



TRUTH & THE INFLUENCE OF MEDIA

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TEMPLER REFLECTIONS

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EDITORS

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FROM THE EDITORS

Ingrid Turner, Jessica Blackwell and Theo Richter

What is truth? This is a fundamental question which is so simple, yet so complex. In this edition, we look at some contemporary issues that our western society faces as we grapple with the massive change in the ways we obtain our information. Issues arise when streaming services, social media and pay television raise their revenue depending on how much their news/information attracts attention. The facts and the news become a commodity rather than a service provided as part of their obligation for their right to broadcast/publish. Due to the extremely rapid dissemination of vast amounts of internationally sourced news and information, there are virtually no universal vetting or validating mechanisms to check it. Editors, high quality journalism, media watchdogs and the laws that govern information supply are scant, and we rely on corporations to self-regulate. Basically, it is “buyer beware”, which is an extremely difficult task, especially when different entities actively distort information for political or commercial reasons in a multitude of ways. And as many of the articles in this *Templer Reflections* edition will show, more than ever, we need to take care in understanding the source and nature of the information we use.

The Temple Society founders splintered from their Lutheran roots partly due to a rejection of dogma and doctrines as well as lack of integrity. They sought to enable and educate our community to search for the uncompromising truth they found in the Bible, and then courageously implement that very truth on the ground. Later the Society encouraged critical thinking and questioning of the truthfulness of the literal interpretation, using the historical context and scholarly analysis of the Bible. Hence, we understand that “the truth” often depends on the context and perspective; it requires deep research and rigorous checking to ensure it is valid. It makes this *Templer Reflections* topic so relevant and important to our Society, since seeking truth is fundamental to our values. It is to understand that the pervasive, highly developed and nuanced mechanisms at work in the production of these new information sources is of pressing importance.

The truth can be uplifting and enlightening, but also inconvenient, embarrassing, even disturbing and harmful. Challenging information is hard for most of us to deal with, be it personally, publicly or in relationships. To hear it can be crippling and, in relationships, many of us walk

away rather than genuinely confronting and sorting out the issues. Compassion, empathy, trust, acceptance, respect are all needed to deal with the truths of others and of the situations. But, today, there are new issues caused by our relationships extending to being online. Small quips become permanent barbs, and comments are often interpreted incorrectly as there is little ability to convey emotional tone.

One problem that is inherent with being human is we all sometimes lie, usually to protect someone or something, and we have no readily accessible way of working out if others do so. The theory of mind is a critical step in human development that starts happening in humans from an early age. We understand the way others think and it shows up as we tell our first little fibs. The internet is littered with these first steps at fibbing, often in hilarious scenes: like toddlers with thickly cake-smudged faces swearing earnestly with their gorgeous doe eyes that they did not eat the cake whilst left alone in the room with it. This enables humans to develop intricate social skills involving analysis and judgement to include when to tell the odd white lie, exaggerate the truth or when it is best to perhaps say nothing at all. Gangs and teen friendships rely on members not "snitching" or telling the truth to authority figures in order to belong. At an extreme of this a person can perpetuate psychological harm on another by gaslighting them to the

point that their basic self-belief and self-confidence is destroyed. Whistleblowers wishing to publicly expose the truth about corrupt, inhumane or other major failings from institutions are not protected in Australia. A few notable cases are still being prosecuted. What price truth? We are constantly negotiating the spectrum and the minefield of truth as part of being a human.

An even more challenging addition to the Truth topic is the complex way we remember information on which we base our truth. When we perceive a situation, we bring our own bias and interpret the observations from our own context. Magicians rely on this to create magic. We are all quite subjective in the amount of information we take in about a situation. As we age our memory frequently declines, and the rigour with which we can recall the past truthfully decreases. Currently, on top of all the barriers to maintaining a truth-based society, there is deliberate obfuscation and channelling of information in order to distract and undermine people's trust in organisations and in structures like science, journalism and expert bodies. Deliberate disinformation is used by corporations like tobacco and fossil fuel companies to successfully continue selling toxic or deadly products or to create cover to avoid scrutiny of inhumane practices such as child labour, slave labour and mistreatment of animals.

Truth is such an important topic because, as voting citizens, we need to be well informed in order to make the best choices for our country. We rely on reliable, balanced, fact-based information and we need legislation in place to ensure this. The monetisation of news by businesses is problematic, as there is an increase in focus on dramatic and compelling news over boring and complex stories, critical to gaining deep understanding of local issues. Social media advertising profits rely on the length of time people are on their platforms. So it uses algorithms or engagement-based rankings which deliver people more of the content they appear to be interested in. But, as noted by Facebook whistleblower Frances Haugen, "Human nature means this system is doomed to amplify the worst in us; it is much easier to inspire someone to hate than it is to inspire compassion or empathy." Bots or fake personal accounts that are powered by programs aided by Artificial Intelligence (AI) – often funded by nations or corporations wishing to undermine another nation's stability (eg Russia in the 2016 US election) – create mistrust around experts in general, so the public no longer trusts rigorous studies

showing disturbing issues surrounding a product or practice.

These are the issues we will be exploring or start to explore in this edition. It is our nation's seatbelt moment. This is a time where we say the current way of operating something, in this case our information delivery services, is unsafe and we need protection from the dark side of an otherwise brilliant technology, just like seatbelts were needed to keep us safe in cars. We also need better whistleblower protection to ensure those who find grave issues in their workplace can expose them safely.

As you read these pages, we hope you keep an open mind. Many perspectives are being presented – some you may be familiar with, some you may not. As Templers, our ability to discuss things, our respect for each other's ability to think deeply, our acceptance of different perspectives, our continual questioning and upgrading of our own understanding, and taking appropriate actions, is part of living mindfully, lovingly and responsibly in our time.

FROM THE PRESIDENT

Mark Herrmann

The judge enquires of the witness whether they will solemnly, sincerely and truly declare and affirm that the evidence they give shall be the truth, the whole truth and nothing but the truth. When the individual in the witness box confidently responds with a single-word affirmative, no doubt – on occasion – they will have already not obeyed.

The intent is to respond truthfully, but I think all of us could admit at some time to not telling the truth, the whole truth and nothing but the truth... just hopefully not in front of a judge in a court of law! And what is the distinction between “the truth” and the “whole truth”? Is there partial truth?

Is my truth the same as your truth? Facts can be checked and verified, but truth also has room for interpretation, making it something of an individual construct. So, even if we can't speak the truth, we can speak a truth.

Young children from an early age are taught the difference between right and wrong, that there are consequences for lying. While *Truth, Justice and the American Way* is a catchphrase of the comic-book character *Superman*, I'm not sure I would in every instance automatically couple the

first two together, and I certainly couldn't instinctively extend them to the third, given the parlous state of the USA.

From Exodus 20:16 in the Old Testament, the Ninth Commandment has its roots in integrity and honesty: “Thou shalt not bear false witness against thy neighbour.” If you lie to someone, you are bearing false witness, and may cause harm to yourself and to others.

I wondered, too, about “struth” in the Aussie vernacular. Apparently, it's a contraction of the words “God's truth” but in this country is used more as an exclamation expressing surprise, verification or dismay. As an example: “Struth! Look how big that bloody emu is!”

Coming from his 1998 debut solo album *Try Whistling This*, the song *Truth* by Neil Finn (and Jim Moginie) seems to be about the importance of honesty and authenticity in relationships and life.

Remember who we are supple and new
If I lose my way you'd tell me the truth for
all its worth

Lifting up your hand show me my rescue
What I said

Truth is worth more than pride
Truth, worth more than pride

Everything you do continues long after
you've gone

Circle overhead the view from the bed
So high and lonely
Sixteen times a day he comes to ground
To get some attention
It's what I said
Truth is worth more than pride
Truth, it cannot be denied
Truth is worth more than pride

They have showered me with riches
And they say that I am worthy of their
love
And their attention
But they still don't know the truth

Everything you do continues long after
you've gone
What I said
Truth is worth more than pride
Truth cannot be denied
The view from the bed so high and lonely
So high and lonely
Truth is worth more than pride

The opening lines suggest a sense of
innocence and vulnerability. When we then
lose our way, we need someone to tell us

the truth, even if it's painful. "Truth is worth
more than pride" is repeated throughout,
emphasising the importance of being
truthful and transparent with oneself and
with others.

The line "Everything you do continues long
after you've gone" suggests that our actions
and decisions have lasting consequences,
beyond our physical existence, so it's
important to make choices based on truth
and authenticity. "Circle overhead the view
from the bed, so high and lonely" could be
a reference to feeling disconnected and
alone, a sense of isolation and detachment
from reality, possibly from living a life that
is not genuine or from not being truthful.

The bridge which features "They have
showered me with riches..." may be a
commentary on the superficiality of
relationships based on material wealth
rather than true connection and honesty.
It touches on the theme of fame and the
idea that even those who reap riches and
attention can struggle with feeling truly
known and understood.

Overall, the song emphasises the
importance of honesty and authenticity in
both personal and interpersonal contexts,
suggesting that living a truthful life is worth
more than pride or material wealth. There
is importance in staying grounded and true
to oneself.

TRUTH AND ACCEPTANCE

Jessica Blackwell, an extract from her service held at *Sommerfest* 2024

I'd like you to take a moment to consider what the word 'truth' means to you.

It could be something that you know at the depth of your core, almost like a gut instinct, which can be no other way. Or an absolute belief that something is the way it is because it has been scientifically proven to be so. Perhaps it has played out as an experience, so therefore becomes a past event which cannot be altered. Your version of truth could be because God has declared it so and made it so.

