INFORMATION DISORDER
LESSONS FROM AUSTRALIA

UTS Centre for
Media Transition

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CONTENTS

EXECUTIVE SUMMARY

1. The term 'Information Disorder' developed by Claire Wardle & Hossein Derakhshan introduces a conceptual framework to tackle the collective problems of misinformation, disinformation and malinformation. While finding better terms than 'fake news' has been complex, the term 'information disorder' highlights salient characteristics that guide research and public understanding while being general enough to allow for the changes and nuances as the phenomenon evolves.

2. Theories that the coronavirus was deliberately engineered or purposely released feeds mis - and disinformation that blamed the pandemic on China and ignited hatred against people of Chinese origin as well as those of Asian appearance. The Chinese diaspora around the world has experienced racist abuse since the pandemic, including in Australia.

3. First Draft tracked the misrepresentation and weaponisation of publicly accessible databases that include reports voluntarily filed by individuals, healthcare providers and vaccine manufacturers on what they believe to be an adverse reaction to the Covid vaccine. This included the Vaccine Adverse Event Reporting System (VAERS) in the US, and in Australia the Database of Adverse Event

Notifications (DAEN). Information was picked up and repackaged in social media to suit the agenda of anti-vaccine proponents, fringe politicians and conspiracy theorists.

4. Australia's summer of bushfires beginning in late 2019 illustrated how anything that carries information — from maps, to memes and even police media reports — can be used to share mis-and disinformation. Inaccurate reporting in mainstream media about arson numbers led to a sustained effort in online inauthentic behaviour, which supplanted the #AustraliaFire and #BushfireAustralia hashtags with the incorrect #ArsonEmergency hashtag. Climate denialists and far-right activists pushed the theory that the fires were started on purpose in order for the government to 'land grab', and were not related to a warming planet.

5. Similarly, narratives that emerged from unprecedented floods on Australia's east coast in early 2022 focused on the broad theme of government control, as anti-vaccine and anti-lockdown activists capitalised on their "pro-freedom" platforms to pivot to climate-related conspiracy theories.

6. Narratives that started circulating online during the 2020 US election were imported, localised and shared in Australia around the 2022 federal election. Disinformation narratives about electoral fraud tend to fall into the following three tracks:
- Disinformation intended to discredit candidates and confuse the public
- Use of information operations to disrupt election infrastructure
- Attempts to undermine public confidence in electoral processes after an election has taken place.

7. The 2022 Australian federal election further fuelled domestic hostilities against members of the Chinese diaspora, building on existing tensions between Australia and China as well as the anti-Asian sentiment from the pandemic, through the accusation thatcertain political figures had ties to the Chinese Communist Party.

8. The last few years have seen strong movement towards the regulation of digital platforms to address information disorder. In December 2019, following the release of the ACCC's landmark Digital Platforms Inquiry final report, the Australian government asked major digital platforms to develop a voluntary code of practice to address

growing concerns about disinformation and the quality of online news. The code was launched by DIGI in 2021. It includes misinformation but excludes some types of content (professional news, political advertising) and services (private messaging) associated with the dissemination of misinformation and disinformation.

9. News, research and civil society organisations across the globe as well as social media platforms have created and trialled various interventions that in varying degrees help cut down mis- and disinformation and improve the information space. Interventions can be broadly categorised into reactive and proactive measures. Reactive measures, which respond to online mis- and disinformation after or as it happens, include the off-platform verification and fact-checking, as well as the on-platform content moderation.

10. Proactive intervention aims at raising media literacy within schools and the community in order to help the public build their awareness of, and resistance, to online mis- and disinformation. Social media users who are not aware of the movement and evolution of a problematic narrative, which is often mixed with biases and hyperbole, can easily have their worldview skewed accordingly, without knowing it.

01

INTRODUCTION

Through an unusually intense bushfire season, then a pandemic that confined a majority of Australia's population at home — Melbourne famously recorded one of the longest lockdowns in the world — followed by a game-changing federal election during which voters made it known where their concerns and aspirations lie, Australians have manoeuvred threats both online and off. Reacting to the news cycle, mis- and disinformation sprung up on various social media platforms, and more intimately, on our phones in the form of texts or messages sent through apps such as WhatsApp, WeChat and LINE. Most of these messages expectedly came from people we know, such as our family and friends — this inherent trust sometimes making closed messaging apps a breeding ground for the spread of misinformation. But during the election, voters were also spammed by messages from some political parties in their last-ditch pitch to secure support. One of these unsolicited political text messages stated, "(Libs/Labor giving Health Dept to China W.H.O - Stop it Vote United Australia Party". This example shows how a conspiracy theory can start from mainstream social media platforms (the UAP promoted it days earlier in a series of Meta and YouTube ads) and continue to circulate in various corners of the internet, as well as other forms of digital mass communication such as texts (Chan et al., 2022).

False and misleading narratives have become more pervasive than ever. Online, the pandemic elevated the semi-closed messaging app Telegram's stardom in Australia as well as elsewhere in the world. The app offers functions that are increasingly under scrutiny on mainstream social platforms: low content-moderation efforts, and no clear policies in place for flagging misinformation or punitive actions against accounts that post hateful or inaccurate content. It is also much harder to find a Telegram group on the app or through search engines if its name has been tweaked to avoid detection, sometimes replacing a number or letter with a symbol, or with a name in a different language. An example of that challenge came as the war between Russia and Ukraine broke out earlier this year in February, when journalists and researchers scrambled to find user-generated content and first-person accounts on Telegram, popular among some Russians and Ukrainians. In the physical world, radio ads and billboards continue to be some of the most convenient ways for well-resourced politicians and political parties to promote their ideas and garner support. However, sometimes these campaign messages can be interwoven with conspiracy theories.

The pandemic has provided a new lesson in the study of conspiracies: some of the most prominent, false narratives about Covid-19 and the vaccine were generated by a single conspiracy theories. A good example of this is the Plandemic documentary, which was a deliberate attempt to harvest the fears and anxiety at the onset of the pandemic by providing "answers" to a desperate general public. By framing various theories of how the pandemic could be a planned event, the creators and organisers of the documentary successfully captured the mood of the times and eroded trust in authorities, scientists, medical professionals and later, the vaccines.

One of the reasons conspiracy theories are powerful is precisely because they are often difficult to verify. For
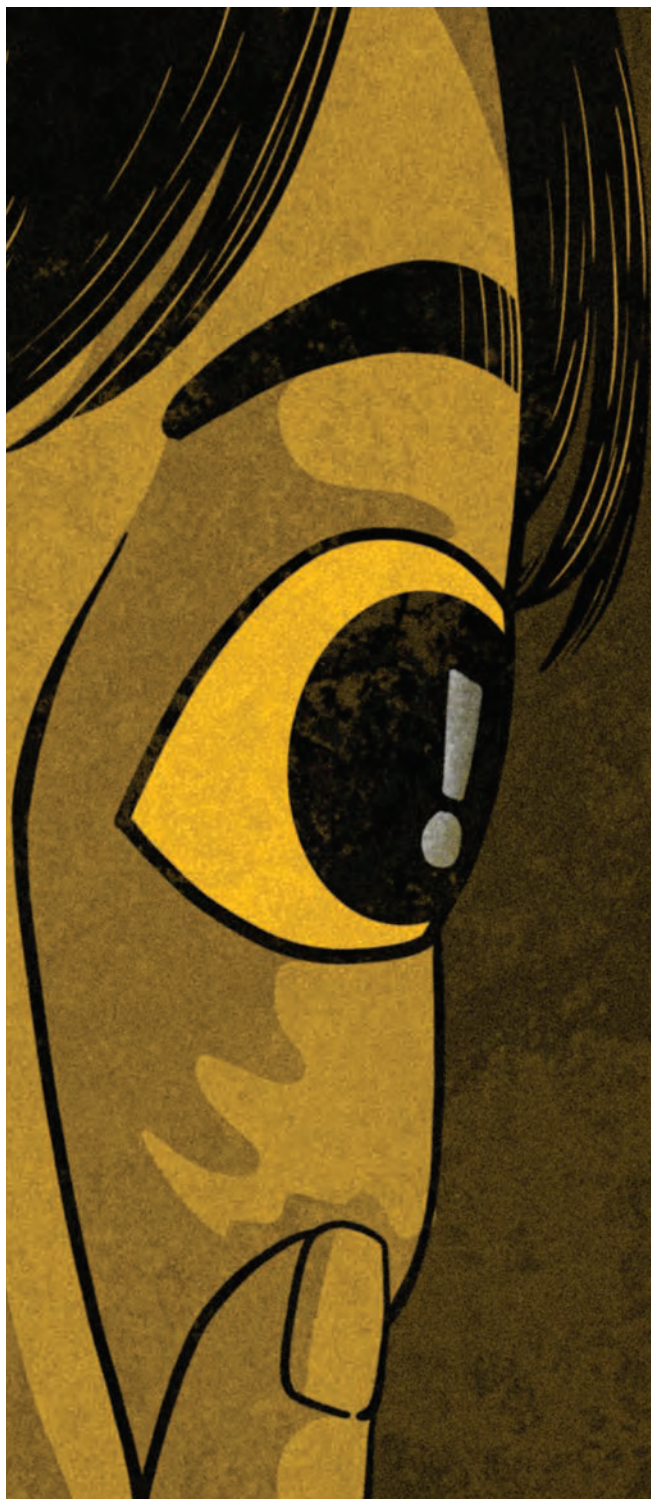
instance, the lab leak theory has been circulating online since the beginning of the pandemic, arguing that the coronavirus was released, intentionally or not, from a laboratory in Wuhan. Findings from a joint WHO–China investigation published in June 2022 recommended "further investigation" into the theory (WHO, 2022). In Australia, memes, mobile billboards and social media ads targeting the Labor Party during the election were built on the age-old "reds under the bed" narrative, baselessly claiming that Labor leader Anthony Albanese was the Chinese government's preferred prime ministerial candidate banking on the strained relations between Australia and China. Members of the Chinese diaspora have suffered racism and sometimes physical attacks as a result of geopolitical tensions, as well as stigma that brands them as "virus spreaders" simply because Covid-19 was first reported in China. Moreover, these conspiracy theories tap into already-existing anxieties in people's minds, providing the missing explanation.

This report predominantly summarises the online discovery of mis- and disinformation themes by a team of researchers working at First Draft's Australian operations based at the Centre for Media Transition, University of Technology Sydney. First Draft began in 2015 as a small nonprofit coalition that grew out of a need to understand, debunk, and provide guidance on misinformation. There were nine founding partners brought together with the support of Google News Labs with the aim to provide practical and ethical guidance in how to find, verify, and publish content sourced from the social web. In June 2022 First Draft closed its doors and shifted its mission to Brown University's newly established Information Futures Lab. This report brings together the output from First Draft's Australian bureau — launched in April 2019 at the Centre for Media Transition at the University of Technology Sydney.

Collaboration was central to First Draft's approach (First Draft, 2017). The influx of online information and misinformation is too much for individual journalists and newsrooms to make sense of alone. First Draft worked to empower journalists through training, guidance, and ongoing monitoring of social media. First Draft's monitoring followed the evolution and movement of misleading and misrepresentative narratives across social media and online platforms — which offers insights on the broader disinformation landscape and complements fact-checking efforts that tend to focus on individual social media posts. The Australian bureau regularly monitored mainstream social media, including Facebook and Google products, as well as Chinese language apps such as WeChat, and alternative chat apps.

The 2019–2020 bushfires and the Covid-19 pandemic were a watershed moment where ordinary Australians gained a heightened awareness of mis- and disinformation in their own country. First Draft's Australian bureau noted in its monitoring how these issues were quickly politicised here. Racist narratives from the pandemic added to the challenges for diaspora communities (Chan & Zhang S (2021); these narratives sprang from a 2019 federal election that included far-right, white nationalist online disinformation campaigns and hyperpartisan campaigns pushing anti-immigration agendas (Kruger 2019). In the leadup to the 2022 federal election, the team started systematically monitoring relevant narratives across various platforms nine months in advance. With an in-depth knowledge in election-related misinformation, the team provided much-needed advice for news media who were part of a network of over more than 100 journalists and community leaders we built specifically for this election.

This report first seeks to provide definitions that explain the nuances of a polluted information space, because precise language is crucial to help us understand the problems we are facing, particularly as technology and social media evolve. We then offer an overview of the mis- and disinformation landscape in Australia by covering the dominating trends and narratives the First Draft APAC team noted in the past few years in several key areas. These include:

- Covid 19 Pandemic
- Federal Election
- Climate.

We then move on to note the progress Australian regulators and those abroad, industry associations and civil society organisations have made in the past years on tackling the rampant mis- and disinformation on social media. The development and effectiveness of different industry interventions, one of the most common methods being fact-checking, will also be discussed.

The report ends with recommendations for policymakers, news media and academics specific to the Australian landscape in the hope of cutting down harmful information that has a direct impact on people's lives, health and safety. These will also serve as lessons for other countries facing similar issues.
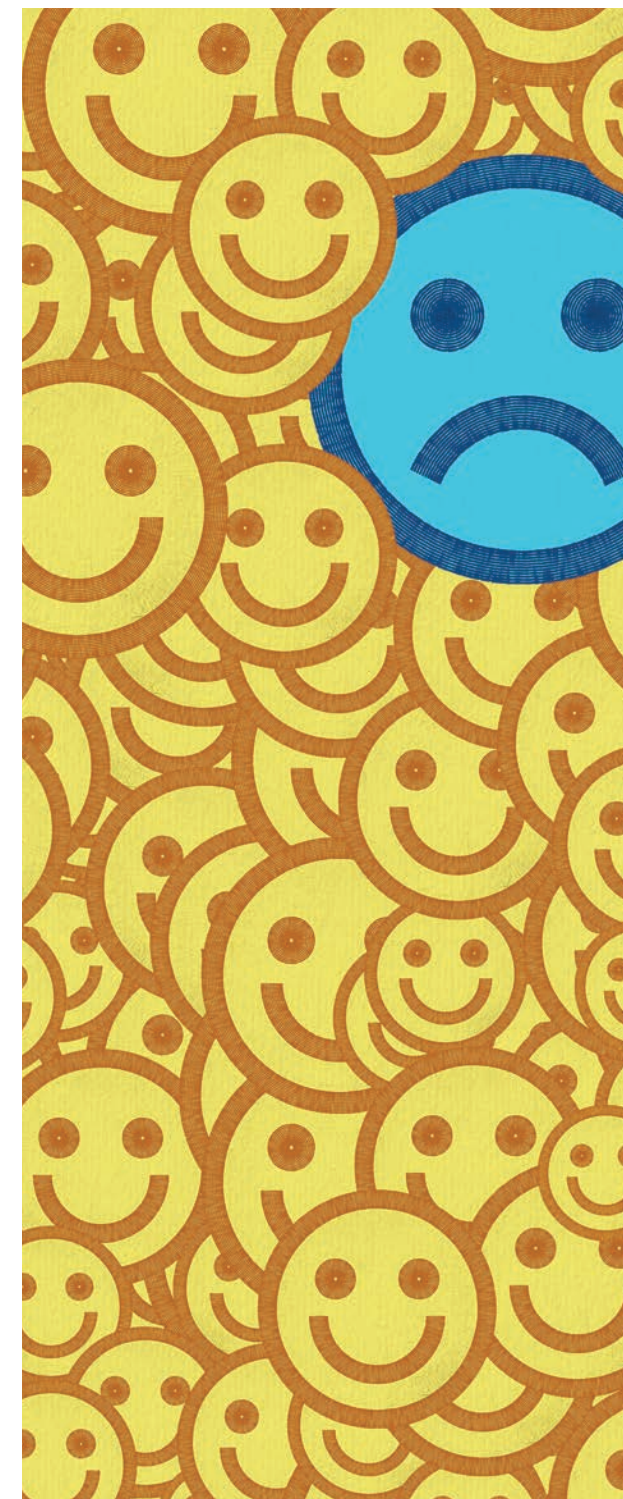
02

DEFINITIONS

False and misleading narratives have become more pervasive than ever. The term 'fake news' does not cover the complexity of the phenomenon and has been weaponised by politicians, most famously Donald Trump (Lee, 2018). The term is still prevalent throughout Asia, although less so from leadership in Australia (Peatling, 2017).

