thing if it is taking what it can see and hear and interpreting that, it is quite something else if this data is being manipulated in a manner to be predictive as opposed to interpretive. In the 2002 file "Minority Report" (well worth a watch if only to add sceptical elements as technologist to the notion that you can get through an iris scanning door with someone else's eye in a bag and that people seeking reports can be thwarted by someone lying in a bath of ice) there was an interesting term introduced – "pre-cognition". I don't want to spoil the whole thing for those of you who want to watch the film, but the basis is that the future can be seen and therefore a "pre-crime" unit can intercept and prosecute based on something that is going to happen rather than something that already has. What a preposterous notion I hear you cry, surely

there are so many variables that can affect every action we take (another film related pointer to this is the 1998 “Sliding Doors” – much less serious than Tom Cruise). But whilst me may consider this to be far fetched, there are systems and algorithms that are making predictions about individual and collective actions and sentiment all the time, that can or could have a profound influence on us.

A much admired human rights solicitor and author, Dr Suzie Alegre once recounted in a session I hosted, about a big tech company that had developed and validated a system that, within a country, could reliably predict your political leanings simply from video imaging. The way that you looked, dressed, your demeanor, all gave makers to your social standing, education, attitude which were enough to accurately predict this trait. Now image how this could be augmented by all the other tracers you leave across your digital footprint and we have a potential for a very invasive capability. That is a very complex scenario, even in a simpler form, racial profiling through videos to segment parts of the community in places like China, or even closer to home to predict a “likeness” to present a problem at an airport or a football match or concert. There is nothing to say that it is right, it works on the basis of probability. But how does probability fit into uniqueness, quirkiness or indeed the “benefit of the doubt” which actually is the basis of many law systems.

We talked a little earlier about privacy in the analogue sense. We looked at the fact that we had the right to see what saw us. The problem is that an increasing number of individual systems do not know who we are, so could not tell us that our data is being accumulated. Somewhere in all of this lies the ability to “super-consolidate” and create a view of individuals and notional connections of individuals where all the context cannot be traced back to source and verified. Pictures and profiles are being created of us all the time that may or may not be accurate, but they can be used to influence (or indeed make) decisions and be a source for manipulation by malevolent parties.

And we then go back to the fact that AI being introduced into the public domain gives unprecedented processing capability in the hands of relatively inexperienced or socially immature people who lack critical skepticism and sometimes moral and ethical fortitude. But, even worse, it provides a capability to accumulate connections based on interpreted rulesets that may be incomplete or have intended or unintended bias. We have the potential to use this observation of actions to predict our very fibre and being without any determination of accuracy or, more importantly, without empathy.

There is a pathway we need to ensure that we build into this bright new future we are creating for ourselves. The key element of this is defining the hierarchy of who is the master and who is the slave in the relationship between man (or woman) and machine. This requires a good, old fashioned and much maligned, degree of skepticism – we have to stop assuming things are true because “the computer says no” (go and have a look at the sketches from the series “Little Britain” – you have a lot of suggested viewing emanating from this read)

### ***Albertism:***

***A man should look for what is, and not for what he thinks should be***

## 11. Deep Thought - The implications and dangers of trying to form a replica of human thought without context

The word of the day is “Sentient” or this context of a “Point of Singularity”. Singularities can happen anywhere, and they are surprisingly common in the mathematics that physicists use to understand the universe. Put simply, singularities are places where the mathematics “misbehave,” typically by generating infinitely large values like at the “Big Bang” Tor in “Black Holes”. More recently, the use of the term Singularity has risen to fame because of two thinkers. The first is the scientist and science fiction writer Vernor Vinge, who in 1993 wrote

“Within thirty years, we will have the technological means to create superhuman intelligence. Shortly after, the human era will be ended.”

Blimey...

The other prominent prophet of the Singularity is Ray Kurzweil. In his book “The Singularity is Near”, Kurzweil basically agrees with Vinge but believes the later has been too optimistic in his view of technological progress. Kurzweil believes that by the year 2045 we will experience the greatest technological singularity in the history of mankind. The implications would be that this could have a capability that could, in just a few years, overturn the institutes and pillars of society and completely change the way we view ourselves as human beings. Just like Vinge, Kurzweil believes that we’ll get to the Singularity by creating a super-human artificial intelligence (AI). An AI at a level that could conceive of ideas that no human being has thought about in the past, and will invent technological tools that will be more sophisticated and advanced than anything we have today.

Blimey squared...