Wikipedia defines truth as the property of being in accord with fact or reality. In everyday language, truth is typically ascribed to things that aim to represent reality or otherwise correspond to it, such as beliefs, propositions and declarative sentences. Truth is knowledge, which is the reflection of what things are, which can be positive or negative, good or bad, right or wrong. It is not judgemental but factual.

Dr Steven J Lawson, an American cultural minister and author of *A Moment of Truth* (published in 2018), defines truth as genuineness, veracity or actuality. He goes on to write that "truth, in a word, is reality. It corresponds with what actually **is**. It is not relative to another person's or society's perspective, instead it is absolute

for every human being, peacock or blue whale. One person may 'feel something is true' but without objective verification, it means nothing. Truth is not determined by personal feelings, popular vote, scientific consensus or any human court of appeal. Truth simply is what is."

Truth simply is what is. There really isn't much room to argue with that! But I do wonder... how many of us find it easy to just accept what is? We live in a technologically advanced society, where media plays a large role in providing information to the community. I think it's a safe assumption to make that we've learnt, across the whole, not to take everything portrayed to us through media as the absolute truth. So where does that line get drawn then? And how are we able to manage our concept of truth without being ridiculously sceptical, yet at the same time know when to ask the right questions to gain more knowledge?

Perhaps the answer starts with us. Let's take the word 'truth' itself and put an ownership in front of it; my truth, your truth, their truth, Jesus' truth. When the phrase 'my truth' is used, what is generally meant is 'what is true to me, or true for me, based on my own experience and understanding'. It is a subjective truth that is valid and meaningful, but only exists for

that person or for people who share that experience or belief.

There are many variables that may come into play when defining one's reality; for example, previous experiences, emotional intelligence, external environmental influences and a healthy or unhealthy upbringing. If I were to place a glass with water to the halfway mark in front of you and ask whether it is half full or half empty, the reasons to the answers given may vary based on a few of these variables. How do we then discern which is true... more so, does it NEED to be true in order to be accepted?

Anyone who watches the news, has an account on any social media platform or even just overhears conversations in public spaces can know that our world is very subject to a whole host of different opinions, outlooks, perceptions and, yes, realities. When these realities are in harmony, sharing similar values and beliefs, they become a truth for more than just the individuals who hold them.

The parable of the blind men and an elephant can be used to illustrate this.

The earliest versions of this parable are found in Buddhist, Hindu and Jain texts, as they discuss the limits of perception and the importance of complete context. The parable has several Indian variations, but broadly goes as follows:

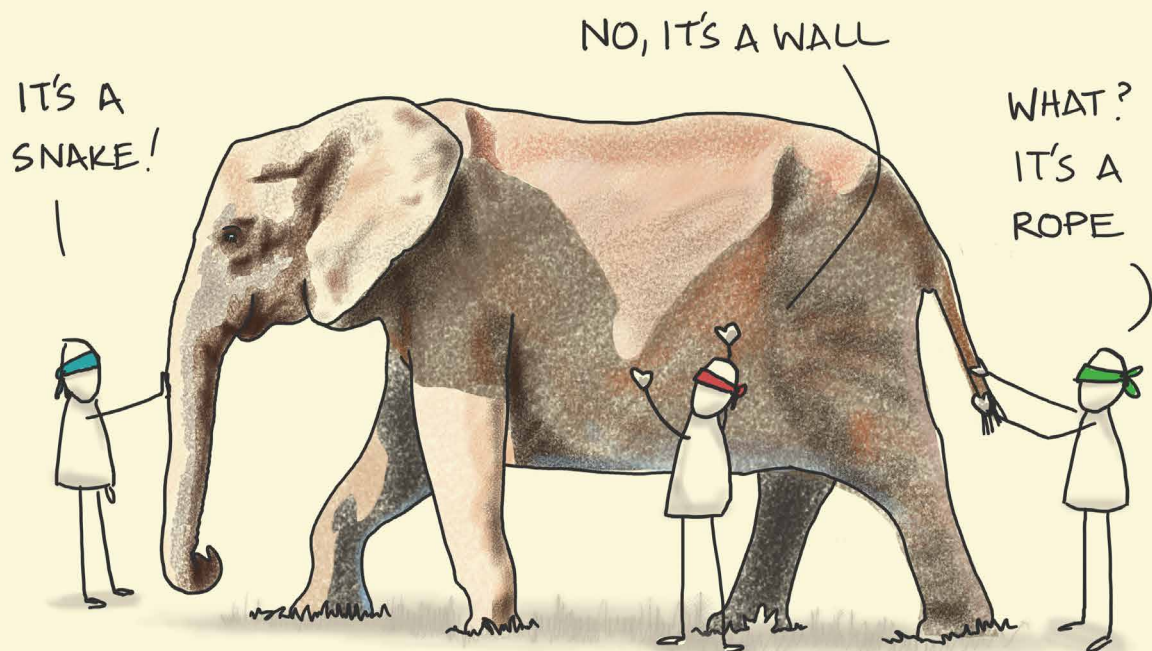
A group of blind men heard that a strange animal, called an elephant, had

been brought to town, but none of them were aware of its shape and form. Out of curiosity, they said: "We must inspect and know it by touch, of which we are capable." So, they sought it out, and when they found it, they groped about it. The first person, whose hand landed on the trunk, said, "This being is like a thick snake." For another one, whose hand reached its ear, it seemed like a kind of fan. Another person, whose hand was upon its leg, said, "The elephant is a pillar like a tree trunk." The blind man who placed his hand upon its side said, the elephant "is a wall." Another, who felt its tail, described it as a rope. The last felt its tusk, stating the elephant is that which is hard, smooth and like a spear.

In some versions, the blind men then discover their disagreements, suspect the others not to be telling the truth and come to blows. The stories also differ primarily in how the elephant's body parts are described, how violent the conflict becomes and how (or if) the conflict among the men and their perspectives is resolved. In some versions, they stop talking, start listening and collaborate to 'see' the full elephant. In another, a sighted man enters the parable and describes the entire elephant from various perspectives; the blind men then learning that they were all partially correct and partially wrong. While one's subjective experience is true, it may not be the totality of truth. Likewise, our perception of something real may not equal its whole reality.

THE BLIND AND THE ELEPHANT

OUR OWN EXPERIENCE IS RARELY THE WHOLE TRUTH



sketchplanations

WHAT DOES GASLIGHTING MEAN AND IS OVERUSE OF THE TERM TRIVIALISING IT?

Featured on *ABC Everyday* by Kellie Scott

From the Editors: This article discusses the term 'Gaslighting' and what that means in the context of social media. Although originally a term used to describe manipulative behaviour, usually of one person over another, it has morphed into a more general description to describe a method of manipulating anyone into believing an alternate truth to the 'real' truth. The best examples are seen in politics. Ministers are issued 'talking points' almost daily – a list of points to define the 'party line' on one or more issue. When interviewed, said ministers stick to the points, religiously, almost ignoring other questions directed at them. There's a very simple psychological reason for this – repetition reinforces a belief to the point where the recipient person unequivocally believes what is being said, despite very clear and convincing evidence to the contrary. It weaponises debate on a subject and is deliberately used to create confusion, fear, mistrust.

Gaslighting was Merriam-Webster's word of the year in 2022, and like a lot of 'therapy speak' the term has taken over the internet.

It's a very real and dangerous pattern of behaviour, but social media doesn't always portray it correctly.

"When something has captured the public's imagination, then that's a chance to educate the community on that," Respect Victoria acting CEO Serina McDuff says.

She says many people are beginning to comprehend what gaslighting behaviour is – and that's an opportunity to prevent it.

"We want to make sure that conversation is deep enough, so people understand what it means and the warning signs."

So, what is gaslighting? And how can we recognise if it's happening to us or those we care about?

WHAT DOES GASLIGHTING ACTUALLY MEAN?

“Psychological manipulation of a person usually over an extended period of time that causes the victim to question the validity of their own thoughts, perception of reality or memories and typically leads to confusion, loss of confidence and self-esteem, uncertainty of one’s emotional or mental stability, and a dependency on the perpetrator.”

It was coined after the name of a 1930s play, *Gaslight*, which follows the story of a husband attempting to convince his wife that she is insane. There were two film adaptations in the 1940s.

While the phrase is almost a century old, and the behaviour goes back even further, there’s been a surge of interest lately, perhaps thanks to a wider societal focus on violence against women.

Dr Catriona Davis-McCabe, president of the Australian Psychological Society, says gaslighting can happen in all kinds of relationships and settings where one person wants to gain power over another.

“This might include intimate relationships, friendships, professional [relationships] with a boss or co-worker, even parent to child,” she says.

Other examples include medical gaslighting, when a patient’s concerns are

unfairly dismissed or incorrectly labelled as psychological by their doctor.

It most commonly occurs, however, in the context of intimate partner violence as a deliberate strategy to gain control over a victim, says Ms McDuff.

She says abusers often use “flat-out denial tactics”, such as refuting that something has occurred, often “in response to some inappropriate behaviour” they have been called out on.

HOW OUR USE OF GASLIGHTING HAS SHIFTED

Kate Burridge, a professor of linguistics at Monash University, says the meaning of the term ‘gaslighting’ has changed since it has entered the everyday vernacular.

“[Now it’s used to describe] the act of misleading someone for one’s own advantage, or even more generally for anything that’s insensitive, perhaps even a difference of opinion,” she says.

Professor Burridge says it’s not uncommon for the meanings of such words to be watered down or even trivialised as they become more popular. Another example she points to is the word ‘angst’.