This paper draws on the term 'Information Disorder' developed by Claire Wardle & Hossein Derakhshan and adopted by UNESCO (UNESCO, 2018) and the Council of Europe (Wardle & Derakhshan, 2017). The research by Wardle and Derakhshan (2017) introduced a conceptual framework for information disorder which sought to tackle the collective problems of mis-, dis- and malinformation. In this section we outline the terms used in the paper and provide context for the use and evolution of related definitions.

Finding salient yet meaningful terms to define the issues remains an ongoing, complex and difficult process (Staines & Moy, 2018). The pandemic has shown the urgent need for all stakeholders to better understand and address information disorder as the world continues to grapple with an infodemic (World Health Organization, 2020a). The conceptual framework by Wardle and Derakhshan used the terms misinformation, disinformation and malinformation. These terms can be summarise broadly as follows.

Misinformation is false information spread mistakenly, even if people genuinely believe it, or are trying to be helpful. The sharing of misinformation is driven by socio-psychological factors. Online, people perform their identities; they want to feel connected to their tribe.

The pandemic helped to focus a nuanced point about the definition of misinformation in that people were often unwittingly sharing information that they didn't realise was false but did so as they thought they were protecting people close to them.

Disinformation is content that is intentionally false and designed to cause harm. It is mainly motivated by three distinct factors: to make money; to have political influence, either foreign or domestic; or to cause trouble or mischief for the sake of it. When disinformation is shared it often turns into misinformation. Wardle and Derakhshan (2017) further specify the motivations as:

- Financial: Profiting from information disorder through advertising
- Political: Discrediting a political candidate in an election and other attempts to influence public opinion
- Socio-psychological: Connecting with a certain group online or off; and, seeking prestige or reinforcement.

Disinformation often contains a grain of truth where a piece of real information has been taken out of context, misconstrued or misrepresented.

Malinformation is genuine information shared with an intent to cause harm. An example can include hacked emails that leak certain details to the public to damage reputations. Revenge porn is another example of malinformation. Elements of hate speech can also come under malinformation.

THE 7 TYPES

In 'Fake News. It's Complicated', Claire Wardle first outlined the seven major types of mis- and disinformation as a way of moving the conversation away from a reliance on the term 'fake news' and illustrated why the use of more precise language is advised (Wardle, 2017). The 'deceptive seven' still acts as a useful way of thinking about different examples. As the figure below shows, this is a spectrum based on the level of manipulation required to create the disinformation.

To further explain, the spectrum includes satire or parody (content that isn't intended to cause harm, but has the potential to fool – and satire which has increasingly been weaponised); false connection (headlines, images or captions that over-sell the content such as clickbait); misleading content (information that frames an issue or a person in a misleading way); false context (genuine content that is shared out of its original context); imposter content (content that impersonates or falsely claims to be from a genuine source); manipulated content (genuine information or imagery that is manipulated or edited to deceive); and fabricated content (new content that is 100% false, made to deceive and do harm). Each piece of disinformation content can fall under one or more of these categories.

Satire and parody

Satire or parody content, such as the Australian satirical website The Betoota Advocate or the Twitter account @ChaserInterns, may seem innocuous but are often weaponised by bad actors or can cause harm if taken seriously.
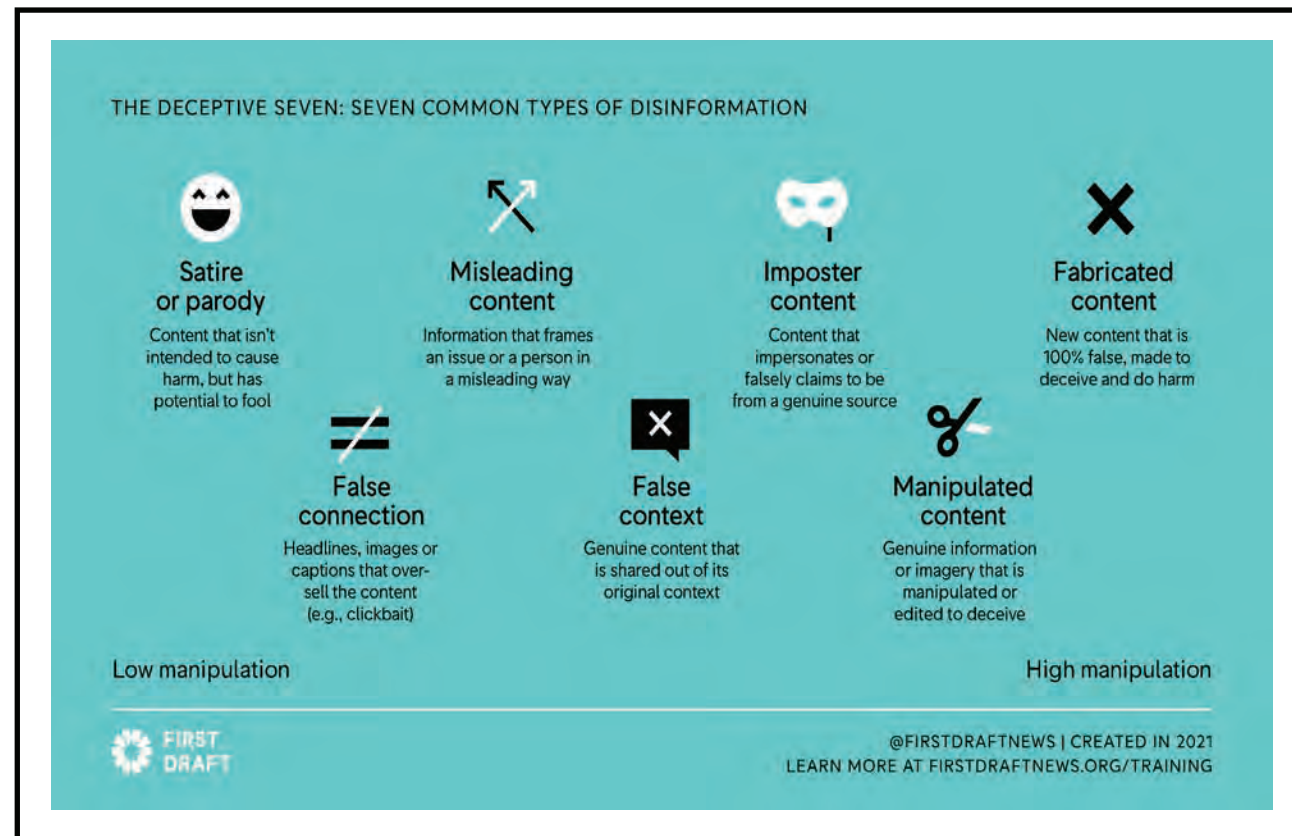

Figure 1 | The Deceptive Seven, First Draft News

False connection

False connection can take many forms, but the most common type is "clickbait", when headlines or titles are attention-grabbing but the content itself doesn't deliver. This can affect users' trust towards news media. A more straightforward example is this graphic that circulated earlier in the pandemic, where virus outbreaks were linked to election years. However, the link between the Zika virus and 2016 is not quite accurate — the virus was discovered in 1947 and the first notable Zika outbreak occurred in 2007, on the Pacific island of Yip in Micronesia.

Figure 2 | An example of a false connection type of misinformation

Misleading content

One example of misleading content that circulated in Australia is a graphic sporting the logo of the Therapeutic Goods Administration, claiming that while there had only been one death from Covid-19 between January 1 and May 23, 2021, there had been 210 deaths caused by the Covid-19 vaccines, and 22,031 adverse events. These numbers are misrepresented — at the time this graphic circulated, the 210 figure actually referred to the number of people who had received the vaccine that later died for other reasons, and the TGA had only attributed one death to the Covid-19 vaccine (AFP Australia, 2021).

Figure 3 | An example of misleading content that misrepresents figures from official sources. Image source: AFP

False context

A video posted to TikTok on August 18, 2021, depicting a father hugging a screaming child while police officers and people in personal protective equipment attempt to take the child, was said to have been "covid related". It was posted with the hashtags #donttouchourkids and #leaveourchildrenalone, and was viewed thousands of times before later being taken down.

Reverse image searches showed that the incident took place in the Werribee Police Station. Victoria Police said in a statement that it was a "family incident", clarifying, "This incident was NOT covid/vaccine related."
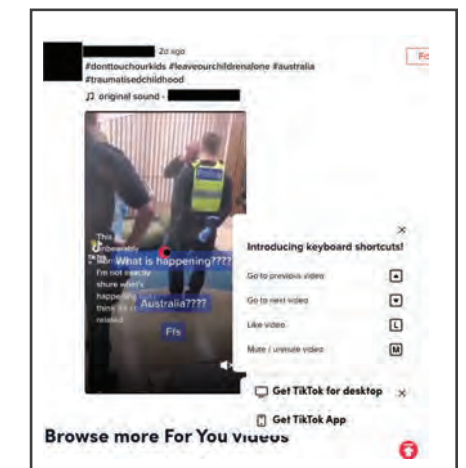

Figure 4 | An example of misinformation

Figure 5 | An example of manipulated content

Manipulated content

Manipulated content can be sophisticated photoshops, or a simple video edit that slows down a video to make a speaker appear drunk, as was done to Barnaby Joyce in June 2021, in a video posted by an Australian comedy-writer. While the video was likely satirical, this style of manipulated media could be taken seriously and has targeted others around the world, including US House Speaker Nancy Pelosi (Harwell, 2019).

Figure 6 | An example of fabricated content.

Fabricated content

Fabricated content is content that is completely made up. For example, a fake press release claiming New South Wales would establish a cashless society in 2022 was circulated in September 2021. As it also bears the letterhead of Gladys Berejiklian, then-premier of the state, this would also be a piece of imposter content.

Figure 7 | An example of imposter content. Image source: AFP

Imposter content

A common example of imposter content is the usage of Australian public figures and media publication logos to promote scams. Most recently, the Nine News logo was appropriated to advertise a mobile gambling app (AFP Australia & AFP Malaysia, 2022).

PLATFORMS AND PEOPLE: USE OF DEFINITIONS IN AUSTRALIA

We have noted the difficulty in finding a meaningful yet salient approach to defining terms within information disorder, and how terms have evolved. For example, misinformation may be shared with the best of intentions, but actually cause real harm or even death as seen in the pandemic, with one study from August 2020 finding that at least 800 people died as a result of coronavirus-related misinformation, such as claims that drinking methanol would be a sufficient cure (Islam et al, 2020). Research has begun to uncover what has been suspected for some time — that audiences do not have shared understandings of the terms, and their political biases may be getting in the way of their definitions (Kruger & Chan, 2022). This is explored further here, but we begin first with how the platforms have traditionally approached the use of definitions for their purposes.

Platform use

This section focuses on how definitions were taken up and used by platforms, and how this related to new policy in Australia. The use of terms such as "deceptive or co-ordinated inauthentic behavior" appears to be favoured by the platforms and social media companies as a focus of dealing with disinformation. Camille François, former chief innovation officer at Graphika and affiliate at the Berkman Klein Center for Internet & Society at Harvard University noted that "while there are significant differences in the various disinformation definitions and terms of service applicable to the issue among technology companies, the focus on deceptive behaviour appears to be a clear convergence point throughout the technology industry" (François, 2019). For example, Google's February 2019 white paper, *How Google Fights Disinformation*, noted it refers to 'deliberate efforts to deceive and mislead using the speed, scale, and technologies of the open web as "disinformation" (Google, 2019). Facebook's approach to disinformation is focused on

addressing "coordinated inauthentic behaviour" (CIB) that seeks to manipulate the public (Gleicher, 2018).

The Australian Code of Practice on Disinformation and Misinformation (ACPDM) launched by the Digital Industry Group Inc. (DIGI) in 2021 acknowledged complications regarding definitions and concepts and noted these "mean different things to different people and can become politically charged when they are used by people to attack others who hold different opinions on value-laden political issues on which reasonable people may disagree." Section 3.2 of the code noted disinformation as:

    A. Digital Content that is verifiably false or misleading or deceptive;
    B. is propagated amongst users of digital platforms via Inauthentic Behaviours; and
    C. the dissemination of which is reasonably likely to cause Harm.

And section 3.6 of the code defined Misinformation as:

    A. Digital Content (often legal) that is verifiably false or misleading or Deceptive;
    B. is propagated by users of digital platforms; and
    C. the dissemination of which is reasonably likely (but may not be clearly intended to) cause Harm.

It is interesting to note terminology used by the Australian government throughout the process of developing the ACPDM. In its 2019 response to the Digital Platforms Inquiry, Treasury (2019) noted the "Australian Government will ask the major digital platforms to develop a voluntary code (or codes) of conduct for disinformation and news quality". The Australian Communications and Media Authority (ACMA) then used the umbrella term 'misinformation' upon the release of its position paper for the code development in June 2020 to describe the various manifestations of information disorder. The ACMA's interpretation of Treasury's response is detailed in the regulation section of this report.

Audience use

The ACPDM delivered by DIGI in 2021 also noted, "understanding and effects of these concepts varies amongst individuals and is also under-researched." With

that last sentiment in mind, in 2022, DIGI undertook a nationally representative survey into Australians' perceptions of misinformation. The survey used a mix of online and telephone interviews (n=2,303) and was "designed to identify Australians' views on the meaning of the term 'misinformation', its prevalence and sources, and the impacts of political biases and media preferences on their perceptions." Examples of case studies that illustrate where this may be applicable can be found in this report's chapter on climate, particularly the bushfires section.

Given a lack of common definitions and evidence that claims of misinformation can be influenced by political bias, care needs to be taken when interpreting reports of misinformation. Published as part of the code's annual report, the DIGI survey confirmed Australians are concerned about misinformation and a clear majority of participants believed they had been exposed to online misinformation within the last week. This compares similarly with findings by surveys including those conducted by the University of Canberra (UC) for the Reuters Institute for the Study of Journalism's *Digital News Report* and a study on Covid-19 misinformation. However, a clear lack of knowledge or consensus was identified and showed there is no shared understanding of the term 'misinformation' among the general public. The results found a strong belief that misinformation is anything false or untrue; and respondents thought it was intentional — something more akin to the definition of disinformation.

University of Canberra's Covid-19 study also found variation in participants' understanding of these terms. Very few participants used the term disinformation, but questions about the credibility and motivations of sources "factor into people's understandings of misinformation" (Park et al., 2022, p. 103). Younger and more highly educated participants showed greater understanding, including awareness of

misrepresentation and false context. Many noted the importance of accounting for genuine differences in belief and opinion.

In addition to this, the DIGI survey also found a stark lack of thinking about the harm misinformation can cause. Only one percent of the respondents defined misinformation as harmful. Given the continuing harmful effects of Covid misinformation, this shows large gaps — and opportunities — in media and news literacy education. By contrast, UC's qualitative Covid-19 study found awareness of harms among many participants. It found there was greater concern about harms caused by false information that is deliberately shared, particularly by political actors and influencers.

As discussed in this report, the Chinese Diaspora in Australia have suffered the harmful effects of misinformation and mischaracterisation of the group as a result of Australia's tensions with China, which reinforced stigma and fuelled racism. As we note below, this was perpetuated in the recent federal election with 'reds under the bed' rhetoric, and populist right-wing senator Pauline Hanson's video (that was swiftly removed by the platforms for tripping over election standards) that fuelled dangerous racist tropes under the excuse of satire.