Since one of the roles of this AI would be to improve itself and perform better, it seems pretty obvious that once we have a super-intelligent AI, it will be able to create a better version of itself. And guess what the new generation of AI would then do? That’s right – improve itself even further. This kind of a race would lead to an intelligence explosion and will leave old poor us – simple, biological machines that we are – far behind.

Blimey cubed...

So what does this really mean? A number of bodies have taken this as an indicator of equal challenge and opportunity. Peter Diamandis, who was one of the co-founders of the Singularity University, states: “Creating abundance is not about creating a life of luxury for everybody on this planet; it’s about creating a life of possibility.” What the Singularity University and others teach is that we need to be involved in the progression that will inevitably take place, what Joseph Voros called “A generic foresight process framework” or more simply a “Cone of Possibilities”. Enough of the long explanations though, if you have followed the train of thought developed over the previous articles in this series, then I hope you will already have come away with the thought that we have to use technology for good. Whilst we may not know everything about how aspects of technology work, we need to understand its purpose and origin, and somewhere in our midst we have to have the capability, in trusted and visible hands, to maintain a relationship with technology that makes it a tool rather than dominating thought. The only way we can do this is to maintain critical thinking capability.

### ***Albertism:***

***A clever person solves a problem. A wise person avoids it***

So let us consider this very carefully, is that the extent of our ambitions for technology, to make our life better, or are we striving to make something in our own image in a god-like manner, that will eventually spiral out of our control? Are we striving to evolve our very being, or are we trying to create a parallel evolution that frees us from our labours, both physically and mentally? Do we want to replace ourselves and if so why?

This leads into what remains as an ambition to be replaced. If we have already replicated the neural process of our brains to make connections and learn, what remains is what we categorise as making us human, the emotions, empathy and “soul” of an individual. This is sometimes called making a machine “sentient” meaning to make it “feel”. However, in a digital sense we are not talking about making machines feel physical sensory items (like pain) that define what a sentient being is. In the digital sense we are talking about self-awareness, the thing that you can assess in animals when they can tell that an image in a mirror is them and not another animal.

There are a couple of problems with this when paralleled with human development. Humans are not born with self-awareness, it develops in the first few years of childhood. There are many things that evolve over time in our brains, in this manner. The true ability to assess risk doesn’t develop until you reach your mid-twenties (unless you are an F1 driver when it never does). This is why the young can appear to be much more reckless than their older peers. But let’s consider why that is the case....

The reason the brain doesn’t go full on from day one is that it wants us to intertwine experiences into this development. Attitudes, learnings and even mistakes are a critical part of how we develop. The imperfections that we have and the errors that we make are a critical part of what makes us what we are. That may not be totally unique as we have common experiences in groups or nations that are very similar, we define peer groups that have collections of ideas and protocols. But imperfections remain and sometimes this is what draws us back from the brink. Think back to the game of noughts and crosses (or for some reason tic-tak-toe in America) in the 1983 film “War Games”, which taught the computer (called WAPR – as in whopper) that there was such a thing as a draw and hence there was no point in trying to win? Actually, this was the wrong lesson in a greater sense, as winning should not be ruled out in such a simplistic manner. If the computer really needed to be taught futility, it should probably have played Monopoly or “JackStaws”. I had to look up the origins of Jackstraws otherwise known as “pick-up sticks”, “pick-a-stick”, “spillikins”, or “fiddlesticks” and became popularised from 1801 in Europe following a much older game in China using Yarrow Stalks – and I don’t know what they are – point is though, would WAPR have known that, or even more importantly would it have cared?

Therein lies the quandary, the idiosyncrasies of human thinking is important to give variety, diversity and, sometimes, boundaries to thoughts and related actions. With AI we have the potential to accelerate thinking beyond evolution, to make something switch on and be ready rather than really learning with all the emotions that are attached to each and every decision we make. Lots and lots of mini mistakes create an antidote to big mistakes where we judge the balance between caution and ambitious actions. AI can certainly learn and it can do that from errors but those error based leanings could be somewhat binary in nature rather than nuanced.

The core question is why we want machines to be better in all senses than a human in the sense of ultimately creating its own race? What really would be the purpose of that? What that requires goes back to the fact that we, as humans, need to retain the capability to constantly ask why and to also be able to see and act in relation to the answer we generate. Some aspect of humanity always has to remain more developed and able to provide better context than pure digital thought can.

