Centre for Media Transition

The Impact of Digital Platforms on
News and Journalistic Content

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Centre for Media Transition

The Centre for Media Transition is an interdisciplinary research centre established jointly by the Faculty of Law and the Faculty of Arts and Social Sciences at UTS.

We investigate key areas of media evolution and transition, including: journalism and industry best practice; new business models; and regulatory adaptation. We work with industry, public and private institutions to explore the ongoing movements and pressures wrought by disruption. Emphasising the impact and promise of new technologies, we aim to understand how digital transition can be harnessed to develop local media and to enhance the role of journalism in democratic, civil society.

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Foreword

This report was commissioned by the Australian Competition and Consumer Commission (ACCC) as an input to the Digital Platforms Inquiry.

The Centre was asked by the ACCC to research and report on aspects relating to news and journalistic content, one of several matters under the Terms of Reference for the inquiry issued by the Treasurer in December 2017.

Specifically the Centre was asked to describe and analyse the impacts of digital platforms on choice and quality for Australian news consumers. The brief for the project recognised that plurality, diversity, choice and quality in the contemporary media environment are highly complex and contested issues, and the inquiry would benefit from an analytical framework through which these issues could be considered.

The research addresses four broad themes of relevance to the inquiry, all of which relate specifically to news and journalistic content:

— The characteristics of this content and its public function in democratic society

— Choice, including production and distribution as well as diversity

— Consumption, including access and specific practices such as customisation

— Quality, including any changes in quality in the contemporary environment.

We were asked to review relevant academic literature and other available resources, and specifically to consider any approaches to measurement of aspects such as diversity and quality that might assist in assessing the current environment. We were not asked for recommendations on regulatory intervention.

The project is comprised entirely of desk-top research, accessing local and international materials. These include academic texts and journal articles, policy reports, industry data and other available material. The project methodology excluded interviews and any other empirical research, as the Commission had itself embarked on an extensive consultation program.

The arrangement of the material in the report reflects our progression from the general characteristics of news and journalistic content, through the international thinking on the impact of technology, approaches to quality, and finally plurality.

This work is our own and should not be taken as representing the views of the ACCC.

Derek Wilding and Peter Fray
Co-Directors, Centre for Media Transition, October 2018

Executive Summary

A report on the impact of digital platforms on choice and quality for Australian news consumers

Chapter One. A contested landscape

- Australians are consuming more news more often, preferring online access over offline.

- Digital platforms have changed the news. The consumption, distribution and production of news have altered fundamentally. The platforms provide a point of access to news – a function formerly performed by media companies.

- Journalism has multiple roles: it monitors and curbs power; it supports and creates public debate; and it educates and entertains.

- News is a public good — it serves a purpose beyond the immediate needs of advertisers and consumers — but it is difficult to monetise that 'good'. Hence, it has traditionally needed a cross subsidy in the form of advertising or, in some cases, government support.

- To attract audiences, news producers often have to make their content available to search engines and social media with little or no financial return. And to satisfy the workings of digital platforms, news producers create content that is more emotive and shareable.

Chapter Two. The impacts of technology

- Technology does not determine consumer behaviour; but it influences and shapes online behaviour by enabling and encouraging consumers to engage in certain ways, not in others.

- In many cases, algorithms determine which content news consumers get to see. The workings of these algorithms are not transparent.

- The evidence on filter bubbles and echo chambers, and on their impacts, is inconclusive.

- Collaborations could be encouraged between digital platforms and news media to develop and refine technology that serves both parties' interests, as well as the interests of consumers and citizens.

Chapter Three. Quality in news and journalistic content

- Driven by a shared professional identity and journalistic values, the news industry has maintained a range of accountability instruments including industry codes of ethics and journalistic norms and practices.

- The contemporary media environment has introduced new challenges to maintaining journalistic quality: the 24/7 news cycle; algorithms; the blogosphere. For news consumers, this represents a new information asymmetry.

- In response to escalating quality challenges, a number of online communities have assumed the roles of news media 'watchdog', 'fact-checker' and 'critic'.

- Indicators of journalistic quality can be grouped under three sets of criteria: content indicators; organisational indicators; and audience engagement indicators.

- The current regulatory framework for the news media is fragmented. There are ways in which digital platforms, as participants within the broader social framework for news media, could help maintain journalism's accountability schemes.

Chapter Four. Choice and diversity

- 'Choice' in competition law has a close parallel in media regulation where 'availability' is a measure of media diversity; as a framework for assessing the digital media environment, media diversity can account for the public functions of journalism.

- Media regulation in Australia takes a narrow approach to diversity, based on availability of traditional media, while omitting all online news, pay TV and public media.

- While Australian regulation only considers the supply aspect of availability, measurement systems used in the EU and the UK also take account of consumption and impact; this offers a richer picture of choice.

- Internationally there is no consensus on the most suitable term for regulation, but the more targeted concept of 'media plurality' used in the UK is likely to be more suitable for application in Australia than the expansive concept of 'media pluralism' used in the EU.

- Even these recent attempts at measuring plurality or pluralism have only limited success in accounting for the impact of algorithmic delivery of news and the use of recommenders; this is now the focus of international research on diversity and pluralism.

Conclusion

- There is conflicting evidence on the overall impact of digital platforms on news and journalistic content.

- It appears some negative effects – such as shorter, more emotive content – can be attributed to platforms; others – like pressures of the 24/7 news cycle – are largely an aspect of digitisation.

- Two aspects present specific future risks: sudden algorithmic changes which can severely disrupt conditions under which news is produced; and the potential devaluation of journalism through extractive summaries.

- Digital platforms can now be regarded as key participants within the broader framework for news media; they may not be publishers, but their role as distributors is increasingly hybrid in nature.

- As participants within this news media framework, digital platforms have a responsibility not to harm the public benefit provided by news and journalistic content; there may also be ways to promote it.

Contents

Introduction

This report arrives at a fractious time in journalism. There is a paradox: at the same time as audiences face a world awash with content and information, the profession best skilled and most dedicated to help them make sense of the deluge — a craft steeped in notions of truth-seeking and serving the public interest — finds itself under intense pressure and attack on several fronts. These challenges are numerous and growing: unprecedented loss of revenue; technological disruption on a grand scale; the hamster-wheel impulses of the 24/7 news cycle; questions about journalism's quality and authority. There is an uneasy sense that something once permanent and unassailable is now up for grabs. These issues are addressed in numerous guises in this report. But for now, we wish to collapse them down to one word: influence.

A host of social, political, economic and technological actors have combined to chip away at — and raise urgent debate about — the influence and role of journalism.

In understanding this, we need to recognise the opaque and changing elements in how journalism works, how news comes into being, how news organisations operate and see themselves and their audiences. But there is no hiding the outputs of those efforts and practices. By contrast, digital platforms are much younger. Their role and place are still becoming clear. There is a fluidity as to how they think about journalism — and how in turn, journalism and those who seek to protect it, should think about them.

As *The Economist* (2018, p. 51) recently noted, seeking to achieve a particular outcome for content, such as a balanced news feed, may well present a 'definitional quagmire'. But that is not to give the digital platforms a free pass. How their practices and protocols impinge on what journalism does in the present — and might wish to do in the future — is worthy of prolonged scrutiny.

In the following chapters we take on key elements of that challenging task. In Chapter One, we look at what journalism is, what it does and how, in a world where traditional models of revenue, content creation and reporter-audience relations are changing. In Chapter Two, we consider a key determinant in those changes: technology. In particular, we look at what impact the digital service platforms owned by the technology companies are having on production, distribution and consumption patterns — and the flow-on effect those factors are having on the content and diversity of news. We pay particular attention to the impact of social media, search and content aggregators and the dominance of Facebook, Twitter and Google as primary *distributors* of news content. This role, akin to being the news 'broker' between journalism and its multiple audiences, drives our thinking when we tackle the complex questions that surround diversity and plurality in Chapter Four. Before we do so, in Chapter Three, we look at the vexed and multi-dimensional question of quality in journalism – how is it best understood and, as with the rest of this report, which parts are changing and which, if any, are immovable.

This report is best described as a framework. In both the chapters on quality and plurality we offer some guidance as to how literal frameworks are used to consider the overarching concerns of the ACCC's Digital Platforms Inquiry.

There is little doubt that the platforms will have an ongoing and profound impact on the supply of news and journalistic content. Much of this will be unambiguous. There is, for instance, no denying that Facebook and Google glean the lion's share of digital advertising revenues. That is what they have been created to do and they have proved extremely effective at doing so. But much more ambiguous is the way in which the digital news agenda is being set by news companies, digital platforms and increasingly, the participatory public. This debate may, as we suggest above, still be in its infancy. Advertisers — and other funders of journalism — should be added to that loose troika. Advertisers were once locked into a model that rewarded scarcity and promised captive audiences. We now live in age of abundance — of attention and content seeking to monetise that attention. Some industry observers have characterised this as 'peak content': there is simply insufficient revenue around to support the amount of content being produced (Anderson 2016). It doesn't necessarily follow that we have reached peak journalism. There is a high degree of ambiguity abroad in society and journalism is no exception. But we argue that journalism remains a special case. We hope our efforts may help clear away some of the ambiguity surrounding its multiple roles and relationships and point to where deeper dialogue and consideration of new ideas may create equitable and sustainable outcomes.

We started this introduction noting some of the immediate challenges and threats faced by the news media industry. As a potential offset, there is considerable, well-placed and positive sentiment towards the industry, in particular its role in providing public interest journalism. This inquiry is evidence of that: six years on from the Finkelstein Inquiry, prompted by the illegal activities of some journalists in another country, we now have another inquiry which seeks to examine the potential threats to journalism.

Much of the current debate has tapped into a hard vein of thought within the industry that what ails journalism is not journalism but those who feed off it. There may be a large dollop of truth and even bigger scoop of sentiment in such thinking. But is it where journalism needs to be to survive this fractious time? As this report shows, journalism and digital platforms are inextricably linked in the provision of news and content. The ties that bind them are now deeply set in the behaviours of their shared audiences.

1 A contested landscape

- *Australians are consuming more news more often, preferring online access over offline.*

- *Digital platforms have changed the news. Consumption, distribution and production have altered fundamentally. For news producers, the pre-digital business model has crumbled.*

- *Journalism has multiple roles: it monitors and curbs power; it supports and creates public debate; and it educates and entertains.*

- *News is a public good — it serves a purpose beyond the immediate needs of advertisers and consumers — but it is difficult to monetise that 'good'. Hence, it has traditionally needed a cross subsidy in the form of advertising or, in some cases, government support.*

- *To attract audiences, news producers make their content available to search engines and social media with little or no financial return. And to satisfy the workings of digital platforms, news producers create content that is more emotive and shareable.*

In 1920, reporter and commentator Walter Lippmann argued for a public recognition of the dignity of a career in journalism, arguing that 'the health of society depends upon the quality of the information it receives' (1920, p. 48). For Lippmann, the provision of news did more than just inform people, it served to better humanity: 'The chief purpose of the "news" is to enable mankind to live successfully toward the future' (p. 52). These grand sentiments have proved highly influential.

In response, however, detractors have argued that *in practice* journalism has regularly failed to meet such high hopes and ideals. Radio presenters accept cash for comment; reporters trample on the right to privacy; bias is rampant. Recently, these arguments have grown louder. Over the past 50 years, public trust in journalism and news media has collapsed. While the theoretical value of journalism and news media remains widely acknowledged, its practice is increasingly challenged.

In the digital platform era, journalism and news media have come under intense scrutiny. With the advent of digital platforms – including Google in 1998, Facebook in 2004 and Twitter in 2006 – questions about the role and value of the news loom large. What's more, digital platforms have *changed* the news. The consumption, distribution and production of news have altered fundamentally: where once news producers also tended to be its distributors, now consumers and digital platforms have also taken on the role of distributors. In this way and many others, the relationship between news and its audience has become more complicated and layered, with far-reaching impacts for consumers and producers of news, and also for digital platforms.

In this chapter, we address the nature and characteristics of news and journalistic content in a contemporary media environment. Specifically, we investigate: the social and community impacts attributable to the production, distribution and consumption of news and journalistic content, which include supporting an informed citizenry and effective democracy; the 'public good' characteristics of media content and services; and the extent to which digital platforms have amplified or diminished the benefits of news media, and altered the underlying economic characteristics of news content. In other words, we will explore the role and value of journalism and news media in the context of digital platforms.

As the research shows, the impacts of digital platforms on news are profound and unprecedented, presenting momentous opportunities and challenges.

The certainty of uncertainty

For today's producers, distributors and consumers of news, uncertainty is a given, disruption is the norm and change is a constant. The result is a confusion of effects: on the one hand, benefits and opportunities; on the other, harms and challenges.

The benefits of recent changes are many. Digital platforms give news producers access to substantial audiences, while search engines and social media engage global audiences at unprecedented speed. This explains the success of internet news outlets such as Upworthy, Buzzfeed and Vox, which mastered the art of creating viral content (Foer 2017, p. 139).[1] As a result, news consumers have access to an unprecedented array of content. Indeed, consumers can now *become* producers, as seen by the emergence of terms such as 'prosumer' and 'produser' (Aitamurto 2011, Bruns 2007). On digital platforms, the voiceless can express themselves and audiences can become empowered as citizens and creators.

The harms are significant too, however. For news producers, the pre-digital business model has crumbled. Between 2011 and 2015, Australian newspaper and magazine publishers lost $1.5 billion and $349 million respectively in print advertising revenue, while gaining only $54 million and $44 million in digital (as noted by this inquiry's Issues Paper). By 2016, three quarters of the total Australian online advertising spend went to Google and Facebook. And since the US presidential election of 2016, the issue of fake news – and the ongoing dismissal by some public figures of unsympathetic coverage as 'fake news' – continues to challenge the credibility of journalism and news media (Marwick 2018; see below).

The hybrid role of platforms

One of the biggest and most complex changes involves the ways in which the *relationship* between journalists and audience is shifting.

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[1] However, Upworthy is hardly an unqualified success story: in August 2018, it laid off 31 staff (Baldridge 2018). See also 'Engagement as practice', below.

Admittedly, the transaction between journalists and the public has never been entirely straightforward. Most commonly, the practice of journalism was funded by the sale of advertising, in a happy accident that regularly saw profit and the public interest coincide for news producers. In economic terms: traditional news media operated in a two-sided market with its audience and advertisers, where democratic exchange was a significant positive externality. In the era of digital platforms, however, that two-sided market has become a multi-sided market (see below, 'The economics of journalism'). Digital platforms have entered the frame, to tremendous effect.

In this way, the relationship between journalists and audience has become more crowded. This in itself is significant, because the relationship between news media and its public is crucial. As journalism scholar James Carey wrote in 1987, 'the public' is the 'god term of journalism':

> Insofar as journalism is grounded, it is grounded in the public. Insofar as journalism has a client, the client is the public. The press justifies itself in the name of the public: it exists – or so it is regularly said – to inform the public, to serve as the extended eyes and ears of the public, to protect the public's right to know, to serve the public (Carey 1987, p. 5).

As noted above, one key aspect of the change in the journalist/audience relationship is in the way digital platforms have helped consuming audiences to become creating audiences (Meikle & Young 2012, p. 108). As Axel Bruns writes: 'The very idea of content production may need to be challenged: the description of a new hybrid form of simultaneous production and usage, or produsage, may provide a more workable model' (Bruns 2007, p. 99). The new model has been described as 'we media' (Willis & Bowman 2003). Here, traditional journalism has been superseded by 'participatory journalism' (Lasica 2003; Singer et al. 2011, p. 2). Participatory journalism comprises citizen journalism, naturally, but also comments sections, discussion forums and the expanding universe of blogs, Twitter, 4chan and Reddit. In 2018, particularly thanks to social media, consumers are no longer passive; instead, they filter and discuss the content of the news, and help to create it.[2]

As a result, the only way to understand the news media today is to take account of this dynamic, interactive environment. Bruns argues that our efforts to understand the:

> multifaceted and dynamic news environment within which we now operate will continue to be restricted if we continue to apply categorical distinctions between industrial news production and individual news consumption, between professional and citizen journalism, between private and public engagement (Bruns 2018, p. 370).

Thanks to digital platforms, the relationship between news producers and news consumers has become more fluid, and more interactive.

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[2] There is a caveat: not all consumers take advantage of the interactive possibilities of digital platforms. As we detail below, news consumption for some people is predominantly passive. They let the news come to them, often in the form of 'incidental news exposure' on social media. See 'Today's news consumer'.

In other ways, the relationship between journalists and audience has become less crowded. Sometimes journalists have been taken out of the picture altogether. This happens, for instance, when those involved in the news bypass the news media and go straight to their audience. On July 12, 2018, the Thai Navy posted a five-minute video to Facebook called 'The operation the world never forgets'. It showed divers cleaning masks and checking gear, preparing to rescue 12 boys and their soccer coach, who had become trapped in the Tham Luang caves in northern Thailand. Instead of issuing press releases and offering spokespersons for interviews with television, radio and newspaper outlets, the Thai Navy published its footage straight to Facebook. Within a week, the video had been viewed 2.5 million times, had attracted 150,000 likes (and 35,000 other reactions) and been shared 44,000 times. Traditional news outlets including *Channel Nine News* and *The Sydney Morning Herald* (among many others) then drew on the Thai Navy's post in their own coverage (Prytz 2018).

In many ways, digital platforms have become an access point, fulfilling a function formerly performed by media companies. Indeed, one emerging impact of digital platforms is that the role of news producer is often separated out from the role of news distributor. In many cases, news producers make the news while digital platforms distribute it, as we detail below. This enables digital platforms such as Facebook and Google to sell advertising generated on the back of diverse content, including news content produced off site.

For Robin Foster, there are four ways in which intermediaries work as gatekeepers, including control of distribution bottlenecks, but also what he describes as their 'editorial-like judgements' about news content (2014, p. 29). Yet this control is hardly unchecked. Traditional media also retain powerful gatekeeping and agenda-setting roles. With the continuing power of 'gatekeeping trust', news organisations retain significant power over news selection and agenda setting, which creates:

> … a *shared* dominance of digital agendas by a relatively small number of institutional megaphones, be they platform monopolies, aggregators, or major conventional news organizations (Schlosberg 2018, pp. 209, 213-14).