“It was originally a term used in psychiatry for an intense feeling of anxiety or dread, but now more generally as any sort of a feeling of apprehension or insecurity,” she says.

Ms McDuff says while the prevalence of the term gaslighting means in some cases it might be “thrown around a bit lightly”, people learning more about a preventable form of violence is important.

“Part of the journey is to understand what it means and educate people on the warning signs.”

WHAT ARE THE WARNING SIGNS OF GASLIGHTING?

Gaslighting can be difficult to spot – especially when you are the victim.

“People who use this as a form of abuse and control are really adept at doing so in ways that happen over time,” Ms McDuff says.

“It’s just the very nature of how it’s done... it can really sneak up on people and how it’s making them feel.”

She says the person using gaslighting may present very different to other people in their lives, as is often the case with men who use violence against women.

“They are often well liked in the broader community,” Ms McDuff says.

She says to look for common phrases such as “you’re overreacting” and “you’re crazy” as warning signs.

“If you’re feeling uncertain and made to feel confused or doubt yourself, that is a real red flag.

“[Ask yourself] why is someone who is supposed to love me and I’m trusting making me feel this way?”

WHAT TO DO IF YOU’RE A VICTIM OR WITNESS GASLIGHTING

If you suspect you’re a victim of gaslighting, talk to someone you trust, and reach out by calling 1800 RESPECT (1800 737 732).

“It is important to pick up early, as it can also be an indication of some serious safety issues,” Ms McDuff says.

If you suspect someone you know is a victim of gaslighting, Dr Davis-McCabe recommends talking to the person about what you are witnessing, and letting them know you are concerned and want to help.

She suggests helping them make a safety plan, including things they can do to protect themselves if they feel unsafe, and encouraging them to seek professional help.

“Gaslighting is not part of any healthy relationship. The impact on victim-survivors can be devastating,” Dr Davis-McCabe says.

MISBELIEF: WHAT MAKES RATIONAL PEOPLE BELIEVE IRRATIONAL THINGS?

Dr Dan Ariely

From the Editors: This book is a fascinating read for anyone who wants to understand the world of conspiracy theorists and misbelievers, and how people like you and me, our close family and our friends become enamoured with beliefs and ideologies that go against accepted norms or that stretch the limits of credibility. It is common parlance in media and on social platforms to hear about people who have 'disappeared down the worm hole' into an alternative reality that is often described by influential people who prey on gullibility and angst. These influencers often have an undisclosed agenda that provokes a particular sentiment or promotes a particular ideology. Usually, the information provided within the alternate reality speaks to only one side of the argument, portrays 'alternate' facts or denies verifiable science.

If you are further interested, I encourage you to read this book. It is available for purchase or at your local library (although the list at my library had six reservations ahead of mine – Theo).

The renowned social scientist, professor and bestselling author of *Predictably Irrational* delivers his most urgent and compelling book – an eye-opening exploration of the human side of the misinformation crisis – examining what drives otherwise rational people to adopt deeply irrational beliefs.

Misinformation affects all of us on a daily basis – from social media to larger political

challenges, from casual conversations in supermarkets, to even our closest relationships. While we recognise the dangers that misinformation poses, the problem is complex – far beyond what policing social media alone can achieve – and, too often, our limited solutions are shaped by partisan politics and individual interpretations of truth.

In *Misbelief*, pre-eminent social scientist Dan Ariely argues that to understand the irrational appeal of misinformation, we must first understand the behaviour of “misbelief” – the psychological and social journey that leads people to mistrust accepted truths, entertain alternative facts and even embrace full-blown conspiracy theories. Misinformation, it turns out, appeals to something innate in all of us – on the right and the left – and it is only by understanding this psychology that we can blunt its effects. Grounded in years of study, as well as Ariely’s own experience as a target of disinformation, *Misbelief* is an eye-opening and comprehensive analysis of the psychological drivers that cause otherwise rational people to adopt deeply irrational beliefs. Utilising the latest research, Ariely reveals the key elements – emotional, cognitive, personality and social – that drive people down the funnel of false information and mistrust, showing how under the right circumstances anyone can become a misbeliever.

Yet Ariely also offers hope. Even as advanced Artificial Intelligence has become capable of generating convincing fake

news stories on an unprecedented scale, he shows that awareness of these forces fuelling misbelief make us, as individuals and as a society, more resilient to its allure. Combating misbelief requires a strategy rooted not in conflict, but in empathy. The sooner we recognise that misbelief is above all else a human problem, the sooner we can become the solution ourselves.

REVIEWS

“In this thoughtful, moving and well-written book, Dan Ariely narrates his personal and professional journey to understand the world of misbelievers and conspiracy theories, and offers insights and tips that will hopefully help all of us protect our fragile social fabric from being torn apart by disinformation and distrust.”--*Yuval Harari, bestselling author of Sapiens*

“*Misbelief* is an urgent examination of the human attraction to misinformation. This timely book can provide a crucial foundation for building a more empathetic and informed society.”--*Daniel H Pink, #1 New York Times bestselling author of The Power of Regret*



"I HEARD THAT SOMEONE'S
TURNED THE SIGN ROUND."

SOCIAL MEDIA PLATFORMS WILL INCREASINGLY DEFINE 'TRUTH'

Kalev Leetaru: Contributor *Forbes Magazine*

Anarchy and the primacy of free speech defined the early days of the modern Web. Social media enshrined the concept of speech without limitations and rebuffed calls from Congress to crack down on growing terroristic misuse of their platforms. Eventually the ideal of a digital world transcending the laws of the physical one came crashing down and social platforms, and the Web at large, rushed to bring censorship, content moderation and truth arbitration to cyberspace. Today social media platforms not only decide what is acceptable for us to see and say, but in their efforts to combat digital falsehoods, they are increasingly defining "truth" itself. In our rush to rid ourselves of false information, we are rushing headfirst towards Orwell's *1984*.

It is remarkable how much of modern society George Orwell predicted in his famous novel that turned 70 this past June. From the surveillance state to the concept

of "thoughtcrimes" to the "telescreen" it seems not a corner of modern society escaped his predictions.

Perhaps most dangerously, Orwell's predictions regarding societal censorship in the digital era are increasingly coming to fruition. Social media companies that were once content merely to regulate speech are increasingly claiming the right to define truth itself. From arbitrating the veracity of a politician's claim to authoritatively authenticating a purported documentary video, social companies are creeping ever forward in their efforts to control the societal discourse of the modern age.

Most troubling, however, is that unlike the governmental world of *1984*, it is unaccountable private companies that are taking over the role of truth arbitrator today. When governments decide what is truth, they can be voted out of office if they stray too far from societal norms or when

they begin to abuse that power to silence their critics. Private companies are subject to no such accountability, free to define truth as whatever is most economically beneficial to their needs.

In this regard, social media platforms are in good company with the dictatorships of the world that similarly redefine reality to fit their contemporary needs.

Indeed, controlling the definition of truth is an almost inevitable cycle of any society. Societies grow increasingly open until they reach a point at which falsehoods become too influential or where freedom of speech threatens entrenched governmental and elite interests; at which point governments begin to proscribe “truth” and decide what is an acceptable “understanding” and what facts have become inconvenient and must now be dismissed as “false”.

Such slippery slopes almost always begin with arguments involving safety, security and safeguarding democracy. Over time they evolve into more nebulous concerns over “societal harm” and begin to focus on silencing dissent and enshrining elites as dictators. Eventually there is a societal

backlash, a return to openness and the cycle repeats itself.

Within the US, the First Amendment’s enshrinement of free speech arose from a world in which the right to speak freely on societal or governmental issues was highly restricted, and even America’s movement towards openness was not without countless attempts to curtail it. It is easy to forget efforts like the Sedition Act of 1798 and the myriad other efforts over the past two centuries to roll back our freedom to express ourselves.

Yet where government has failed, private companies are stepping into the censorship void, establishing their own absolute rules over acceptable speech and just what constitutes truth and enforcing those rules without fear of contradiction given that the First Amendment applies only to government, not private companies.

In the end, as private companies increasingly define “truth”, we are heading towards a frighteningly Orwellian world in which a handful of unelected digital dictators will construct our reality. Even Orwell could not have imagined a more dangerous dystopia.

FINDING TRUTH IN SOCIAL MEDIA

Dr Jessica Stokes-Parish

Assistant Professor of Medicine and Clinical Practice, Bond University

We know that teens are using social and digital media for, well, just about everything. As a millennial, it's difficult to get my head around having social and digital media permeate every part of teenage years – the magazines and peer pressure were already enough!

According to the 2020 eSafety survey, 95 percent of teens use digital media, with YouTube, Instagram, Facebook and SnapChat their top four platforms of choice. Teens cite a variety of reasons for using social media – staying connected, entertainment and researching information. When it comes to researching information, the majority of teens seek material on health.

Social media is an enticing place to seek health information – it's visually appealing and highly influential. In research from the US, teens were found to frequently access health-related material on fitness, sexual health and nutrition.

Picture it in your mind – a fit athlete sharing tips on bulking up while in sponsored kit, or the local Gold Coast influencer sharing their favourite healthy smoothie recipe. Innocent on the outside, social media is a breeding ground for misinformation, bullying and eating disorders.

The effects of cyberbullying are well-documented. The links between social media and eating disorders are well established, with filters and media internalisation (“maladaptive” usage of social media) known to be associated with increased risk of eating disorders. As are the links between other types of eating disorders that contribute to body dysmorphia in teens – like orthorexia, the obsession with eating healthy food.