## 12. Consequences of being passive - The downward spiral of outsourcing thinking.

If you have read all the other chapters you will have picked up the pattern by now. A bit of a rant, a little reminiscing, a spattering of factoids and then something to think about. So you have the measure of me a little, or at least the public persona that I choose to project, in just over 17,000 words (according to the little word counter at the bottom of my screen). I have opened up bits of my mind to you to illustrate points and (hopefully) entertain, but amidst that I should have demonstrated some of my biases, and I would guess that without clever algorithms helping, you could probably figure out some things about me as a person, my demographic my upbringing and education level. That's not a bad thing, knowing who you are dealing with, as it adds to the credibility of whether you equate to that person, and ultimately whether you trust them and value their opinion.

However, I do that without knowing anything about my audience – you are all (sort of) anonymous to me. Of course, I can see if you subscribe to my newsletter and some of you are kind enough to like what I am doing here, but I don't harvest that information to target things at you, rather I use that to feed my inquisitive nature and see what interesting things other people have to say. I use it to feed my knowledge so my next opinion can be a more informed one. That is a commonality that I have with AI and its method of absorbing information.

However, with me that is not systematic and can be flawed, and that lack of precise definition is a good thing. I started off by saying I was going to do this in the style of "ChatKHR" but actually that was not entirely true. I hope you will notice that I am not endlessly referencing other people or principles, I have been trying to use the original Quantum computer, my brain, to recall things in what may be an entirely imperfect way. Have you ever considered what dreams are all about? "Do Androids Dream of Electric Sheep?" was the question posed by Philip K Dick in his 1968 (the date I did have to look up, but makes it nearly as old as me!) novel which ultimately was adapted into the film Bladerunner. But for us, the downtime of sleep is used by the brain to make random synaptic connections to see what happens. It is experimenting with memories, which is why you have some totally random collections of things that you have seen and done before, but not the way that you did them. How do you represent that element of "playing" into structured instructions that would be implied in a machine? Anyway, what I am trying to illustrate, and it has been my thread through all my comments that I hope you have picked up, is that thinking in the old fashioned, flawed and sometimes random manner is not just a good thing but, it is a necessary controlling mechanism for decision making machines.

### ***Albertism:***

***Unthinking respect for authority is the greatest enemy of truth***

Healthy scepticism and critical thought is my key takeaway phrase. We can ask machines (and machines even a correct definition any more?) to think on our behalf, but we should never abdicate responsibility for thinking, because to do that will genuinely lead to our demise. We need the machines to have input and accountability always with those who can dream, and, perhaps even more importantly can have nightmares.

### ***Albertism:***

***The most beautiful experience we can have is the mysterious. It is the fundamental emotion that stands at the cradle of true art and true science***

Right on Albert – we need to retain that wonder at things that are new, we need to have randomness in life and perception of beauty, love, passion and fear as all of those things are what contribute to the human condition. In automation, we are seeking a betterment of life. I would maintain that undermining our ability to think, or leading us to believe that we don't have to think for ourselves anymore, ultimately will undermine our quality of life and actually not be a healthy way forward for the very automation we are trying to promote. Let me elaborate on that a little.

In relatively simplistic terms, at the moment, we are teaching AI as we would a child. It is learning from things that we give to it. It is absorbing our original thoughts and actions to try and piece together an order and “opinion” from a myriad of sources but with precision of memory. Nonetheless, all of this learning is from the collective experience that we have accumulated the old fashioned way. Now, if we get to a point where we consider that we don’t have to have original thought any more because machines much cleverer than us will figure everything out for us, then we remove the generation of new original human thought. So how does AI progress from that point, like we do now, it has to start making stuff up itself and that cannot be a good thing. For us to get the most out of what technology can achieve we have to be an ongoing active participant in the ideas process.

Without that “partnership” or segregation of duties, then one of two things will happen, either the “Skynet” moment from the Terminator film series, or perhaps more likely, that AI gets dumber because of lack of original input. Consider nature’s version of this -Genes. We all are aware of the fact that if you limit the gene pool then the lack of diversity of genes means that bad mutations are much more likely and that diseases can become more prevalent because the random element of how we are made up actually provides some statistical protection. So if you apply this to a closed loop of AI where new “randomness” is not being input from outside its own ecosystem, then potentially the same will happen. The AI will create more and more anomalies or “hallucinations” to use the technical term (yes really it is called that), and, actually the AI will get more stupid over time or diverge away from its original precepts.

I am not the harpenger of doom here. I am a technologist and appreciate (and encourage) the huge advances that we can make in the use of technology because we have already demonstrated this. However, my plea is not that we do this by totally outsourcing thought to technology. We need a whole bunch of abstract things that we will always do better as humans to both temper progress and make it relevant to why we wanted it in the first place. This intent should not just be about productivity and profit, but genuine human progress, assisted by technology. This does not deny the inevitability of machines doing things done by humans now, but the human element of that should actually be that this allows humans to move up to a higher plane of thought, not a lower one. We need to teach people to think more not less.