Digital platforms do not typically produce news content. They do, however, play a key role in news distribution. They also shape the news agenda. As such, they are less than content producers, but more than mere intermediaries. They perform a hybrid role that involves, to some degree, both distribution and deciding what is and isn't acceptable content. This is particularly evident with social media. As Tarleton Gillespie writes:

> As soon as Facebook changed from delivering a reverse chronological list of materials that users posted on their walls to curating an algorithmically selected subset of those posts in order to generate a News Feed, it moved from delivering information to producing a media commodity out of it. If that is a profitable move for Facebook, terrific, but its administrators must weigh that against the idea that the shift makes them more accountable, more liable, for the content they assemble — even though it is entirely composed out of the

content of others (Gillespie 2018b, p. 33; we return to this argument in Chapter Four).

The digital news agenda is now controlled both by news companies and the digital platforms that play a significant role in news distribution. And, increasingly, the participatory public helps set the agenda too. In this multi-sided market, news media transact with audiences, advertisers and digital platforms. Disentangling this four-sided relationship, let alone its impacts, is challenging.

To proceed, it helps to define and discuss some key terms: 'media', 'digital platforms', 'news' and 'journalism'.

Definitions and functions

Definitions

Digital platforms

In this report, we are concerned with the impacts of 'digital platforms' and 'platform services': digital search engines, social media platforms and content aggregators, as well as hybrids thereof. We are specifically concerned with the impact of digital platforms on news media and its consumers.

'Media' stems from the Latin, 'medium', or middle (Chun, Fisher & Keenan 2006, p. 2). Traditionally, the news media's role has been as mediator: to stand in the middle of newsmakers and the public, informing citizens by communicating items of news. Digital platforms have changed the way news is consumed, distributed and produced. The news is still mediated, but in many cases the nature of the mediation between consumers and the news has changed. One attempt to capture this new relationship is by describing digital platforms as 'intermediaries', including in the economic sense: as intermediaries in multi-sided markets, connecting two sets of users, such as advertisers and web users. Here, the commercial attractiveness of the offering to advertisers depends on the large number of potential customers (Dolata 2017, p. 6).

Further, it is worth noting that the term 'platform' is also used by economists to refer to a product or service that brings together two or more groups. On this basis, Google and Facebook are platforms, but so too are traditional media organisations which bring together readers and advertisers.[3] Both digital platforms and news media can be categorised as intermediaries, and they interact in ways that intersect and overlap (Evans & Wurster 2000, pp. 70-72). Thanks to digital platforms, the reach and richness of the news have been transformed, as we will see.

For the purposes of this report, we define 'digital platforms' as:

- Digital search engines, social media, content aggregators and hybrids thereof. In this definition, we thus include: Google search, Google News and YouTube;

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[3] See Bjorkroth & Gronlund 2015, p. 305. These arguments are addressed in more detail below, in 'The economics of journalism'.

Facebook's News Feed and Facebook platforms Instagram and WhatsApp; and Twitter, Apple News, Snapchat and LinkedIn. Among others, we also include Reddit, where content is shared, aggregated and rated, and Amazon's Alexa voice assistant, which provides briefings in response to questions such as, 'Hey Alexa, what's the news?' As discussed in this chapter and Chapter Four, however, we do not include platforms such as news.com.au or abc.net.au in this definition, even though they are sometimes referred to as digital platforms, including by economists.

News and journalism

Few, if any, public activities attract as much definition and redefinition as journalism and news. Notions of journalism's roles – its purposes, standing, impacts and future(s) – remain contested among its practitioners, its scholars and, increasingly, its publics. To understand the impact of platform service providers on the level of choice and quality of 'news and journalistic content' – the focus of the current inquiry – for consumers, we must agree on what constitutes news and journalism.

Tellingly, the law struggles to define news and journalism. This is evident in the many ways various legal protections and privileges afforded to journalists are enacted. They reveal considerable uncertainty over what should be protected and how to define terms, including what is news. It may be the act of newsgathering that is protected or the act of publication; protected content may be limited to news or it may extend to comment and opinion; the protection may be limited to professional journalists and news organisations, or it may extend to bloggers; in some cases, commitment to media standards is required, in others it is not.

For instance, there are differing ways various shield laws define who is a journalist. Under the Commonwealth Act, 'journalist' means 'a person who is engaged and active in the publication of news and who may be given information by an informant in the expectation that the information may be published in a news medium'. But in NSW 'journalist' means 'a person engaged in the profession or occupation of journalism in connection with the publication of information in a news medium'. And in Victoria 'journalist' means 'a person engaged in the profession or occupation of journalism in connection with the publication of information, comment, opinion or analysis in a news medium'.[4] Similar definitional distinctions exist in many other areas of the law. While there are multiple similarities, there are also significant differences, and there is certainly no unified elaboration of key concepts.

If the law is unclear about the precise scope of news and journalism, the same is true outside the law. One of the earliest semantic references was in 1551, when 'newes' was described as 'novelties' (cited in Lamble 2011, p. 34). This captures the self-evident essence of the term: news is 'that which is new'. Beyond this, definitions diverge widely, leading Stephen Lamble (2011) to suggest that news, like beauty, is in the eye of the beholder.

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[4] The relevant definition provisions for the shield laws are: s 126J, *Evidence Act 1995* (Cth); s 126J, *Evidence Act 1995* (NSW); and s 126J, *Evidence Act 2008* (Vic).

Nonetheless, there have been many famous attempts at definition. These include the description of news and journalism as 'the first rough draft of history', a phrase dating from the 1940s and commonly attributed to *The Washington Post* publisher Philip Graham (Schafer 2010). The import of this phrase carries through to the notion of particular newspapers as 'journals of record' (Hill 2016, p. 11). It is significant that that phrase, with all its gravitas, has fallen out of use, including for *The Sydney Morning Herald* (Prisk 2011). By contrast, another definition of news – perhaps more aligned with a digital age – is, 'Anything that will make people talk', from *New York Sun* editor Charles Dana (cited in Lamble 2011, p. 34).

One commonly drawn distinction is between 'hard news' and 'soft news'. The former is driven by the imperatives of objectivity, accuracy and timeliness, and concerns the reporting of *newsworthy* matters. For some, only 'hard news' can legitimately claim to earn its place in such company. This is typified by the quote, 'News is what somebody somewhere wants to suppress; all the rest is advertising', which is attributed to early 20th century British press baron Lord Northcliffe, among others (Meikle 2009, p. 17). It also finds voice in the newsroom motto, 'If it bleeds, it leads', a hardy trope attributed to journalist Eric Pooley (1989, p. 36). The hard news ethic underpins the practice of investigative journalism. However, news can also be defined more broadly, also to encompass 'soft' news, such as feature articles, entertainment journalism and human interest stories.

Apart from 'hard news' and 'soft news', a further significant distinction exists between news and opinion. Traditionally, journalists have considered it good practice to keep the two distinct. That distinction remains, reflected in the way that news and opinion are subject to different standards within regulatory regimes. Both in print and online, however, and particularly on social media, there is increasingly a blurring of boundaries between the two: 'In social spaces, the traditional journalistic value of objectivity no longer makes sense: virtually every story is augmented with someone's opinion' (Marwick 2018, p. 504). The internet, and digital platforms, have enabled a proliferation of opinion, and a blurring of opinion and news. We do not seek here to disentangle the two, as both news and opinion are within the scope of this report. Similarly, there has traditionally been a clear distinction drawn between editorial and advertising. Increasingly, this distinction is also being blurred. We return to this point below.

Given various contrasting conceptions, the definition of 'news and journalistic content' is open to debate. The current inquiry followed the 2017 Senate Select Committee on the Future of Public Interest Journalism. Defining the 'public interest' is difficult. For instance, does soft news fall within the public interest? What about opinion? For the purposes of this report, we do not limit journalism to 'public interest journalism'. We define 'news' and 'journalism' neither extremely narrowly (as, say, investigative journalism only) nor extremely widely (so as to include personal status updates from friends).

For the purposes of this report, **we define 'news' as:**

- A diverse range of informative content about matters of import. It can often be defined by characteristics including timeliness, exclusivity, conflict, proximity,

prominence, relevance and scale (Schultz 2017, p. 168; Harcup & O'Neill 2017, p. 1482). Within this definition, we include political reports, sports results and celebrity updates; we do not, however, include social media posts by friends and family about personal matters. This definition is deliberately elastic. As we discuss below ('Is news found or made?'), news is a shifting category that is, now more than ever, continually being recreated by news producers, distributors and consumers.

And **we define 'journalism'** as:

- The practice of producing news by gathering information and using storytelling techniques. This includes, but is not limited to, fulfilling the watchdog role and the practice of 'public interest journalism' (see below). In this definition, we also include current affairs, comment and analysis that appear in news media. We accept that not all such content is produced by journalists, but note that this Inquiry explicitly seeks to encompass 'journalistic content'.

Hence **we define 'news and journalistic content'** as:

- A diverse range of informative content about matters of import that can be defined by characteristics such as timeliness. This definition extends beyond the watchdog role and 'public interest journalism' and also encompasses current affairs, comment and analysis. Deliberately elastic, it extends beyond content produced by journalists. However, this definition does not extend to social media posts about personal matters.

One implication that follows from the identification of this category of news and journalistic content is that the product is not always aligned with the producer. For instance, at times the practices and values of individual editors and journalists will differ from those of the organisations that may employ them. While on occasion we refer to 'news media' in the collective sense of news-producing and/or news-distributing organisations – either traditional or born digital – we generally use the more specific terms 'news producer' to describe, say, Fairfax Media and 'news distributor' to describe the platforms and others that supply news to consumers. We deal with this subject of distribution in some detail below. Further, we end this section with an outline of how some issues are applicable specifically to journalists as practitioners.

In the sections that follow, we expand on these definitions and distinctions, and further address both the function and value of news and journalistic content.

Public benefits of journalism

Journalism, by origin, is the production of 'factual accounts, and explanations of current or recent events'; it can be traced back many centuries, to a time before it became an industry and profession. Originally, journalism existed in the form of 'pamphlets and broadsides (large sheets printed on only one side)', 'content of private letters, public announcements and also word of mouth reports' (McQail 2013, pp. 2-3; Marshall 2011, p. 4). Those who produced this content would not have identified as journalists. Rather,

they would have aimed to: 'make money, argue politics, provide a community service, and promote their faith' (Marshall 2011, p. 4).

Change arrived with the liberalism of John Stuart Mill. Previously, European monarchs had 'restrictions on the number of printing presses that could function', which were also 'subject to pre-publication censors'. The emerging 'capitalist class' resisted these strictures, which had enabled those in power to protect their seats at the table, and champions began to emerge for the freedom of press. In the 19th century, John Stuart Mill crystalised matters by proposing an argument that focused on the notion of the press as a 'watchdog of the state'. This was a liberal understanding, involving 'the provision of information; and the facilitation of the public sphere'. It marked a significant departure from the spiritual and moral arguments that had previously been used to support the idea of the freedom of press (Errington & Miragliotta 2007, pp. 1-8).

The 'watchdog of the state' role exercised by journalists has affected social structures and cultural mores. It has toppled governments and exposed injustice. It has, as is commonly acknowledged, advanced democracy.

The modern archetype of the watchdog role is Watergate, and the investigative journalism of Bob Woodward and Carl Bernstein of *The Washington Post*. On June 12 1972, police were called to investigate a break-in at the Democratic National Committee's headquarters at the Watergate Hotel, Washington D.C. Using traditional journalistic methods, the young journalists unearthed a story that forced the resignation of US President Richard Nixon. Watergate had several effects. On the one hand, the episode demoralised the American public, promoting distrust and placing the public in a state 'ready to believe the worst of their leaders'. However, Watergate also shifted the relationship between the government and the press, magnifying scrutiny of those in power, and revealing the significance of such scrutiny (Fisher 2012).

In Australia, a recent example of this function of journalism is the exposure of evidence of sexual abuse in the Catholic Church by journalist Joanne McCarthy at *The Newcastle Herald*, which sparked the Royal Commission into Institutional Responses to Child Sexual Abuse. For McCarthy, the story involved years of work and hundreds of stories: between 2006 and 2013, McCarthy wrote more than 350 articles on the sexual abuse of children by Catholic clergy in Newcastle and the Hunter Valley (Walkley 2016). In recognition, then Prime Minister Julia Gillard wrote: 'Thanks in very large measure to your persistence and courage, the NSW special commission of inquiry and the Federal Royal Commission will bring truth and healing to victims of horrendous abuse and betrayal.'

Another role played by investigative journalists comprises the way they can pursue and publish the claims of whistleblowers. The Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry was sparked after a former employee of the Commonwealth Bank, Jeff Morrison, spoke out about the misconduct of his former colleagues. Morrison had taken his claims to politicians, but only after journalist Adele Ferguson from Fairfax Media investigated the claims and published stories was a Royal Commission appointed to investigate Australia's 'big four' banks (Ellis 2018). Investigative journalists can also come to the aid of the wrongfully

accused: in 2007, *The Australian*'s Hedley Thomas won the Gold Walkley Award for revealing how Australian police had bungled in their arrest and detention of Indian doctor Mohamed Haneef for terrorism-related offences. In their work, investigative journalists face many obstacles. Former ABC reporter Chris Masters has detailed receiving death threats, and also the 'death by a thousand courts' (Molitorisz 2008) by which his stories were stymied, via defamation suits and other actions. Similarly, Joanne McCarthy faced legal action from the Catholic Church, which has $30 billion of assets just in Australia (Bourke 2018).

In some ways, digitisation (if not specifically digital platforms) has presented investigative journalists with unprecedented opportunities. Most importantly, it has enabled data-sharing and collaboration on a global scale. Leading to the 2016 release of the 'Panama Papers', more than 350 reporters speaking 25 languages collaborated in a secure virtual newsroom for more than a year. To expose corruption, the International Consortium of Investigative Journalists built a platform that included an encrypted communication system and a specially designed search engine (ICIJ 2017).

Investigative journalism and the watchdog role are key components of what has come to be known as the 'fourth estate' function of journalism. In 1790, British parliamentarian Edmund Burke said: 'There are three estates in Parliament but in the reporter's gallery yonder sits a fourth estate more powerful than they all.' In this quote, Burke posits the journalist as independent and influential. He evokes journalists' role as a watchdog on power, belonging to a fourth estate apart from clergy, aristocracy and commoners (or, as often conceived, separate from the parliament, the judiciary and the executive). Such thinking underpins contemporary journalistic practice.

The watchdog role, variously described, appears in most contemporary definitions of what constitutes journalism. Typically, however, the watchdog role is included as merely one form of good journalism. The philanthropically supported Civic Impact of Journalism project at Melbourne University, which in 2017 made a submission to the Senate Inquiry into Public Interest Journalism, cited six key features of good journalistic practice (CIJP 2017):

- to keep the public up to date with what is going on in the world;
- to provide the public with reliable information on which they may base choices as participants in political, economic and social life;
- to provide a forum for the exchange of ideas and opinions;
- to be a watchdog on those in power;
- to help societies understand themselves;
- to provide the material upon which members of a society can base a common conversation.

After reviewing the academic literature, McNair (2005, p. 28) identifies three core functions of news media:

- A supplier of the information required for individuals and groups to monitor their social environments; what Denis McQuail (1987) has characterised as a medium of *surveillance.*

- A resource for, support to and often participant in public life and political debate – in liberal-democratic societies particularly, the discursive foundation of what sociologist Jurgen Habermas (1989) famously called the *public sphere.*

- A medium of education, enlightenment and entertainment – what might be grouped together as its *recreational* or *cultural* functions.

Within these three core functions, there is a range of categories of journalism that attempt to satisfy the information needs of different audiences: 'prestige' (or quality) journalism, tabloid journalism, local journalism, specialist journalism, 'new' (personal and committed) journalism, development journalism, investigative journalism, journalism of record, advocacy journalism, alternative journalism and gossip journalism (McQuail 2000, p. 340). We might now usefully add to this list representational journalism. This refers to interactive features of news media that enable citizens to express their opinions in their own words and is allied to the concepts of civic and public journalism, both of which turn journalism away from simply exposing problems towards assisting citizens and communities to solve them.

Jay Rosen, one the key proponents of 'public journalism', argues that this style of journalism seeks to 'address people as citizens, potential participants in public affairs, rather than victims or spectators'.

A further approach is to consider the *values* of journalism. Objectivity is among the most important. The norm of objectivity can be traced back to the 18th and 19th centuries, and springs from the efforts of journalists to assert their independence from highly partisan press barons and employers and instead conceive their role in society as servants of the public. The goals of balance and fairness were adopted to articulate their 'professional allegiance to the separation of facts and values' (Schudson 2001, p. 159). Adherence to the notion of objectivity as a key marker of what makes journalists different to non-journalists remains an important part of the profession's view of itself.

But it isn't all. In Deuze's summary of key concepts, values and elements that define journalism's ideology, objectivity is only one of five elements (2005, p. 447):

- Public service: journalists provide a public service (as watchdogs or 'newshounds', active collectors and disseminators of information);

- Objectivity: journalists are impartial, neutral, objective, fair and (thus) credible;

- Autonomy: journalists must be autonomous, free and independent in their work;

- Immediacy: journalists have a sense of immediacy, actuality and speed (inherent in the concept of 'news');

- Ethics: journalists have a sense of ethics, validity and legitimacy.

Is news found or made?

What exactly qualifies as news? And is news made, or found?

In their landmark study, Galtung and Ruge (1965) examined coverage of foreign events in Norwegian newspapers with the aim of answering the question, 'How do events

become news?' Their analysis provided a list of 12 news characteristics: **frequency** (daily events fared well, while long term social trends did not); **threshold** (high impact events were favoured); **unambiguity** (ability to clearly interpret events); **meaningfulness** (content needs to be contextualised within the familiar frames for local audiences); **consonance** (refers to the possibility of an impending event); **unexpectedness** (refers to the element of surprise or level of novelty); **continuity** (continuing coverage of an event or issue); **composition** (has a strong resonance with the newspaper's ideological agenda and target audience); **reference to elite nations** (whose actions are considered relatively consequential); **reference to elite people** (whose actions are considered relatively consequential); **reference to persons** (presenting events as the actions of named people rather than a result of social forces); and **reference to something negative** (element of conflict or drama, even surprise or shock).