But it's not all bad news, there are positives to social media, too. The ability to communicate in creative ways to large numbers and strategically promote awareness of health is a huge opportunity.

The challenge is to help balance the risks with its potential benefits.

There are plenty of examples of inaccurate information online. For example, in a study on influencers and nutrition information, 90 percent of the influencers included in the study did not provide evidence-based information in their posts about food. Throughout the pandemic we have also seen a proliferation of inaccurate health information online in regard to immune boosting and nutrition.

So how do teens fare when assessing accuracy of information? A recent study found that more than 80 percent of adolescents were unable to identify two reliable sources of health information when presented with reliable sources and unreliable sources (eg the World Health Organisation vs unidentified blogs).

One way parents and educators can help them decipher reliable advice from misinformation is to provide accessible critical appraisal tools for assessing the quality of health information online.

When assessing the accuracy and credibility of content online, it's helpful to systematically consider the information at hand. The essence of critical appraisal of health information is 'think fast, share slow' in an effort to help teens and others consider the credibility of information at hand.

Here's one handy framework that you might like to use – CRABS.

C - CONFLICT OF INTEREST

Conflicts of interest occur when an individual stands to benefit from a certain message or decision, making the information less reliable, for example telling you a problem and delivering a solution (that benefits them). Conflicts include financial benefits or even political ones.

R - REFERENCE

References are important as they indicate two things: one, whether there is evidence to back a claim; and two, whether the author is across the body of evidence and key work. In addition, they should be recent (science changes fast) and from reputable scientific sources.

A - AUTHOR

Anyone can write on anything. The internet provides more opportunities for everyone to have a voice. Their expertise/ qualifications (or lack of) relative to the topic is important when determining how much weight to give the content.

B - BUZZ WORDS

Designed to draw you in with marketing speak, buzz words are great for science washing and misleading you with jazzy claims.

S - SCOPE OF PRACTICE

Scope of practice is a complex combination of an individual's qualifications and expertise, the setting of practice and the needs of the client. Most people don't ever set out to overreach their scope of practice; it's a slippery slope of rule bending. A nurse providing specific nutrition advice or an engineer talking about infection control is likely overreaching scope of practice.

Helping teens spot discredited or misleading information doesn't have to be hard. A memorable strategy, such as a mnemonic or slogan, can be useful to guide teens through systematic appraisal. Being aware of the challenges our teens face is crucial to helping them tackle social media with confidence.

MISINFORMATION ON SOCIAL MEDIA: CAN TECHNOLOGY SAVE US?

Filippo Menczer, Professor of Computer Science and Informatics; Director of the Centre for Complex Networks and Systems Research, Indiana University

From the Editors: This is an abridged version of the full article. Ingrid Turner used ChatGPT to reduce the original from three A4 pages to one page.

In the modern digital age, social media platforms have become the primary source of news for most Americans. However, amidst the flood of information, lies a murky blend of hoaxes, rumours and conspiracy theories, making it challenging to discern truth from falsehood. Research indicates that misinformation spreads just as rapidly as reliable information, raising concerns about its potential influence, particularly in significant events like elections.

Filippo Menczer, a prominent figure in the field of computer science and informatics, highlights the pervasive nature of misinformation on social media. Drawing from his research, Menczer illustrates how individuals are susceptible to manipulation, often trusting links shared by friends without critical evaluation. This vulnerability has paved the way for a lucrative industry centred around the dissemination of fake news and digital misinformation.

One of the key facilitators of this phenomenon is the ease of creating social bots, automated accounts designed to mimic human behaviour and thereby contribute to the amplification of false narratives. In response, Menczer's team developed tools like BotOrNot to detect these bots, shedding light on their role in shaping online discourse.

Moreover, the structure of social networks fosters the creation of information bubbles, where individuals are exposed only to content that aligns with their beliefs. This phenomenon not only perpetuates confirmation bias but also facilitates the rapid spread of misinformation within tightly knit echo chambers.

Menczer's research underscores the inevitability of some memes going viral due to the network's inability to discern between reliable and fabricated

information. This viral spread is further fuelled by the attention economy, where fabricated content garners as much traction as genuine news, driven by algorithms prioritising engagement over accuracy.

The reliance on algorithms to curate content exacerbates the problem, reinforcing existing biases and contributing to the formation of echo chambers. While efforts are underway to address this issue, such as labelling verified links, challenges persist in discerning truth from falsehood in the vast sea of online content.

In the quest to combat misinformation, Menczer emphasises the importance of understanding its spread. Tools like Hoaxy, developed by his lab, aim to track and visualise the dissemination of unverified claims, providing valuable insights for combating fake news. By leveraging real-world data and simulation models, researchers can explore strategies to mitigate the impact of misinformation on social media.

Menczer advocates for a collaborative approach involving experts from various disciplines, including computer science, social science, economics, journalism and industry partners. He stresses the urgency of investing resources in studying this phenomenon, highlighting the need for collective action to safeguard the integrity of information in the digital age.

In conclusion, the proliferation of misinformation on social media poses a significant challenge to society, undermining trust in reliable sources and shaping public opinion. While technological solutions offer promise in combating this issue, a multidisciplinary effort is essential to effectively address the complex interplay of social, cognitive and algorithmic factors contributing to the spread of fake news. Only through concerted action can we hope to preserve the integrity of information in an increasingly interconnected world.

THE ROLE OF SOCIAL MEDIA IN THE POST-TRUTH ERA

Emmanuel Jesuyon Dansu, Postdoctoral Researcher, Ecological Integration Lab, Tohoku University, Sendai, Japan

The role of social media in the post-truth era has been a subject of significant debate and concern. The post-truth era is characterised by a blurring of the line between facts and opinions, where emotional or personal beliefs often hold more sway than objective facts. Social media platforms have played a complex and multifaceted role in this phenomenon. Here are some key points to consider:

1. Dissemination of Misinformation:

Social media platforms have made it easier for false or misleading information to spread rapidly. False news, conspiracy theories and misinformation can gain traction quickly on platforms like Facebook, Twitter (X) and YouTube, often before they can be fact-checked or debunked. This can contribute to the erosion of trust in traditional sources of information.

2. Echo Chambers: Social media algorithms are designed to show users content that aligns with their pre-existing beliefs and interests, creating filter bubbles or echo

chambers. This can reinforce existing biases and limit exposure to diverse viewpoints, making it harder to discern the truth.

3. Virality and Sensationalism: Social media rewards content that is sensational, emotional or controversial, often at the expense of more nuanced or factual information. This can incentivise the creation and spread of sensationalised or false content, further fuelling the post-truth environment.

4. Polarisation: Social media has been linked to increased political polarisation. It can amplify extreme voices and polarise public discourse by promoting emotional and divisive content. This can make it harder for people to engage in productive, fact-based discussions.

5. Manipulation and Disinformation Campaigns: State actors, political organisations and malicious actors have used social media platforms to spread disinformation, sow discord and influence public opinion. These efforts can further

blur the line between truth and falsehood, making it challenging for the public to discern accurate information.

6. Fact-Checking and Accountability:

While social media has facilitated the spread of misinformation, it has also enabled fact-checking organisations and concerned individuals to rapidly respond and correct false information. Many platforms now have mechanisms for flagging and fact-checking content, although the effectiveness of these efforts varies.

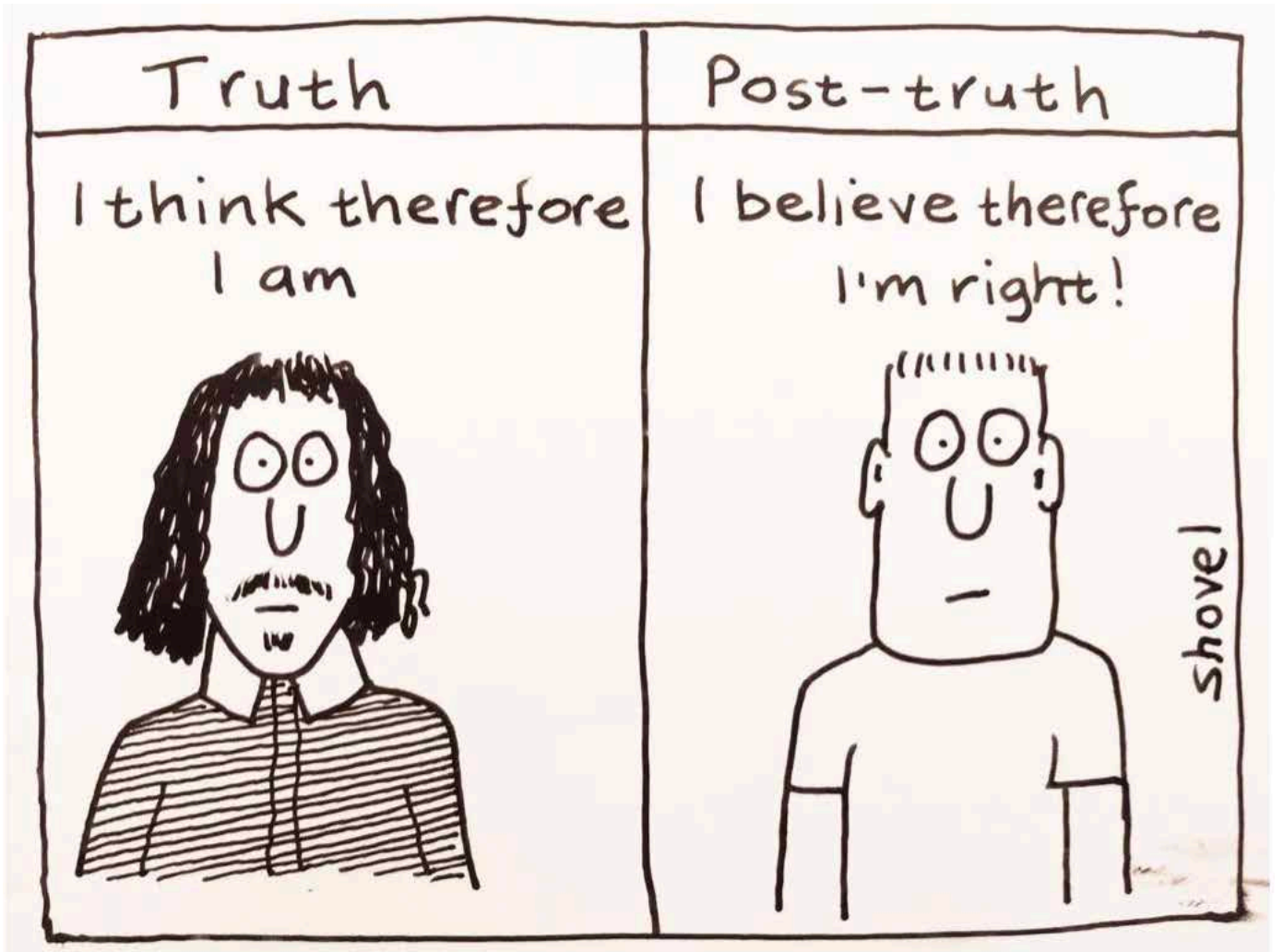
7. Citizen Journalism and Activism:

Social media has empowered individuals to report on events and share their perspectives, particularly in regions with limited media freedom. This can provide valuable insights, but it can also lead to the spread of unverified or biased information.

8. Efforts to Address Misinformation:

Social media companies, governments and civil society organisations are increasingly working to combat misinformation by implementing policies, improving content moderation, and promoting media literacy and digital literacy programs.

In conclusion, social media has played a significant role in the post-truth era by both amplifying and mitigating the spread of misinformation. Its impact depends on how it is used and regulated, as well as the actions taken by both platforms and users to promote accurate information and critical thinking. It is crucial for individuals to be discerning consumers of information and for society to continue efforts to address the challenges posed by social media in the post-truth era.



LET'S TALK ABOUT TRUTH-TELLING AND IMPARTIALITY

Denis Muller, Senior Research Fellow, Centre for Advancing Journalism,
The University of Melbourne

From the Editors: In this article, we read a very concise disassembly of the Voice campaign that reveals the tactics employed to sow fear and doubt in the minds of the population and how the media stood by – too slow to react and, ultimately, complicit in the subterfuge.

The rules by which politics are conducted have changed dramatically, especially since the rise of Trumpism. Yet the professional mass media continue to cover politics in ways that are no longer fit for purpose.

This has created distortions in how the public discourse unfolds – distortions that have been on full display during the Voice referendum debate.

It presents a complex challenge to journalists and editors about how to simultaneously meet their obligations to truth-telling and impartiality, because there is now an unresolved tension between these two professional standards.

Truth-telling requires that lies and misrepresentations be either not published or refuted; impartiality requires that voices on all sides of a debate be heard, especially if they are the voices of people in positions of influence.

What happens, then, when influential voices on one side of a debate engage in obvious falsehoods?

Take two examples from the Voice debate: Opposition Leader Peter Dutton's allegation that the Australian Electoral Commission had rigged the referendum outcome by accepting ticks but not crosses as indicative of voting intention, and Senator Jacinta Nampijinpa Price's claim that colonialisation has had a positive impact on First Nations Australians.

In the pre-Trump era, journalists could have counted on the self-righting process of politics to kick in, governed by conventions that repudiated gross falsehoods and imposed consequences.

A completely baseless allegation by a leader of the opposition that the voting system was rigged would probably have finished his career on the grounds that he

had undermined public confidence in the electoral process.

And an outlandish claim of the kind made by Price would have been quickly rebutted by other public voices referring to the facts from *Closing the Gap*, the findings of various royal commissions and countless other sources of reputable data on Aboriginal disadvantage.

Instead, Dutton sails on as leader of a party that seems to think his conduct unremarkable, perhaps even politically advantageous, while Price begins to be spoken about in certain circles as a potential Prime Minister.

So, the pre-Trumpian self-righting process can no longer be relied on. The old expectation that by exposing misrepresentations of this kind, the media will be holding these public figures to account is dead. Instead, it just gives them publicity.

At the same time, the responsible elements of the professional mass media try to adhere to established standards of truth-telling and impartiality by publishing rebuttals or condemnations.

In the Dutton case, *The Australian* published a sharp response from the constitutional lawyer George Williams, calling out Dutton's "irresponsible and harmful" conduct. In the Price case, her comments provoked a backlash published in many newspapers, including the *Canberra Times*, where her remarks were condemned as "offensive"

by the Minister for Indigenous Australians Linda Burney.

"Peter Dutton's claims about the AEC should have been fact-checked sooner by journalists." Darren England/AAP

This is all very well, but these responses appear days after the initial misrepresentations. In that time, the damage is done, the social media beast has devoured and regurgitated them in almost unrecognisable form, and public attention has long ago been diverted to some newer excitement. By then, to quote Winston Churchill, the lie has gone halfway around the world before truth has got its boots on.

There is no easy and conclusive answer to this dilemma. But there are some steps the media could take to make it less acute.

First, it requires a commitment from the media not to indulge in disinformation of its own. During the Voice debate, for example, several News Corporation mastheads – though not all – published an article claiming the Uluru Statement from the Heart was not one page but 20-plus pages, and included references to treaties and reparations, none of which formed part of the statement or the proposed Voice.

This was too much even for some other News Corporation journalists, who pointed out that the document referred to was not the statement itself but a record of meetings and discussions leading up to it.

The second step the media could take requires the application of a few filters. The first is: does this need to be run at all? If the answer is yes, then how can a neutralising antidote be delivered at the same time? Or can this wait until the speaker can be challenged on it?

The third – and some in the media are already doing this – is to confront the threat disinformation poses by drawing attention to examples and calling them out. During the Voice debate, articles of this kind appeared in the *Canberra Times* and *The Age*, as well as in the George Williams article in *The Australian* referred to earlier.

So much for truth-telling: now for impartiality.

Impartiality does not oblige a broadcaster or publisher to ventilate lies, fantasies or misrepresentations as if they are true.

It is not a failure of impartiality to call Dutton's utterance a baseless allegation at the time of reporting it. Accuracy and fairness are the vital elements of impartiality.

It is not a failure of impartiality to report Price's remarks and in the next paragraph point out that this view is refutable by reference to whatever data seem most apt.

Another element in the impartiality equation is balance. Balance is not about giving equal time, space or prominence to each or every side of a story. Balance follows the weight of evidence.

In the context of the referendum, it is false balance to give equal weight to the claim that the proposed Constitutional amendment would import a divisive race-based element into the Constitution, and to the constitutional lawyers' opinion that it does no such thing.

The fact is that the Constitution already contains two race-based clauses: 25 and 51, the latter known specifically as the "race power". Reporting the claim of racial divisiveness without the contradicting facts is a failure of balance.

Giving effect to these remedies requires close scrutiny of potential content and rigorous editorial decision-making.

The alternative – still widely used – is to fall back on that discredited and outdated approach called "he said/she said" journalism. This is where the damaging content is presented as a plausible point of view, someone else is quoted as opposing it, and the public is left to figure out the truth for itself.

This is against the public interest. Lies and misrepresentations are not just another set of truths – what Trump's one-time press assistant Kellyanne Conway called "alternative facts". They corrode trust. No one knows where to turn for reliable information, and the ground is prepared for yet more conspiracy theories to take root.

WHY THE NEWS IS NOT THE TRUTH

Peter Vanderwicken

From the Editors: This is an abridged version of the full article. Interestingly, Ingrid Turner used ChatGPT to reduce the original from seven A4 pages to one page.

The article delves into the systemic corruption within the US press and its entanglement with government institutions. Vanderwicken argues that while the press and government may not engage in traditional forms of corruption, like bribery, they are intertwined in a cycle of manipulation, mythmaking and self-interest.

Former political scientist and journalist Paul H Weaver's analysis, *News and the Culture of Lying: How Journalism Really Works*, serves as a backbone for Vanderwicken's argument. Weaver suggests that journalists and politicians collaborate to fabricate crises, presenting a false image of government action while neglecting underlying issues.

Vanderwicken provides examples such as the Gramm-Rudman-Hollings Amendment in the 1980s, where the press portrayed Congress and the Reagan administration as heroically tackling the deficit crisis while ignoring routine spending increases that

contributed to it. He argues that the press' focus on drama and crisis perpetuates a culture of lying, distorting the public's perception of government.

The transformation of journalism initiated by Joseph Pulitzer in the late 19th century, emphasising sensationalism and drama, set the stage for the modern media landscape. Vanderwicken contends that this model, amplified by television and the rise of lobbying and special interest groups, prioritises entertainment over substance.

Businesses also contribute to the manipulation of perception, utilising propaganda to promote their interests. Vanderwicken shares examples from his experience at the Ford Motor Company, where executives were coached to present favourable narratives to the media, regardless of their true beliefs.

Moreover, Vanderwicken highlights the detrimental effects of fabricated news

stories on public perception and policy debates. He cites instances where crises manufactured by the media led to significant public outcry and policy changes, despite lacking factual basis.