***Albertism:***

***Weakness of attitude becomes weakness of character***

## 13. The final frontier – Unchallenged sentient thinking

Here we go then, the last real chapter before the blockbuster conclusion, and it's about sentient thinking. Now let's not start by getting into a big convoluted debate about what sentient means. If you want to do that, just go back a few articles and you'll find it there. Let's work on the basis that for me it means two things – self-aware and self-evolving. For me these are the crux of what makes people different from machines together with a spattering of emotion, empath, conscience and fallibility. Put all these together and you might want to refer to them as the "soul" – the intangible elements that make us unique, and also makes us consistently cling to beliefs that these elements transpose life and give us a purpose to life beyond simple biodiversity.

So, that's all good and dandy then. These are all the things we need to design into machines to make them sentient. But have you noticed that all of these elements we are talking about are very subjective? If we were asked to even define ourselves in these terms we would often not be able to do this. That being the case, how can we define within logic machines what these are and even if we could, that the interpretation would be the same. Sometimes our ability to forget or be inconsistent is our greatest asset and also our firebreak to stop us from doing certain things that, if laid out in pure logic terms would make sense. Remember the logic bomb that was the basis for the film I, Robot where the robot saved the adult rather than the girl from drowning in a sinking car, based on probability of survival? As humans I wonder how many people have drowned trying to save a stricken dog – emotion taking precedent over logic – but not a bad thing to have in your armoury.

### ***Albertism:***

***Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid***

Now let's take that thought a bit further. We have over 8 billion sentient beings roaming this earth with the most sophisticated biological quantum computers nestled between their ears. Yet with all of this processing capability have we really figured out how we function as a unit? In fact, the difference of location and circumstance, even without tribal and racial differences have never been ironed out over millennia of evolution. In some senses, volume has only made things worse, with differences highlighted and derided rather than celebrated.

With this as a context, if we were trying to model these sentiments, in whose reality would that be? It is likely that this modelling would come from those building and controlling the development of the devices and that is not the entirety of humanity. Even worse, divided we are already, but is it possible that in the creation of a sentient machine that we will create another tribe, another view of the world, another potential to be prejudiced against those that are not of its kind. I know that sounds very like the Skynet view of the world from the Terminator films (don't know what it is about films today but there will be more so brace yourselves – seems I am not building a bibliography to this but a filmography) but there is an interesting path there which we have not refuted in human existence. Namely, one tribe acquires some knowledge, it uses that knowledge to gain attributes, it decides other tribes who do not have the knowledge are stupid and subjugates them. This is fundamentally how the British Empire was built – an organised party subjugated other nations because they didn't know they needed to be organised. Although I do prefer the Eddie Izzard viewpoint that the British Empire was built on the basis that we had a flag that we could plant and if you didn't have one you lost...

### ***Albertism:***

***Artificial Intelligence is no match for natural stupidity***

So, given that making something sentient is inherently difficult and potentially dangerous why do we want to do this in the first place? For me technology and technological development is a wonderful thing, it is a natural part of our evolution. When you look at the possibilities for betterment of the human condition, the curing of diseases, the removal of danger from our lives, the enrichment of education, the solving of environmental problems, all of this can be massively assisted by technology and the ability of AI to increase the speed at which things are done. But that is about processing and analytics

and machine learning (very quickly). Making something self aware and giving it the ability to define its own future evolution is a different matter.

What you have to consider is that alongside all of that is a commercial imperative. Unlike biology, technology does not (yet) evolve without commercial impetus – someone has to pay for it. That paying for it requires a return of some type and that will often be in terms of productivity that displaces people. Create an automated AI driven chatbot and you don't have to employ a person to do this any more. Now this is just a different displacement to the call centre offshoring that has taken place over a number of decades across nations (and one might argue that in comparison the AI chatbots can actually be more helpful). But this is about machine learning and pseudo intelligence. When we talk about sentient machines then we are not just talking about creating a function that a person once did, that is the natural order of things. We are talking about replacing entire people and that is where we have to pause and think why we are doing that – are we running out of people to use – clearly not.