The two considerations (lack of consensus over the definition/understanding of misinformation as well as the lack of awareness over harm) are especially important during elections when problems can be exacerbated. Consideration must be given ahead of an election to the level of understanding audiences and politicians alike have of definitions. Regardless of political leaning, they must be able to consider whether a claim that something is 'misinformation' could actually be political bias or misunderstanding of the definitions and shows the need for greater emphasis on news

GIVEN A LACK OF COMMON DEFINITIONS AND EVIDENCE THAT CLAIMS OF MISINFORMATION CAN BE INFLUENCED BY POLITICAL BIAS, CARE NEEDS TO BE TAKEN WHEN INTERPRETING REPORTS OF MISINFORMATION

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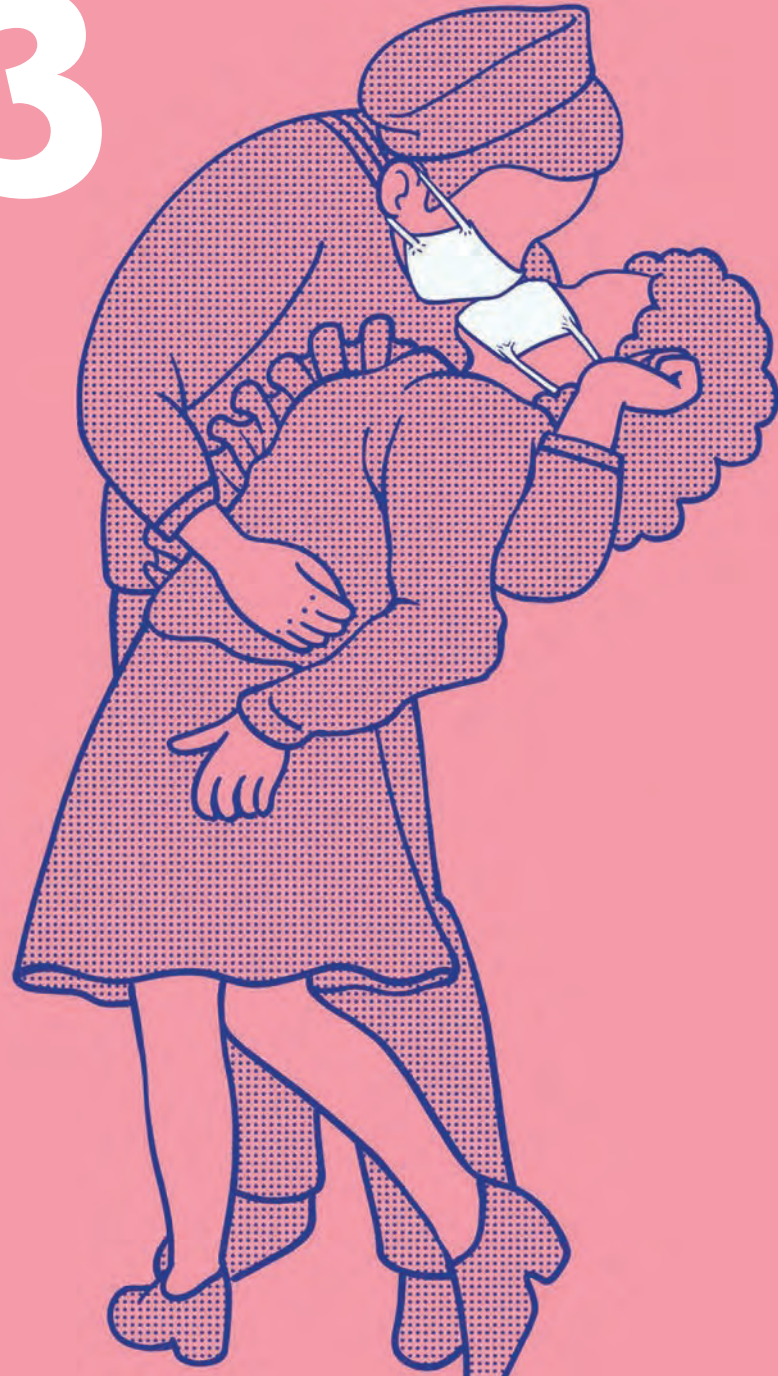
PANDEMIC

Australia hardly had time to recover from the Black Summer (Cook et al., 2021) of bushfires that scorched more than 24 million hectares between 2019 and 2020 when it was hit by yet another crisis — this time a global one. The Covid-19 pandemic, first reported (World Health Organization, 2020) in China in December 2019, has infected more than 600 million people and claimed over 6 millions lives (World Health Organization, 2022) as of September 15, 2022. At the time of writing, vaccines have been developed and administered to ease severe symptoms and lower Covid death rates, but looking back, as the pandemic unfolded at the beginning of 2020, very little information was available on how and how long the viral disease would affect our lives. This data void (Shane & Noel, 2020) — when the supply of credible information fails to meet the demand — created a breeding ground for online disinformation and conspiracy theories. Early fact-check reports focused on debunking unproven claims about natural remedies or alternative treatments (AFP FactCheck, 2020); rumours that foods and locations in Australia were "contaminated" by the coronavirus (AFP FactCheck, 2020); as well as a fabricated travel alert (AFP FactCheck, 2020) pretending to be a genuine one issued by the Queensland government against travel to Wuhan.

TIT-FOR-TAT CONSPIRACY THEORIES OVER VIRUS ORIGIN

The pandemic also exacerbated Sino-US tensions, and by extension the relationship between China and US allies, including Australia. Since the first Covid case was reported in China, critics and conspiracy theorists alike accused the Chinese government of "releasing" or even "manufacturing" the virus with an aim to infect the world. In January 2020, news.com.au, often billed as Australia's most-visited news website (Mediaweek, 2021), published articles that fuelled these theories, with headlines such as "Four creepy coincidences in coronavirus outbreak" (Chung, 2020) or "Mystery lab next to coronavirus epicentre" (Seidel, 2020). While the idea that the SARS-CoV-2 virus may have accidentally found its way outside of the Wuhan Institute of Virology (WIV), where similar respiratory viruses were being studied, is a legitimate theory being investigated by scientists, the phrase "lab leak theory" soon became a catch-all term to include both the legitimate theory as well as a plethora of conspiracy theories. Examples of these conspiracy theories include that the virus was intentionally released to the public, or that it was manufactured as a bioweapon.
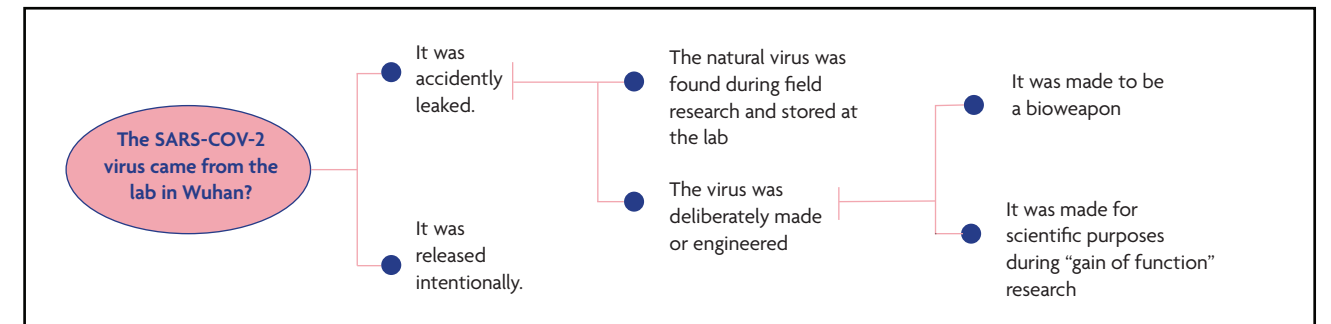

Figure 8 | Flow chart demonstrating the lab origin theory of SARS-CoV-2 and aspects of it subject to conspiracy theories or disinformation.

Chart created by Stevie Zhang

The lab leak theory was heavily pushed by political actors, in part to pressure China to allow international investigators into Wuhan and the WIV. At the highest level, former US President Donald Trump and his then–secretary of state Mike Pompeo used the theory as a talking point in public remarks, despite former administration officials telling the media that evidence the government had at the time did not conclusively support the theory (Banco & Lippman, 2021). Trump's inflammatory rhetoric, such as calling the virus the "Kung Flu", not only lent the theory an undeserved air of legitimacy, but further fuelled speculation in favour of the conspiratorial aspects, such as the idea that the virus was deliberately engineered or purposely released. For earlier analysis on the politicisation of the lab leak theory, see Zhang 2021.

Scientists have warned that the divisive debate about the lab leak theory is exacerbating existing tensions between China and the US, thereby making virus-origin investigations more difficult (Maxmen, 2021). Virologists also point out that demands for an investigation into the WIV are politicised and often sound like allegations. Rather than an escalating political rift, global solidarity is more important when it comes to preventing future pandemics.

On the other hand, counter-theories that the virus was "created" by the US Centers for Disease Control and Prevention (CDC) (AFP FactCheck, 2020), or that it was circulating in a number of European countries before it was found in China in 2019 (Wu, 2022) were published on Chinese news sites and then posted by supporters on both Chinese-

and English-language social media platforms. These narratives, shared by pro-China pundits and influencers, were covered extensively by Chinese state media (Global Times, 2021). One of the most prominent theories directed at the US concerned the now-closed biological laboratory at the Fort Detrick military installation in Maryland. Chinese foreign ministry spokesperson Wang Wenbin called for an investigation into the base in August 2021 (Embassy of the People's Republic of China in the Commonwealth of Australia, 2021) as it "is the center of US bio-military activities and USAMRIID is the main research entity there. USAMRIID has long been engaged in coronavirus research and modification." He added that "after the Institute was shut down because of serious safety incidents in 2019, disease with symptoms similar to that of COVID-19 broke out in the US."

At the time of publication, the evidence overwhelmingly points to a natural spillover from the animals sold in Wuhan's Huanan Seafood Market. A study published in July 2022, conducted by 18 scientists from institutions around the world, found that the market was the early epicentre of the Covid-19 pandemic, where "the earliest known COVID-19 cases from December 2019, including those without reported direct links, were geographically centered on this market" (Worobey et al., 2022). Another study authored by 29 scientists, published on the same day, found that there were two variants introduced to humans, both of which were transmitted zoonotically, concluding that the most probable explanation was that the zoonotic jumps were "from as-yet-undetermined, intermediate host animals at the Huanan market" (Pekar et al.,

2022). Professor Edward Holmes, an Australian virologist from the University of Sydney who contributed to both studies, wrote for the Royal Australian College of General Practitioners that there was "not a single piece of data suggesting" that the virus was present at the WIV prior to the Huanan market outbreak: "There's no evidence for a genome sequence or isolate of a precursor virus at the Wuhan Institute of Virology. Not from gene sequence databases, scientific publications, annual reports, student theses, social media, or emails" (Holmes, 2022). He concludes that the lab leak theory is simply "an unfalsifiable allegation". The WHO-backed Scientific Advisory Group for the Origins of Novel Pathogens (SAGO) published similar findings in June 2022, noting that "there has not been any new data made available to evaluate the laboratory as a pathway of SARS-CoV-2 into the human population and recommends further investigations into this and all other possible pathways" (WHO, 2022).

The theories above gained undue credibility as they were repeated by politicians and news outlets, while social media platforms' recommendation algorithms repeatedly pushed them into online users' feeds. Media reporting that failed to highlight the political implications brought on by these narratives, as well as the ongoing and ever-changing nature of the heavily criticised investigations into the origin of the virus, reinforced xenophobia and escalated tensions between China and the Western world. Furthermore, failure to distinguish between the legitimate lab leak theory and conspiracy versions has led to further stigmatising of China or people of Chinese origin being responsible for the pandemic.
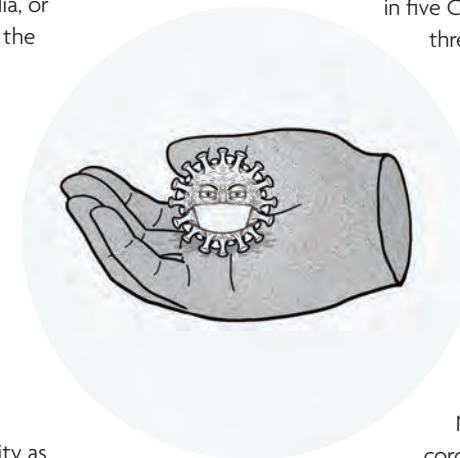
CHINESE DIASPORA MADE TARGETS OF RACISM

A 2022 Lowy Institute report (Hsu & Kassam, 2022) surveying more than 1,000 Chinese Australians found "One in three respondents reports having been treated differently or less favourably in 2021 because of their Chinese heritage... one in five Chinese-Australians (18%) had been physically threatened or attacked because of their Chinese heritage". The Chinese diaspora around the world has experienced racist abuse since the pandemic began, as United Nations Secretary-General António Guterres put it, "#COVID19 does not care who we are, where we live, or what we believe. Yet the pandemic continues to unleash a tsunami of hate and xenophobia, scapegoating and scaremongering." (Guterres, 2020)

News organisations initially referred to the coronavirus as the "Wuhan virus" (Phillips et al., 2020) or the "Chinese virus" (Beaini et al., 2020), linking to the location where Covid-19 was first reported. These references were adopted widely by social media users and politicians alike, including then–US President Donald Trump. While Trump argued it was "not racist at all" (Rogers et al., 2020), a Yale professor pointed out, "This behavior, and the stigma associated with referring to an illness in a way that deliberately creates unconscious (or conscious) bias, can keep people from getting care they may desperately need to get better and prevent others from getting sick" (Vazquez, 2020). In fact, two years after the pandemic began, a research paper published by scholars at The Ohio State University (Holt et

THE THEORIES...GAINED UNDUE CREDIBILITY AS THEY WERE REPEATED BY POLITICIANS AND NEWS OUTLETS, WHILE SOCIAL MEDIA PLATFORMS' RECOMMENDATION ALGORITHMS REPEATEDLY PUSHED THEM ONTO USERS' FEEDS.

al., 2022) found that one media article using these stigmatising references is enough to increase the likelihood for people to blame China for the pandemic.

Adding fuel to the flames is the lab leak theory, which as illustrated above blames the pandemic on China and ignited hatred against people of Chinese origin as well as those of Asian appearance. The theory again spread far and wide on social media in multiple languages. It was seized upon by groups with political agendas (Chan & Zhang, 2021), such as the anti–Chinese Communist Party Himalaya movement, to discredit their perceived enemy. Publications that continue to evoke the unproven theory may also benefit from views, clicks and advertising revenue as well as, for some journalists, a book deal (McDonald, 2021).

The Chinese diaspora communities and people of Asian descent suffered. Online debate and verbal attacks turned into violent physical assaults against Asians. In California, a 16-year-old Asian teen was attacked and accused of having Covid (Capatides, 2020); a masked woman in New York was kicked, punched and called a "diseased bitch" (Palmer, 2020); two Asian women were spat on and told to "eat a bat" in the Sydney suburb of Marrickville (Dinjaski, 2020). While movements such as Stop Asian Hate have been launched to denounce violence against Asians, the pandemic and the anti-Chinese stigma associated with it have become a convenient weapon for some politicians.

Australia's Chinese diaspora communities were targeted during the lead-up to the 2022 federal election as well. We discuss this further below in the "Election" section.

SOCIAL MEDIA BECAME AN APPARATUS FOR SPREADING COVID DISINFORMATION

There are no geographical barriers on social media. It is a function that is supposed to help people stay connected, but which has also been exploited to facilitate the spread of disinformation. False and misleading claims circulating in Australia, for instance, would sometimes be discussed in some of the most popular online shows and podcasts in the world (Hibberd, 2022).

In November 2021, US podcaster Joe Rogan mistook a skit as evidence that Australia is subjected to tyrannical rule. The podcaster shared a segment from Australian comedy series Gruen as proof that "Australia had the worst reaction to the pandemic with dystopian, police-state measures that are truly inconceivable to the rest of the civilized world". He later added "EDIT: apparently this is not a real ad. It's from a satirical show", but the post had potentially reached some of his 13 million Instagram followers (his followership has since grown to over 15 million). Rogan has an outsized influence in the English-speaking world with his podcast, The Joe Rogan Experience, which consistently tops the Spotify podcast chart in countries including Australia, Canada, the UK and US. Similarly in December 2021, American right-wing personality Stew Peters and Red Voice Media, a conservative news and opinion site he co-founded, shared videos purportedly from Indigenous community leaders in Australia falsely stating that the government was physically forcing vaccination on Aboriginal people in the Northern Territory. Peters, who has a history of sharing disinformation (AAP FactCheck, 2021), wrote in the title of his video: "BREAKING: Aboriginals HUNTED BY MILITARY, Kids JABBED BY FORCE".