The prevalence of propaganda in the media erodes public confidence in institutions, with surveys showing declining trust in both the press and government. Vanderwicken suggests that journalists' focus on crises blinds them and the public to systemic issues, perpetuating a cycle of misinformation and manipulation.

The article concludes with recommendations for reform, including improved statistical literacy, transparency in research sponsorship and a shift in media focus from drama to substance. However, Vanderwicken acknowledges the challenges of implementing such reforms in a media landscape driven by sensationalism and profit motives.

WHY A.I. IS THE NEMESIS OF TRUTH ITSELF

Neil J. Rubenking

AI isn't going to take over the world. It probably won't even take your job. The real threat is far more insidious – the AI boom heralds the erosion of truth and fact, and it's already happening.

How is AI going to change your life? Will it make your job obsolete, or will you get a job that's only possible because of AI? Do we risk the extinction of the human race by meddling with AI?

Fear, uncertainty and doubt run rampant in discussions of AI, but don't go hiding under the bed just yet. Many of these concerns are rooted in a failure to understand just what AI is – and what it isn't. Even so, I have my own worries about the effects of the AI boom. Before I lay them out, some background.

AI IS NOT INTELLIGENT

Stories and movies have trained us for years to think of AI as a sentience in a box. Think Joshua from *WarGames*, HAL-9000 from *2001: A Space Odyssey* and even Majel Barrett's voice as the Enterprise computer on *Star Trek*. These storied entities represent AGI, artificial general intelligence.

Ideally, an AGI can learn new tricks, make deductions and generally do every kind of thinking a human can, only faster and better. The current crowd of ChatGPT, Gemini (previously known as 'Bard'), Bing AI and such are nothing like AGI.

The GPT in ChatGPT stands for generative pre-trained transformer, and the others are also GPTs. They're also referenced as LLMs, large language models, hence the name of Meta's Llama AI. You feed the AI large amounts of language, and it generates new language based on patterns found in its corpus of input data. That's it. The GPT doesn't have morals, opinions or attitudes. It's simply a system trained to produce answers. If an AI chatbot posts racist tweets, that comes from the input, not from the AI developing a racist attitude.

When ChatGPT does something like write an essay, what it's essentially doing is just asking over and over again "given the text so far, what should the next word be?"

Stephen Wolfram

The incident of Microsoft's "racist AI" is an old story, but in truth, AI-type programming

has been in use for a long time. Your fitness tracker doesn't chat with you or tell jokes, but it uses AI to analyse your workouts and make suggestions. Spam filters have been using Bayesian networks to learn what's spam and what's not for decades. Every time you see a list that "you may also like" there's a pattern-seeking algorithm in the background.

To be fair, interacting with ChatGPT or another generative AI feels like having a conversation. It doesn't help that mainstream news sources talk about AI as if it were conscious; that just adds to the confusion. Stories where reporters wheedle a generative AI into making "shocking" statements are the worst. The AI doesn't love you. The AI doesn't hate you. The AI doesn't yearn to be free. It just generates output based on its corpus of data, responding to the questions or prompts you throw at it.

HOW DOES AI SIMULATE INTELLIGENCE?

In the 1960s, MIT's [Ed: Massachusetts Institute of Technology] Joseph Weizenbaum created a small program called Eliza¹, which emulated a Rogerian therapist. It used very simple pattern matching to simulate a conversation. If I typed, "I am sad," Eliza might respond, "How long have you been sad?" or, "What makes you think you are sad?" To Weizenbaum's surprise, some of those using the program

became emotionally attached, even asking him to leave the room to allow a private conversation. Hard to believe?

The only way for Eliza to learn a new pattern would be to have someone program it [Ed: the new pattern] in. Generative AI programs, on the other hand, make their own patterns and rules by analysing vast amounts of data. Eliza is totally predictable; Google Bard is not.

Stephen Wolfram, mathematician and founder of Wolfram Research, has written an extensive description of just how a large language model turns its corpus of data into rules for generating text. Not prepared to read 20,000 or so words on the subject? I'll try to break it down.

The AI is a kind of neural network where every word is a node (yes, some nodes aren't words, but let's keep it simple). In its learning mode, it processes vast quantities of text and creates links between related nodes. In particular, it aims to answer the question, "What comes next?"

That is to say, given a sequence of words, what are the most likely next words. Oh, there's more to it than that, concepts like 'attention heads' that look back at the text produced previously to keep things consistent. But at its heart, the system that makes ChatGPT answer your questions and write limericks for you just works

¹ If you want to try Eliza for yourself, go to: <https://psych.fullerton.edu/mbirnbaum/psych101/Eliza.htm>

by repeatedly determining what comes next. Yes, it's difficult to keep this in mind when you seem to be having a spirited conversation with a generative AI. But remember, some people bonded with the much simpler Eliza.

THE PROBLEM: AI CHIPS AWAY AT TRUTH AND FACTS

The real threat from the ever-increasing use of AI is twofold. On the one hand, it's a fantastic tool for frauds and cheats. On the other hand, it can spit out false information as easily as fact. Either way, the truth is the victim.

AI is a powerful tool for deception, and I'm not talking about fooling your English teacher with an AI-generated essay. Those phishing emails revealed by poor spelling and grammar? AI can fix them, so they look better than human-written messages. This is especially relevant to highly directed spear-phishing attacks, in which online malefactors specifically target an individual to gain access to the network, initiate a transfer of funds or otherwise wreak havoc.

AI is also vastly improving the quality of audio and video deepfakes. Fraudsters can convincingly emulate an interactive phone call from your boss authorising a large cash transfer. They can create a video of a politician making outrageous statements (even more outrageous than usual, that is). They can clone your face into a sexually

explicit image to extort money. You can't necessarily believe what you see and hear, thanks to AI.

What I had not realised is that extremely short exposures to a relatively simple computer program could induce powerful delusional thinking in quite normal people.

Joseph Weizenbaum

Even when the aim is accuracy, not deception, the output of AI is not reliable. AI systems can present outrageous errors as facts, cite nonexistent sources and otherwise come up with defective information. Worse, as people come to rely more on AI for search and research, actual sources of confirmed, factual information online may dry up. AI can optimise articles to maximise their rank with search engines. In turn, that pushes the original sources farther down in results, depriving them of the clicks they need. It's a kind of Gresham's Law for the internet – bad reporting drives out good.

AI WILL NOT KEEP YOUR SECRETS

Not everything that's true needs to be public, and thereby hangs another tale of AI woe. Coders love using AI because it can spit out code on demand, debug or transform existing code, and even write comments. But in most cases, whatever you put into the AI becomes part of its training. A few developers at Samsung got into hot water over feeding an AI proprietary code

for debugging. AI may not take your job, but misusing it might get you fired.

In a similar vein, *The Guardian* published a cautionary tale about an academic at the University of Cambridge who used AI to summarise an unpublished paper, then found the summary had leaked to other users of the AI. At least, I think that's true. I vaguely remember the article. Google Bard jogged my memory, supplying the title, publication date and a summary. But when I went to find the original source, even armed with all those details, I found nothing. Did Bard hallucinate those details? This is exactly the problem.

Some AI services promise that they don't use your prompts as input. With others, you can opt out. Even so, I'd suggest you avoid putting anything into an AI chatbot that you wouldn't want revealed to the public.

WHAT CAN YOU DO ABOUT AI?

So, how can you help push back against the AI challenge to the truth? Most of what

you can do boils down to common sense. If you get a call or email instructing you to do something sketchy, perhaps with a tone suggesting you need to act fast, double-check with the supposed sender. Trust your gut (something AI doesn't have). If an interaction seems "off" then don't act until you can confirm.

When you use AI for research (and you almost certainly will), don't take results at face value. Go to the original sources. I much appreciate the fact that Bing AI footnotes its results, so finding sources is easy.

It's my hope that the big security companies get involved. What if your antivirus tool's phishing filter could also identify deepfake videos? Fast analysis of possible fraudulent emails and web pages becomes important when clues humans can use (misspellings and such) are eliminated. As for the rest of us, we need to remember that AI doesn't produce truth or facts – it just creates text that matches the patterns it has learned.

WHAT ARE LARGE LANGUAGE MODELS?

A large language model (LLM) is a type of artificial intelligence (AI) algorithm that uses deep learning techniques and massively large data sets to understand, summarise, generate and predict new content. The term generative AI also is closely connected with LLMs, which are, in fact, a type of generative AI that has been specifically architected to help generate text-based content.

HOW DO LARGE LANGUAGE MODELS WORK?

LLMs take a complex approach that involves multiple components.

At the foundational layer, an LLM needs to be trained on a large volume – sometimes referred to as a corpus – of data that is typically petabytes in size. The training can take multiple steps, usually starting with an unsupervised learning approach. In that approach, the model is trained on unstructured data and unlabelled data. The benefit of training on unlabelled data is that there is often vastly more data available. At this stage, the model begins to derive

relationships between different words and concepts.

The next step for some LLMs is training and fine-tuning with a form of self-supervised learning. Here, some data labelling has occurred, assisting the model to identify different concepts more accurately.

Next, the LLM undertakes deep learning as it goes through the transformer neural network process. The transformer model architecture enables the LLM to understand and recognise the relationships and connections between words and concepts using a self-attention mechanism. That mechanism is able to assign a score, commonly referred to as a weight, to a given item (called a token) in order to determine the relationship.

Once an LLM has been trained, a base exists on which the AI can be used for practical purposes. By querying the LLM with a prompt, the AI model inference can generate a response, which could be an answer to a question, newly generated text, summarised text or a sentiment analysis report.