So the argument that prevails here is that “menial” tasks can be taken away and therefore human life can be devoted to higher and better things. Do we really have such a balanced world right now where everyone can have choices like this? We have massive global disparities already and a lot are based on wealth. If we are truly going to create something to elevate the human experience, how are we going to make that happen when technology will always cost more and be more usable in rich economies and displace more people in poor economies. Would we simply be enhancing the disparities that already exist and make the rich richer and the poor poorer because they cannot play in the same game?

For me, this is not an inevitability, but it is a point of inflection where we need to consider both consequences and motivations. Ideally, technological advancement should define a balance between commercial expediency and human benefit. If there is commercial interest but humanity (or at least human customers) have no advantage, then this is a form of exploitation. There are things that would be to the detriment of people, from both the wider and individual perspectives and that is what we have to consider as a society. Sometimes, when asked why to do something, the answer “because we can” is not always the right one.

I want to progress forward and take every advantage that human ingenuity can afford us to benefit the widest range of use cases possible. But, handing over that ingenuity without very serious consideration is a step that I think should be taken very seriously and not happen by accident of design. In conjunction with this, the premise of this whole series of articles is that, to participate properly in that debate you need to be able to understand all sides of the debate, question the assertions, and be aware of the risks of particular actions. We always take risks, as I was reminded by film (there I go again) Oppenheimer recently, but we have to know the percentages of risk/reward to know what to do. I don't see the sentient argument being compelling enough, in human advancement terms yet, to be worth the risk. However, I stand prepared, and armed with a sword of scepticism, to be proven wrong. But let's have the debate.

### **The Road We're On: A Future by Default**

If we continue on our current trajectory—outsourcing our thinking, chasing validation, and passively consuming what algorithms feed us—the future looks predictable, and frankly, a bit bleak. We are at a “very busy intersection, with all the stop signs and traffic lights removed and the speed limit increased.”

Here is a plausible timeline of that intellectual atrophy:

- **In 6 Months:** The “echo chamber effect” intensifies. Political discourse becomes even more polarized, driven by AI-optimized headlines and deep fake content that confirms our biases. We spend more time arguing with caricatures of the “other side” online and less time engaging with our actual neighbours. The feeling of “static mobility” becomes the norm; we are always connected, yet feel more isolated than ever.
- **In 2 Years:** Original thought becomes a niche hobby. Most people rely on AI assistants not just for information, but for opinions, creative ideas, and even personal advice. We begin to see the “downward spiral” in action, as the AI, trained on an increasingly homogenous diet of recycled human thoughts, starts producing more “hallucinations” and

less genuine insight. The quality of art, music, and literature plateaus, as creators optimize their work for algorithmic discovery rather than human connection.

- **In 5 Years:** We arrive at a world eerily similar to the one depicted in the film *WALL-E*. Humanity is physically comfortable but mentally passive. A "committed minority" of technologists and corporations wield disproportionate influence, shaping public opinion not through debate but through the subtle manipulation of our information streams. Democracy still exists in form, but not in substance, as our choices are presented to us "on a plate presented as our own." The "vicious loop of dependence" is complete: we have become so reliant on the machines that we have forgotten how to think for ourselves, and the machines, in turn, grow dumber from the lack of fresh, The journey through this book has led us to a fundamental crossroads, a decision that each of us must make, consciously or by default. It is not a choice between using technology and living in a cave. I am a technologist, an innovator, and an advocate for change. The choice is far more personal and profound. It is the choice between intellectual outsourcing and intellectual autonomy.

One path is easy. It is paved with convenience and constant validation. On this path, we let the algorithms choose the next song, the next movie, the next news article, and eventually, the next opinion. We outsource our curiosity to search engines and our creativity to AI. We accept the comfort of the echo chamber and the illusion of connection. This is the path of the passive consumer, the downward spiral where our own original thought dwindles, feeding an AI that, in turn, gets dumber from our lack of input. It is a path that risks leading to a future where we have all the information in the world but have lost the ability to understand it, a future where we have abdicated the very thing that makes us uniquely human.

The other path is harder. It requires effort. It requires you to question. It requires you to be an active participant in your own life. This is the path of the critical thinker, the conscious user, the digital citizen. It means challenging the "herd mentality" and daring to ask, "really?" It means embracing the messy, unpredictable, and sometimes random nature of your own life experience, your "hunch theory", as the most valuable source of knowledge you possess. It means recognizing that you create your life, and you have the power to recreate it

And I finish off with one last film reference – for a wonderfully worked piece that goes through both the human condition and the development of a sentient being you probably can't get any better than watching *Bicentennial Man* with Robin Williams (no not the singer of Angels but the actor who started off life as Mork). A slight spoiler alert – in the end the one human attribute that ultimately completed the ambition of a robot to be sentient was to be able to die.