The videos, which specifically made claims about the Binjari, Rockhole, and Katherine communities which were at the time in lockdown (Perera & Vivian, 2021), have been refuted by the Aboriginal Medical Services Alliance Northern Territory

(AMSANT) and the Wurli-Wurlinjang Aboriginal Health Service in Katherine, which said, "We have been treated with a lot of respect and appreciate all the support being given by these support personnel people. We are in lockdown because we're in the biggest fight of our lives." Residents also spoke to local media directly refuting the misinformation spreading on social media (Saroukos, 2021).

ABUSE OF VACCINE REACTION REPORTING REPOSITORIES

The ability of online disinformation to traverse national borders does, however, offer an advantage: by tracking how a narrative travels online, journalists and researchers are able to study the pattern and provide insights and warnings to the general public.

One such example concerns the analysis of the misuse and misrepresentation of the data from the US Vaccine Adverse Event Reporting System (VAERS) (Beaman & Chan, 2021). The publicly accessible database includes reports voluntarily filed by individuals, healthcare providers and vaccine manufacturers on what they believe to be an adverse reaction to the Covid vaccine. These reports are unvetted so the connection, if any, between a vaccine and a health condition remains unclear. However, the fact that VAERS reports are unverified and therefore do not indicate the causality of adverse events is often conveniently ignored.

First Draft's researchers noted a similar misinterpretation and weaponisation of public data in Australia, concerning its own reporting systems, the Database of Adverse Event Notifications (DAEN). Screenshots of voluntary reports would crop out any disclaimer that the event may or may not be connected to a vaccine.

By identifying and collating examples across the world of how vaccine reporting systems are abused, researchers are able to issue timely warnings for social media users to think twice before further circulating any screenshots and references from these databases.

04
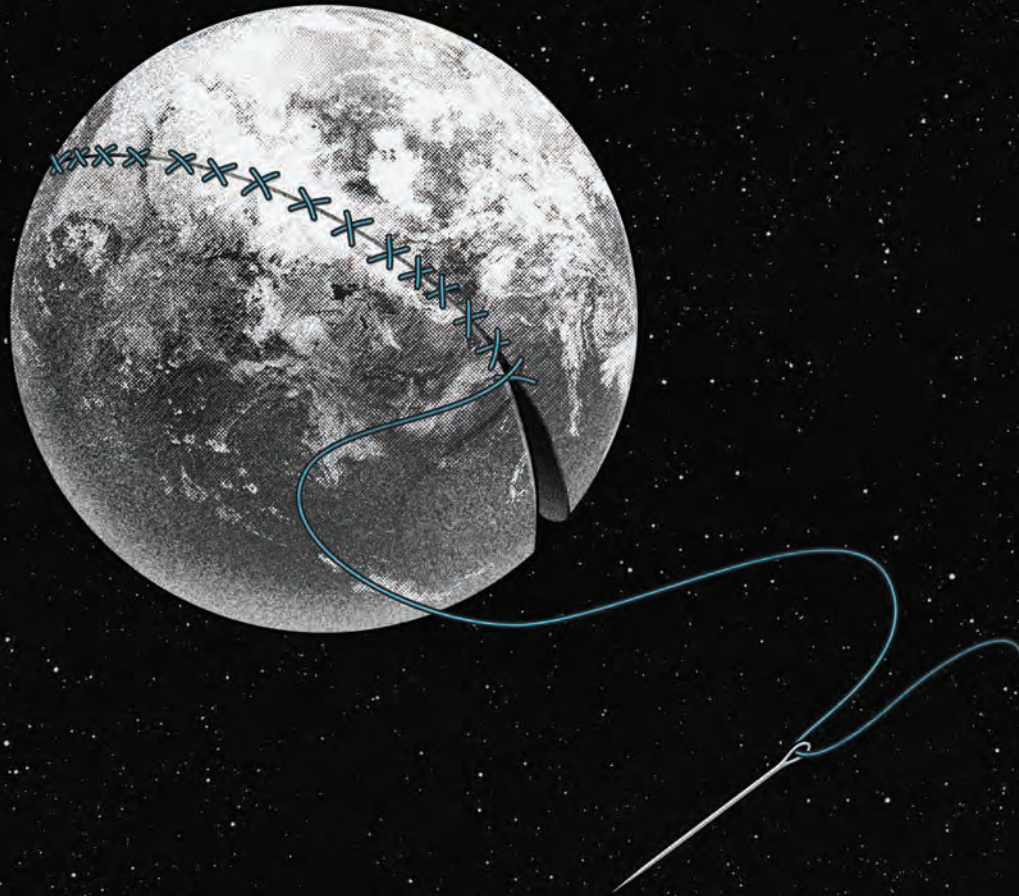
CLIMATE

Weather events have proven to be particularly susceptible to misleading or false interpretation, and Australia is no exception. This can then easily be picked up and turned into disinformation, which can in turn be shared by audiences who may unwittingly believe this to be true — creating a cycle of Information Disorder. This section provides pre-pandemic and current context with examples of misinformation and disinformation, to track the growth of environment-related conspiracy theories in Australia.

AUSTRALIAN SUMMER OF BUSHFIRES 2019–2020

Australia's summer of bushfires beginning in late 2019 was a watershed moment illustrating how anything that carries information — from maps, to memes and even police media reports — can be used for mis-and disinformation. This section outlines some of the tools and tactics used by agents of disinformation at the time. This sets the scene for the following section on the floods of 2022, where tactics and conspiracy theories further proliferated.

As the ACPDM discussion paper noted (UTS Centre for Media Transition, 2020), the celebrity Rihanna tweeted a highly misleading picture of Australia during the bushfires to her 96 million followers which enabled mass amplification. The 3D art had been mistaken for a satellite photograph by many online. However, the artists who created it later explained it was a visualisation made from hotspot data from 31 days of fires, and

others had shared it with an incorrect caption labelling it as a NASA photograph (see Figure 9).

Shortly after this, First Draft's Australian Bureau provided further examples of problematic bushfire maps with educational resources for journalists and the public on how to avoid misleading maps (Dotto & Berkefeld, 2020).

In times of crisis and breaking news, it is common for misleading photos and videos to circulate online, providing an opportunity for bad actors to take advantage and spread disinformation to further their own cause or agenda. For example, a photo of a little girl wearing breathing apparatus in front of flames was created by an artist in December 2019 (AFP Australia, 2020a) and is clearly marked as #photoshop. However, the image went viral globally in January with hashtags on Twitter and Instagram linked to the Australian bushfires as if the image was real.

AFP FactCheck found eight photos circulating on Facebook purporting to represent the Australian bushfires that were in fact old photos, some dating back to 2003, and previously used in news reports from Indonesia and the Philippines as well as photos from California bushfires (AFP Australia, 2020b). Photos with tens of thousands of shares on Facebook later showing botanical re-growth after the bushfires have also been found to have dated back in some cases to 2009 (AFP Australia, 2020c). The problem above shows how easy it is for mistakes to be picked up and used by bad actors.

Satirical memes were also a daily feature of online bushfire commentary. Memes often use satire and parody to reflect
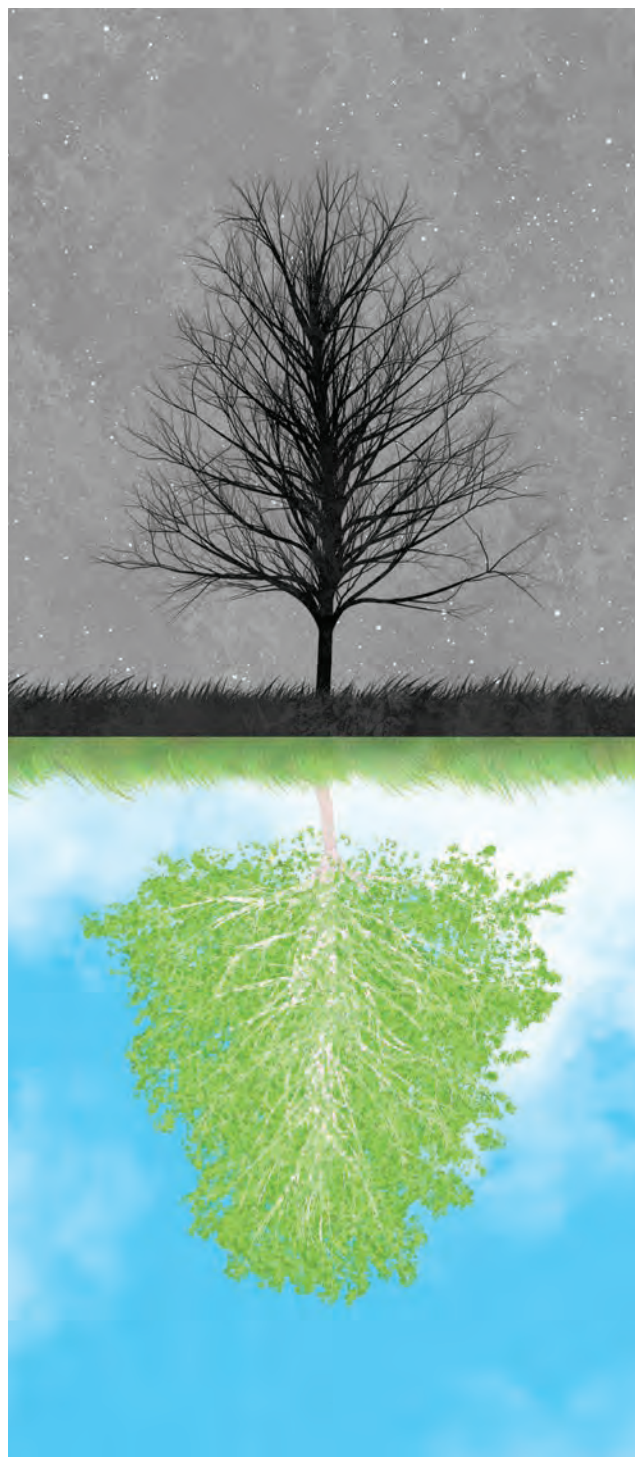
upon the issues of the day. If a story on a satirical website is shared by an audience member who doesn't realise they were consuming satire and shares it in the mistaken belief that this story is true, then that is classed as misinformation. But memes can range from having political undertones, to hyperpartisan campaigns to discredit those with different beliefs. In the case of the bushfires, memes were used to reflect on political 'blame games' and leadership. Poor journalism and misinformation over the role of arson in the bushfires also led to an inundation of memes, while in some cases, these also took the form of TikTok videos, which went viral during the bushfires for questioning then–prime minister Scott Morrison's leadership and inaction. Many such videos were viewed hundreds of thousands of times each (Zhou, 2019). However, other memes were used as a mechanism to spread disinformation, ranging from conspiratorial theories about climate change and 5G to climate-science denialism.

Arson emergency

Graham and Keller from Queensland University of Technology studied 300 Twitter accounts driving the #arsonemergency hashtag and found that it was rife with "inauthentic behaviour" — more so than the #AustraliaFire and #BushfireAustralia hashtags (Stilgherrian, 2020). The inauthentic behaviour was made up of both bots and trolls spreading disinformation online, beginning in November 2019 when the hashtag #ClimateEmergency began trending during the first round of bushfires. The researchers documented a rise in accounts attempting to replace #ClimateEmergency with #ArsonEmergency. The hashtag didn't pick up in usage until early 2020 when the researchers found it was pushed in a sustained effort by around 300 accounts. From here, it was adopted by genuine accounts as the narrative was pushed further into mainstream conversation. These findings suggest to the researchers that there was some kind of organised campaign behind the accounts, although not to the scale of campaigns such as the one around the US elections in 2016. Disinformation agents also attempted to link the topic of arson in Australia to anti-Islam conspiracy theories accusing ISIS of ordering its followers to set fires as part of a jihad (Landis-Hanley, 2020). Prominent far-right anti-Islam activist Tommy Robinson's site TR News published an article on January 7, 2020, linking the court appearance of two teens in Australia accused of starting a grassfire to an ISIS order.

This in turn was picked up the following day by alt-right commentator Stefan Molyneux. The false narrative of a 'fire jihad' was amplified by an Indian outlet which speculated on the possibility but with no investigation or research into the claims (Nanjappa, 2020).

Narratives about arson were further exacerbated that same day after The Australian reported more than 180 alleged arsonists had been arrested since the start of 2019 (Ross & Reid, 2020). This, and many other headlines, misconstrued a New South Wales Police media release. As Vox quickly reported in a debunk: "What the release actually says is that legal action was taken against 183 people since November 8, 2019, for fire-related offences, including things like improperly discarding cigarettes or not taking enough precautions around machinery, i.e. not arson" (Irfan, 2020). The false claim was picked up and amplified on the international stage, including by far-right figures and websites. Confusion and a lack of immediate, clear information over the arson arrests caused further speculation and misinformation.
Other conspiracy theories also drew on the arson theme to allege fires were deliberately lit in order to clear the way for

a high-speed rail corridor. High profile US-based conspiracy theorist Alex Jones on his InfoWars programme pushed this theory and alleged it was being financed by the Communist Chinese. His program included callers who were purportedly ordinary citizens of Australia to discuss this as part of the Agenda 23 New World Order conspiracy theory. The program was spread further and later reposted on YouTube.

Memes were used as disinformation content in viral climate-denying strategies throughout social media and video platforms. For example, Buzzfeed Australia noted posts "pegged to the Australian bushfires have been among the best-performing posts on the 'Climate Change LIES' Facebook page over the last 12 months" which used a superimposed meme character often used in far-right memes as an arsonist (Ryan & Wilson, 2020). The Facebook page's top performing post picked up an opinion article during the first round of bushfires by the Sydney Morning Herald on November 18, with the headline "Arson, mischief and recklessness: 87 per cent of fires are man-made" (Read, 2019). As Buzzfeed Australia noted, this headline was "ripe for confusion — the figures in the article were about fires more broadly and not the bushfires specifically" (Ryan & Wilson, 2020). The "Climate
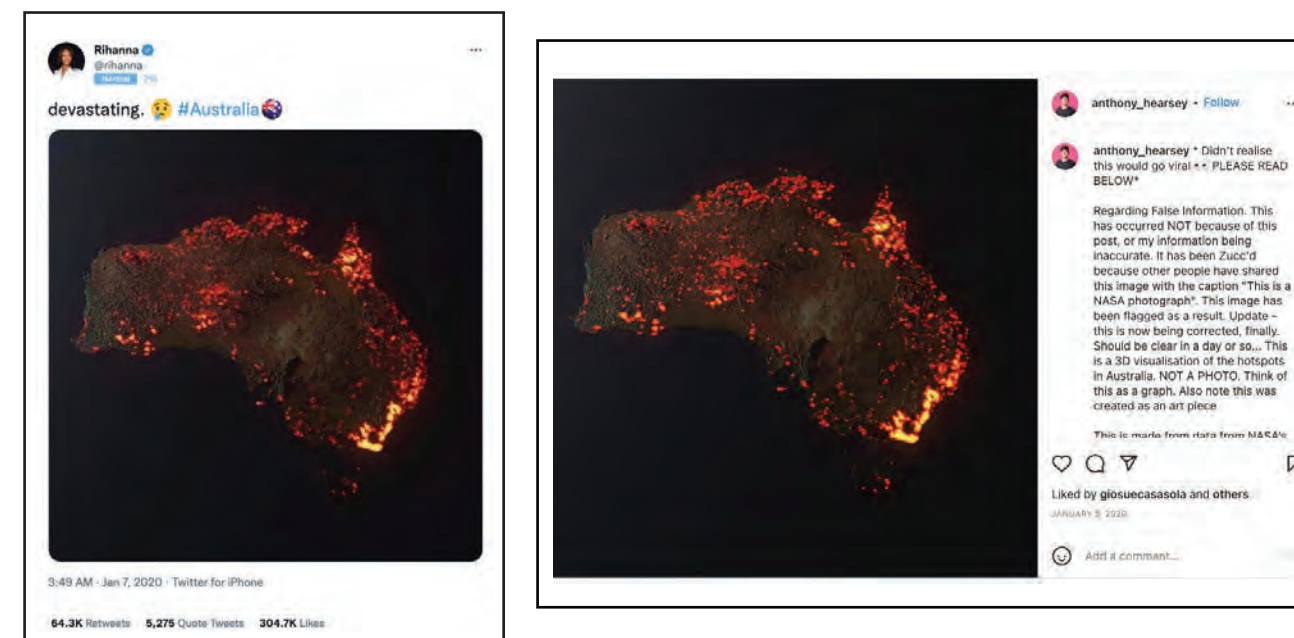

Figure 9 | An example of misinformation cirulated during the 2020 bushfires

Change LIES" page added "not global warming" to its own headline, with the post shared over 1,100 times.