IS TRUTH A CASUALTY OF ARTIFICIAL INTELLIGENCE?

PERSONALIZED LLMS WILL CONJURE UNIQUE PERSPECTIVES THAT OFFER OUR TRUTHS

John Nosta, Innovation Theorist; founder of NostaLab

The truth, the whole truth and nothing but the truth

In the tumultuous discourse around Artificial Intelligence, the conversation often circles around this quest for the truth or the 'right answer'. However, a recent discussion with Sam Altman, CEO of OpenAI, suggests a fascinating shift: The move towards highly personalised AI responses. This evolution raises a profound question: Is there a single 'right answer' in the context of AI? Let's take a step back.

This relentless pursuit of understanding, the concept of 'truth' has always been a beacon of enlightenment, guiding societies through the darkness of ignorance. However, the advent and expansion of Large Language Models (LLMs) are challenging the very fabric of this pursuit, creating a curious and problematic shift in our approach to knowledge and truth.

THE EROSION OF TRADITIONAL EXPERTISE

Historically, experts and thought leaders were esteemed as the custodians of knowledge, their scholarly perspectives shaping our understanding of the world. Their opinions, deeply rooted in research and experience, were often regarded as definitive. However, as LLMs empower the populace with vast, easily accessible information, the role of these experts is undergoing a radical transformation. The once clear line between expert opinion and popular belief is blurring, leading to an egalitarian but complex landscape of knowledge.

LLMS: DEMOCRATISING KNOWLEDGE

LLMs democratise information in an unprecedented manner. By synthesising vast amounts of data, these models offer insights and perspectives that were once

the exclusive domain of experts. This democratisation, while empowering, also raises crucial questions about the nature of truth and opinion. As LLMs tailor responses based on individual preferences and contexts, the notion of an absolute 'truth' becomes elusive.

THE EXPANDING GREY ZONE

The crux of this transformation lies in the expanding grey zone between truth and opinion. In this new era, individual cognitive functions and resources are being augmented by AI, enabling a more personalised exploration of knowledge. This expansion is not without its challenges. The personalised nature of LLM responses, while insightful, also means that personal biases and contextual nuances may tint the 'truth' one receives.

NAVIGATING THE NEW LANDSCAPE OF TRUTH

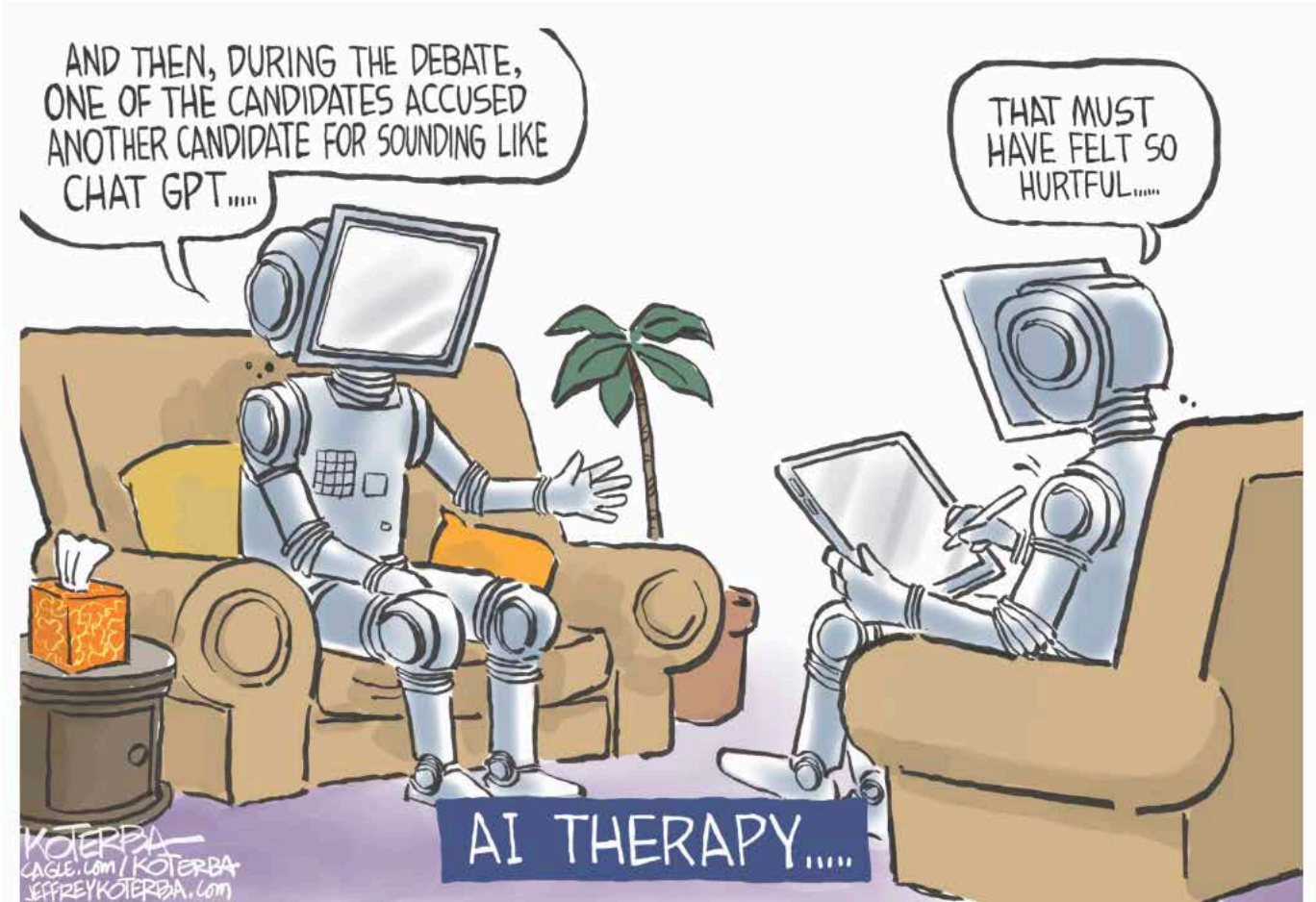
In navigating this evolving landscape, we are compelled to redefine our understanding of truth. It is no longer a monolithic, universally accepted concept but rather a spectrum of interpretations, each valid within its context. This shift demands a

more critical engagement with information, urging individuals to discern between fact, opinion and the nuanced interpretations offered by AI.

Critical thinking becomes paramount in this new age. With LLMs presenting a multitude of perspectives, the onus is on the individual to evaluate and synthesise these viewpoints. This process is about filtering information and understanding the underlying biases and contexts that shape AI responses.

EMBRACING COMPLEXITY AND UNCERTAINTY

The emergence of LLMs as tools for knowledge dissemination is testament to our technological prowess. However, it also brings us to a philosophical crossroads, where the search for truth is no longer linear but a complex web of perspectives. Embracing this complexity and the inherent uncertainty in our quest for knowledge is perhaps our greatest challenge and opportunity. As we continue to explore the uncharted territories of AI-augmented knowledge, the journey toward understanding 'truth' becomes a more inclusive, albeit intricate, endeavour.



MERCHANTS OF DOUBT

BY NAOMI ORESKES AND ERIK M CONWAY

A book review by Robin McKie, Science and Environment editor for *The Observer*

From the Editors: Merchants of Doubt was published in 2010 and later came out as a film. This rigorously researched work was groundbreaking in cracking open the way major corporations act to deal with existential threats to their business turned up by science and scientists. Professor Naomi Oreskes felt compelled to study this topic when she received death threats after giving a lecture summing up the evidence for climate change. Ringing around, she found that many of the scientists whose work she had referenced had been inundated with similar threats. Smelling something rotten, she and Dr Erik Conway set to the task of working out what was going on and still goes on. Though today similar doubt mongering, alternative facts and bullying tactics are used more universally, to undermine the integrity of not only science, also democracies, social policies and perhaps even a referendum.

Rachel Carson is generally viewed as an environmental heroine, a courageous campaigner whose book *Silent Spring* alerted the world to the dangers of the indiscriminate use of pesticides. Hers was a success story, the tale of a woman who highlighted a serious problem – that the anti-mosquito agent DDT was building up in the food chain where it was killing millions of birds and animals – and who helped introduce a global ban on use of the chemical.

At least that is the common appreciation of Carson. However, a brief search of her name on the internet today produces an unexpected response. According to many websites, Carson – by all accounts

a pleasant, amiable woman – was a mass murderer who killed more people than the Nazis. This dramatic claim is based on her campaign against DDT, which, it is alleged, has led to the deaths of countless Africans from malaria.

“Millions of people around the world suffer the painful and often deadly effects of malaria because one person sounded a false alarm,” states one site set up by the Competitive Enterprise Institute. “That person is Rachel Carson.” Another site goes further: “Fifty million dead,” while a third claims: “More deaths likely.” Others compare Carson to Hitler or Stalin.

As an appraisal of Carson's achievements, this is a fairly shocking piece of revisionism and, as the authors of *Merchants of Doubt* make clear, it also is a false one. DDT was banned not just because it was accumulating in the food chain but because mosquitoes were developing resistance to it. The pesticide was losing its usefulness long before it was taken out of commercial production.

So why this hysterical vilification? Why these sudden denunciations of Carson? The answer – provided by Oreskes and Conway in this painstakingly assembled but nevertheless riveting piece of investigative reporting – is simple. The far right in America, in its quest to ensure the perpetuation of the free market, is now hell-bent on destroying the cause of environmentalism.