Drawing on this work, Harcup and O'Neill put these news values to the test empirically in two influential studies of the British press. In 2017, taking into account the role of search engines and social media, they drafted a revised and updated list of factors that determine 'newsworthiness':

- Exclusivity: Stories generated by, or available first to, the news organisation as a result of interviews, letters, investigations, surveys, polls and so on;

- Bad news: Stories with particularly negative overtones such as death, injury, defeat and loss (of a job, for example);

- Conflict: Stories concerning conflict such as controversies, arguments, splits, strikes, fights, insurrections and warfare;

- Surprise: Stories that have an element of surprise, contrast and/or the unusual about them;

- Audio-visuals: Stories that have arresting photographs, video, audio and/or which can be illustrated with infographics;

- Shareability: Stories that are thought likely to generate sharing and comments via Facebook, Twitter and other forms of social media;

- Entertainment: Soft stories concerning sex, show business, sport, lighter human interest, animals, or offering opportunities for humorous treatment, witty headlines or lists;

- Drama: Stories concerning an unfolding drama such as escapes, accidents, searches, sieges, rescues, battles or court cases;

- Follow-up: Stories about subjects already in the news;

- The power elite: Stories concerning powerful individuals, organisations, institutions or corporations;

- Relevance: Stories about groups or nations perceived to be influential with, or culturally or historically familiar to, the audience;

- Magnitude: Stories perceived as sufficiently significant in the large numbers of people involved or in potential impact, or involving a degree of extreme behaviour or extreme occurrence;

- Celebrity: Stories concerning people who are already famous;

- Good news: Stories with particularly positive overtones such as recoveries, breakthroughs, cures, wins and celebrations; and

- News organisation's agenda: Stories that set or fit the news organisation's own agenda, whether ideological commercial or as part of a specific campaign (Harcup & O'Neill 2017, p. 1482).

In this list, we can begin to see the contours of some of the impacts of digital platforms on news. Most obviously, as editors become concerned with shareability, their definition of what constitutes news may shift. Indeed, in various factors (surprise, entertainment, celebrity) we can see potential pressures on what qualifies as news. In the digital platform landscape, definitions of news are becoming extremely broad, it seems, with extensive scope for the 'softest' of content.

In this observation lies an acknowledgement that the selection of news is not a purely routine or neutral process. News coverage is strongly influenced by logistics such as resource availability and time constraints as well as subjective factors such as: the combination of social, educational, ideological and cultural values of journalists; the organisational cultures of the news organisations for which they work and their position in the organisational hierarchy; and the target audience for whom the content is being produced (Harcup & O'Neill 2017).

All of these objective and subjective factors influence the selection of information that is considered newsworthy, as well as the manner in which these events and issues are reconstructed – or imagined – for consumption by news audiences. As Peter Vasterman wrote in 1995:

> [N]ews is not out there, journalists do not report news, they produce news. They construct it, they construct facts, they construct statements and they construct a context in which these facts make sense. They reconstruct 'a' reality (quoted in Harcup & O'Neill 2001, p. 265).

In the era of fake news, it is necessary to question the notion of constructing *facts*. Incontrovertibly, facts exist. On August 24, 2018, Scott Morrison became the Prime Minister of Australia. However, Vasterman's point is significant: the particular way in which that fact is reported involves the presentation of specific, subjective perspectives on reality. There exists objective, verifiable truth, but reporters interpret that truth. In this way, we suggest, news is both found and made. And today, it is found and made not just by journalists and news media, but also by interactive consumers and digital platforms.

Impact of digitisation

Given the far-reaching import of news and its contested definition, it is unsurprising that scholarly debate about journalism and news attracts its own interpretative communities. In this report, we pay particular attention to those who see the news media through the prism of technology. The impacts of technology, including algorithms, will be addressed in detail in the next chapter. Here, however, we can ask a preliminary and overarching question. And that is, if we accept that digitisation and digital platforms have changed

the revenue models for news producers, have they also changed the nature of news itself?

Several answers have been given. One, heard as early as the first blush of the digital revolution, sought to push journalists and journalism to the side, reflecting the view that they had to change or wither away. In his 2008 book, *Here Comes Everybody: The Power of Organising without Organisations*, Clay Shirky wrote that scholars and practitioners alike are now seeing answers to the question, 'What happens when the cost of reproduction and distribution go away?' (2008, p. 60). He argues that 'news' has decisively moved away from the notion of newsworthiness and 'events covered by the press', to stories that are produced and sustained by the actions of online users. In other words, the editorial practice of filtering information has been severely undermined and perhaps even made irrelevant (Shirky 2008, p. 640).

Within the news industry, there remains a deep-set fear that the price of survival in a landscape dominated by non-journalistic platforms, citizen-journalists and journalists seeking the approval of citizens is a lowering of standards and a de-professionalisation of the industry. Reporter and author Nick Davies is often credited with inventing the pejorative term, 'churnalism', denoting content that is produced quickly and without care, often recycled from other news content, or lifted straight from press releases. A decade ago, Davies argued that 'if truth is the object and checking is the function then the primary working asset of all journalists, always and everywhere, is time. Take away time and you take away truth' (Davies 2008, p. 63). Davies cited research by Cardiff University to show that 80 per cent of the stories in the so called quality press were not original, and only 12 per cent were based on original material generated by journalists.

Since 2008, there has been a renewed push to re-constitute journalism practice and toward convincing consumers to acknowledge that if journalism is a service, it might well be worth paying for via online subscriptions. In the face of the digital onslaught, revenues in TV and radio have stood up relatively better than print/online. Standard Media Index figures for 2017 revealed that advertising spend across newspapers was down 22.3 per cent and 20.8 per cent for magazines, while television avoided the landslide, slipping only 0.7 per cent across the calendar year (Redrup 2018).

TV remains a leading way Australians receive news and current affairs. That TV news was sandwiched between reality stars, soap operas and quiz shows seemingly never negated its value in the past. Is it a problem that on social media the news is sandwiched between cats, Kardashians and status updates from friends? This brings us to the question: what interests consumers, and how do they access news about it?

Production, consumption and citizenship

Today's news consumer

In many ways, patterns of news consumption in Australia are unrecognisable from a generation ago. In other ways, little has changed.

A first point is that Australians are consuming **more news more often** (Park et al. 2018, p. 8). Since 2016, the number of heavy news users – people accessing news more than once a day – has risen 15 per cent. More than 80 per cent of Australians access news at least once a day, and 56 per cent of Australians access news multiple times per day (Park et al. 2018, p. 51). Young Australians (aged 18 to 24) remain the lightest consumers of news, but even among the young there was a 19 per cent rise in the number of heavy users (Park et al. 2018, p. 51).

The biggest change in consumption is **the switch to online**. More Australians now consume news online than offline. In 2018, 82 per cent of Australians accessed online news, compared with 79 per cent who accessed traditional offline sources (Park et al. 2018, p. 10). This is reflected internationally. Digital media have now surpassed television as the most widely used source of news in many countries (Majo-Vazquez 2018). The switch to online is partly explained by the rise of the mobile. In 2018, 59 per cent of Australian news consumers used smartphones for news. Further, more than a third of Australians access news *mainly* on mobile phones, a group that is growing rapidly (Park et al. 2018, p. 10).

However, traditional media is not dead. In particular, **television** remains a highly significant component of the news media diet for most Australians. In fact, TV remains the main source of news for more Australians than any other source: in 2018, TV was the main source of news for 36 per cent of Australians, followed by online news (29 per cent) and social media (17 per cent, but gaining) (Park et al. 2018, p. 51). Meanwhile, more than a third of Australians still access radio news on a weekly basis, and for 7 per cent of Australians radio remains their main source of news. Counter-intuitively, the number of users of television and radio has been growing. In 2018, 82 per cent accessed TV news on a weekly basis, compared with 79 per cent a year earlier.

Meanwhile, printed **newspapers** are fading from view. Globally, a series of mastheads have shut down or shed staff (Fenton 2011; Tani & Cartwright 2018). Only 6 per cent of Australians cited printed newspapers as their main source of news in 2018, down from 8 per cent a year earlier (Park et al. 2018, p. 51). Even for digital editions, the future may be cloudy, with younger generations abandoning newspapers, both in hard copy and on the internet (Wadbring 2015).

Arguably the headline news about Australians' news consumption is **the rise of social media**. In 2018, more than half of Australians accessed the news via social media on a weekly basis, a 6 per cent rise on 2017, with one in six describing social media as their main news source (Park et al. 2018, p. 51). The young are particularly social, with 71 per cent of 18- to 24-year-olds using social to access news, and 36 per cent citing social media as their main source of news (Park et al. 2018, p. 51). That said, all demographics are embracing social, including those over 55. However, a gender divide is emerging: 22 per cent of women use social media as their main source of news, compared with 12 per cent of men (Park et al. 2018, p. 52).

Social media plays a markedly different role around the world. In 2018, 76 per cent of consumers in Chile accessed social media for news, compared with only 29 per cent in Germany and Japan. However, there is a constant: between 2013 and 2017, the use of

social media for news roughly doubled in all six countries surveyed by the Digital News Report (the US, UK, Germany, France, Japan and Spain) (Newman et al. & Fletcher 2018, p. 134). And social media tends to mean Facebook. Across 36 countries, almost half of those surveyed accessed Facebook for news in 2017 (Newman & Fletcher 2018, p. 135). In Australia, 41 per cent of those surveyed by the Digital News Report in 2018 used Facebook for news, with Facebook's Instagram and WhatsApp also on the rise (Park et al. 2018, p. 55).

Some indicators suggest social media use for news peaked in 2016 and has started to fall (Park et al. 2018). In the UK, Facebook use for news has fallen (Ofcom 2018b, p. 51). In the US, the proportion of consumers who said they used social media for news in 2018 was 45 per cent, down from 51 per cent the previous year. News consumption on Facebook fell further. From 2017 to 2018, news consumption via Facebook fell 9 percentage points, and fell 20 percentage points among younger groups (Park et al. 2018.) This may be explained by scandals about 'fake news' and further falls may also result from Facebook prioritising friends and family posts above news content in January 2018 (Isaac & Ember 2016; see Chapter Two).

However, US research published in September 2018 reveals that the number of Americans who get their news on social media remains steady. The Pew Research Center study showed two thirds of US adults (68 per cent) get news on social media in 2018, compared with 67 per cent in 2017. Facebook is the most commonly used social media for news (43 per cent), followed by YouTube (21 per cent) and Twitter (12 per cent). However, Reddit is rising fast: it is now the social media site where the highest portion of users are exposed to the news: 73 per cent of Reddit users get news there, compared with 71 per cent of Twitter users, 67 per cent of Facebook users and, in fourth place, 38 per cent of YouTube users (Shearer & Matsa 2018). And in Australia, Facebook use for news has been steady since 2016 (Park et al. 2018, p. 60).

In the past five years, however, while the use of social media for news has doubled, the use of search for news has not. In fact, the use of **search engines**, chiefly Google, for news has fallen in some countries: across the US, UK, Germany, France, Spain, Italy, Japan, Denmark, Finland and Brazil, weekly usage declined from 44 per cent in 2014 to 38 per cent in 2017. This can partly be explained by the rise of social. However, it can also be explained by a proliferation of sources. Increasingly, news consumption patterns are becoming more diverse (Newman et al. 2018, p. 136).

Among other trends, recent developments have included the rise of mobile aggregators and mobile alerts, and the rebirth of email in the form of newsletters. **Podcasting** has also emerged as a key way for people to access news (Lindgren 2016, p. 27). This is particularly true for the young: more than half of Australians under 35 now listen to at least one podcast per month (Park et al. 2018, p. 59). Increasingly, users are consuming news that is on-demand, rather than live and scheduled. If current trends continue, live and scheduled news may be endangered (Sheller 2015, pp. 17-18).

Earlier, we noted that news consumption has become a more interactive process, enabling consumers to share, comment and create their own content. Alongside the (inter)active audience, however, there is also a large passive audience. This is

captured in the phrase 'incidental news consumption', which denotes the way that users encounter news unintentionally. This occurs often on social media, particularly among young users, where news is consumed according to a different set of norms and parameters than on traditional top-down media (Ahmadi & Wohn 2018, p. 2). (Although, of course, consumption can be passive on traditional media too.)

One study reveals that incidental exposure to news is stronger on YouTube and Twitter than on Facebook, and concerns have been raised around the passive nature of such news consumption (Fletcher & Nielsen 2017). Further, WhatsApp users are three times more likely to take part in a group discussion about a particular news topic (36 per cent) than Facebook users (11 per cent) (Park et al. 2018). In other words, the consumption of news varies significantly from platform to platform, and many users are not active and interactive, but simply let the news find them.

The rise of social can be partly explained by consumers' desire for access and convenience (Newman et al. 2018, p. 141). For consumers, this access and convenience are a boon, particularly since so much news content is 'free' (Rutt 2011, p. 26). In 2016, only 10 per cent of Australian respondents to the Digital News Report said they paid for online news. Admittedly, by 2018, the figure had doubled, with 20 per cent of news consumers saying they paid for online news (Park et al. 2018, p. 72). Even so, this means that four out of five consumers are still not paying for online news.

This deprives news producers of revenue, and also diminishes brand loyalty. As researcher Nic Newman notes: 'One consequence of this high-choice environment has been reduced loyalty to any individual news brand, with the price of most content reduced to zero' (Watkins et al. 2016, p. 14). Researchers are finding that consumers tend to give credit for news stories to platforms, not publishers, with consumers praising Facebook and Twitter for breaking some of the year's biggest stories (Newman et al. 2018, p. 147).

Making it pay

With a majority of consumers accessing only 'free' news,[5] a question arises: what is news worth, in dollar terms? What should consumers be paying? There is no easy answer. Both Doyle (2013, p. 13) and Flew and Cunningham (2015) raise the difficulty of characterising a unit of media 'content': 'This lack of clarity surrounding the unit of media content makes it difficult to determine the *price* of different media, since there are highly variable interpretations of what is being consumed' (Flew & Cunningham, 2015, p. 18). We explore this concept further in 'The atomisation of news' below.

The business model for news has always been different to that for consumer goods such as appliances or cars because of inherent differences in how information is produced. These differences help explain how a key benefit of journalism – its function in advancing the public interest – is also a reason for the difficulties in developing a

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[5] Here and elsewhere in this report, by 'free' we mean there is no payment of a subscription, a one-off fee or some other form of explicit payment. We acknowledge there may be other, indirect forms of consideration, such as the provision of information about the consumer.

sound business model (Gabszwicz, Resende & Sonnac 2015, especially pp. 5-8; Doyle 2015, pp. 92-99; Flew & Cunningham 2015, pp. 17-27).

First, there are very significant fixed costs that must be borne by a media organisation before news can be produced. For print media, this has involved printing facilities and equipment and distribution costs along with the employment of professional journalists and other staff. In explaining the economies of scale that operate in print media, Robert G. Picard writes: 'the first copy printed is said to bear all the fixed costs of production' (Picard and Dal Zotto 2015, p. 152). This leads to a departure from the ways in which goods are generally priced, given that the price of more conventional goods is closely aligned to the cost of producing the subsequent units (setting price according to 'marginal costs'). To do so for news would generate very little revenue.

Second, the value of the news product increases exponentially the more that people access it. This is known as a 'network effect'. It is clear how this applies to advertisers who have traditionally sought the exposure that comes from mass media, but also applies to consumers who benefit from the investment in journalism that can be made from the additional revenue.

Third, information, and by extension news, is in most cases what economists refer to as a 'public good' in the sense that access and use by one consumer does not exhaust its supply for others and generally prices are not set to a level that means poorer consumers miss out. John Quiggin describes information as 'an almost perfect example of a pure public good' (2013, p. 91). Government often has a leading role in the supply of public goods, and it does indeed have a strong presence in the form of public service media and, at least in relation to broadcasting, a public asset – radiofrequency spectrum – which is used in the delivery of news (Kind & Moen, 2015, p. 354).

Closely related to this 'public good' status is the fact that news (or at least journalism) serves some kind of public purpose beyond the immediate interests of advertisers and news consumers. As Doyle (2013) explains when discussing broadcasting in general, this kind of good or service may be the subject of government intervention in the way of subsidies or other regulation because: it has a greater social value; it is likely to be undersupplied if left to the market; and 'the government takes the view that more of it should be produced than people would choose to consume if left to their own devices'. This is the 'merit good' aspect of news (2013, p. 95).

While our report does not investigate the revenue model for news, this brief review of some key economic aspects helps us to identify the challenge for policy makers when considering the impacts of digital platforms. We may characterise the benefits of journalism in terms of its 'fourth estate' function, its 'positive externalities' or the 'public interest' in affording it certain statutory privileges and exemptions, but essentially the same underpinning concept is recognised by journalists, economists and legislators. For instance, as economists Hans Jarle Kind and Jarle Moen write regarding the positive impacts of journalism on the public sector:

> Good journalism ensures the quality of many large and small decisions that civil servants and local government employees make on behalf of society every day. All citizens benefit from this, not only those who pay for and read newspapers (Kind & Moen 2015, p. 354).

As a result of these and other distinguishing factors, many forms of news simply cannot be produced by the conventional market mechanism of payment for the good or service by consumers. Long before digitisation or the emergence of platforms, supply of news was, for the most part, characterised by cross-subsidisation in the form of advertising (in the case of commercial media) or direct or indirect government support (in the case of public service broadcasting). While the loss of a huge slab of the advertising side in recent years has brought this cross-subsidy into focus, McChesney and Nichols (2010) have suggested there has *always* been a conflict between the social good and commercial aspects of journalism.[6]

However, these and other non-conventional market factors have been exacerbated by digital technology and exploited (we use that term in a neutral sense) by the digital platforms that have arisen in response. The two-sided market, as we have noted, has in many cases become a multi-sided market comprising news producers, consumers, advertisers and digital platforms, which frequently play the role of news distributors.