FLOODING

By 2022, water and flood-related mis- and disinformation received renewed attention on social media. A series of floods along Australia's east in early 2022 produced one of the nation's worst recorded flood disasters. As this section outlines, notable at this time was the rise in conspiracy theories that claimed geo-engineering or "weather manipulation" was responsible for the events. As AFP reported, climate change denial TikTok posts that received tens of thousands of views were then reshared on Facebook and Twitter, which brought the misinformation and hoaxes to new audiences (Tan & AFP Australia, 2022).

Climate change conspiracy theories

Narratives that emerged from these unprecedented floods focused on the broad theme of government control, as anti-vaccine and anti-lockdown activists capitalised on their "pro-freedom" platforms to pivot to climate-related conspiracy theories. Many of these users turned to open-source data to bolster their claims. For example, during the March 2022 floods, users focused on visual abnormalities (see figure 10), that appeared on the Bureau of Meteorology rain radar map. The fan-like circular shape that appeared on the map for only a few seconds was likely caused by a technical glitch, but led to conspiracy theories about the government manipulating the weather. Meanwhile, another clip of the BOM map was similarly subject to conspiracy theories, this time showing a long triangular shape. It may have been a moving trough, but was uploaded to social media spaces and interpreted by Telegram users as a "beam" and was seen as a sign of "manipulated weather" (see figure 11).

In another example, conspiracy communities also misused flight patterns found on flight tracking apps. Users on Telegram and Instagram claimed that unusual flight patterns in Australia spotted on the flight-tracking website Flightradar were signs of weather manipulation and cloud seeding. While cloud seeding is a technology that has been used for decades (Gray & Ramirez, 2022), conspiracy groups made false

Figure 10 | A post in a conspiracy theory Telegram chat group of the fan-like shape caused by a technical glitch

Figure 11 | A post in a conspiracy theory Telegram chat group of a diagonal beam taken as evidence of weather manipulation

'chemtrail' claims, referring to a long standing conspiracy theory that governments are exposing the public to chemical or biological agents by spraying them in the sky from aircraft (David Keith's Research Group, n.d.). Comments with these claims thought that this was the cause of the predicted heavy rainfall. However, as the Flightradar site observed, the more likely explanation is that these flight patterns, though odd-looking, show standard aerial surveillance, likely conducted by "large online mapping services like Google Maps and Bing or for more specialized purposes like agricultural inspection or real estate development" (Petchenik, 2015).

Screenshots of similar flight patterns in the airspaces of South Australia and Western Australia have led to similar conspiracy theorising, though outside of the context of floods. In one example, flight-radar pictures were uploaded to Instagram, but comments speculated that the flights would damage crops and poison tap water.

Since Covid-19 vaccines and the pandemic have gradually retreated from headlines, our research shows that fringe communities that focused on opposing pandemic prevention measures have shifted more attention to conspiracy theories about the climate. Not only have they spread conspiracy theories about specific natural disaster events, such as the 2022 floods, many also advanced claims that climate change is a hoax pushed by governments or other nefarious actors in power. To these communities, recent extreme weather events such as flooding, storms, or hurricanes are human modification of the weather. In one poll conducted in July 2022, a Telegram channel asked its over 71,000 subscribers what they believed was the true cause of flooding around the world. Results showed that 70 percent of respondents believed the floods were caused by weather modification and HAARP, the High-frequency Active Auroral Research Program that can "temporarily excite a limited area of the ionosphere for scientific study" (University of Alaska Fairbanks, n.d.). Conspiracy theories that falsely claim extreme weather events are caused by HAARP have circulated elsewhere around the world as well (Marchant de Abreau, 2021).

Meteorological catastrophes are on the rise and extreme weather events have become the "new normal" (Priest, 2022). The above examples, from bushfires to floods, illustrate how weather events can swiftly attract a flurry of dangerous conspiracy theories which attempt to appeal to audience

emotions, and can undermine the work of climate scientists. Researchers should also be aware that mass events such as the Covid-19 pandemic have the potential to amass a greater following for other conspiracy theories such as those about climate outlined above. Many of the groups we monitored and researched, from which climate-related conspiracy theories have emerged, were initially created to question or protest Covid-19 pandemic measures such as masking, lockdowns, or vaccines, and have members in the tens of thousands each. Conspiratorial thinking around governments' pandemic response then served as a gateway for belief in

deeper conspiracies, such as the presence of a "deep state" or a "globalist" movement for coercion or control over the global population. Other similar pipelines that radicalised fringe communities have been documented, including the wellness-to-far-right (McGrath, 2021) or wellness-to-QAnon (Meltzer, 2021) pipelines. In some cases, such as Pizzagate (Robb, 2017), these conspiracy theories have led to real world harm.

CONSPIRACY THEORIES WHICH ATTEMPT TO APPEAL TO AUDIENCE EMOTIONS ... CAN UNDERMINE THE WORK OF CLIMATE SCIENTISTS
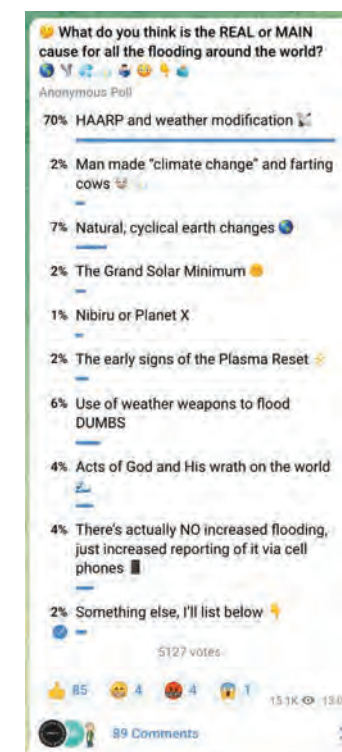

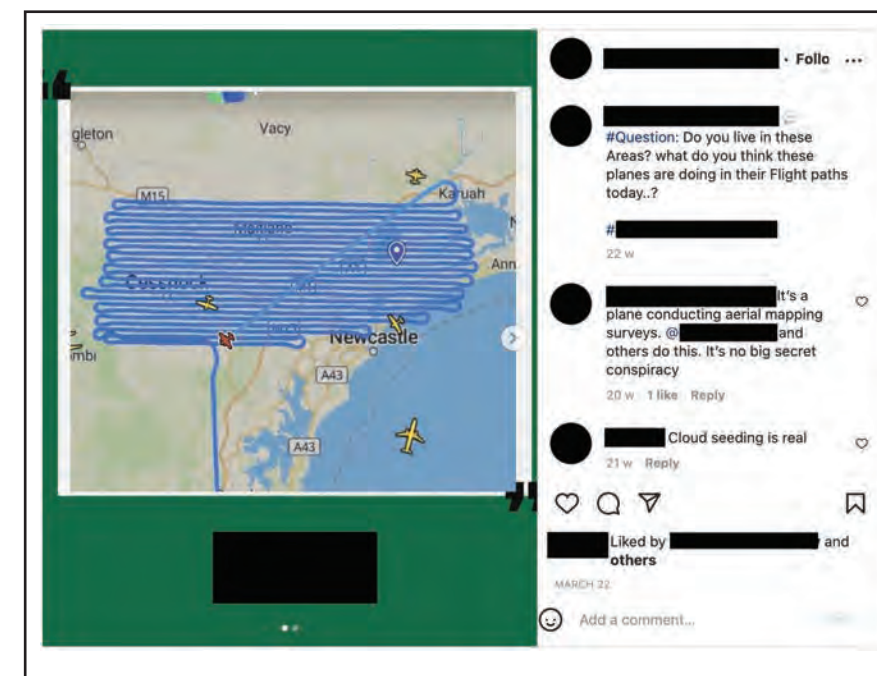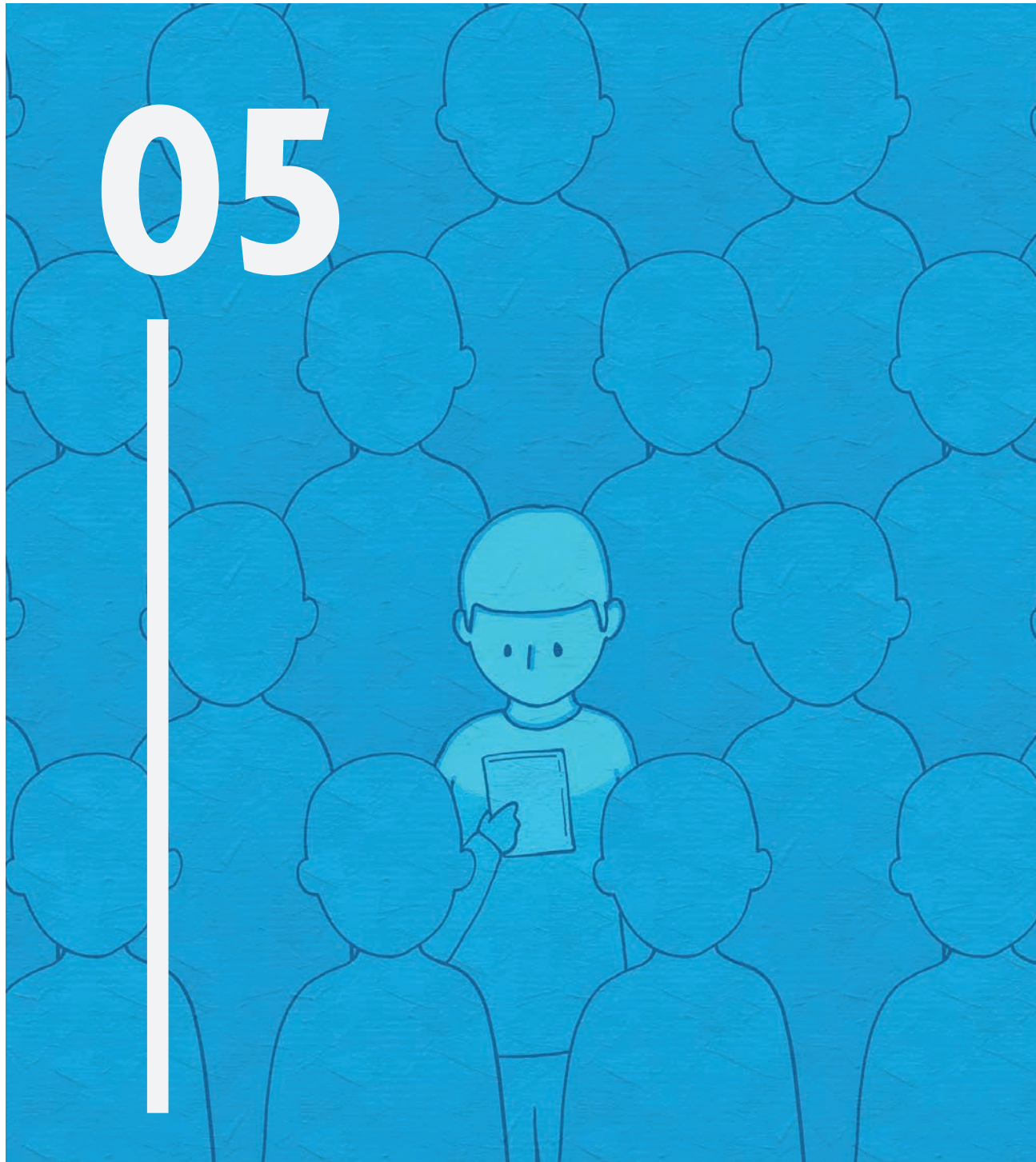**Figure 13 | A poll conducted in a conspiratorial Telegram group**

Figure 12 | An Instagram post showing unusual flight patterns over NSW, claimed to be signs of the chemtrails conspiracy theory

ELECTION

Election misinformation has become a fixture across the world, especially after false claims of widespread fraud were popularised during and after the US 2020 election. Agents of disinformation will use all steps in the electoral process to sow doubt and undermine public confidence in the process, candidates or parties. Research (Chan et al., 2022) has shown that disinformation narratives about electoral fraud tend to fall into the following three tracks:

- Disinformation intended to discredit candidates and confuse the public
- Use of information operations to disrupt election infrastructure
- Undermining public confidence in electoral processes after an election has taken place.

NARRATIVES AND ELECTION PROCESSES

During the 2022 Australian federal election, we saw some of these same themes circulate. Narratives that emerged from the 2020 US election were imported and localised here — for example, former senator Rod Culleton, who leads the Great Australian Party, hinted prior to the election being officially called that widespread voter fraud would take place in Australia. Culleton claimed that Dominion Voting Systems (Culleton, 2021), which was subject to debunked conspiracy theories in the US (Smartmatic, 2020), would be used in our election. The AEC quickly clarified that electronic voting would not be seen in Australia anytime soon (Australian Electoral Commission, 2021).

Similar narratives casting doubt on the integrity of our electoral system circulated throughout the election campaigning period. For example, people were explicitly told not to cast postal votes due to unfounded claims that vote tampering would be more likely (Smit, 2022). This narrative was heavily promoted by former President Trump before the US election (Reality Check team, 2020), and localised after an Australia Post worker was reportedly suspended after being caught on camera dumping postal vote applications (A Current Affair, 2022), leading to a perceived bias of Australia Post as an institution. Seniors in nursing homes were further told that staff assisting them could change their votes (Reignite Democracy Australia, 2022).

Meanwhile, on polling day, videos and recordings emerged from conspiratorial communities that purported to show AEC staff committing electoral fraud, some in person and some over the phone while answering questions. The AEC told us via email response on August 1 2022 that investigations into the validity of these recordings (Australian Electoral Commission, 2022) are still ongoing, as "suspicions arose regarding the legitimacy... given they didn't all show signs of the interaction structure or language we'd expect, or had observed, from such calls." One such claim alleging electoral fraud was about AEC advice given to voters by staff regarding the 'blank' boxes on the Senate ballot. Independent candidates are usually grouped together at the end of the ballot paper, but, as the AEC confirmed to us, those running together as part of an unendorsed group are ineligible for 'Independent' status and are therefore shown on the ballot under an unlabelled box above the line. Videos that circulated purportedly showed AEC staff telling people not to number these 'blank' boxes (Jonas, 2022), leading to accusations that the AEC was "giving out information that is totally incorrect, misleading voters" (Dickson, 2022) and "[sabotaging] independent candidates" (Reignite Democracy Australia, 2022a).

AD LIBRARY MONITORING

Disinformation during the 2022 Australian election did not only come from fringe groups. Both major and minor parties, as well as lobbying groups acting in support of certain parties, engaged in political messaging that contained false or misleading information. In our monitoring of Meta's ad library, we found a variety of conspiratorial content, scare campaigns and disinformation related to the electoral process, all within Meta's Australian "social issues, elections or politics" category.

A popular narrative this election, which the Coalition and supporting lobby group Advance Australia leaned into, was the idea that the Greens would have a disproportionate influence over a Labor government as well as independent candidates. Ads authorised by the Coalition claimed that electing Labor would mean installing in government a Labor–Greens alliance (Stoker, 2022). Independent candidates such as Zali Steggall (Advance Australia, 2022) and David Pocock (Advance Australia, 2022a) were also portrayed to be operating as clandestine Greens members, not only in online ads but also in newspapers, on offline billboards and trucks (Advance Australia 2022b). These ads featuring Steggall and Pocock,

authorised by Advance Australia, were later found by the AEC to be in breach of section 329 of the Electoral Act, for being "likely to mislead or deceive an elector in relation to the casting of a vote" (Australian Electoral Commission, 2022a). While linking parties and their policies may be a common political campaigning strategy, ads like those placed by Advance Australia can still contain false or misleading information and misrepresent parties or candidates in the running.