Na-nu Na-nu (look it up... *Mork and Mindy*)

**Albertism:**

***Everything should be made as simple as possible, but not simpler***

## 14. Conclusion

"And so it goes, and so it goes, and so will you soon I suppose" are some words from a song by Billy Joel, and in writing this very last part in the sequence I may have already lost you, but my hope is that, in some way I have made you think. We are at a very busy intersection, with all the stop signs and traffic lights removed and the speed limit increased. The sensible thing is to stop and consider the peril of that situation and react accordingly. However, by some means you have to figure out how to get to the other side of the road, whether you are in the AI juggernaut travelling down the road, or the pedestrian that is the end user standing on the pavement. We all have places to be and things to do, but we need to be aware and mindful of our surroundings and use that to charter our course.

### **Albertism:**

**Truth is what stands the test of experience**

My whole premise in writing these has been to stimulate thought, to get people thinking about the "what if" things in life, because that is the basis of innovation and evolution. However, we also have to match that with the "why not", which can be just as positive a train of thought but actually with a wider scope. Being inquisitive should go hand in hand with being sceptical. We should not simply accept things that are presented to us without validation at lots of levels. We have created a real deficit of teaching people to do this and be acceptant. This is a form of subservience that can be very dangerous, as the systems around us get more and more sophisticated in their precognition and ability to manipulate and create addictions.

### **Albertism:**

**To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science**

The largest failure in this process is the lack of education in what we are using, how they work and the risk/reward ratios that these imply (and for whom). It should seem a little perverse that, whilst we are creating "intelligence" in systems, we are not devoting anywhere near as much effort into advancing the intelligence of humans. We should not aim to have systems that, in the round, are more intelligent than ourselves. To do that at best creates a significant technocracy and at worst makes us superfluous. If the professed utopia of machines doing all the work comes true then we become not only dependent on them, but in a lot of ways subservient. What would we do with our spare time of all the pursuits of intellect, learning and creativity have also been taken away?

### **Albertism:**

**Imagination is everything. It is the preview of life's coming attractions**

We have to be able to dream, we have to be able to imagine, but the core of that is knowledge. We have to experience to develop, we have to feel to evolve. If we continue to seek abdication from this through surrogate technology then we will wither at the vine.

### **Albertism:**

**The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking**

### **The Path Less Travelled: A New Age of Enlightenment**

But what if we choose differently? What if we heed the call to "educate, educate, educate" and begin a fundamental shift in our relationship with technology? This path doesn't reject technology, but embraces it with mindfulness and intention.

Imagine this alternative future:

- **A Renaissance of Creativity:** By breaking free from the "herd mentality," we rediscover our own unique perspectives. People start creating for the joy of expression, not for the sake of likes. We see a resurgence of local art scenes, independent music, and deeply personal storytelling. We use AI as a powerful tool to augment our creativity, not as a replacement for it, leading to new forms of art and discovery we can't even yet imagine.

- **A Resurgence of Civic Engagement:** Armed with critical thinking skills and media literacy, we learn to see through the "disinformation endemic" in our current systems. We demand more transparency from tech companies and more accountability from our leaders. Political conversations move from online shouting matches to productive dialogues, as we learn to value "equanimity" and diverse opinions. We use technology to organize, to learn, and to build coalitions, strengthening the core of our democratic process.
- **A Deeper Human Connection:** By consciously managing our digital lives, we reclaim our attention. We put down our phones and look up. We have deeper conversations with our families and friends. We rediscover the richness of the physical world and the joy of being present. Our social networks become tools for facilitating real-world connections, not substitutes for them. We find a new appreciation for the "intangible elements that make us unique."

### New Genies, New Bottles

This more hopeful future is not a utopia. A more conscious society will still face new and complex challenges.

- **Digital Inequality 2.0:** The gap may no longer be about access to technology, but about the ability to *master* it. A new form of inequality could emerge between those who have been educated to think critically and control their digital environment, and those who remain passive consumers, susceptible to manipulation.
- **The Need for Constant Vigilance:** Technology will not stop evolving. New platforms and more powerful AIs will emerge, presenting fresh challenges to our autonomy. The "new framework" of awareness, intention, and action won't be a one-time fix, but a lifelong practice. We will always have to be on guard, ready to put new and more powerful "genies...back into the jar again."

Ultimately, the future is not something that happens *to* us. It is something we build together. Every choice we make today—every time we question an algorithm, every time we choose a real conversation over a digital distraction—is a vote cast for the future we want to live in.