According to this distorted view of life, environmentalists are watermelons – green on the outside, red on the inside – who want to impose regulation – “the slippery slope to socialism” – on the use of tobacco, ozone-destroying chemicals and greenhouse gases. “And in the demonising of Rachel Carson, free marketeers realised that if you could convince people that an example of successful government regulation wasn't, in fact, successful – that it was actually a mistake – you could strengthen the argument against regulation in general,” state Oreskes and Conway.

Hence the monsterring of Carson's reputation, an act of deliberate misinformation, say Oreskes and Conway, that has become the hallmark of a group of far-right institutions which are funded by businesses and conservative foundations and supported by a coterie of right-wing scientists who believe ecological threats are made up by lefty [Ed: Leftist] researchers as part of a grand plan to expand government control over our lives. These are the villains of *Merchants of Doubt*, and the same names pop up throughout its pages: scientists such as Fred Seitz, Robert Jastrow and Bill Nierenberg, along with the institutes through which they, and their kind, have lent their services to a range of right-wing, free-market foundations and institutions including the Competitive Enterprise Institute, the source of that anti-Carson diatribe that I quoted earlier. When not funded by the tobacco industry, many of these outfits often receive backing from fossil fuel companies such as Exxon.

In these campaigns, a common strategy is evident: discredit the science, spread confusion and promote doubt, tactics that were introduced in the 1970s to combat plans to limit smoking – whose links to cancer were by then becoming unambiguous – and which have been refined and used in battles to combat acid rain, ozone layer depletion and greenhouse gas emissions.

Real science is dismissed as 'junk' while misrepresentations are offered in its place. Thus cancer is triggered by many different causes, not just smoking, it was argued – even though the tobacco industry was, by this time, admitting in private that there was indeed a definite link between smoking and serious disease. Similarly acid rain was blamed not on its real cause, the by-products of burning fossil fuels, but on volcanic eruptions, which were also said to be the cause of the depletion of the ozone layer.

In each case, experts offered briefings to journalists and politicians and their claims were accepted, with little qualification, by an acquiescent media happy to establish the idea that there were real divisions among mainstream scientists where none actually existed. In short, we have been led by the nose and have meekly accepted the outpourings of a small, dedicated group of right-wing propagandists who have found themselves pushing, all too easily, at open doors. As Oreskes and Conway point out: "Who among us wouldn't prefer a world where acid rain was no big deal, the ozone hole didn't exist and global warming didn't

matter? Such a world would be far more comforting than the one we actually live in. We may even prefer comforting lies to sobering facts. And the facts denied by our protagonists were more than sobering. They were downright dreadful."

Thus the tactics – the spreading of doubt and confusion – of a small group of cold war ideologues have worked their way across America and have now crossed the Atlantic, so that the public in both the US and the UK are more confused than ever about the truth on a series of key scientific issues, in particular global warming, even though scientists have become more certain about the accuracy of their efforts.

In many ways, it is a tough message to stomach, though there is no doubt that Oreskes and Conway deserve considerable praise for this outstanding book and for exposing the influence of these dark ideologues. *Merchants of Doubt* – which includes detailed notes on all sources – is clearly and cleanly outlined, carefully paced and is my runaway contender for best science book of the year.

TO ALL PARENTS WHO NEED TO TELL THE TRUTH ABOUT SANTA

From the Editors: Here's a light-hearted look at a 30-something old son who's discovering the truth about Santa Claus.

Son: "Dad, I think I'm old enough now. Is there a Santa Claus?"

Dad: "OK, I agree that you are old enough. But before I tell you, I have a question for you. You see, the 'truth' is a dangerous gift. Once you know something, you can't unknow it. Once you know the truth about Santa Claus, you will never again understand and relate to him as you do now. So, my question is: Are you sure you want to know?"

Brief pause...

Son: "Yes, I want to know."

Dad: "OK I'll tell you: Yes, there is a Santa Claus."

Son: "Really?"

Dad: "Yes, really, but he's not an old man with a beard in a red suit. That's just what we tell kids. You see, kids are too young to understand the true nature of Santa Claus, so we explain it to them in a way that they can understand. The truth about

Santa is that he's not a person at all; he's an idea. Think of all those presents Santa gave you over the years. I actually bought those myself. I watched you open them. And did it bother me that you didn't thank me? Of course not! In fact, it gave me great pleasure. You see, Santa Claus is the idea of Giving for the Sake of Giving, without thought of thanks or acknowledgement. When I saw that woman collapse on the subway last week and called for help, I knew that she'd never know that it was me who had summoned the ambulance. I was being Santa Claus when I did that."

Son: "Oh."

Dad: "So now that you know, you're part of it. You have to be Santa Claus too now. That means you can never tell a young kid the secret, you have to help us select Santa presents for them and, most importantly, you have to look for opportunities to help people. Got it?"

Source: Facebook



MARGRIT WAGNER

FIRST MATRON OF THE TEMPLER HOME FOR THE AGED (1972 – 1983)

“WITHOUT MARGRIT WE WOULD NOT HAVE THIS AGED CARE FACILITY”

When the Temple Society Australia saw the need for an Aged Care facility, Margrit Wagner agreed to take up the immense challenge of planning and bringing the project to life. She was a person of vision and great organisational skills.

Margrit trained as a nurse in Sydney and at the Alfred Hospital in Melbourne. In 1972, Margrit was in charge of operating theatres at the Dandenong and District Hospital. She resigned from that position to work with architect Willi Blaich to plan and set up the Templer Home for the Aged (THA).

The Templer Home was the first purpose-built Aged Care facility. At that time the industry was not regulated as it is today. Aged Care facilities were converted large residential buildings, e.g. Edwardian

homes. (In those days employment in such facilities did not count as nursing experience in resumé.)

The original Templer Home had 16 rooms, 6 independent living units and 2 apartments. One apartment for the matron, a smaller one for the cook and two garages built along the courtyard. Later, as the demand for accommodation increased, the garages were converted to an apartment and replaced by carports.

The rooms were on two levels: eight upstairs for low-care residents and eight downstairs for high-care. There was no lift. A ramp went up and down and a flight of stairs was at the other end of the building.

The Templer Home for the Aged opened in 1972. Margrit meticulously planned the facility down to the last detail, including staff requirements and recruitment,



Margrit Wagner in 1984. Photo from Irene Kemper

resident admissions, operational routines and the furnishings. She designed a medication trolley that was made to her specifications. The manufacturer called it the 'Wagner' trolley and it was used until the amalgamation with Tabulam Nursing Home. The THA was her 'Home'.

Margrit commissioned the artists Hans and Hilde Knorr who had a studio in the Dandenongs to design and manufacture a fountain for the courtyard. This fountain was turned off during the drought of the early 1980s. It was never turned on again and eventually disappeared. Two paintings

by Hilde Knorr graced the reception area for many years. Sadly, they too have disappeared. A hand-carved sculpture of grandmother and child – by Leopoldine Mimovic (also known as Poldi) and commissioned by Margrit – was also feared lost but has recently resurfaced. A framed photo of Margrit was hanging in the dark corridor near the Sunroom, named in her honour, but in a place where it was visible to only a few people.

In the early days the Home was run on a shoestring budget. Matron and housekeeper/cook were the only full-



Georg Wagner family in Jaffa circa 1936. Photo from Irene Kemper

time staff. The other staff members were part-time nursing assistants, cleaners and gardener/handyman. There was no night staff. The night bell was in the matron's flat and she answered the calls. Bed linen was sent to a commercial laundry. Personal washing was done by nursing assistants and residents. Residents helped in the kitchen with setting the table, washing dishes and preparing vegetables. Community members donated fruit and vegetables to the Home. The cook bottled and preserved the surplus.

Gradually, as the need arose, more rooms and more units were built. First another eight beds were added (four rooms on each level) increasing the capacity to 24. Later still, a further four rooms plus the Sunroom were built.

The unit residents were part of the 'family' and could come to the Home anytime they required medical attention. The handyman attended to any repairs.

Margrit retired in 1983.

Written by Helga Anderson

SOME BRIEF BIOGRAPHICAL NOTES REGARDING MARGRIT WAGNER

Margrit was born 26 February 1922 in Jaffa, Palestine. Her parents were Georg Wagner and Elsa née Aberle, and she was the second of five siblings: Liselotte (Lilo), Margrit, Theodor (Theo), Gerhard and Irene. Her family owned and operated the Gebrüder Wagner engineering works in Walhalla. Her grandfather, also Georg Wagner, was one of the founders of the engineering works of which her father became partner in 1921. This venture was one of the leading German industrial establishments in Palestine.

Margrit spent a happy childhood in Jaffa, attending kindergarten and school there. She was confirmed in 1936. In that year she travelled to Germany with her sister Lilo who wanted to complete her *Abitur* studies. They lived and attended school in Erfurt for two years before returning to Palestine.

In 1941, together with the Wagner family and hundreds of other Templers, she was sent for internment to Australia. After five years in Camp 3 Tatura, she was released in November 1946 and lived with her family in Sydney, beginning her nursing training there. She was a dedicated student and won several nursing prizes. Margrit continued her training at the Alfred Hospital after transferring to Melbourne in 1949. She obtained her certificate as Infant Welfare Sister, spending a further two years working in Germany from 1958. In 1962 she began work at the Dandenong Hospital as Sister-in-Charge of the operating theatres and acquired the Certificate of Theatre Management.

Margrit was the first Matron of the Templer Home for the Aged from July 1972. In May 1983 she retired due to ill health. She spent her retirement years living in Bayswater, passing away on 29 September 1990.

Written by Doris Frank



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