Notably, the United Australia Party spent big during this election, in excess of $1.2 million between March 1 and the May 21 polling day. Their paid content often surpassed one million impressions, and frequently placed conspiracy theories previously confined to closed and semi-closed spaces into the feeds of people from every demographic. Their ads often referenced the World Economic Forum or the Great Reset, alongside claims that major parties and their candidates were "pawns" or "puppets" in a globalist conspiracy. Alongside One Nation and other fringe parties, they also promoted anti-vaccine, anti-lockdown narratives, including claims of "medical apartheid" and violations of the 1947 Nuremberg Code, as well as calls for the government to be tried for "treason".

As noted, these conspiracy theories were previously confined to closed and semi-closed spaces, such as on Telegram. However, with the resources of Clive Palmer, they were served to a much larger audience through platforms like Facebook, Instagram, as well as Google, YouTube and elsewhere offline such as on corflutes and through text messages. Other advertisers that also promoted similar narratives may have only garnered a small audience, but the sheer volume led to an unprecedented accumulation of false and misleading content.

The election did not award these conspiratorial parties a single seat in the lower house (Australian Electoral Commission, 2022b). However, the ability for conspiracy-theory groups to reach voters online and through text is concerning, particularly as research into these spaces can be difficult (Wardle, 2019). There are also no current barriers against proliferation of mis- or disinformation in political advertising, as long as it comes with a disclaimer and does not mislead electors in relation to the casting of a vote. As the AEC clarified numerous times, it has "no role in regulating the

political content of electoral communications" (Australian Electoral Commission, 2022c).

MIGRANT AND DIASPORA COMMUNITIES

Worth especially noting here is the role of multicultural or diasporic groups during this federal election. These groups are often not reached by mainstream messaging or included in mainstream media reporting, despite being deliberately courted by politicians. After polling day, The Guardian reported that there was a disproportionately high number of invalid votes cast from culturally diverse seats (Davies, 2022), prompting concerns about whether explanations of Australia's preferential voting system were getting through. According to the report, some voters failed to fill all squares on the House of Representatives ballot paper, or they put a tick or cross next to a chosen candidate, rather than a number, rendering their votes invalid.

While the AEC ran a social media campaign this election that has generally been regarded as successful (Miller & Vinall, 2022), answering voters' questions promptly on Twitter with a sense of humour, a greater effort is needed to address the specific needs of communities made up of largely non-English-speaking members.

During this election, we also observed that these migrant and diaspora communities may have been impacted by the aggressive campaigns run on issues relating to China. In some cases, the campaigns were overtly racist — for example, Senator Pauline Hanson published a cartoon in April (Worthington & Workman, 2022) which weaponised satire to push false claims of voter fraud, such as dead people voting or postal votes being stolen. The video was later taken down from Hanson's official channels after the AEC lodged complaints to social media companies, but was viewed over a million times collectively (Davis, 2022), and versions continued to circulate among users. What went unaddressed, however, was the racism — the cartoon showed a bat in a bowl of soup, clearly referencing a video of a Chinese girl eating bat soup that went viral in the early days of the pandemic. The video was falsely described as having taken place in Wuhan (it was actually taken in Palau), and social media users used it to blame supposedly "dirty" Chinese eating habits for the outbreak of Covid-19 (Palmer,

2020), sending the girl a slew of abuse and death threats (O'Neill, 2020) and further fuelling anti-Asian racism.

Australia and China's deteriorating relationship has also fuelled harmful campaigns this election, with Chinese diaspora groups bearing the brunt of these tensions (Chan & Zhang, 2021). Both major and minor parties rolled out hawkish claims about China's influence in Australia, contributing to the "reds under the bed" environment (Bergin, 2022) — for example, ads paid for by the Coalition claimed that Anthony Albanese had been endorsed by the Chinese Communist Party (CCP) (O'Sullivan, 2022), while Advance Australia's mobile billboards linked the Labor party to CCP imagery (see figure 15).

The Liberals were targeted by similar accusations, namely, the official page of the Labor's Queensland state branch claimed that the Hong Kong-born Chisholm candidate, Gladys Liu,

Figure 15 | Conservative lobby group Advance Australia used billboards and roving trucks to claim that the Labor party was the Chinese communist Party and Xi Jinping's preferred party

was a Chinese spy (Bali & Workman, 2022). She was also accused of "taking money from the Chinese government" by Queensland Senate candidate Drew Pavlou (Lucas, 2022), who also ran roving billboards that labelled Liu "Xi Jinping's candidate for Chisholm" (Mok, 2022). These allegations aren't new to Liu — she was elected to Parliament amidst similar accusations for working on commerce bodies that have been "linked to the Chinese government's United Front Work propaganda and foreign influence activities" (Manuel, 2019).

Speculation about a politician's possible links to the Chinese government has been a mainstay in Australian politics for the past decade, not only affecting candidates themselves but also staffers. For example, Daniel Andrews has been subject to scrutiny numerous times, such as in 2020 when The Australian reported a staffer to have taken a propaganda course held by the Overseas Chinese Affairs Office of China's State Council (Baxendale, 2020), or in 2019 when the Herald Sun reported that his parliamentary secretary for Asia Engagement had ties to numerous Chinese lobby groups (Minear, 2018). Faced with this landscape, members of the Chinese diaspora who are publicly political are often treated as "guilty by association". Allegations of ties to the CCP are often based on involvement in local Chinese community groups set up by the CCP, which does not necessarily mean the individuals themselves are involved in the party. A 2021 report from the Lowy Institute demonstrates this further — while most participants were aware of the Chinese government's interests in influencing Australian society and politics (with this influence more deeply felt in certain communities such as among Tibetans or Uyghurs), motivations for interacting with these groups are often unrelated. One Chinese-Australian journalist said these groups "help people adjust to Australian life, but have been demonised in the Australian political debate",

and that 'united front work' has now become a "catch-all term", used "much more widely than what it actually does and gets way more credit" (McGregor, Kassam & Hsu, 2021). One consequence of this environment, as documented in a Senate inquiry into issues facing diaspora communities in October 2020, is that those who are interested in a political career may hesitate to enter the political arena. Three Chinese Australians spoke to the Inquiry about difficulties members of the Chinese diaspora face in being pulled both ways in the much broader geopolitical context, leading to reluctance to participate in public debate (Hurst, 2020). They were subsequently asked by a conservative senator to "unequivocally condemn" the CCP — exactly proving the type of "gotcha loyalty tests" Chinese individuals are subjected to, simply due to their ethnicity or appearance (Chiu, 2020). Positive sentiment about China may lead to Australian backlash, while public criticism of China can lead to physical harm for family or friends still in mainland China, or even detention or prosecution upon return (Hale, 2022): these conditions strongly discourage Chinese Australians from engaging in Australian politics, and if they do, they often drop out over fear of harassment, like one woman did during the Glen Eira City Council elections in October 2020 after being accused of being an agent of Chinese influence (Galloway & Chung, 2020).

Mainstream misunderstanding of diasporic groups is by no

means limited to the Chinese community. During the election campaign, both Anthony Albanese and Scott Morrison were seen wearing a saffron scarf bearing the logo of the Vishva Hindu Parishad (VHP), which has been described as a "right-wing Hindu terrorist organization" for its attacks on Muslims and Christians in India (Bali & Bogle, 2022). While the VHP in Australia is legally a separate entity to the VHP in India, the lines are blurred — they use the same logo, VHP lists VHP Australia on its website, and VHP Australia has hosted VHP leaders as recently as 2016. Despite the well-meaning meetings with the Hindu Council of Australia to court Indian diaspora votes, the failure to catch this potential meaning signals a broader lack of understanding of diaspora communities and a greater need for mainstream society to be in conversation with experts of underrepresented groups.

This lack of familiarity with cultural and racial groups and traditions and community members' patterns of activity can foster an environment where disinformation flourishes because there are heightened risks of misunderstanding, misinterpretation, and stereotyping (Chan & Zhang, 2021) in relation to already-underrepresented communities. And these issues can impact the political representation of multicultural groups, as seen by the proportion of informal votes cast in seats such as Fowler, which has one of the highest non-English-speaking populations.
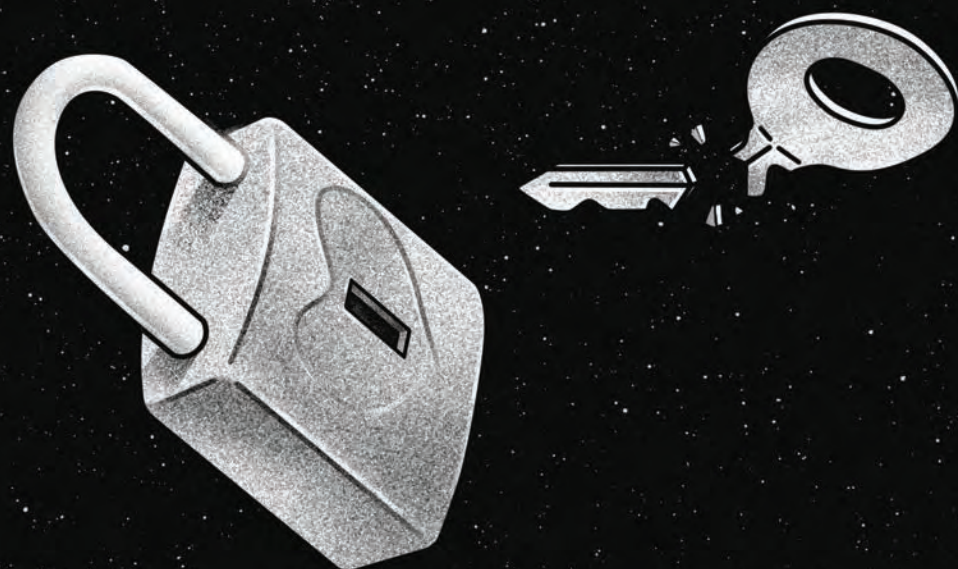
LACK OF FAMILIARITY WITH CULTURAL AND RACIAL GROUPS AND TRADITIONS AND COMMUNITY MEMBERS' PATTERNS OF ACTIVITY CAN FOSTER AN ENVIRONMENT WHERE DISINFORMATION FLOURISHES BECAUSE THERE ARE HEIGHTENED RISKS OF MISUNDERSTANDING, MISINTERPRETATION AND STEREOTYPING

06

REGULATION

The last few years have seen strong movement towards the regulation of digital platforms to address information disorder. The first substantial effort to regulate came in the EU, following growing evidence of Russian disinformation campaigns, the rise of monetised fake news during the US 2016 election and the European elections that same year. The EU Code on Disinformation was launched in 2018.

Moves to regulate have since gathered pace in other jurisdictions, with the release of the Australian Code of Practice on Disinformation and Misinformation (ACPDM) in February 2021, the ongoing consideration of the Online Safety Bill in the UK Parliament and the launch of a strengthened EU code in June 2022. Other countries have also introduced or are considering legislation.

In this chapter we first examine the current regulatory situation in Australia before looking at developments overseas.

AUSTRALIA

In December 2019, following the release of the ACCC's landmark Digital Platforms Inquiry final report, the Australian government asked major digital platforms to develop a voluntary code of practice to address growing concerns about disinformation and the quality of online news. The Australian Communications and Media Authority (ACMA) was appointed to oversee the development of the code and to report to government on its effectiveness.

In June 2020 ACMA released a position paper to guide code development. The paper urged industry to take a comprehensive and inclusive approach to the scope of the code and to include robust transparency and reporting measures tied to concrete outcomes (ACMA, 2020). The paper noted the fluidity between different types of information disorder, as we outlined in Chapter 1 above, and the difficulty of identifying an intent to harm, arguing that restricting the code to disinformation would fail to address the wide range of potential harms arising from misinformation, as seen during the Covid pandemic. It also noted that the government's call for an industry code came in response to both recommendations 14 and 15 of the Digital Platforms Inquiry final report. Recommendation 14 , and called for the ACMA to monitor ongoing platform efforts to address problems with the broader information environment including misinformation, and to conduct research into the effects of filter bubbles, echo chambers and other potential problems. Recommendation 15 called for a mandatory code to address disinformation, with the ACMA or another regulator to oversee a complaints-based enforcement system.

In February 2021, following public consultation on a draft code, industry group DIGI released the ACDPM (DIGI, 2021). Initial signatories were Google, Meta, Microsoft, Redbubble, Tiktok and Twitter, with Adobe and Apple joining soon after. The code includes misinformation but excludes some types of content (professional news, political advertising) and services (private messaging) associated with the dissemination of misinformation and disinformation. Since launching the code, DIGI has introduced a code governance framework with independent input into both code oversight and evaluation of annual platform transparency reports.
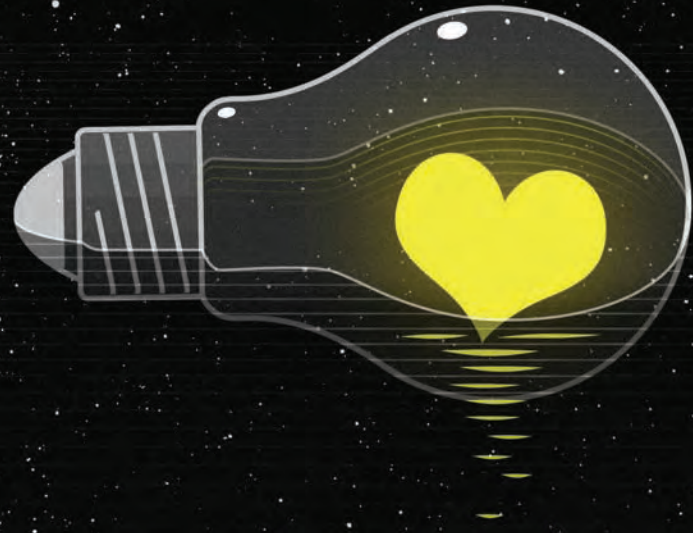
In June 2021 ACMA submitted a report to government on the adequacy of digital platforms' responses to misinformation and disinformation, including the code. The report was released by the government in March 2022.

Amongst ACMA's findings (ACMA, 2021) were that:

- the scope of the code was too narrow with a high threshold for action
- the code was too generous in allowing platforms to opt in to commitments relevant to their services
- with appropriate caveats, private messaging, professional news content and issues-based advertising should be in scope
- the code should include industry-wide frameworks for the development and implementation of individual platform measures, such as frameworks to establish criteria for assessing harm and for news and information quality as well as processes for sharing information and commitments to address risks arising from platform algorithms and architecture
- platform reporting lacked consistency and the detail necessary to assess the effectiveness of platform measures and performance over time.

ACMA's recommendations included providing ACMA with information-gathering powers to overcome shortcomings in platform reporting, and reserve powers to register and enforce industry codes and standards. While ACMA recommended that industry be given 'additional time to bed

down its voluntary code', once exercised, the recommended reserve powers would essentially shift the scheme from self- to co-regulation.

On the release of the report, the then Liberal government announced that it would move to introduce legislation to provide ACMA with the recommended powers. The new Labor government, in power since the federal election in May 2022, had at the time of publication, not indicated whether it will continue with the policy announced by its predecessor.

DIGI announced a review of the code on June 6, including consultation on the code scope. Submissions were under consideration at the time of publication of this report.

THE EUROPEAN UNION

The 2018 code

The EU Code of Practice on Disinformation was released in October 2018 with major platforms Google, Facebook, Twitter and Mozilla signing up, and later, Microsoft and Tiktok. Several advertising industry groups also joined.

The 2018 code was restricted to disinformation, with misinformation excluded ostensibly to protect freedom of expression (European Commission, 2018). The code included commitments to introduce measures to address financial incentives to spread disinformation, increasing transparency of political advertising, and developing technological means to prioritise authentic and authoritative information.