On the digital technology side, the marginal cost problem has been compounded by digital production, which makes the cost of subsequent copies virtually zero. At the same time, the most lucrative form of advertising for print news organisations – classifieds – has been decimated by online tools for searching employment, real estate and motor vehicle listings. In addition, the ease of reproducing digital content without payment has heightened a longstanding feature of knowledge production (Picard 2011, p. 8; Kind & Moen 2015, p. 353; Quiggin 2013, p. 100). Ergas et al (2018) argue that the upside includes the significant cost reductions in both production and distribution.

On the business side, in Australia at least, these lucrative classifieds services have shifted in large part to non-media, non-platform companies that have developed efficient online tools. Meanwhile the two-sided markets of the past have evolved into 'multi-sided' markets of the platform model involving social networking, internet search, various forms of e-commerce etc. But, as Picard and Dal Zotto (2015, p. 156) note, publishers themselves face significant hurdles in setting cover/subscription prices, generating audiences and pricing advertising in an environment where print is sold both separately and together with digital versions (online, tablet, mobiles) and where some versions are made available for no payment, and where platforms have at times placed news producers in an invidious position where they have no real choice but to make their content available for search engines and social media, with little financial return.

Given the disruption of traditional advertising and revenue models and ongoing financial pressures for many news media companies, the advent of native advertising is also noteworthy. Earlier, we described the way that news content has traditionally been distinguished from opinion and comment, but that in a digital media landscape the line

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[6] They then suggest that changes in technology and the circumstances of production and consumption present a compelling argument for separate, substantial public support of journalism.

between the two is becoming increasingly blurred (see 'Definitions and Functions'). Much the same can be said of the distinction between editorial and advertising. Traditionally, news companies have made a point of keeping the two separate. Further, they have been eager *to be seen* to be actively enforcing this separation, as an indication of the independence and objectivity of their editorial. This is captured in the phrase 'church and state', which signified the way in which editorial and advertising were traditionally kept at arms-length (Conill 2016, p. 904).

Recently, however, researchers have examined the rise of native advertising, sponsored content and branded content, which have been described as 'camouflaging church as state' (Conill 2016). In 2013, the US Interactive Advertising Bureau identified six distinct types of native advertising, all designed to convince users that sponsored content belongs on the platform. These six are: in-feed ads; paid search units; recommendation widgets; promoted listings; in-ad with native element units; and custom (IAB 2013). In Australia, several digital-only newsrooms rely heavily on native advertising and sponsored content: 'For most digital newsrooms, the most important source of revenue is native advertising. This is paid ads that match the news outlet's page content, overall design and is consistent with its platform behaviour' (Carson & Muller 2017, p. 5). For instance, Junkee Media, a Sydney-based digital media company that creates content to appeal to young Australians, has said native ads are a 'massive part of our revenue' (Carson & Muller 2017, pp 36-37). In 2016, most of the advertising revenue attracted by arts media company *The Daily Review* came from native advertising, not banner advertising. This includes reviews sponsored by the company being reviewed, without any explicit acknowledgement that the review is sponsored (Carson & Muller 2017, p. 37). Disclosure is a key issue for native advertising, branded content and sponsored content. The US Interactive Advertising Bureau argues that disclosure is crucial: 'Regardless of native advertising unit type, the IAB advocates that, for paid native ad units, clarity and prominence of the disclosure is paramount' (IAB 2013, p. 15).

Citizens and/or consumers

In the economic concepts discussed above and also in the other approaches we have considered, journalism is both a 'public good' in the marketplace and a public good for society.

This ties in with the distinction between 'citizens' and 'consumers'. Legal scholar Cass Sunstein argues, 'the role of citizen is very different from the role of consumer' (Sunstein 2017, p. 127). The former role concerns, inter alia, people's engagement with the democratic process and public life; the latter concerns their role in the marketplace, in regard to the goods and services they consume. This distinction is obvious in myriad ways: for instance, a person may vote for parties that seek stringent laws to protect the environment and create national parks, and yet they may litter and never visit those parks. 'In their role as citizens, people might seek to implement their highest aspirations when they do not do so in private consumption … they might attempt to satisfy altruistic or other-regarding desires, which diverge from the self-interested preferences often characteristic of the behaviour of consumers in markets' (Sunstein

2017, p. 128). Sunstein then argues that we ought to think through the citizenship lens, not merely the consumer lens, when seeking to assess and regulate the structures that inform our consumer choices: 'we should evaluate communications technologies and social media by asking how they affect us as citizens, not only by asking how they affect us as consumers' (Sunstein, 2017, p. 157).

The tension between notions of citizen and consumer is evident in the scope of the current inquiry: while we are seeking to articulate how news media plays a vital role in the way *citizens* engage in democracy and public life, at the same time we seek to investigate and reveal the impacts of digital platforms on news *consumers*.

One response has been to reposition journalism more clearly on the side of the citizen. As journalism scholar Jay Rosen suggests, journalism ought to strive to work side by side with citizens, rather than seeking to service its audience primarily as consumers. The Dutch website, De Correspondent, has seemingly created such a model. It works with its 50,000 or so members to set the agenda of its reporting, often co-opting its 'citizens' to report. It is member-funded and ad-free, and Rosen is ambassador for De Correspondent in English-language countries. He sees the site as an example of 'optimising for trust' and listening to the audience: 'Because the users of the product have more power, the makers of the product have to listen to them more. Increasingly the quality of your journalism will depend on the strength of your relationship with the people who use and value your work' (Rosen 2018).

Unfortunately, levels of trust in news media have been in free fall for 50 years. In 1978, 68 per cent of people in the US trusted news media; by 2016 that figure had dropped to 32 per cent (Swift 2016). These figures have been consistently confirmed globally (McKewon 2018). In the past two years, however, there has been a rebound. In May 2018, the Digital News Report found that trust in news had risen to 50 per cent among Australians, up from 42 per cent a year earlier. Further, 55 per cent of Australians (up 7 per cent) said they trusted the news they use most of the time. By contrast, only 24 per cent of news consumers said they trusted the news they found on social media and 39 per cent trusted the news they found via search engines (Park et al. 2018). Taken together, these trust levels are concerning, because societies that trust have been shown to be societies that thrive. As Francis Fukuyama writes: 'One of the most important lessons we can learn from an examination of economic life is that a nation's well-being, as well as its ability to compete, is conditioned by a single, pervasive cultural characteristic: the level of trust inherent in society' (Fukuyama 1995, p. 7).

Fake news and atomisation

Fake news

Trust in news media has been hit particularly hard by the rise of 'fake news', a term which has expanded significantly in usage and scope since 2016 (Waisbord 2018, p. 2). Scholars have long used the term to describe satirical sites, doctored photography, fabricated news, propaganda and more (Tandoc et al. 2017). This changed during the US election of 2016. Initially, it was used to describe the no-frills sites that parroted the

conventions of online news, but contained sensationalised stories to attract advertising dollars (Silverman 2016). The term was then invoked in reference to hyper-partisan but not necessarily misleading news sites such as Breitbart; and it further expanded when presidential candidate Donald Trump used it to describe unsympathetic news coverage. In the first year of his presidency, Mr Trump used 'fake news' in 180 tweets (Hambrick & Marqardt 2018). In 2018, the term remains 'both vague and value-laden' (Marwick, 2018: 476). As a result, scholars have suggested instead the terms 'problematic information' (Jack 2017) and even 'malinformation' (Derakshan and Warkle 2017).

Still, the term 'fake news' is in wide currency, often in connection with digital platforms:

> Regardless of what 'fake news' actually means, it is typically tied up with anxieties about the democratic ramifications of the shift from consuming news from broadcast television and newspapers to consuming news on social platforms … Thus, platforms including Facebook and Twitter have been heavily criticized for their role in spreading, facilitating, and even encouraging 'fake news' (Marwick, 2018: 478).

Facebook's newsfeed algorithm has been accused of supercharging the spread of fake news (Pourghomi et al, 2017). So too Google's YouTube, which ranks second (behind Facebook) in Australia for social media used to access news (Park et al. 2018; Lewis, 2018). Certainly, fake news is perfectly suited to the fragmented news landscape, where 'clickbait' has been implicated in the rapid spread of misinformation online (Chen, Conroy, Rubin, 2015). What's more, fake news content can crowd out real news. During the US presidential election of 2016, fake news stories received more engagement from Facebook users than the news stories of credible news organizations (Silverman in Brummette et. al., 2018 p. 501; Gillespie 2018, pp. 202-3). During the final three months of the 2016 US presidential election, the 20 most widely circulated false election stories from discredited sites and hyperpartisan blogs generated more than 8.7 million shares, reactions and comments. These stories were shared with much greater frequency than were the top circulating stories from major news sites (Clark & Marchi, 2017, p. 6). Similar trends were evident on Twitter (Schlitzer 2018, p. 38). In one extensive and recent study, researchers investigated all the verified true and false news stories distributed on Twitter from 2006 to 2017. This involved 126,000 stories tweeted by 3 million people more than 4.5 million times. They found:

> falsehood diffused significantly farther, faster, deeper, and more broadly than the truth in all categories of information, and the effects were more pronounced for false political news than for false news about terrorism, natural disasters, science, urban legends, or financial information (Vosoughi, Roy & Aral 2018).

The researchers found that fake news was 'more novel', and, unlike true news, inspired emotions of fear, disgust and surprise.

The intentions behind fake news vary, and are often unclear. In her research, Alice Marwick found that a lot of fake news is 'polysemous'. That is, it deliberately appeals to

diverse people, such as both Democrats and Republicans. The combination of fake news and an atomised news landscape (see below) has left consumers confused and disoriented, unable to distinguish between types of news, the credibility of individual news items and the relative importance of news items (Brummette et. al., 2018; Clark & Marchi 2017, p. 6-7; Sehl et. al., 2018, p. 29).

Digital platforms, which stand to profit financially if fake news attracts audiences and advertisers, were initially slow to accept responsibility or take action. Two days after the US election, Facebook CEO Mark Zuckerberg said: 'I think the idea that fake news on Facebook—of which it's a very small amount of the content—influenced the election in any way is a pretty crazy idea.' However, by April 2017 he had announced partnerships with fact-checkers and introduced tools to allow people to dispute the veracity of news items appearing on the sites (Hackett 2017). Subsequently, there have been several anti-fake news collaborations, including the 'coordinated project of journalism newsrooms, universities, nonprofits and tech companies to challenge rumors and fabrications in the 2017 French election, which appears to have gained widespread support and increased media literacy by journalists and members of the public' (Tenove et al. 2018, p. 38).

Explicitly, fake news was the motivation behind changes in January 2018 to Facebook's News Feed algorithm, which prioritised the posts of friends and family over news content (see Chapter Two). And in July 2018, YouTube announced it is investing US$25 million to better support trusted news providers. The service will promote videos from vetted sources 'to make it easier to find quality news', and will create new features to help distribute local news. According to YouTube: 'We believe quality journalism requires sustainable revenue streams and that we have a responsibility to support innovation in products and funding for news' (cited in Hern 2018b). In August 2018, Facebook, YouTube, Apple, Spotify, LinkedIn and Pinterest all banned or cracked down on InfoWars and host Alex Jones, who claims the Sandy Hook elementary school shooting was a hoax (Fisher 2018). Twitter followed. Globally, several major initiatives are working to combat fake news and restore trust. Among them: News Guard is hiring journalists to rate news content by trustworthiness (newsguardtechnologies.com); The Trust Project is devising 'trust indicators' to increase transparency for users (thetrustproject.org); Trusting News is working with local US newsrooms to develop specific trust-building solutions (trustingnews.org); the News Integrity Initiative is supporting various projects 'to foster informed and engaged communities, combat media manipulation, and support inclusive, constructive, and respectful civic discourse' (journalism.cuny.edu); the Journalism Trust Initiative is a media self-regulatory initiative to combat disinformation online (rsf.org); Deepnews.ai is working to use AI and machine learning to surface higher quality content (deepnews.ai); the 'verified accounts' initiative from Twitter (help.twitter.com) uses a blue badge to alert users 'that an account of public interest is authentic'.

Many of these initiatives are backed by digital platforms.[7] The Trust Project is co-funded by Google, and the project's partners include Facebook, Twitter and Bing. The News Integrity Initiative is co-funded by Facebook. The Trust & News Initiative is co-funded by the Facebook Journalism Project. And Deepnews.ai is partnered with the Trust Project. In September 2018, Facebook announced it would roll out its context button to help Australian users check the veracity of stories appearing in their News Feed. Previously launched in the US and UK, the feature enables users to see a publisher's previous posts and further information, including its Wikipedia page (Wallbank 2018).

Early research suggests some of these strategies are having a positive impact. In September 2018, researchers from NYU and Stanford found that Facebook's efforts to combat fake news seem to be working, with the result that:

> … the overall magnitude of the misinformation problem may have declined, at least temporarily, and that efforts by Facebook following the 2016 election to limit the diffusion of misinformation may have had a meaningful response (Owen 2018).

Concern has been expressed that fake news will become increasingly sophisticated with the advent of automated fake news, algo-journalism and 'empathic media' (Bakir and MacStay, 2018). In this context, Alice Marwick argues that the causes and effects of fake news are complex, but digital platforms bear some responsibility:

> We must understand 'fake news' as part of a larger media ecosystem. That does not mean that we should ignore platforms; we must scrutinise the ways in which algorithms and ad systems promote or incentivise problematic content, and the frequency with which extremist content is surfaced (Marwick, 2018: 510).

Engagement as practice

In an era of fake news and viral content, journalism has had to change.

On one view, the advent of Web 2.0 technologies and the emergence of participatory journalism have changed the *function* of journalism from primarily being about providing information to being something much more contested, active and, perhaps, important. Clay Shirky et al. (2015) claim that the rise of citizen journalism and 'free' online content has transformed the news ecosystem from being a world of 'limited information' to one of 'overwhelming, often unprocessed, information'. They claim that this places emphasis on the role of journalists and news organisations as creating an effective and reliable process that has the effect of transforming the information-scarce environment to one that is information-rich. One of the major dilemmas of amateur production becomes how to organise, rationalise and systematise production of news. In a market where it is easily achievable to set up a new news organisation, stabilising

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[7] In addition to the matters mentioned here, see Chapter Two for an account of changes to the Facebook algorithm which prioritised 'meaningful' content over news content, and also for specific collaborations between digital platforms and publishers, including Instant Articles and Accelerated Mobile Pages. In Chapter Four we mention some initiatives that relate to media diversity.

and maintaining momentum over a medium to long term is the challenge. Shirky et al. claim that creating an understanding of how journalistic organisations stabilise themselves is the 'missing link' in creating a thriving digital news ecosystem that enables journalism to uphold its traditional functions. On this view, *stability* may be an essential new value for journalists and news media.

A contrasting view is that news is, by definition, amorphous and unstable. As Matt Carlson writes, journalism is a 'constructed and malleable cultural practice and therefore an adaptable one'. On this view, journalism is open to change and reconstruction. Evidence for this perspective can be found, for instance, in the way in which print media has responded to the digital environment by emphasising the visual and conversational nature of news content, adding video, audio, links and tweets to tell stories and engage audiences. Rather than stability, then, the suggestion is that *adaptability* is a significant emerging news value. When some argue for stability, and others for adaptability, we can see the competing forces acting on journalism.

Over time, either stability or adaptability – or perhaps a hybrid of both – may well establish itself as a core journalistic value. In the meantime, another value already has established itself, and is perhaps driving journalism more than any other. That value is *engagement*. In fact, it denotes more than a value. It serves as a measure of success (of a story, whether hard or soft, text, video or audio; of a day; of an organisation), a guide by which to service and connect with journalism's publics, and a way of using social media networks in the act of distribution. Sharing/engagement has created new newsroom practices and activities: comments, retweets, fans, friends, favourites and followers. They have also opened up a tool-driven approach that has enabled all sorts of websites, some that look like news sites, some that don't, to enter the journalism space. The lines between social media, news media and social platform are increasingly blurring. As journalism scholar Barbie Zelizer notes, 'social media sites as varied as Reddit, LinkedIn, Medium and traditional news media platforms all use what they know about their communities to feed on their information needs' (2017, p. 24).

Most newsrooms employ social media editors whose job it is to take content produced by journalists, share it and monitor what is 'going off'. These efforts may still respond to the perceived values of the masthead or publisher but they also speak to another dynamic: that a sharer's 'social circle takes on the role of news editor, deciding whether a story, video or other piece of content is important, interesting or entertaining enough to recommend' (Hermida et al. 2012). Hal Crawford, a long-standing digital editor, argues there are two reasons to care about social networks if you care about news:

> First, sharing on social networks has become a major distribution mechanism for news stories ... [and] the second reason hinges on the first. Like all distribution mechanisms, social networks influence the content they distribute … The stories change and with them the tone and flavour of the news-making process (Crawford, Hunter & Filipovic 2015, p. 5).

The audience has in many cases become a primary driver of what is reported, posted and published. As Kate de Brito, the editor-in-chief of the country's most visited news website, news.com.au, writes, if no one clicks, 'you may as well have just emailed it to

your mum' (Fray 2017). Audience engagement is now a key marker of journalistic authority, and is a core value. As a result, there are changes happening to the type and range of content being created and consumed. Social media tends to reward content that is shorter, more visual and more emotive (e.g., Kalogeropoulos, Cherubini & Newman 2016; see next section). Editors at large news organisations believe that social media platforms favour soft news over hard news (Hanusch 2017; Lischka 2018; Rashidian et al. 2018, p. 36; Sehl, Cornia & Nielsen 2018). By contrast, search engine reliance tends to return near-identical popular stories that have been produced by various providers (Cagé, Hervé & Viaud 2017).