We have travelled a long way together through these ramblings, from the quiet hum of "static mobility" to the roar of the "manipulation machine." If you have worked your way here from the beginning, you have seen the threads connect, revealing a pattern that has not so much crept up on us as it has been woven into the very fabric of our daily lives. If you have just jumped to this conclusion for a shortcut, I hope the urgency of this message is not lost. The point was never to provide all the answers, but to provoke the right questions (that's definitely a quote from the film "I, Robot")

And I leave you with this final thought. Although it may have seemed that this was a book written by a Luddite (although they were misunderstood and misrepresented in history, they were not against technology as the term has come to mean, they just represented the earliest form of Trade Union, standing up for the rights of the people affected by technology to get their fair recompense).

#### ***Kurtism:***

***I am a technologist, I am an Innovator, I am an advocate of both evolutionary and revolutionary change...***

Technology moves us forward in remarkable ways, but we have to be able to keep up, intellectually, with the genies we are letting out of bottles because some of them, just some, need to be put back into the jar again. Educate, educate, educate – we need to completely rethink the way that we teach people, and about what and for what purpose. Sir Ken Robinson was right all those years ago, we are letting technology learn without us, as we are still stuck in a Victorian factory mode of education where the key attribute is your year of manufacture. But most of all, every change, whether technological or otherwise, must be viewed from the perspective of asking "why?". And if the answer is simply "because I can..." with no other supporting premise, then we have to think a little harder.

#### ***Albertism:***

***Only those who attempt the absurd can achieve the impossible***



## Key Terms and Concepts

**Static Mobility:** A term coined to describe the paradoxical state of being physically present but mentally absent. It's the feeling of being in a room full of people, yet completely absorbed in the world of your smartphone, a passenger in your own life. This "always on" culture, fuelled by a constant stream of notifications and information, keeps us in a perpetual state of distraction, moving without purpose and present without connection.

**The Echo Chamber Effect:** This is the digital equivalent of hearing your own voice bounce back at you. Social media algorithms are designed to show you content you will like, which often means showing you content that confirms your existing beliefs. Over time, this creates a personalized reality bubble where dissenting opinions are filtered out, and your own views are amplified and validated, making it harder to engage in genuine dialogue or consider alternative perspectives.

**Intellectual Outsourcing:** The subtle but pervasive act of delegating our thinking to external sources. It's reaching for a search engine to answer a trivial question instead of trying to recall the information, or relying on an AI to summarize a complex topic instead of grappling with the original text. While convenient, this habit can atrophy our own cognitive muscles—our memory, our critical thinking, and our ability to synthesize information and form original thoughts.

**The Manipulation Machine:** This is not a single entity but a complex, interconnected system of algorithms, data collection practices, and sophisticated psychological techniques used by big tech companies. It's the invisible hand guiding your online experience, designed to predict your behaviour, trigger your emotions, and influence your decisions for commercial or political gain. It operates on a scale and with a subtlety that makes it incredibly difficult to detect, let alone resist.

**Digital Wellness:** More than just a "digital detox," this is a holistic approach to living a healthy, balanced life in the digital age. It's a state of well-being where you use technology as a tool to enhance your life, not escape from it. It involves making conscious, intentional choices about how, when, and why you engage with your devices, ensuring that your digital habits support your mental, emotional, and social health rather than undermining them.

## Appendix A: The Science of Persuasion

The manipulation we have discussed throughout this book is not the stuff of old-school advertising. We are not just talking about a catchy jingle or a glossy magazine ad. We have entered an era of deeply psychological, data-driven persuasion, a "manipulation machine" that operates relentlessly and, for the most part, invisibly. Its goal is to shape your behaviour, your beliefs, and your purchases, often without your conscious consent.

The currency of this machine is data, but not just the data you knowingly provide. It thrives on inference. Consider the case of Walmart, which correctly inferred a teenager was pregnant based not on purchases of baby products, but on a subtle shift in her buying habits (a larger handbag and a change in washing products). This is the power of accumulated information: predicting profound life events from seemingly unrelated data points.