The main criticisms of the 2018 code were that it lacked concrete commitments and mechanisms for measuring signatory performance against the code. This was borne out by signatories' transparency reports, which were criticised for being very high level and lacking in performance data (Pamment, 2020; European Commission, 2020a). Some criticisms extended to the code's self-regulatory framework (Pamment, 2020).

While the 2018 code fell short of the European Commission's (EC) ambitions, it was a first step towards industry regulation to address online information disorder and provided a model for subsequent efforts including the Australian code.

The 2022 code

In December 2020 the EC released its European Democracy Action Plan, outlining an intention to move towards a co-regulatory framework to address disinformation (European Commission, 2020b). The Digital Services Act (European Commission, 2020c), includes a co-regulatory scheme for 'very large' online platforms (those reaching more than 10% of the EU population—i.e. currently around 45 million people) that would enforce compliance with industry codes of conduct, including the EU disinformation code. The scheme would require annual independent audits and allow fines to be imposed for breaches.

In May 2021 the EC released guidance for strengthening the EU code (European Commission, 2021a). The guidance called for finer-grained commitments and KPIs to measure signatory performance, greater attention to countering financial incentives, increased cooperation in the exchange of information and collaboration on shared industry frameworks for addressing disinformation. Given the rise of viral misinformation during Covid-19, the paper argued that the code needed to address misinformation alongside disinformation, with appropriate safeguards for freedom of speech. It also called for the participation of messaging services and a wider range of advertising industry stakeholders, and urged platforms to commit to increasing transparency, accountability and safety in system architecture.

Industry released a revised code on 16 June 2022 (European Commission, 2022). The strengthened code sets much higher standards for comprehensiveness, accountability and transparency than the 2018 code. The scope of the code is broader, covering misinformation, information influence operations and foreign interference in the information space as elements of 'disinformation', as well as disinformation more narrowly conceived.

The code commitments are much more detailed than in the 2018 code, with each commitment comprising several outcomes and specifying qualitative and, where appropriate, quantitative KPIs to improve consistency and comparability of platform reporting.

The strengthened code requires signatories to form formal working groups, advisory bodies and other partnerships with experts and stakeholders to develop best-practice measures and collaborative processes and to share information and research. It also requires platforms to increase their monitoring and research efforts and to provide robust data to allow greater scrutiny of the effectiveness of platform measures.

As part of the Democracy Action Plan the EU has also proposed legislation to improve the transparency of political advertising on digital platforms (European Commission, 2021b). As well as requiring greater transparency, the proposal would limit the use of personal data to target political advertising at EU citizens.

OTHER COUNTRIES

The United Kingdom

A bill to address online harms is currently under consideration by the UK parliament. This follows the 2019 release of the Online Harms White Paper (UK government, 2020). The Online Safety Bill (UK government, 2022) takes a different approach to the self-regulatory schemes introduced in the EU and Australia, establishing a series of statutory duties of care for

online platforms towards their users. These cover the gamut of online harms. Those particularly relevant to information disorder include duties:

- to perform risk assessments relating to service design and operation
- to explain in terms of service how harmful content will be treated in accordance with the risk assessment
- to include features to increase user control over harmful content, including the ability to filter out material from 'non-verified users' (those who have not verified their identity to the platform)
- to use proportionate processes to ensure the importance of free political expression and journalistic expression is taken into account
- to publish transparency reports on their activities.

The bill also requires Ofcom, the UK communications and media regulator, to develop codes of practice for digital platforms to describe measures recommended for the purpose of complying with their statutory duties. Ofcom would also be granted a suit of enforcement powers including information gathering and the issuing of penalties and service-restriction orders.

The bill is currently under consideration by a committee of the House of Commons.

United States

Much of the recent regulatory focus in the United States has focused on section 230 of the Communications Decency Act (47 U.S.C. § 230), which provides immunity from liability for third-party content to providers and users of interactive computer services. This includes immunity for distributing or making third-party content available online (47 U.S.C. § 230(c)(1)). It also includes immunity for moderating or restricting access to 'objectionable' content, irrespective of whether the content is protected speech under the first amendment (47 U.S.C. § 230(c)(2)).

In effect, section 230(c)(2) means that digital platforms and websites can implement their own content-moderation policies and cannot in most cases be required to remove or moderate user-generated content. There are exceptions for material that violates copyright or federal sex-trafficking laws.

Calls to reform section 230 have come from both those seeking more-robust content moderation and those seeking to prevent platforms from removing or moderating content. In 2020 the US Department of Justice undertook a review of section 230 in response to an executive order from then-president Donald Trump. No legislative changes resulted from the review and the executive order was repealed by President Joe Biden on 21 May 2021.

At the state level, some US jurisdictions, including Texas and Florida, are considering laws to limit the ability of digital platforms to moderate user content (Knight First Amendment Institute, 2022).

In 2016 the US enacted legislation to address foreign interference and disinformation, but this was to establish government capability and is not directed at digital platforms (US Congress, 2016).

Canada

Canada has been undertaking consultation on a proposed online harms bill since a 2020 review of the country's communication laws (Government of Canada, 2020). Following public consultation in 2021, an advisory group was convened in 2022 to provide expert advice on legislative and regulatory design. The group advised the government in June 2022 to consider including disinformation in legislation on online safety, while being sure not to undermine fundamental rights enshrined in the Canadian Charter of Rights and Freedoms. The overall approach recommended by the group is to implement a risk-based approach underpinned by a formal duty for platforms to act responsibly (Government of Canada, 2022).

New Zealand

In New Zealand, non-profit online safety organisation Netsafe has led development of the voluntary Aotearoa New Zealand Code of Practice for Online Safety and Harms (NZTech Alliance, 2022). The code was released on 25 July 2022 and will be administered by industry group NZTech. Signatories are Meta, Google, TikTok, Twitch and Twitter. The code aims to address a range of online harms, including disinformation and misinformation by increasing platform accountability and transparency. It takes an outcomes-based, self-regulatory approach similar to the Australian code.

The New Zealand government commenced the Content Regulatory Review in June 2021 to examine harmful content as well as broader media reform (New Zealand Department of Internal Affairs, 2022). It is currently examining options for regulatory reform, with consultation on a new framework expected in mid-2023.

Singapore and Indonesia

Singapore and Indonesia take a more robust approach to misinformation and disinformation than the other countries outlined here. In Indonesia, the spreading of false information or news that intentionally causes public disorder is illegal under the Criminal Code and those convicted can face prison sentences up to ten years (Carson, 2021). Spreading false information or news that causes unrest, or uncertain, exaggerated or incomplete information or news carries lower sentences. The use of the criminal code for policing misinformation has attracted significant criticism (Carson, 2021). The code is currently under review.

In Singapore, the Protection from Online Falsehoods and Manipulation Act (POFMA) was introduced in 2019 (Republic of Singapore, 2019). Under the Act, any minister can declare information to be "false or misleading" and force its publisher to apply a correction notice or remove the material if they believe the material to be against the public interest. Individuals face fines of up to S$50,000 and/or jail terms of up to five years. Non-individuals (such as internet companies) face up to S$1million in fines plus $100,000 per day of non-compliance. International human rights groups have criticised POFMA as a threat to free speech. POFMA has been considered as a model for tackling online misinformation in other countries, such as Nigeria (Carson, 2021).

07
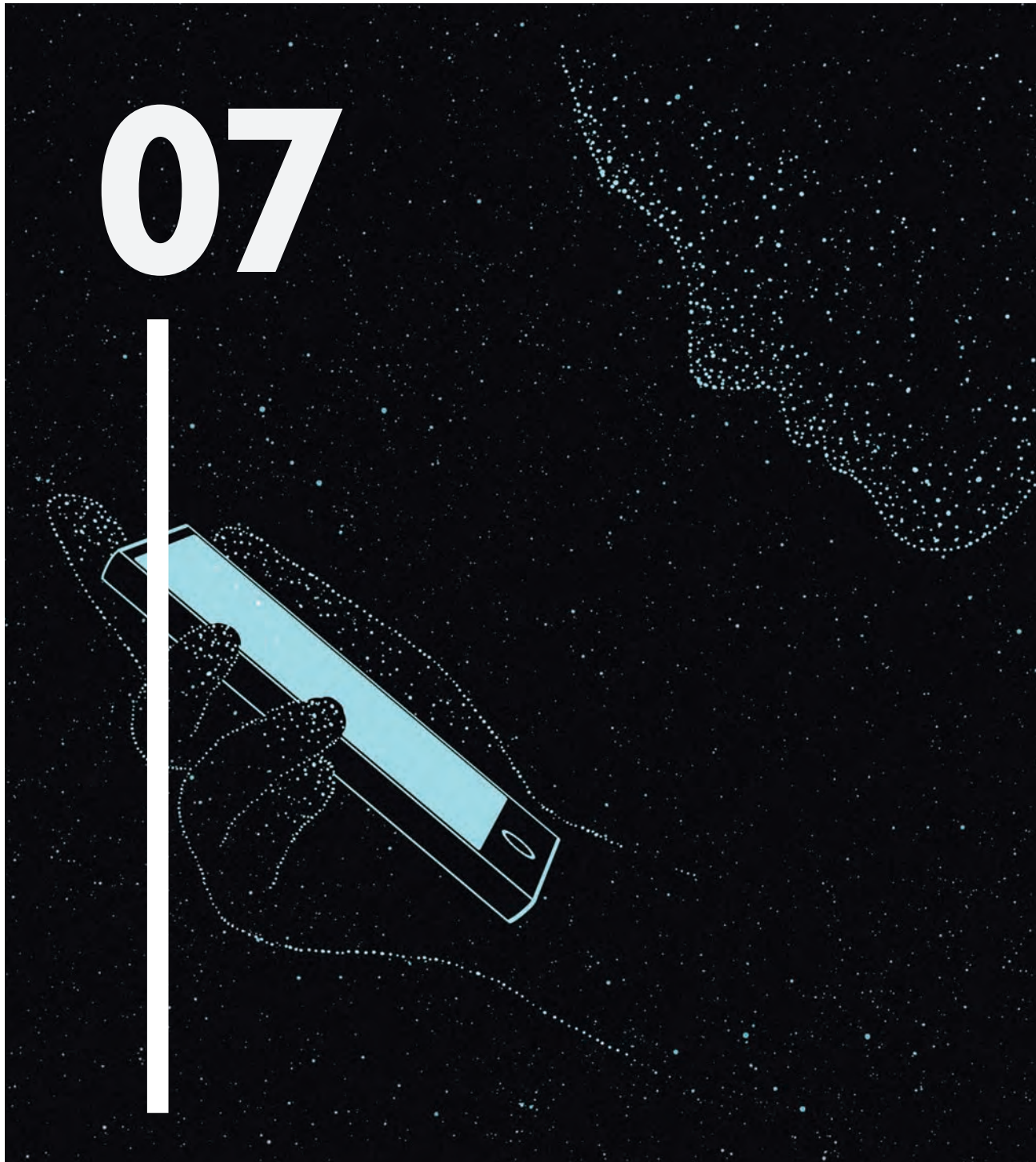
OTHER INTERVENTIONS

News, research and civil society organisations across the globe as well as social media platforms have created and trialled various types of interventions that in varying degrees help cut down disinformation and improve the information space. Interventions can be broadly categorised into reactive and proactive measures.

Reactive measures, which respond to online disinformation after or as it happens, include the off-platform verification and fact-checking, as well as the on-platform content moderation. The latter is implemented by social media companies which devise their own policies on the type of content allowed on their platforms and label violating content as such. Typically, problematic posts would then have their visibility reduced, and in more serious cases, removed. Repeat offenders may have their accounts suspended.

News media can also be disseminators of mis- and disinformation so tools have been developed to rate the credibility of news and information websites and tracks online misinformation. These trust indicators rely on trained journalists and "not AI" in the case of Newsguard, and insights from the general public in the case of The Trust Project, to rate and review the trustworthiness of news sources. While these ratings do not result in active intervention, they can provide an indicator on where and when it may be necessary.

On the other hand, proactive intervention aims at raising media literacy with schools and the public and helping people build their awareness of online mis- and disinformation. Some common measures include incorporating the subject of misinformation in education syllabuses, creating coalitions of newsrooms to tackle misinformation together ahead of a major news event, and exploring creative means such as online interactive games that provide an immersive environment to help users prepare for misinformation in real life.

PROACTIVE INTERVENTION

Proactive measures, which misinformation experts believe are most effective when administered before disinformation crosses the tipping point (Wardle, 2018), include inoculation, research; the monitoring of mis- and disinformation, conspiracy theories, extremism and hate speech; and education that seeks to promote media and information literacy.

Inoculation

The concept of inoculation was formulated based on psychological research inspired by the logic of vaccines. Much like vaccines train our immune response against a virus, knowing more about misinformation can help us spot,

question and dismiss mis- and disinformation (Garcia and Shane, 2021). John Cook, a postdoctoral research fellow at Monash University's Climate Change Communication Research Hub, proposed to put the inoculation theory in practice through the Fact-Myth-Fallacy framework, which was adopted in a free online course about climate misinformation that Cook co-designed (Cook, 2017). Since then, research has continued to prove the effectiveness of inoculation against misinformation. An August 2022 study published in the peer-reviewed Royal Society Open Science explores the inoculation theory within the context of agent-based models. (Pilditch et al., 2022). Agent-based models are computer simulations used to study the actions and interactions between autonomous agents in order to understand behaviours of a system and what decides its outcomes (Bonabeau, 2002). The study concluded that inoculation programs conducted at scale can be effective at making misinformation less susceptible and biased content less convincing. On top of that they are most impactful when rolled out before people form their beliefs. "Inoculation programs are likely to be more effective when a population's baseline ability to identify misinformation is higher, highlighting the potential benefits of media- and digital literacy education on top of administering inoculation trainings."

Media literacy education

Universities such as University of Pennsylvania and University of Michigan have incorporated the topic of misinformation and the broader information disorder in their syllabus, equipping the next generation of students with the knowledge and tools to counter misinformation. In Australia, Western Sydney University's Dr. Tanya Notley has been researching media literacy education to help develop a national media literacy strategy.

Apart from traditional classroom setting and coursework, fun, interactive games such as Bad

News and PolitiTruth put players in a made-up scenario where they are exposed to misinformation and are tasked to make decisions about whether to react to and share the content on a pseudo-social media platform. These games create an immersive, safe environment where players are guided to come to their own solutions, which will hopefully inform their future reaction to online misinformation.

The First Draft model

NGOs are among those who have contributed the most to media literacy training. First Draft, a pioneer in the misinformation research and training field, had designed, distributed and taught training materials on information disorder, verification and digital investigation across the globe between 2015 and 2022. These materials, including interactive knowledge tests for users to try their hands on verifying images online, were freely available on First Draft's website. The fact that the materials were devised by experts in the field and that they were free and easily accessible made them the go-to source for educators, journalists and fact–checkers who were in need of brushing up their skills, or on the hunt for teaching materials. First Draft also provided free, topical misinformation training for journalists, civil society organisations as well as members of the public at times when it was most needed. An example is the 10-week "vaccine bootcamp" focusing on measures to counter vaccine misinformation, which was offered in three different time zones and nine languages at the beginning of 2021 during the height of the Covid pandemic.

First Draft also demonstrated the importance of signal sharing, newsroom integration and the need to prioritise public interest in the fight against misinformation. We designed a new collaborative model, CrossCheck, for monitoring and responding to misinformation and launched the world's first collaborative online verification newsroom in 2017. Dubbed CrossCheck France, the project brought together 37 newsrooms and five technology partners in France and the UK to work together to accurately report on false, misleading and confusing claims that circulated online in the 10 weeks leading up to the French presidential election.

Even though First Draft closed its doors in June 2022, the CrossCheck model lives on in the Comprova project in

Brazil. Launched ahead of the 2018 presidential election, Comprova brings together 42 national, regional and local newsrooms to identify and explain rumors, fabricated content and manipulation tactics that might influence the election campaign. The project also has a high level of public participation by calling for submissions to their WhatsApp tipline. The coalition of Brazilian journalists continue to work together to this date on Comprova, most recently debunking misinformation that surfaced around the time of the 2022 presidential election.