Digital tools have been developed to enable a cross-platform approach to news creation. These tools inform the news cycle in Australia and work by tracking and understanding what is 'trending' across a variety of platforms. They include:

- **NewsWhip:** content discovery and analytics tools that give an overview of what audiences are interested in today across a variety of platforms;

- **BuzzSumo:** a 'research and monitoring' tool that highlights the most shared content on specific platforms and finds 'influencers' who are related to particular topics;

- **Chartbeat:** a 'content intelligence' company billed as an alternative to Google Analytics for real-time data; and

- **CrowdTangle**: a 'social monitoring platform' for publishers and brands.

These tools and others spot trends, measure audiences and, ultimately, assist news producers and distributors to optimise engagement.

The tools of social media, in particular, channel the production, distribution and consumption of news that will engage users. Often, this involves the cultivation of curiosity, a technique mastered by websites including Upworthy, Buzzfeed and Vox.

> Humans are comfortable with ignorance, but they hate feeling deprived of information. Upworthy designed headlines to make readers feel an almost primal hunger for information just outside their grasp. It pioneered a style – which it called the 'curiosity gap' – that explicitly teased readers, withholding just enough information to titillate the reader into going further … The core insight of Upworthy, Buzzfeed, Vox, and the other emerging internet behemoths was that editorial success could be engineered – that if you listened to the data, it was possible to craft pieces that would win massive audiences (Foer 2017, p. 139).

According to NewsWhip, in August 2018 the top English-language publisher on Facebook, measured by total likes, shares and comments, was ladbible.com, with unilad.co.uk in fourth position (Boland 2018). Stories featured on the websites included, 'Big Brother Gets Tattoo Of Little Brother with Down's Syndrome On Arm, He Absolutely Loves It', which drove 2.5 million engagements. LADbible's website explains: 'Founded in 2012, LADbible Group is redefining entertainment and breaking news for a social generation.' Meanwhile, 'content farms', which specialise in producing 'questionable, low-quality content going ultra-viral' are also proving successful, with

three such websites in the NewsWhip top 25 (Boland 2018). The story, 'A group of black bears caught a New Jersey family by surprise for having a wild pool party in the backyard' drove 2.8 million engagements.

Fabricated news is particularly adept at optimising engagement (Marwick 2018). As detailed above, false news spreads faster and further than true news. Both cognitive scientists and media scholars have found that the more people are exposed to untruths, the more likely it is those people will believe them (Hambrick, Marquandt, 2018; Pennycook, Cannon & Rand 2018 cited in Marwick 2018). The spread of false news – and the more slippery 'fake news' – has coincided with the rise of digital platforms. Several scholars, including Efrat Nechustai, draw a direct link:

> [T]he new separation between news production and distribution, and the migration of news distribution to third-party platforms, enabled producers of false information (fake news) to make their product formally and functionally indistinguishable from professional journalism (Nechushtai 2017, p. 11).

Nechushtai argues that digital platforms provide news producers with much of their audience and potential for growth, and that digital platforms equip news organisations with tools for news production, provide data on the reach of stories, and offer analytics and insight tools. Nechushtai describes this as 'infrastructural capture'.

The atomisation of news

Underpinning the rise of engagement as a core journalistic value is a new feature of the news landscape: the atomisation of news. In many cases, the news has been decoupled from its source. It has been broken down into its constituent parts, so that it is now distributed and consumed on a story-by-story basis, rather than as one among several. This is one effect of separating out the roles of producer and distributor, and in the same way that the music industry has seen albums replaced by individual tracks, so too an edition or news bulletin has been replaced by individual items of news. And just as the music industry has been disrupted, so too the news industry.

In a modern (digital) newsroom, success is now gauged on a story level. What might have previously been a page, site, edition or show is now fragmented into discrete units, with each unit's success measured in minutes and hours, not days and weeks. And, as we have noted, soft news tends to flourish in this environment. However, the platforms differ from one another. The original architecture of Twitter did not include any algorithmic filtering based on user preferences, which made the platform suited to hard news. In August 2014, for example, Twitter feeds were dominated by news of the Ferguson protests against the fatal shooting of Michael Brown by a white police officer. On Facebook, by contrast, the dominant news of the day was the charity 'Ice Bucket Challenge', promoting awareness of Amyotrophic Lateral Sclerosis (ALS). On Facebook, the Ferguson riots were not very visible, arguably because the story was not 'like-able and even hard to comment on' (academic Zaynep Tufekci, cited in Bell et al. 2017, p. 67).

Further studies show the distribution flows and content demands of social media create an increasingly 'emotionalised' media environment (Bakir & McStay 2018, p. 159). Today's online news consumers are more likely to come across news that creates strong emotions, particularly surprise (Lischka 2018), news that is more personal and affective (Hanusch 2017; Bouvier 2017; Bruns 2018, p.101) and news that is visually arresting (Harcup & O'Neill 2017). The content is also likely to be shorter in length (Hindman 2017, p.187; Barnard 2018, p. 189). Both Hindman (2017) and Barnard (2018) note this issue of length is particularly important when it comes to investigative journalism:

> Critical, investigative journalism is time-consuming and expensive, and is often reported in long form. Both factors, cost and length, pose challenges for news production in the age of mediatization, given that online platforms provide less profit per reader than traditional media. Also, the competition for audience attention, driven largely by social media platforms, makes it difficult to get, let alone keep, readers' attention (Barnard 2018, p. 189).

To increase the 'click through rate' for individual stories, headlines are rewritten to emphasise sentimentality. The technique works at attracting eyeballs (Kuiken et al. 2017). These content effects are particularly pronounced for digital only newsrooms whose distribution system depends on atomised news delivered through social media and search (Petre 2015). Digital journalists are also more likely to accept commodification: the belief that every individual piece of writing is its own 'stand-alone mini-profit centre … success measured in shares, likes or tweets or the direct income a piece brings in' (Cohen 2018, p. 13).

The widespread use of digital platforms, and particularly social media, means that journalists' content, and also their competitors' content, is *hypervisible* online. This can have the effect of homogenising content, as journalists follow each other's leads. As Axel Bruns writes, whether such tendencies toward groupthink have been caused by:

> … journalists' increasing mutual observability towards each other, or whether they existed previously and have merely been translated to social media environments, is hardly relevant in this context; the de-diversifying effects of such groupthink on the journalistic coverage of major events are likely to be the same in either case (2018, p. 208).

Hypervisibility also manifests inside newsrooms, where keen attention is paid to the clicks and shares generated by each story. This has changed the competition dynamics of newsrooms, creating more internal competition between individual journalists – competition based on the popularity of the content, not the quality of the content. This can create incongruous situations. For example, Petre (2015) describes a writer on feminist topics who felt her stories were in direct competition with sports stories: 'The leaderboards ranking stories and staffers don't just harness employees' competitive tendencies; they shape the very nature of competition in the media field, namely by turning it further inward' (2015, p. 28). Increasingly, digital news media practitioners work at a frenetic pace in an environment of overwhelming workloads and constant competition, knowing that 'online news consumers often visit news sites

through links they find on other platforms like Google News, Facebook, and Twitter' and can easily navigate away (Burggraaff & Trilling 2017, p. 4). The existence of readily available data heightens internal competition, encouraging employees to measure themselves by how their stories are performing (Petre 2018). This increased visibility and internal competition can lead journalists to copy what has worked in the past (both their own work and that of others) and engage in a churn of articles that leaves little time for research (Petre 2015). Such practices run counter to the concept of the journalist as fiercely independent.

However, the rise of engagement as a value and the atomisation of news have also benefited journalism in significant ways. Several successful newsrooms, including Buzzfeed, have used social media success to fund significant investigative journalism (Tandoc 2018, p. 211). Social media is not just a distribution tool; it is also a content tool credited with helping to create diverse and quality journalism by putting journalists in touch with a wider range of sources and perspectives (Bruns 2018; Barnard 2018; Malik & Pfeffer 2016, p. 960). Further, Twitter has had a positive impact in a global context as a check on the occasional hubris and assumptions of elite foreign correspondents (Bruns 2018, pp. 98-100; Dewey 2013; Nyabola 2014).

The values of journalism

Bourdieu and Buzzfeed

At this stage in our review of the functions, values and contemporary practice of journalism, it is useful to outline how this subject is approached through one of the most influential conceptual frameworks in the field of social sciences. Media scholars in particular often use the work of Pierre Bourdieu to unpack the norms and practices that make journalism valuable to society. We offer this account of the influence of digital platforms not as the definitive way of understanding the phenomenon, but in order to explain the conceptual framework through which at least some media and journalism scholars are likely to approach the issue.

A sociologist and philosopher, Bourdieu was concerned with power, and with the concept of a *social field,* which indicates a semi-autonomous and distinct social sphere with its own logic (Bourdieu & Wacquant 1976). For Bourdieu, capital is an institutionalised resource of which there are three main species: economic capital (money and other financial assets); cultural capital (socially valued knowledge and credentials); and social capital (access to social networks). Journalism is a culture-producing institution (Carlson 2017). And cultural capital is the field's institutionalised resource (Neveu & Benson 2005). Its foremost cultural product is quality journalism, a socially valued public good that supports a well-informed citizenry and effective democracy. The pursuit of the truth distinguishes journalism from other informational products and provides the organising principle of the field's 'doxa', or shared system of values (Vehkoo 2010). Doxa drives the field's 'habitus', or professional identity, which is centred on commitment to public service, objectivity, autonomy, immediacy and ethics (Deuze 2005, p. 447). The institutions established by the field uphold standards

of integrity and quality: accuracy and clarity; fairness and balance; privacy and avoidance of harm; and integrity and transparency.

Bourdieu identifies the defining conflict of modern industrial societies as the antagonism between economic capital and cultural capital (Swartz 1997). This is said to have been the source of long-standing tension in the commercial news industry, which straddles the media field and the economic field, the latter being driven by market forces and the pursuit of economic capital (Medvetz 2012). This conflict has been exacerbated by the growing dominance of digital platforms which, although they do not produce news or journalistic content, have heavily influenced their production, as we have been describing. First, the news industry's business model, which has historically cross-subsidised the production of news and journalism with advertising revenue, has been disrupted. And second, the conflict between cultural and economic capital in the journalistic field has intensified with the introduction of web analytics, including 'most read', 'trending' and 'top stories'. Many journalists view this as an assault on their professional autonomy and identity, as they are left to reconcile the opposing logics of the journalistic field and the economic field:

> [O]ne of the major consequences of this increased visibility of consumption preferences in daily editorial practice, in particular those who produce public affairs content [is that] it intensifies the pre-existing tension between the logic of the occupation and the logic of the market … Thus, if the logic of the market prevailed over that of the occupation, it might decrease homogenization in a direction that would be pleasing to consumers and more competitive for organizations. However, this would have a detrimental effect on society in light of the function that robust public affairs reportage plays in a healthy functioning of the polity (Boczkowski 2010, pp. 147, 178).

In other words, the increasing dominance of digital platforms has pressured news producers to make concessions to market forces that serve to weaken the cultural products of the journalistic field – the very products that afford journalists their unique form of cultural authority as watchdogs, voices of the people and experts on current events.

We can see the flip-side of this conflict emerging as digital native news organisations such as Buzzfeed and Vice, which have already achieved substantial market success by following the consumption demands of audiences, and seek to accumulate cultural capital via the journalistic field. Stringer's (2018) analysis of this 'hybrid approach' sets out their strategy of hiring experienced journalists (who embody the doxa, habitus, norms and practices of the journalistic field) to produce high quality content they hope will translate into peer recognition. Stringer argues that this strategy enables them to accumulate two different forms of institutional resources from two fields with opposing logics: ongoing accumulation of economic capital, based on number of users, advertising sales and profits; and cultural capital based on the legitimacy, credibility and prestige cultivated by the values-driven cultural production of the journalistic field.

A clash of values

Moving beyond Bourdieu, the professional identity of the journalist in a platform environment can still be seen as largely composed of a set of dispositions, motivations and shared values (or Bourdieu's *habitus*) that account for the more or less universal norms and practices that inform journalism in liberal democracies. Deuze (2005) calls this a 'shared occupational ideology among news workers which functions to self-legitimise their position in society' (Deuze 2005, p. 446). In this final section of the chapter, we examine how digital platforms might influence the work of journalists themselves, as distinct from the news-producing organisation that (often) employ them.

Journalists in the digital age have only become *more* committed to defending their autonomy, freedom and independence, writes Deuze:

> Reporters across the globe feel that their work can only thrive and flourish in a society that protects its media from censorship; in a company that saves its journalists from the marketeers; in a newsroom where journalists are not merely the lackeys of their editors; and at a desk where a journalist is adequately supported through, for example, further training and education (Weaver 1998). Any kind of development from perceived extra-journalistic forces – be it public criticism, marketing or corporate ownership – tends to get filtered through this overriding concern to be autonomous to tell the stories you want to (p. 448).

Journalists and editors are reluctant to give up the idea that they and only they work to 'structure the world into coherent and believable news products' (Carlson 2017). Journalism's values and professional identity account for the continuity and regularity of practices, which include news gathering and analysis, fact-checking and packaging information, and then publishing news or journalistic content on one or more media formats or platforms.

Digital platforms certainly fulfil the functions of ordering the world. Facebook does so largely via the feeds and the shares of friends and family. Google does so via the precision and algorithmic power of search. They also preference truth and facts over untruths and lies, increasingly supporting verification and fact-checking. But their practice and habits are not those of journalism. Indeed, they explicitly renounce journalistic authority, which is a sort of authority that necessarily comes with high expectations:

> We place many expectations on journalism. But if journalism is to be a watchdog working on our behalf, the fourth estate holding government accountable, a communal glue, an enabler of deliberative democracy, a diffuser of new scientific and technical knowledge, a judge of the arts, if it is to provide an accounting of the day's news, the first draft of history, an exchange of ideas, a space for disparate voices, a place where society makes sense of itself, if it is to be any of these things, it *must* have authority (Carlson 2017, p. 7, emphasis in original).

The authority of journalism relies on a commitment to values that include accuracy, objectivity, and the service of the public interest. The values of digital platforms and Silicon Valley include innovation and connectivity. And it is when these values come

together that problems arise, argues Franklin Foer, the former editor of political magazine *The New Republic*:

> The problem isn't just the media's dependence on Silicon Valley companies. It's the dependence on Silicon Valley values. Just like the tech companies, journalism has come to fetishize data. And this data has come to corrupt journalism … data is a Pandora's Box. Once journalists come to know what works, which stories yield traffic, they will pursue what works. This is the definition of pandering and it has horrific consequences … The profusion of data has changed the character of journalism. It has turned it into a commodity, something to be marketed, tested, and calibrated. Perhaps media have always thought this way. But if that impulse existed, it was at least buffered (Foer 2017, p. 149)

On this view, the pursuit of truth has been compromised by the quest to go viral. The alternative view, however, is that such a negative account sells both journalism and digital platforms short. Both have flaws, certainly, but both have the capacity to adapt and improve themselves, one another and the wider world.

Media scholar Barbie Zelizer writes that journalism is an act of imagination, in that journalists create 'an imagined engagement of events beyond the public's reach' (Zelizer 2017, p. 2). That is what they do, even if the word is rarely used in relation to journalism. 'What journalists know is valued precisely because no one else shares that knowledge, rendering it necessarily the target of imagination.' Zelizer argues that re-aligning with journalism's imaginative capacities – of what it could be — is a powerful way of tackling 'journalism's exhaustion'. She notes the term 'journalist' is now applied to 'individuals with a range of skills', including publishers, photographers, field producers, digital content providers, bystanders, fixers, citizen journalists and bloggers.

While many practitioners would dispute such a broad brush approach, risking as it does the diminution of key roles, few, if any, still cling to the idea that nothing has changed. This is particularly evident in journalists' fast-evolving job description. More than ever, journalists require a broad array of skills. Jeff Jarvis describes the combination of new skills required as 'journalistic superpowers' (Jarvis 2016). The most desirable abilities for new recruits include (but are not limited to): coding, audience development, data-driven storytelling and visual storytelling (Stencel & Perry 2016).

Journalism professor Mitchell Stephens calls for an epistemological re-evaluation, such that the 'journalism business must consequently become an ideas business' — a higher value business opposed to the low value activity of reporting the news. He calls this 'wisdom journalism'. It calls on Enlightenment values, such as logic and reason, and harks back to Aristotle's analytical philosophy pertaining to syllogistic logic and inductive argumentation (Stephens 2014, pp. 26-30). However, Stephens also suggests that wisdom journalism is not simply a logical endeavour; it is, as he describes by comparison, 'wisdom literature' and 'wisdom philosophy', a practice that encompasses 'thoughtful advice, good judgement, insight and sagacity' (Stephens 2014, p. 9). In other words, it is a call for a practice of deliberation and care, with the public interest in mind. He seeks to replace the 'five Ws' of traditional news reporting —

who, what, where, when, why — with the 'five Is' of a new journalism: informed, intelligent, interesting, insightful and interpretive. He argues that journalists must stop spoon feeding readers with easy to understand chunks of easily verifiable facts and challenge them to work harder, with the journalist, to uncover 'more stimulating, more challenging fare' (Stephens 2014, p. 182).

Conclusion

Fifteen years ago, media scholar Mark Deuze issued a warning about the changing nature of journalism in the online space. He nominated hypertextuality, interactivity and multi-mediality as the key characteristics of a new journalistic order. He said journalism must change or face the consequences:

> Connecting changes in journalism because of new technologies such as the internet to changing definitions of different types of (possible) contemporary journalism shows us that a news medium considering or implementing new strategies has to enable its organisation to reflexively address the existing journalistic culture and rethink its location on the continuum between content and connectivity. If not, it cannot be expected to fully grasp the consequences of these changes – and cannot be expected to succeed (Deuze 2003, p. 220).

With the rise of digital platforms, that warning rings even more true. To survive, the news media industry must find new models for content, product and business. Yet, at the same time, it is expected to fulfil the foundational roles of journalism that the 'old' practices and revenue streams supported.

Coming to terms with the new dynamics and outlines of journalism appears to require constant attention. As journalism scholar Jeff Jarvis argues:

> We must continue the search for what is possible today that was not possible before, to find new ways to serve the public, and to find new models to sustain that work (Jarvis 2014).