This predictive power is then combined with sophisticated psychological techniques designed to exploit our deepest human needs:

- **Addictive Validation:** The "like," "share," and "comment" functions create a dopamine loop, a system of continuous validation that can become addictive. This need to be liked and seen makes us more susceptible to influence from the very platforms that provide this validation.
- **The Virtual Herd:** We are social creatures, and the manipulation machine uses this to its advantage. By creating a "vortex" of influencers, targeted content, and curated comment sections, it manufactures a herd mentality. We are led to believe we are in a benign peer group of friends, all sharing their own views, when in fact we are being fed information designed to reinforce a particular thought or guide us toward a specific action.
- **Emotional Triggers:** Beyond simple persuasion, the machine is now capable of creating fictitious events or dialogues—what we now call "deep fakes" or "fake news"—designed specifically to elicit powerful emotional reactions. Fear, outrage, and desire are powerful motivators, and these platforms have become experts at triggering them on a mass scale.

The most chilling aspect of this is the complete absence of passion and empathy in the process. It is purely business, a relentless algorithm optimizing for engagement and conversion. As long as we remain unaware of these methods, we are not making free choices; we are following a script written for us.

## Appendix B: The Digital Detox Toolkit

This toolkit is not a list of apps to download or websites to block. The solution to a problem caused by technology is not more technology. Instead, this is a set of principles and practices, a framework for thinking, that will help you reclaim your mind and forge a more intentional relationship with the digital world.

### Phase 1: Awareness & Assessment (The First Week)

Before you can change your habits, you must understand them. For one week, become an observer of your own digital life. Don't try to change anything yet, just notice.

- **Track Your Triggers:** What is the first thing you do when you feel bored, anxious, or lonely?
- **Map Your Time:** How much time are you *really* spending on various platforms? Be honest with yourself.
- **Identify the "Why":** For each digital interaction, ask yourself: "What is the purpose of this? Am I consuming, or am I creating? Am I connecting, or am I just scrolling?"

### Phase 2: The Reset (The 30-Day Challenge)

This is where you actively change your behaviour. The goal is to break the cycle of passive consumption and "static mobility."

- **Curate Your Inputs:** Unfollow accounts that make you feel inadequate. Mute conversations that cause you stress. Consciously choose what information you let into your life.
- **Practice "Unitasking":** When you watch a film, just watch the film. Don't scroll through your phone at the same time. Give your full attention to one thing at a time.
- **Schedule "Do Nothing" Time:** Our brains need boredom to be creative. Schedule time in your day to simply sit, think, walk, or stare out a window without any digital input. This is where original thought is born.
- **Embrace Analog:** Read a physical book. Write a letter. Talk to a neighbour. Re-engage your senses with the world beyond the screen.

### Phase 3: Mindful Integration (The Lifelong Practice)

A detox is temporary; the goal is to build a sustainable, healthy relationship with technology for the long term.

- **Technology as a Tool, Not a Pacifier:** Use your devices to achieve specific goals—to find an answer, to connect with a loved one, to create something new. When the task is done, put the tool away.
- **Cultivate Your "Hunch Theory":** Trust your own life experience. Value your own unique perspective. Don't let an algorithm tell you what you think or what you like.
- **Stay Questioning:** Make this Albertism your mantra:

Albertism: "Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning."

## Appendix C: A Call to Action for Educators

We are failing our children. We have equipped them with the most powerful information and communication tools in human history but have failed to teach them how to use them wisely. We have allowed them to be disarmed by a weaponized information environment that preys on their insecurities and manipulates their emotions. The task of preparing them for this reality falls to us—to parents, teachers, and anyone involved in raising the next generation.

Our current educational model is obsolete. As Sir Ken Robinson noted, we are stuck in a "Victorian factory mode of education" that values conformity and rote memorization, preparing students for a world that no longer exists. This must change.

The new curriculum must focus on the adaptable, "soft" skills that are essential for navigating the digital age:

- **Critical Thinking & Scepticism:** We must teach children not *what* to think, but *how* to think. This means teaching them to question everything they see, read, and hear online. Who created this? Why? What is their motivation? What information is missing?
- **Media & Algorithm Literacy:** Children should understand the basic mechanics of the platforms they use. They need to know that their feeds are not random but are curated by algorithms designed to maximize engagement. They need to understand what "fake news," "deep fakes," and "influencers" are and how they are used.
- **Emotional Resilience:** We must help children build a sense of self-worth that is not dependent on external validation from likes and shares. We need to have open conversations about online bullying, social pressure, and the addictive nature of these platforms.
- **Fostering Original Thought:** The greatest gift we can give the next generation is the confidence to form their own opinions based on their own unique experiences. We must create space for creativity, for boredom, for unstructured play, and for the kind of random collisions of ideas that lead to genuine innovation.

This is not about banning technology. It is about balance. It is about empowering our children with the intellectual and emotional tools they need to become not passive consumers, but active, engaged, and thoughtful citizens of the digital world. The future of thought depends on it.