REACTIVE INTERVENTION

Verification

The concept of online verification in journalism was made popular by Storyful, an Irish social media news agency. Launched in 2010, Storyful noted the vast amount of social media content filmed and uploaded by eyewitnesses to social media, and which could inform news reporting. The agency proceeded to devise new methodologies and techniques to verify this material and set an industry standard on consent and attribution when it comes to the use of online content, which before then was often used by news organisations without the owner's permission.

At the core of Storyful's verifying methodologies are the need to investigate the provenance of a piece of content by confirming, or at least corroborating, the source, location and date. Along with proprietary tools like the mapping service Google Maps, open-source intelligence (OSINT) tools have also become instrumental in digital investigation. From attempts to geo-locate by checking the position of the sun at a certain time using tools like SunCalc, to conducting a frame-by-frame analysis of a social media video using the InVID WeVerify extension, these constantly evolving, free tools have expanded the breadth and depth of online investigation in the past decade.

The accessibility of OSINT tools means verification does not need to be an expertise only journalists, fact checkers and open-source investigators can master. In 2016, Amnesty International's Citizen Evidence Lab launched the Digital Verification Corps, engaging volunteers from six universities

around the world to learn open-source investigation methods and techniques. The program equips the next generation of journalists, human rights investigators, or the everyday social media users with the skills and tools, and most importantly, the awareness to the need of verification.

Fact-checking

Fact-checking is one of the most prominent reactive interventions. Social media platforms such as Meta and TikTok partner with third-party fact-checking partners, relying on their journalism know-how and expertise in verification to counter pockets of polluted information on their platforms. These fact-checking programs inform different types of interventions depending on the platform. On Meta, only content that violates its Community Standards would be removed. In other words, problematic content flagged by fact-checkers but which does not violate the platform's Community Standards may have its distribution reduced so fewer users would see it, but it would get to stay on the platform (Meta, 2021). On TikTok, a video flagged by fact-checkers may also have limited distribution if it contains misleading information or dubious claims, but it would be removed entirely if it features false claims (TikTok, 2022).

When conducted before a piece of problematic content goes viral, it can be the most direct and efficient way to address mis- and disinformation. Fact-checking outlets like AFP FactCheck has published a large volume of debunked hoaxes and false information about the Covid pandemic since it broke out; the fack-checking arm of various news organisations also worked at speed to alert the public about disinformation surrounding the 2020 US presidential election. A deepfake video of Ukrainian President Volodymyr Zelenskyy was circulating on multiple social media platforms after being planted by a hacker on a Ukrainian news website in March 2022. The video was quickly debunked by fact-checkers and since it also violated platform policies, it was removed by Facebook, YouTube and Twitter, NPR reported.

LIMITATIONS OF FACT-CHECKING

However, with the speed misinformation travels online, increasing the number of human fact-checkers won't help. More often than not, fact-checkers end up playing a round the clock game of whack-a-mole. Algorithms that some platforms said would help apply the same punitive action on identical posts do not appear to work across different platforms which allow cross-posting, and which belong to the same company, such as Facebook and Instagram. For instance, just a day after the New Zealand account Counterspin Media was removed from Instagram for violating Meta's platform policies, a Facebook post by the same account discussed violence as an anti-government protest took place near the Beehive, one of New Zealand's parliamentary buildings, on August 23. The New Zealand news website Stuff reported that the suspension of Counterspin's Instagram account came after host Kelvyn Alp "called for violence against the Government and politicians" (Stuff, 2022). While the Facebook post had limited engagement, its equivalent on the group's Telegram had been viewed more than 2,000 times within six hours on the same day. Other accounts escape scrutiny altogether despite being frequently called out. The anti-vaccine organisation Children's Health Defense, founded by Robert F. Kennedy Jr., only just had their Facebook and Instagram accounts shut down in August 2022 after spinning vaccine and Covid conspiracy theories — many of these detrimental to people's health — throughout the pandemic (Merlan, 2022). Content from the organisations, especially about the safety and efficacy of the Covid vaccines, has been debunked by multiple fact-checking organisations such as Health Feedback and FactCheck.org throughout the pandemic. A Meta spokesperson told the news website VICE the reason for the removal of Children's Health Defense's Facebook and Instagram accounts is repeated violations of their policies.

Another issue lies in the warning labels that platforms apply to problematic content after it is flagged by fact-checkers. The labels applied to misinformation in mainstream media do not travel with the posts when they are shared on other platforms. Rather, inaccurate information circulates unchecked online once it leaves the platforms where the contextual warnings were applied (Zhang & Chan, 2020).

Most fact-checking activities focus on textual information, while audio-visuals may dodge moderation because they take longer to consume and study and therefore more difficult to moderate automatically (John & Urbani, 2022). In order to tackle the lack of insights into audiovisual misinformation, Spotify announced in June 2022 the formation of a new Safety Advisory Council, formed by "individuals and organizations around the world with deep expertise in areas that are key to navigating the online safety space" (Spotify, 2022). Among the founding members and partner organisations are organisations that research audiovisual as well as textual disinformation.

On Facebook and Instagram, content flagged by third-party fact-checkers would have an overlay applied to it, featuring a warning to social media users and a link to the corresponding fact-check report. The warning labels, however, are only applied to Facebook and Instagram posts but not comments. Quantitative research by First Draft looking at Facebook's comment sections found that comments, rather than the posts to which they are attached, can be the main source of misinformation — and a source that often goes undetected. Users scrolling to read comments might miss warning labels attached to the post, or the context and details the post itself has to offer. Studies have also shown that Facebook users tend to interact with posts that contain links without reading the linked article, much less finishing it (Manjoo, 2013). The second challenge is that online comments, particularly those contradicting the news article in the post, can affect readers' opinions more than the article itself (Winter et al., 2015). In order to combat misinformation about Covid-19 and vaccines, audiences are often told to seek out reputable sources, such as official medical advice or mainstream media outlets. While these outlets' reporting may be accurate, unmoderated comment sections may nonetheless expose readers to misinformation, even those actively seeking verified information. Moderation by news outlets and public health organisations on their own social media accounts often isn't effective or sufficient at keeping misinformation out of comment sections.

PLATFORM INTERVENTION

On top of some of the platforms' reliance on third-party fact-checkers, all the major social media platforms like Google's YouTube, Meta's Facebook and Instagram, TikTok, Snapchat and Spotify have all developed their own content moderation

...WITH THE SPEED MISINFORMATION TRAVELS ONLINE, INCREASING THE NUMBER OF HUMAN FACT-CHECKERS WON'T HELP.

policies. As the Covid-19 pandemic broke out and persisted, many of these platforms ramped up their moderation efforts in the face of a deluge of Covid and vaccine misinformation, much of which can cause direct harm on people's health and well-being. However, it is uncertain how effective these new policies are, and whether more rules mean a better and healthier information environment.

Stanford Law School Associate Professor Evelyn Douek touched on one of the problems with rolling out content moderation rules at scale: "Platforms have only continued to impose more and more guardrails on what people can say on their services. They stuck labels all over the place during the US 2020 election. They stepped in with unusual swiftness to downrank or block a story from a major media outlet, the New York Post, about Hunter Biden. They deplatformed Holocaust deniers, QAnon believers, and, eventually, the sitting President of the United States himself." (Douek, 2021)

Platforms' arbitrary and erroneous enforcement is also increasingly seen by some social media users as a clampdown on free speech or at the very least a plan to silence certain political ideologies and religious belief. Meanwhile, there is an apparent lack of enforcement on various types of harmful content. For instance, the Institute for Strategic Dialogue (ISD) finds a lack of consistency in how social platforms moderate discussions about the inclusion of transgender athletes in women's sports which sometimes lead to hateful and harmful content targeting trans individuals. "Both Meta and Twitter do not appear to protect the transgender community from hate speech and misgendering on their platforms. On both platforms, current policies to protect the community still lack a definition for misgendering, and when a policy against misgendering is present (as is the case for Twitter), it appears to be poorly enforced." (ISDG, 2022)

Social media migration to obscure spaces

Another challenge in recent years to monitor and detect emerging trends in disinformation ironically stemmed from social media users' heightened awareness of content moderation. In attempts to evade what they perceive as "big tech censorship" and pivot to "free speech platforms", a migration was reported during the pandemic from mainstream social media users to closed and semi-closed spaces with little to no moderation (Dickson, 2020). In Australia, the most notable transition was users' moves from mainstream social platforms to the messaging app Telegram.

Anti-vaccine and pro-freedom groups converged on Telegram, sharing and discussing disinformation and conspiracy theories about vaccine safety and vaccination drives. In September 2021, mass protests against vaccine mandates for the construction industry took place in Melbourne and journalists monitoring anti-lockdown Telegram groups found a surge in the number of protesters following calls by those groups (Taylor, 2021). Before the Melbourne protests, Telegram groups were already coordinating and organising similar protests (Bogle & Zhang, 2021), such as the Australian editions of the anti-vaccine, anti-lockdown Worldwide Rally for Freedom (Dotto et al., 2021).

Inspired by a similar movement in the Canadian capital of Ottawa, a convoy calling for freedom and opposing vaccination set forth to Canberra in February 2022. Telegram, alongside several private Facebook groups, was the main space where these convoys were organised. First Draft's research also detected signs of inauthentic behaviour, including that automation could be involved in the rate some of the profiles signed up. Another sign is that interactions on some of the more popular posts are only a fraction of the purported number of members. The use of deepfake, a type of synthetic media that fabricates audio or visual materials, was another alarming incident reported during the Canberra convoys. First Draft researchers noted that a sole admin for one of the private Facebook groups had a mismatched Facebook ID and account name; that the user is listed as based in Ottawa while organising a rally in Australia; and that the profile picture purporting to show a white male displays signs of an artificially generated image. This example illustrates how contrary to a dominating concern about foreign interference, harmful

narratives are often spread by domestic actors galvanised by events overseas. These efforts are further facilitated by platforms like Telegram, where biased, insinuating or hateful comments are unrestrained and allowed to fester.

USING AI TO COMBAT MIS- AND DISINFORMATION

The use of artificial intelligence (AI) to screen and detect false and harmful information and identify deepfakes has become more popular in recent years among third-party technology providers. Companies like the New York-based Blackbird.AI, or the Dublin-based Kinzen which was acquired by Spotify in October 22, mainly rely on Natural Language Processing (NLP) or Machine or Deep Learning (Schiffrin, 2022) to identify mis- and disinformation. One of the ways NLP works is by training an algorithm by exposing it to a large dataset of assertions classified as true or false by humans, while Machine or Deep learning teaches an algorithm to understand and simulate human learning so that it can spot and analyse patterns and find highly automated, bot-like accounts.

These firms have worked to surface mis- and disinformation on social media platforms with tech giants like Google and Meta, which are also constantly developing and improving their own AI solutions. It is unclear how well tech platforms' algorithms work in cleaning up a polluted information space on their platforms, but it is well-noted that they also diversify their solutions in engaging and funding disinformation experts, civil society partners and third-party fact-checkers on top of their own content moderation work.

The more data, assertions and classification AI is exposed to, the more sophisticated and nuanced it becomes. However, it is far from being effective enough to uncover and classify false information on its own. As Columbia University's Director of the Technology, Media and Communications specialization Anya Schiffrin said: "Artificial intelligence, and other technologies like content provenance verification and blockchain, can only offer part of the solution against mis/disinformation. Human intervention and moderation will remain critical in the fight against the spread of false information, not least because mis/disinformation is not primarily a technology issue." (Schiffrin, 2022)

CONCLUSION

As we noted in the introduction, this report provides an overview of the mis- and disinformation landscape in Australia by highlighting the key issues that have been the most prone to false, misleading narratives and conspiracy theories. These observations serve as important lessons for misinformation reporting, research and literacy education in Australia but are not intended to present any conclusive view on the extent and impact of online mis- and disinformation. Large-scale, cross-platform quantitative research is needed for further assessment of the issue. These studies will be crucial for academics and policymakers to achieve a better understanding of how Australians' beliefs, behaviours and relationships are shaped by what they come across online.

Our research has revealed the most prominent online narratives targeting several areas, including the Covid-19 pandemic, Australia's federal elections and the ongoing climate debate. These are political events, social and health issues and natural disasters that are part of everyone's life and are therefore popular subjects of discussions online. By extension, our daily monitoring of online spaces also found a large volume of inaccurate information, biased comments and out-of-context claims surrounding these topics in Australia. In response, this report features the thought process behind how our researchers identify and analyse harmful narratives: After locating a dubious claim, we seek to find patterns and interactions between similar claims that fall under a narrative. We discussed, for instance, how fears about the pandemic quickly shifted into a fault-finding exercise focusing on the origin of the virus and blaming the Chinese diaspora for the disease, simply because it was first reported in China. This particular case study finds that fears and anxiety, coupled with a shortage of credible information that can provide some answers and certainties – i.e. a data deficit – give rise to a plethora of conspiracy theories which then circulate across different social media platforms, message boards as well as semi-closed and closed messaging apps. Conspiracy theories are often weaponised or in some cases, started by state actors and media as part of their propaganda. This example shows how social media users who are not aware of the movement and evolution of a problematic narrative, which is often mixed with biases and hyperbole, can easily have their worldview skewed accordingly, without knowing it. This can lead to consequences detrimental to our collective good, such as outbreaks in societies with low vaccine coverage.

Further research into other emerging narratives would be beneficial. One example is that false information about gender-affirming procedures and transphobic narratives have increasingly been politicised and have in some cases, led to threats against individuals and medical professionals over gender-affirming procedures. This is especially dangerous when malicious, anti-trans narratives are amplified by influencers with millions of followers.

In this report we also examined the different means of interventions from authorities, academia and tech companies to eliminate damaging content, mitigate risks and educate the general public. Based on findings by surveys including those conducted by the University of Canberra for the Reuters Institute for the Study of Journalism, we identified some of the major issues that could be working against Australia's efforts to counter problematic content. One of these is a general lack of shared understanding of the term "misinformation" and the harm misinformation could cause. It is especially important to improve literacy on information disorder before elections, when political leaning can make it harder to distinguish what is false and misleading from that which is neither but is politically charged and should not be taken as unbiased, factual information.

This paper focuses on the unique challenge mis- and disinformation poses to Australia as a society, taking into considerations its pandemic measures, reactions to climate denialism, elections and geopolitical relations, and the impact of all of these on the Chinese diaspora to illustrate the impact online narratives can have on a community. While narratives, trends and social media habits may vary from country to country, we hope that insights drawn from this report will be helpful to industry and governments around the world to enhance their measures and training programmes addressing polluted information spaces.

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ABOUT THE CENTRE FOR MEDIA TRANSITION

The Centre for Media Transition (CMT) is an applied research unit based at the University of Technology Sydney (UTS).

Launched in 2017, the CMT is an interdisciplinary initiative of the Faculty of Arts and Social Sciences and the Faculty of Law. It sits at the intersection of media, journalism, technology, ethics, regulation and business. Working with industry, academia, government and others, the CMT aims to:

- Understand media transition and digital disruption, with a view to recommending legal reform and other measures that promote the public interest;

- Assist news media to adapt for a digital environment, including by identifying potentially sustainable business models;

- Develop suitable ethical and regulatory frameworks for a fast-changing digital ecosystem;

- Foster quality journalism, thereby enhancing democracy in Australia and the region;

- Develop a diverse media environment that embraces local/regional, international and transnational issues and debate;

- Combat misinformation and protect digital privacy; and

- Articulate contemporary formulations of the public interest informed by established and enduring principles such as accountability and the public's right to know.

The CMT's published works include reports on digital defamation, trust in news media, the state of regional news and news media innovation. Current projects include work on industry self-regulation, privacy, news verification, foreign reporting and press freedom.

The CMT has consulted for the Australian Competition and Consumer Commission and the Australian Communications and Media Authority. We are also the home of the Asia-Pacific bureau of First Draft News, which combats misinformation.

The Centre regularly hosts public events, conferences and forums. You can sign up to our regular newsletter at go.uts.edu.au/CMT-eNews-Signup. Details of events and the CMT's work can be found on our website at cmt.uts.edu.au