Journalism doesn't stand still. It has been changing since before the advent of digital platforms. However, digital platforms have had significant impacts on the production of news, and journalism has had no choice but to adapt. Perhaps above all, journalists are embracing engagement as a core value, with both positive and negative effects. One effect is that content that is shorter and more emotive is proliferating.

Digital platforms have also had significant impacts on the consumption of news. Consumers increasingly access their news via social media. Faced with unprecedented choice and convenience, today's consumers have become accustomed to receiving news for 'free'. And in many cases, consumers can become part of the distribution and production process. They can share, react and comment. They can *create* content. Consumers are no longer just consumers.

The distribution of news has been disrupted too. Before the advent of digital platforms, news producers tended also to be the dominant news distributors. Now producers share their distribution role with consumers, and also with the digital platforms. The

result is an atomised news landscape, a multi-sided market where advertising revenue commonly goes to the digital platforms that distribute news, as well as to the news media that produce content. Digital platforms extend the reach of news media, even as they capture much of the revenue news media needs to do its multiple jobs.

It is through the digital platforms that audiences are to be found. As Rashidian et al. (2018) write:

> The new standard is to be present on multiple platforms at all times, and to post tailored, native content on those platforms. We found that almost as many articles are published by news organisations directly to technology platform applications such as Instant Articles as link back to publisher sites (2018, p. 252).

As noted above, Nechushtai has described this phenomenon as 'infrastructural capture':

> These companies offer innovative products that open up new markets for journalism but in exchange for such opportunities, news outlets gradually relinquish the ownership and distribution of their product (Nechushtai 2017, p. 12).

As distributors, and as agenda-setters, digital platforms have taken on a key role in the news ecosystem. Increasingly, they may be news gatekeepers. Frank Michael Russell notes: 'Silicon Valley platforms now hold an important gatekeeping role between journalists and news consumers'; and digital platforms, to some extent, select and edit items so that the news published is 'fit to print' according to journalistic standards (2017, p. 15). This may overstate the argument, but digital platforms certainly employ algorithms to select content and invoke community standards to edit content. As Barnard writes, 'gatekeeping has a latent function: it separates the news and views of those deemed legitimate from those that are not' (Barnard 2018, p. 181).

Meanwhile, digital platforms produce many benefits for news consumers. Philosopher Jurgen Habermas (1989) famously formulated the idea of the public sphere as a place that is equitable and available to all. The concept of the public sphere has been used and adapted by a succession of media scholars, including from the disciplines of law, media, journalism and associated research fields. It is therefore worth asking: do social platforms enhance the public sphere by creating more avenues for journalism to enter it? Newman et al. (2018) note: 'Social networks like Facebook, for example, are considered to do a good job in alerting people to news stories that they might otherwise miss' (Newman et al. 2018, p. 141). Consistently, consumers cite the convenience of finding multiple sources in the one place and the ability to discuss and debate the news with friends as key benefits. In Australia, recent research has included focus groups gauging participants' engagement with public affairs. In building on Habermas's work and advancing a concept of an expanded public sphere in a networked, global environment, the authors noted the importance in a democracy of competing views, especially in relation to public policy:

> A democracy is distinguished by the existence of real political choice. This requires diversity and plurality in the provision of information and its interpretation. Particularly important in this regard are the media of journalism ... Through the medium (and media) of the public sphere the private individual becomes part of a public opinion which can be measured and deployed to influence or legitimize the exercise of political power (McNair et al. 2017, pp. 19-20).

Together, journalism and digital platforms are reshaping the public sphere. As we have seen, the impacts are mixed, and still emerging. However, the potential exists to channel that public sphere for the better, or for the worse.

All of these shifts are dramatic, and the pace of change shows no sign of slowing. As the Reuters Institute concludes in its 2018 *Digital News Report*:

> Nothing stands still for long: new technologies like voice-activated interfaces and artificial intelligence are on the way, offering new opportunities but also new challenges for audiences, regulators and media companies. The future of news remains uncertain … (Newman et al. 2018, p. 30).

In this uncertain news environment, journalism – to maximise its benefits – has a responsibility to adapt and change. And so too do digital platforms, given their increasingly complex and significant role. With this in mind, we turn now to the impacts of technology.

2 The impacts of technology

- *Technology does not determine consumer behaviour; but it influences and shapes online behaviour by enabling and encouraging consumers to engage in certain ways, not in others.*

- *In many cases, algorithms determine which content news consumers get to see. The workings of these algorithms are not transparent.*

- *The evidence on filter bubbles and echo chambers, and on their impacts, is inconclusive.*

- *Collaborations could be encouraged between digital platforms and news media to develop and refine technology that serves both parties' interests, as well as the interests of consumers and citizens.*

The online space is marked by radical innovation and technological change. In this chapter, we examine the impact of this change on news consumers, distributors and producers. Our focus is on the innovation and technological change implemented by 'digital platforms': digital search engines, social media and other content aggregators.[8] However, we also address the innovation and technological change implemented by news media companies. In part, this is in recognition of the fact that both digital platforms and news producers employ the same technologies, including algorithms, personalisation, recommender systems and artificial intelligence. It is also in recognition of the fact that, for consumers, the distinction between digital platforms and news media often disappears, including when traditional news outlets are active on social media. Wherever possible, however, we specifically seek to identify the impact of technologies implemented by digital platforms on news consumption, production and distribution.

This chapter is divided into six sections. In the first, we examine the extent to which technology shapes user behaviour, as we address technological determinism, platform studies and 'affordances'. In the second, we turn to the impact of algorithms on news consumers, distributors and producers. We build on this in the third section, where we turn to customisation and personalisation, including the recommender systems employed by both digital platforms and traditional news media. This leads, in the fourth section, to a discussion of filter bubbles and echo chambers, and to a consideration of arguments that the content diversity of news is being diminished, that consumer autonomy is being inhibited and that there is an ongoing failure of transparency and accountability. Then, in section five, we turn to artificial intelligence, and thus to automated journalism, automatic text summarisation and AI bias. Finally, in section six,

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[8] Throughout this report, we use 'digital platforms', not 'platform services', to denote digital search engines, social media platforms and other digital content aggregation platforms, while acknowledging that some news media can also be categorised as digital platforms. This point is addressed in Chapter One.

we address further instances of innovation: Search Engine Optimisation; First Click Free and Flexible Sampling; and Instant Articles and Accelerated Mobile Pages.

The role of technology in shaping behaviour

Any assessment of the impact of technology must contend with a preliminary issue: how much responsibility for user behaviour should be ascribed to technology, and how much should be ascribed to users?

The extreme positions in this debate can be categorised as 'determinism' and 'instrumentalism'. At one extreme, technological determinists propose that user behaviour is determined by technology, and that the internet and digital platforms technologise our lives in such a way that we have no choice but to behave in accordance with their dictates (see Smith & Marx 1994; Carr 2010). At the other extreme, instrumentalism suggests that users are 100 per cent free to choose if and how they engage online. Instrumentalists are:

> The people who … downplay the power of technology, believing tools to be neutral artefacts, entirely subservient to the conscious wishes of their users. Our instruments are the means we use to achieve our ends; they have no ends of their own (Carr 2010, p. 46).

As Nicholas Carr writes, instrumentalism is the prevailing view, in part because it's the view we *want* to be true: 'The idea that we're controlled by our tools is somehow anathema to most people' (Carr 2010, p. 46).

Positioned between these extremes, the prevailing scholarly view holds that users are free, but only within the limits of the parameters and values that are embedded, or encoded, in technology (Lessig 2006; Spinello 2011). On this view, users and technology both impact each other. As sociologist Manuel Castells writes, there is a 'dialectical interaction between society and technology' (Castells 1996, p. 5 fn.2). Hence technology bears *some* responsibility for user behaviour. Similarly, legal scholar Alice Marwick specifically acknowledges the effect of *platform* technology on behaviour. As Marwick writes: 'Platforms do play a role: the material affordances of technology amplify or stifle certain types of human behaviour' (Marwick 2018, p. 506). She notes, for example, that network television cleaves to dominant ideologies much more than YouTube (Marwick 2018, p. 490).

The term 'affordances', as used by Marwick, is common in an emerging field of media and communication research known as 'platform studies' (Gillespie 2016; Just & Latzer 2017; Montfort & Bogost 2009; Plantin et al. 2016; Nielsen & Ganter 2018). The focus of this research is on the way in which the 'affordances' of various digital technologies affect behaviour. An affordance, in this context, refers to what a technology *allows* its users to do (Bucher & Helmond 2017, p. 3). For instance, in 2015 Twitter replaced the 'star' button with a 'heart' button, and thereby changed the way users could engage with and 'favourite' content. Though this change might seem insignificant, some users publicly expressed their outrage. This shows the way that features such as the star/heart button create *meanings*:

> A feature is clearly not just a feature. The symbols and the connotations they carry matter. Pressing a button means something; it mediates and communicates, or … relates to different affordances. While this platform change may seem trivial – a controversy in the heat of the moment – it also shows how features are objects of intense feelings (Bucher & Helmond 2017, pp. 2-3).

Another example: Facebook has a 'like' button, which was supplemented in 2016 with 'love', 'haha', 'wow', 'angry' and 'sad', but no 'hate' button.

Some platform studies scholars take issue with the term 'platform', arguing it is not neutral. Gillespie (2010) notes that the term has been used by content providers such as YouTube as part of a strategy enabling them to position themselves for users, clients, advertisers and policymakers, but contends that it is deliberately vague. On the one hand, this vagueness empowers providers to seek protections for enabling user expression in their role as 'curators of public discourse'; on the other, it suggests they are not liable for content posted by users. In other words, the word 'platform' can afford a type of linguistic cloak.[9] More recently, Gillespie (2016) and others have argued that the platform landscape is dominated by a few large and many small players acting self-interestedly. As van Dijck (2013) writes, platforms enable public expression, but while they claim the neutrality implied by the term 'platform', they are in fact private firms with their own agendas. According to Nielsen and Ganter: 'Platform studies remind us that these platform-builders are of course also *actors* with interests of their own, who engage directly with other actors' (2018, p. 1605). This, it is argued, can be seen clearly in the platforms' use of technology: 'the intermediaries are in control and can and will change their product and strategy in line with what serves their own interests' (Nielsen & Ganter 2018, p. 1614).

Legal scholar Lawrence Lessig also assessed the impact of technology, or 'code', on user behaviour. Lessig argues that there are four regulatory 'modalities' that circumscribe people's behaviour online: the law; social norms; the market; and the architecture embedded in the internet and its platforms (Lessig 2006, pp. 121-125). In other words, technology is merely one of the four regulatory constraints that limit people's freedom to choose how to act online, and these four constraints sometimes work together, and sometimes in contradiction: 'The constraints are distinct, yet they are plainly interdependent. Each can support or oppose the others' (Lessig 2006, p. 124). Like Marwick and others, Lessig thus argues that technology – in the form of 'code' – does play a key role in influencing and shaping online behaviour, even though other factors also come into play.

In the discussion that follows, we examine the impact of specific technologies on news consumers, distributors and producers. We do so on the understanding that technology

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[9] A related discussion concerns whether or not digital platforms such as Google and Facebook are 'publishers', 'media companies' or 'news companies'. Technology companies have specifically argued against being defined as media organisations, let alone news organisations (Carlson 2018; Duguay 2018; Nielsen & Ganter 2018, p. 1605). Facebook, for instance, has repeatedly insisted that it is not a publisher, media company or news company (Constine 2016). This is true even of Twitter, which has worked hard to cement and celebrate its role in the distribution of news (Bruns 2018, p. 10; Kantrowitz 2018; Shearer & Gottfried 2017, pp. 4-5). This debate is about more than semantics, given that publishers and journalists are granted certain rights and responsibilities, both ethical and legal, as a result of their status.

does not determine user behaviour, but does influence and shape it to a greater or lesser degree.

The impact of algorithms

Algorithms are a set of specified rules and protocols enabling a system to act autonomously. Digital platforms employ various algorithmic methods to produce and curate news to optimise engagement (e.g., Ricci, Rokach & Shapira 2015). Indeed, digital platforms' innovation includes periodical and often significant changes to algorithms. Such changes most obviously affect the distribution of news, but they also have significant effects on production and consumption (Caplan & boyd 2018, pp. 5-6; Cohen 2018; Oremus 2018; Rashidian et al. 2018).

For news consumers, algorithmic systems can provide significant benefits. In 2016 it was said that approximately 90 per cent of data on the internet has been created in the past two years (IBM 2016). The increase in the quantity of information available online has been unprecedented and dramatic. Methods to search, sort and filter information are becoming increasingly essential, and the capacities of algorithmic systems to filter the abundance of news content are immense. Without algorithmic systems, access to recent, relevant and important news content would be considerably more cumbersome (see 'Personalisation', below). Algorithmic systems also provide benefits for news producers. They can help news producers to identify important stories on social media platforms and they can help news producers use data sets to generate stories (Carlson 2018a, p. 1762; see below). Meanwhile, digital first and public broadcasters are particularly reliant on social media algorithms. Digital first publishers, whose business model is built on atomisation, rely heavily on social media distribution for their audiences (Bruns 2018, p. 236; Chaykowski 2018; Oremus 2018). And for public broadcasters, social media can help them fulfil their mandate by granting access to traditionally 'hard-to-reach' news audiences (Sehl, Cornia & Nielsen 2018).

Aside from these benefits, there are also harms. These include the ways in which news media companies are required to devote considerable resources to accommodating the ongoing algorithmic changes made by digital platforms (Rashidian et al. 2018, p. 28). Some algorithmic changes involve collaborations between digital platforms and news producers; however, these collaborations do not preclude further algorithmic changes (Hindman 2015, p. 21). In 2016, Facebook began implementing a 'pivot to video', in which the social network encouraged news publishers to produce more video content (Moore 2016). The stated intention was to help news publishers to monetise social media (Mullin 2016). For a time, Facebook paid news publishers to experiment with video so as to offset high production costs (Rashidian et al. 2017, p. 35). However, the result was a rush of poorly produced content, in part due to contractual clauses imposed on publishers specifying the number of videos to be produced each month (Rein & Venturini 2018). And recently editors in Europe have lamented that Facebook has abolished 'the carousel', which combined native video on Facebook with an accompanying article that directed traffic straight to the organisation's news website. This change, they say, happened 'overnight' (Sehl, Cornia & Nielsen 2018, p. 28).

Following a series of changes, the pivot to video has been described by some commentators as 'dead' (Banikarim 2017). However, in August 2018 Facebook announced it was rolling out Facebook Watch in Australia, a year after its US launch (Samios 2018). The video service, a potential rival to both Google's YouTube and traditional TV broadcasters, will feature content created by partners who earn 55 per cent of advertising revenue, while Facebook earns 45 per cent (Samios 2018). For news producers (such as free-to-air TV newsrooms), the impacts are hard to predict.

Other changes have had a mix of positive and negative effects. In January 2018, Facebook announced changes to its newsfeed algorithm that significantly affected news content. The changes involved prioritising 'meaningful content' posted by friends and family over news, videos and posts from brands (Beckett 2018; Koebler 2018). As a result, the amount of news overall on the platform shrank from 5 per cent of the content on users' newsfeeds to 4 per cent (Zuckerberg 2018). In the United States (but not yet Australia), recent changes also involved prioritising content that is 'trustworthy' (Facebook 2018). To determine trustworthiness, Facebook now asks its US users, in the course of ongoing quality surveys, whether they are familiar with a source, and whether they trust that source (Zuckerberg 2018). Early industry observation suggests that larger organisations are being favoured by these and other algorithmic changes (Oremus 2018). The changes have frustrated some journalists: 'In Guatemala … some journalists reported readership halving overnight as a result of them disappearing from most social media feeds' (Hern 2018a).[10] In February, the four-year-old publisher LittleThings shut down. The website, which employed 100 people and shared feel-good stories and videos on Facebook, claimed it lost 75 per cent of its organic reach following the algorithmic changes (Moses 2018). However, Facebook argues that the changes prioritise quality over quantity for news and reduces clickbait : 'News media content generally represents less than 5 per cent of items in a person's news feed … when people see news media content on Facebook that content is high quality, by prioritising content that is trusted, informative and local' (Facebook 2018). Other algorithmic changes have further given priority to local over international news.

Some news producers have described playing a cat-and-mouse game as they try to balance their strategic autonomy with ongoing attempts to adapt to the algorithmic innovations of platforms (Sehl, Cornia & Nielsen 2018, p. 28). The attempt to produce algorithm-satisfying content is sometimes referred to as 'gaming the algorithm'. To satisfy social media and search engine algorithms, for instance, journalists and publishers are increasingly trying to produce content with maximum 'shareability' (Hanusch 2017; Petre 2015; Burggraaff & Trilling 2017, p. 3). At its best, gaming the algorithm can ensure high quality journalism receives the online distribution it deserves (Belair-Gagnon & Holton 2018; Cherubini & Nielsen 2016). However, it also means that many news organisations are engaging heavily in story-by-story optimisation. This takes significant technical investment, which some smaller news organisations struggle to resource (Schlesinger & Doyle 2015, p. 313; Hindman 2015).

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[10] In August 2018, it was also reported that Facebook has been secretly giving users a trustworthiness score, based on users' ability to flag and report inaccurate news. Facebook reportedly takes this into account when determining how to spread a user's content, but does not tell users what their score is (Coen 2018).

A further key point is that the code of digital platforms' algorithms tends to be kept secret (Bucher 2018, p. 41). Google's foundational PageRank algorithm, which assigns a score to each webpage signifying its importance, has been described as the company's 'secret sauce' (Pasquale 2015). As a computing journalist noted in 2007, people 'would pay millions to crack the code for Google's PageRank algorithm – the elusive Holy Grail of online marketing' (Collett 2007). PageRank is still in use, but its composition and role have changed. It has been joined by other Google algorithms, and its rankings are no longer made public, but only used internally (Southern 2016). Partly due to the secrecy of their coding, the overall effects of algorithms are complex and difficult to determine. This is even more the case given that algorithms rarely stand still, but are constantly updated and refined. For news consumers, the effects of algorithms are significant and shifting, and include the benefits and harms that come with personalisation and customisation.

Personalisation and customisation

The migration of news content to digital channels, and the attendant atomisation of news discussed in Chapter One, has caused a shift from mass communication to personalised and customised news consumption (Haim Graefe & Brosius 2018). Personalisation, in this context, is a digital process that involves searching, sorting and recommending news content based on the explicit and/or implicit preferences of individual users (Thurman & Shifferes 2012). Customisation refers to the modification of sources, delivery and frequency of digital news content for individual consumption. Both personalisation and customisation help to filter the abundance of digital news and to present information tailored to the interests of the individual.

The capacities to personalise and customise news consumption have been made possible by the growth of online news access. In Australia in 2018, news accessed via digital channels surpassed traditional channels, with social media, online news platforms and search engines playing a leading role (Park et al. 2018, p. 53, 57). As a large, and increasing, proportion of Australians rely on digital platforms for their news, Australians are increasingly dependent on algorithms 'autonomously' to select the news content they consume. Such algorithms are used both by digital platforms and by traditional news media.

Personalisation

The purpose of algorithmic news personalisation is to optimise user engagement by increasing the consumption of news items per user (Pariser 2011; Ricci, Rokach & Shapira 2015). This aligns with the nature of internet advertising, where granular details on user preferences are gathered to create comprehensive user profiles. These profiles allow digital platforms to sell targeted advertisements and to personalise news content that engages the user (Schneier 2015).[11] Digital profiles can include

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[11] The impact of digital platforms on user privacy is a highly significant and related issue. In 2018, details emerged that data analytics company Cambridge Analytica had accessed the personal data of 87 million Facebook users in the lead-up to the 2016 US presidential election in order to target them with highly personalised pro-Trump content (Isaak &

preferences that are explicitly made by the user, such as 'likes' and 'shares' on Facebook; they can also include implicit preferences, such as comparing user behaviour on news websites and recommending news stories that have engaged similar profiles.

Digital platforms and digital news producers rely on 'recommender systems' to filter news content. Such systems prioritise and personalise news content based on recorded or inferred user preferences (Konstan & Riedl 2012). The ensuing recommendations are designed to assist the user's decision-making process in the consumption of news. Generally, recommender systems operate in a cyclical process, which involves:

- Collecting information on the user: a system receives explicit and/or implicit feedback on user preferences to build a profile (or model) that is used for prediction;

- Processing and learning: a system applies an algorithm to 'learn' from the feedback data gathered about the user and adapts the profile (or model) of the user; and

- Prediction or recommendation: a system then predicts or recommends news content that the user may prefer. This can either be predicted based on the user's behaviour on the platform (through probabilistic inference, for instance) or recommended based directly on a dataset of explicit feedback provided by the user (Isinkaye, Folajimi & Ojokoh 2015).

Recommender systems

Three major types of recommender systems are used for news content online.

Content-based filtering: Systems that learn to recommend content similar to items that the user has explicitly liked or engaged with in the past. Similarity is calculated based on comparing features of content (Ricci, Rokach & Shapira 2015, pp. 73-4). For example, if a user positively rates a news story that belongs to particular topic, then the system learns to recommend other stories that are also associated with that topic area. As news content can be associated with an array of features (including author, medium and political orientation), recommendations can become extremely precise. A significant problem with content-based filtering, however, is its dependence on metadata; that is, rich descriptions of contents' features and well-organised user profiles are required before useful recommendations can be made (Isinkaye, Folajimi & Ojokoh 2015, p. 265).

Collaborative filtering: Systems that learn to recommend content that other users with similar preferences have liked or engaged with in the past. Recommendations are calculated based on the similarities between user profiles, such as user behaviour or

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Hanna 2018). The episode revealed the way in which privacy breaches can threaten the democratic process, particularly when combined with highly targeted (and sometimes untrue) news content. An investigation of the impact of digital platforms on privacy and hence on news and democracy is beyond the scope of this report.

ratings history (Ricci, Rokach & Shapira 2015, p. 12). For example, a single white female aged 25 from Sydney and interested in Australian politics might engage with a news story that received high engagement from similar profiles. A significant advantage of collaborative filtering is that it can perform well in domains where it is difficult to accurately label content (such as opinions). Collaborative filtering systems can also generate useful recommendations even when content is not explicitly listed in a user's profile (Schafer et al, 2007). Challenges can emerge, however, when inadequate information is known about the user or the content, which results in irrelevant predictions and can make collaborative systems difficult to scale (Park et al. 2012).

Hybrid filtering: Systems that combine different recommendation techniques to utilise the advantages of one method and compensate for the weaknesses of another. This allows hybrid systems to base their recommendations on both content and similar profiles that have engaged with the item. There are many variations of hybrid systems, including the sophisticated system built by *The New York Times*.

The New York Times recommender system

Digital platforms including Google, Facebook and Twitter are secretive about the details of the workings of their algorithms. Their algorithms have been described as the 'black box', or 'secret sauce', of their services (Pasquale 2015; Bucher 2018, p. 41). *The New York Times* (NYT), by contrast, has exhibited some transparency with its hybrid recommender system, which uses a combination of different algorithmic techniques. This hybrid system blends elements of content-based filtering with collaborative filtering to recommend news content (Spangher 2015). The system relies on three main components:

- Users: People who interact with digital systems. Each user may have a set of attributes to help construct an accurate representation (or model) of their profile, such as age, gender, topic interests, etc.

- Preferences: These represent users' likes and dislikes. Preferences can be both explicitly determined by the user (e.g., 'sharing' a news story) or implicitly inferred (similar profiles to other users).

- Items: Content that a system chooses to recommend are referred to as 'items'. Each item may have a set of attributes or properties (such as meta tags) that help to describe the content and match it to users. E.g. content topic, author, and location (Ricci, Rokach & Shapira 2015, pp. 1-3).

The NYT recommender system is based on a technique known as Collaborative Topic Modeling, or CTM (Wang & Blei 2011, pp. 449-50). The CTM method works by modelling content to determine its topic(s); adjusting the model by gathering signals from readers, such as clicks; modelling reader preferences from interactions with the platform; and making recommendations based on the similarity between content and preferences.

The process behind the NYT's recommender system consists of four main steps (Spangher 2015):

1. *Determining the topic of an article*: The algorithm starts by analysing each article to understand what it is about (content-based filtering). It achieves this using a Natural Language Processing, or NLP, technique called 'Latent Dirichlet Allocation', or LDA, which counts the number of times a particular word appears in an article and compares this to other articles (Blei, Ng & Jordan 2003, pp. 993-4). LDA enables the algorithm autonomously to determine the topic of the article. For example, words such as 'senator' or 'parliament' are likely to be associated with the topic of 'Politics'. LDA also helps to determine how much an article is devoted to a particular topic, whenever multiple topics are present in an article (referred to as 'weightings'). For instance, it might categorise an article as 20 per cent Politics, 30 per cent Environment and 50 per cent Business.

Figure 1: **LDA (Latent Dirichlet Allocation) helps algorithms to determine what content is about by categorising topics (Source: Blei 2012)**
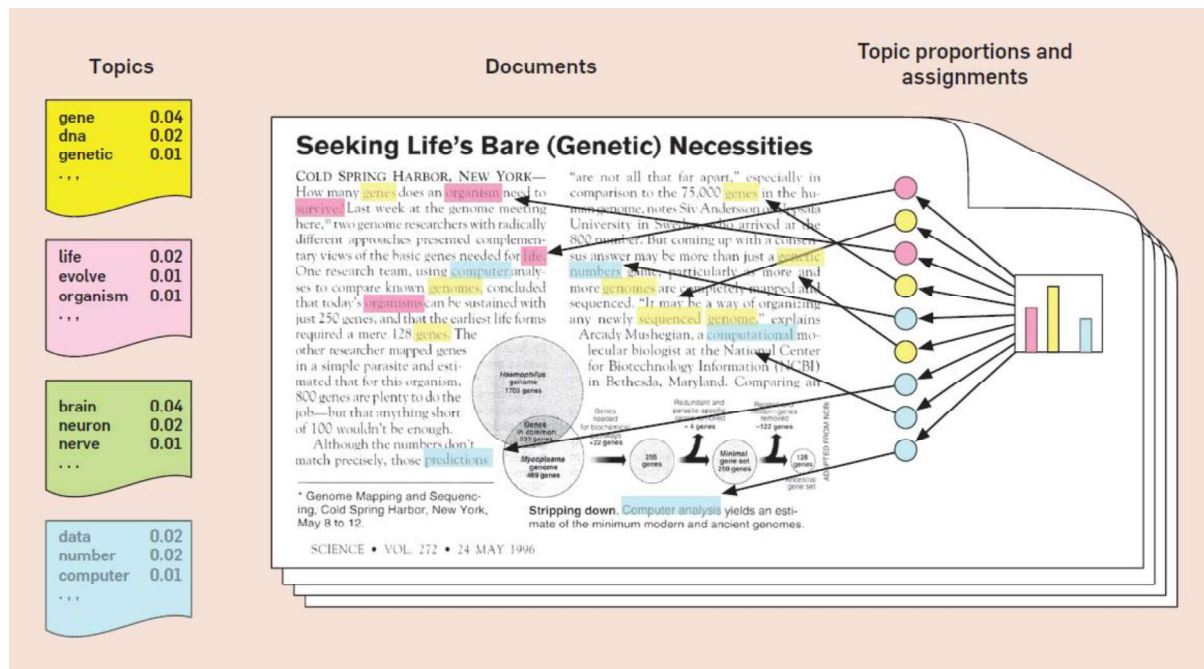
Figure 1 provides a visual representation of this process. First, each document is characterised by a distribution of topics (histogram on the right). These topics are assigned a set of words that have higher probabilities of being associated with that topic (coloured coins). Then, the algorithm processes the text, allowing it to determine the different topic weightings present within the document ('Topics' categorisation, on the left).

2. *Cross-checking the model based on audience reading patterns*: Part of the problem with the LDA approach alone is that the ambiguity of language presents challenges. For example, the use of puns and metaphors in satirical articles can make it difficult for LDA systems correctly to categorise content. The NYT algorithm offsets such topic errors by incorporating reading patterns to create a hybrid approach. This requires using collaborative filtering techniques to compare the profiles of users who are reading a particular article. For example, suppose the LDA technique identified an article to be 30 per cent Environment and 70 per cent Business, but the profiles of the article's readership are 95 per cent Environment. The algorithm would then adjust the topic categorisation of the article according to the two percentages (depending on their weighting specified in the algorithm). The NYT algorithm also prioritises other factors such as recent content, word length, specific words, and others.

3. *Understanding reader preferences*: The NYT applies topic-modelling on the articles a user has read to establish a baseline of user preferences. This means that if a user reads 10 NYT articles within a week, the recommendations system would take an average of the topics present in those articles to determine the user's preferences. 'Clicks', however, are not always indicative of preferences. Some clicked articles don't engage users; and users miss some articles that they would have otherwise enjoyed. In response, the NYT uses a technique called the 'back-off' approach. This assumes that articles clicked mostly reflect a user's preferences. For example, this might mean users '80 per cent like' the articles they clicked and '20 per cent like' the articles they didn't. This provides a more conservative estimate of user preferences, but also exposes readers to more serendipitous recommendations.

The NYT recommender system also incorporates more granular user information. Analytics are collected on reader behaviours such as scroll depth, article dwell time, social media sharing, and other indicators, enabling the NYT to construct a more complete model of user profiles to understand their preferences. To train the algorithm to account for these evolving preferences, a subset of the readership is selected, along with their labelled attributes and preferences. Supervised Learning (a type of Machine Learning) techniques are then applied to help make predictions of what a user wants to read based on their recorded preferences. The algorithm then iteratively improves its classification and recommendation abilities (or 'learns') as it is trained on more data (both user preferences and news articles) and as its algorithmic weightings are tweaked.

4. *Making personalised recommendations*: This process of modelling topic content and user preferences allows the NYT to provide personalised news recommendations. It enables the abundance of online NYT news content to be filtered at an individual level, and to improve with greater user interaction. Hybrid recommender systems, such as the NYT recommendation engine, generally perform better than content-based and collaborative filtering alone, and are becoming more widespread throughout digital news platforms (Isinkaye, Folajimi & Ojokoh 2015, p. 269).

Like the NYT, digital platforms including search engines, social media and content aggregators employ algorithms that use personalisation techniques (Diakopoulos &

Koliska 2017). Just as Google searches return personalised recommendations, Google News has a 'For You' feature, in which content is tailored for users according to their search and other history. The Facebook 'newsfeed' blends posts by friends, advertisers, companies and others in ways that are personalised for each user. And news aggregators such as Pocket and Nuzzel, which enable users to customise their news feeds, employ algorithms to personalise that customised content. However, as previously noted, details of the algorithmic techniques used by these platforms are generally not made public.

Customisation

Related to the personalisation practised by digital platforms and news media is the capacity for consumers to customise their news feeds. Customisation, as previously noted, refers to the modification of sources, delivery and frequency of digital news content for individual consumption.

Customisation, like personalisation, is in part a response to the way in which digital media has expanded the possible channels by which users can consume news content. That is, the proliferation of digital devices, in concert with the accelerated news cycle, has created an increasing range of options for news consumption. This had led some to argue that an abundance has been superseded by an *overabundance* of news options. In 2007, Martin Moore, the director of the Media Standards Trust in the UK, referred to a 'bombarded and bewildered public' (Moore 2007). Similarly, in workshops held by the Centre for Media Transition in 2018, news consumers in Sydney and Tamworth consistently admitted to feeling 'overwhelmed' and 'bombarded' by the news media landscape (Fray, Molitorisz & Marshall 2018).

Against this backdrop, greater capacities have been developed enabling the customisation of how, when and where news is consumed. In particular, social media is founded on a principle of customisation. For instance, users choose their friends on Facebook and who they follow on Twitter. The news encountered on Facebook and Twitter is thus largely determined by whatever is shared by those who have been befriended and followed. Among many other capacities, consumers can also: customise their settings on Google News; customise their settings on various news aggregators; and customise the news they consume on YouTube by subscribing to specific channels that stream news coverage. News organisations including *The New York Times*, Axios.com and many Australian sources also enable users to receive email newsletters customised by topic. With the rise of social media, email newsletters were for a time regarded as 'old technology', but they have recently experienced a surge in popularity (Smith and Page 2015; Fagerlund 2016; Park Et al. 2018). For many news producers and some consumers, one advantage is that newsletters are not subject to the algorithms of search engines and social media (Fagerlund 2016; Smith & Page 2015).

Thanks to these and other expanding customisation capacities, individual consumers are now able make the sorts of curatorial decisions formerly reserved for editors of traditional news outlets. One potential caveat is that this shift to customised news

consumption presumes certain levels of news literacy (Powers 2017). That is, individuals are presumed to have the knowledge and abilities to make responsible news consumption decisions that are in their best interests. Given the lowered barriers of access to content for consumers, it is argued, news literacy becomes more important as users are increasingly required to check facts, monitor the reliability of sources and consume a diversity of sources.

Thanks largely to technological innovation, the consumption of news is changing dramatically. Australians are consuming more news online than offline, they are increasingly accessing news via their mobile phones, and they are highly reliant on social media and search engines (Park et al. 2018). The pathways to news are proliferating. However, amid all this abundance and proliferation, consumption patterns and habits remain ill understood. As Joelle Swart (2017) writes:

> The current news media landscape is characterized by an abundance of digital outlets and increased opportunities for users to navigate news themselves. Yet, it is still unclear how people negotiate this fluctuating environment to decide which news media to select or ignore, how they assemble distinctive cross-media repertoires, and what makes these compositions meaningful (Swart 2017).

For today's consumers, news is accessible, convenient and often 'free'. It is also often personalised and customised. The potential benefits and harms are substantial, and not always well understood.

Filter bubbles and echo chambers

There are two primary purposes for deploying algorithmic techniques for news consumers: (1) to sort through the abundance of news content; and (2) to recommend news content that users will consume to keep them engaged with the platform (Thurman & Schifferes 2012, p. 776). As noted above, this is done by gathering information on users, selling that information to advertisers to generate revenue[12], and then providing personalised news content via algorithmic methods to engage individual users. Greater user engagement logically leads to greater opportunities for advertising revenue for digital platforms. The concern, however, is that the relentless pursuit of engagement does not always align with the fundamental ideals of news as the fourth estate and the public interest, as described in Chapter One. Scholars have argued, for instance, that it is in the interest of digital platforms to host news that attracts attention. The public interest is irrelevant. As legal scholar Alice Marwick writes: 'YouTube and Facebook take no interest in *what* the content is about, whether it's holocaust denial videos or makeup tutorials; they are simply interested in keeping their viewers on the platform' (Marwick 2018, p. 506).

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[12] Facebook says it does not sell user data. However, it does sell *categories* of users. As Mark Zuckerberg said in April: 'What we allow is for advertisers to tell us who they want to reach, and then we do the placement.' <https://motherboard.vice.com/en_us/article/8xkdz4/does-facebook-sell-data>.

To maximise engagement, it is argued, consumers are increasingly having their news content filtered to reflect narrow, personalised interests (Pariser 2011). As we have seen, consumers increasingly rely on algorithmic systems to provide them with news content that aligns with their preferences (Haim, Graefe & Brosius 2018, p. 330). And when digital platforms are incentivised to show content that optimises engagement, consumers can find themselves in algorithmically constructed 'filter bubbles' (Pariser 2011; Sunstein 2017). These filter bubbles are personalised according to user preferences, and then further reinforced by customisation. These cycles of personalisation and customisation, it is argued, exacerbate the tendency of people to consume news that conforms to their existing worldviews, which thus creates 'echo chambers' (Lezard & Mimms 2017). The potential implications include a constrained public discourse, a less informed citizenry and sharpened political polarisation (Pariser 2011).

In this section, we address three specific issues attending claims of 'filter bubbles' and 'echo chambers'. First, we consider the argument that the diversity of news content being consumed is being reduced by personalisation and customisation. Second, we ask whether the autonomy of news consumers is being inhibited by algorithms. And third, we consider whether there is a problematic lack of transparency and accountability attending the use of algorithms.

Reduced diversity of news

Diversity is often regarded as a fundamental principle of news quality, which helps to ensure a well-informed citizenry (McQuail 1992, p. 47; Strömbäck 2005, p. 332). A balance of news can include a diversity of sources, content, and perspectives (McDonald & Dimmick 2003, p. 63).[13] Algorithmic filtering methods, however, run the risk of constraining diversity, which may cause information blindness for consumers. This has led scholars to question whether algorithmic methods on digital platforms value and foster diversity as a key feature of news quality (Pasquale 2015, p. 88). Further implications of these filtering effects are that consumers could have their preferences and perspectives artificially reinforced (Guess et al. 2018). These 'echo chambers' can lead people to avoid important public issues altogether or can polarise public discussion and thereby inhibit constructive debate (Pariser 2011).

A point to note here is that algorithms do not necessarily limit diversity. In fact, the reverse can be true: content diversity can be programmed into platforms' algorithms. The effect of an algorithm on diversity depends on the specifics of that algorithm. We return to this point below. In addition, studies on filter bubbles and echo chambers which consider diversity (Dubois and Blank 2018; Guess, et al. 2018; Haim, Graefe and Hans-Bernd 2018; Möller et al. 2018) do not establish conclusive evidence that algorithmic techniques inhibit content diversity.

However, one study that is directly on point examined whether news recommendation engines contribute to filter bubbles by asking 168 participants to search Google News

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[13] We address the related issues of diversity and plurality in Chapter Four.

for news about Donald Trump and Hillary Clinton during the 2016 election and report the first five recommended stories. The study found that users with different political leanings from different states were recommended very similar news: the top recommendations were consistently identical for conservatives and liberals. This challenged the notion that algorithms are encouraging echo chambers. However, the researchers also found a high degree of homogeneity: on average, 69 per cent of all recommendations were to five news organisations; and the most-recommended five publishers accounted for 49 per cent of links collected (Nechushtai & Lewis 2018). It would be difficult to attempt an analogous study for a social media platform such as Facebook, where news items mingle with non-news items, and where user experiences are necessarily more individualised.

Meanwhile, studies have certainly observed a dramatic increase in the *quantity* of news content. In part, this is driven by the rise of both social media and search platforms, which require that websites have a steady stream of new content to remain competitive (Petre 2015; Hindman 2007). There is also a growing amount of 'robot'-produced journalism content (Barnard 2018, pp.189-90). However, many hard news stories are now written quickly, with little, if any, original reporting (Boczkowski 2010; Buhl, Günther & Quandt 2018; Smyrnaios, Marty & Rebillard 2010, p. 1258; Starkman 2010). Even before the rise of digital platforms, online news had moved towards becoming a 'generic' commodity, with news outlets differentiating their stories only by cosmetic differences in headlines and lead paragraphs (Boczkowski 2010; Ghersetti, cited in Hoffstetter & Schoenhagen 2017, p. 46). Further, some researchers are finding an increased quantity of news stories does not equate to increased content diversity. Research from The Netherlands examining more than 762,000 news stories found that online news articles are almost twice as likely to be 'follow up' stories as print articles (Burggraaff & Trilling 2017, p. 15). The authors do not attribute this to algorithms, but to the speed and churn of the online environment, given that follow up stories are easier and quicker to write than original content (Burggraaff & Trilling 2017, p. 15).

Algorithms can filter and prioritise news in much the same way as human editors (Weber & Kosterich 2018). Rather than replacing humans in news production, algorithms can thus be regarded as helping journalists to curate and communicate the news. This can work both ways: to promote diversity, or to limit it. In their study of 59 open source mobile news apps, Weber and Kosterich found that the coding for news flows is often closely linked to the content flows on social media. For 43 per cent of the news apps studied, a first step is to search the social media habits of the user (2018, p. 318). This common starting point suggests a limit on, rather than an expansion of, diversity in these apps. However, such limits can be designed out. Certainly, news recommender systems can be designed to have diversity effects similar to human editors (Möller et al. 2018). In other words: code and algorithms can be just as excellent as human editors, and just as lamentable. Recently, digital platforms have changed their algorithms in the wake of the outcry over fake news. As the 2018 Digital News Report found: 'Notions of trust and quality are being incorporated into the algorithms of some tech platforms as they respond to political and consumer demands

to fix the reliability of information in their systems.' Similar changes could also be implemented to promote content diversity.

While there is some evidence supporting the notion that algorithmic techniques have tended to inhibit content diversity, there are also studies that dispute this suggestion (Del Vicario et al. 2016, pp. 2-3). Indeed, it has been argued that the problem of filter bubbles and echo chambers has been overstated (e.g., see Dubois & Blank 2018, pp. 729-30; Guess et al. 2018, p. 3; Haim, Graefe & Brosius 2018, pp. 338-9). As Möller et al. note in their study: 'All of the recommendation logics under study proved to lead to a rather diverse set of recommendations that are on par with human editors' (2018).

A further point here concerns a potential *excess* of choice. On the internet, news consumers have access to an abundance of information and sources. So much so, that many users describe being overwhelmed by an *overabundance* of news content (see 'Customisation', above). This is potentially problematic, given that research has shown that when people are confronted with too many choices, they regularly make bad choices, or are paralysed into making no choice at all. What's more, they are often left feeling dissatisfied with those choices (Schwartz 2004). This has been described as the 'paradox of choice': presenting more options can lead to worse choices and lower satisfaction (Schwartz 2004). This paradox has been confirmed for search engine results: participants whose searches returned six results made better choices and were more satisfied than participants whose searches returned 24 results (Oulasvirta, Hukkinen & Schwartz 2009).

It is unclear whether this paradox prevails for news consumers. Barry Schwartz has argued that in the field of culture, the paradox of choice does *not* prevail. An enormous choice of novels, say, may not be overwhelming (Schwartz 2008). We have noted above that news users take unpredictable and idiosyncratic paths to get their news (see 'Customisation'). Certainly, they are not always satisfied with the news they consume. As Joelle Swart writes: news 'users do not always use what they prefer, nor do they prefer what they use' (Swart 2017). A detailed account of this issue is beyond the scope of this report; however, given the vast range of news content available to consumers, the role played by customisation and personalisation is hard to overstate. Given this abundance, algorithms can determine whether consumers make good or bad choices, including by means of the number of options presented to users. Hence recommender systems, for instance, become vital. As Ricci, Rokach and Shapira (2015, p. 2) write: 'In recent years, RSs [Recommender Systems] have proven to be a valuable means of coping with the information overload problem.' Just as the effects of algorithms on content diversity remain unclear, so too it is unclear whether algorithmic techniques are fostering a constrained public discourse, a less informed citizenry and exacerbated political polarisation. This lack of clarity may be due to the relatively recent rise of algorithmic systems, the difficulties and methodological shortcomings of measuring their effects, or simply, that theories of filter bubbles and echo chambers are exaggerated. Further, these negative effects must be weighed against the benefits that algorithmic systems provide to news consumers, including the ability to search, sort and filter masses of online news content. What is clear is that the prevalence of

algorithmic systems in digital news media is wide and growing, and that their effects on content diversity and public discourse warrant ongoing scrutiny.

Compromised autonomy and constrained choice

Ostensibly, digital platforms promote autonomy when it comes to news consumption. The cross-platform availability of content seemingly affords users greater freedom to consume news media in ways that they choose (Napoli 2011). However, as more consumers access news via digital platforms, and more digital platforms use algorithmic methods to personalise news consumption, it has been argued that user autonomy is being compromised, and that user choice is considerably more limited than it first appears (Pariser 2011; Sunstein 2017). This argument holds that algorithms, not autonomy, are guiding our actions and thoughts. As Eli Pariser writes, 'The algorithms that orchestrate our ads are starting to orchestrate our lives' (Pariser 2011, p. 9).

The value of individual autonomy is rarely questioned in applied ethics and legal philosophy (Mackenzie & Stoljar 2000, p. 4). The concept is difficult to define, but is tied up in notions of self-determination, self-governance and self-authorisation (Mackenzie 2014, pp. 15-16). In simple terms, it is the ability to determine one's own life and chart one's own course. This is precisely what the algorithms of search engines and social media arguably compromise: that is, they compromise autonomy by limiting and channelling choice. For instance, as legal scholar James Grimmelman writes, 'Whoever controls search engines has enormous influence on us all. They can shape what we read, who we listen to, and who gets heard' (Grimmelman, 2008).[14] Evidence for social media's adverse impact on autonomy emerged in 2014, when Facebook revealed it had manipulated the newsfeeds of nearly 700,000 users to see how adding negative or positive content affected the mood of users. The results of the controversial Facebook-backed study showed that 'emotional states can be transferred to others via emotional contagion, leading people to experience the same emotions without their awareness' (Kramer, Guillory & Hancock 2014).

For digital platforms, the underlying assumption is that the implicit preferences they attribute to individual consumers will become more and more accurate, so that they perfectly align with the choices of consumers. This reasoning suggests that if the algorithms are good enough, they will not compromise autonomy, because they will perfectly align with users' choices and preferences. However, such alignment is difficult, perhaps impossible. As discussed in the previous section, algorithmic methods infer the implicit preferences of consumers. This means that news content can be personalised based on consumers' historical behaviours on the platform, similarities between consumer profiles and the profiles of others like them, and other inferred attributes. However, consumers might change their preferences over time, or they may in fact prefer content that diverges from the content received by people with similar profiles. A related issue concerns transparency: if users do not know how those

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[14] Similarly, it has been argued that big data has the effect of compromising autonomy, and also privacy (Pan 2016).

algorithms affect them, including their consumption of news, then their autonomy would seem to be compromised. (The issue of transparency is addressed below.)

The degree to which Facebook and Google dominate the social media and internet search markets – two increasingly significant news consumption channels – could also mean that this process of algorithmic personalisation falls disproportionately into the hands of two companies. The more consumers use these platforms, the greater incentives for news content to be published on these platforms. There is potential for these 'network effects' to constrain consumer choice and inhibit autonomy; however, the evidence underlying this claim remains unclear.

Transparency and accountability

The algorithmic systems that digital news platforms depend upon are often proprietary methods that are withheld from public purview. In the interests of keeping trade secrets, the full scope of how these algorithmic systems personalise consumer news remains opaque and removed from public criticism. This raises concerns about a lack of transparency and poor accountability (Diakopoulos & Koliska 2017, p. 812). The question is: how well do consumers understand the processes behind algorithms and filtering?

While evidence to support the theories of 'filter bubbles' and 'echo chambers' remains inconclusive, consumers generally do not have a firm grasp on the application and extent of algorithmic personalisation in providing news content (Powers 2017). Consumers are largely unaware of how and whether digital news platforms track user preferences to make editorial decisions in the delivery of personalised news content (Powers 2017b). This is due, in part, to the non-transparent nature of how algorithmic systems are developed and deployed (DeVito 2017). Transparency of the way algorithmic systems produce, curate and disseminate news content is limited (Rader & Gray 2015, p. 178). The tension between preserving trade secrets and disclosing algorithmic methods is an emerging issue. This is potentially problematic for companies that don't identify themselves as 'news organisations', yet increasingly host the publication of news content. In the transition to digital personalisation, accountability to dispense accurate, balanced and timely news is arguably compromised.

'Transparency' is the ability to view the truth and motives that underlie people's actions as a means to strengthening accountability and trust (Balkin 1999; Bennis 2013). This highlights an important distinction between algorithmic 'transparency' and 'explanation'. Algorithmic 'transparency' provides insight into the operations of autonomous systems, whereas 'explanation' refers to *how* and *whether* certain input factors affect final decisions, outcomes, or recommendations (Doshi-Velez et al. 2017). Both transparency and explanation allow consumers to access more information about how digital platforms and news outlets produce, curate and distribute content. Tellingly, transparency has evolved as a key ethical principle of news journalism (Plaisance 2007). The growing use of proprietary and ever-changing algorithms, however, inhibits levels of transparency in the delivery of digital news content.

Reduced transparency from the algorithmic delivery of news content has a number of implications. First, as discussed in the previous section, the **autonomy** of consumers can be constrained by the inability to fully evaluate consumption decisions (Powers 2017b). 'If readers don't know they are influencing content, they cannot make critical decisions about what they choose to [consume]' (Jolly 2014). Research has shown that people are unaware or uncertain of how digital news content is being algorithmically personalised (Rader 2014), particularly via social media channels (Eslami et al. 2015). Algorithmic methods that are reasonably transparent and intelligible (through understandable explanation) could equip consumers to make appropriate news consumption decisions.

Second, transparency is considered a route to **accountability** (Ward 2014). It provides an avenue for public scrutiny and a means to building legitimacy with consumers (Allen 2008). The current lack of transparency contributes to a dynamic of self-regulation in accountability. It has been argued that this process of self-regulation of accountability raises contradictory incentives: relentlessly pursuing engagement on the one hand; and upholding the values of the fourth estate and the public interest on the other (Fengler & Russ-Mohl 2014). Greater transparency and explanation offers one approach towards more accountability of algorithmic systems on digital news platforms (Dörr 2016).

Third, inhibited transparency can contribute to reduced **trust** in news media (Hayes, Singer & Ceppos 2007). In theory, greater access to information reduces uncertainty in social relations, which increases trust (Cotterrell 1999). Research has shown that transparent explanations of how recommender systems arrived at specific recommendations enhanced user acceptance (Cramer et al. 2008). Conversely, however, methods for improving transparency have had negative effects on the user experience (Schaffer et al. 2015). This acts as a potential disincentive for digital platforms, including digital news platforms, to become more transparent. It has been argued, however, that these user experience issues are surmountable (Lezard & Mimms 2017).

While improving transparency can help to foster autonomy, boost accountability and engender trust, it can also undermine competitive advantages or create costs that exceed social gains (Granados & Gupta 2013). This suggests that any measures to improve algorithmic transparency, and the quality of explanations, might need to balance the established values and benefits of the fourth estate and the public interest with the proprietary rights of digital platforms.

Artificial Intelligence (AI)

Artificial Intelligence (AI) can be considered as a group of technologies capable of performing tasks autonomously, which, if performed by a human, would be considered to require intelligence (Crawford et al. 2016, p. 2; Scherer 2015, pp. 361-2). There are several subset technologies of AI, but four of the most relevant to digital platforms and digital news include:

- Machine Learning (ML): Techniques that enable machines to learn autonomously and to improve from experience without being explicitly programmed (Jordan & Mitchell 2015, pp. 255-56), e.g., news content recommendations on Facebook.

- Deep Learning (DL)/Artificial Neural Networks (ANNs): Techniques, loosely inspired by how the brain works, that use an infrastructure of connected nodes and layered algorithms to process masses of data to approximate representations. DL depends on advanced computational infrastructures and requires less input from humans in comparison to ML techniques, e.g., DL can be applied to transcribe speech into text.

- Natural Language Processing and Natural Language Generation (NLP and NLG): Techniques that allow machines to automatically analyse, interpret, manipulate, and produce natural language, including speech and text, e.g., Google Home and Amazon Alexa reading a summary of the daily news.

- Computer Vision: The techniques that allow intelligent machines to 'see' the world around them. Tasks include acquiring, processing, analysing and understanding visually perceived information, e.g., automatic captioning on YouTube videos.

These techniques can be used both by news media and digital platforms to generate news content.

Automated journalism

The abundance of data and advances in AI have enabled significant steps in the automation of news production and distribution (Carlson 2015, p. 417). Such techniques are widely used by both digital platforms and by news media. While AI applications in digital news are predominantly used for processing and recommending content (see above), automated news production is on the rise (Leppänen et al. 2017b, p. 188). These systems are already deployed in prominent media outlets due to the increasing content demands and shrinking resources of newsrooms (Leppänen et al. 2017b, p. 189). One form of automated information gathering is practised by the NSW Government at @NSWSharkSmart, which sends out automatically generated live tweets from tagged sharks, such as, 'DPI Fisheries advise: tagged white shark detected by Bondi Beach, Sydney receiver at 04:50:00 AM (AEST) on 28-Aug-2018'.

A fast growing method, but not yet widely deployed, is NLG that autonomously produces news text content (Linden 2017, p. 124). Most NLG systems appear to rely on a combination of templates to structure a story: well-organised data sources, very clear algorithmic rules and usually some human input (such as names of locations) (Leppänen et al. 2017a, p. 189). Due to the reliance on highly structured data, NLP applications are being applied to news domains such as weather forecasting (Sripada, Reiter & Davy 2003, p. 4), weather updates (Chen & Huang 2014, pp. 746-47), finance

(Nesterenko 2016, pp. 37-8), and sports (Bouayad-Agha et al. 2012, pp. 1-3). These methods, however, require considerable customisation to meet the content demands of different news outlets. Given that most are proprietary systems, details remain scarce. Such applications can also be used by digital platforms.

Automatic Text Summarisation

The inundation of news text online creates problems of 'information overload' for consumers. Automatic Text Summarisation (Summarisation) techniques help to overcome this problem by creating short text summaries of the most important information from a document (that is, a text source). The use of AI techniques, particularly Machine Learning (ML), Deep Learning (DL), and Natural Language Processing (NLP), enables representative summaries of documents to be created autonomously. Summarisation is applied for various purposes, such as extracting news headlines, featuring relevant snippets from documents, and summarising news content. There are two main forms: Extractive Summarisation and Abstractive Summarisation (Gambhir & Gupta 2017, pp. 2-4).

Extractive Summarisation: This method extracts parts of the text that are considered to be most representative of the document according to a specified metric. For example, a popular measure is to assess the frequency of a word in a document and adjust this score based on how frequently the word appears in a corpus of documents. This measure is called 'term frequency – inverse document frequency'. It is designed to devalue common words, such as 'the' and 'of', and place greater value on more instructive (or rare) words, such as 'politics', by comparing it to many other documents. This approach finds words in a text that are common, but not too common, which provides the basis for a text summary. For instance:

> *Original text*: Last week, **Prime Minister Turnbull and** wife **Lucy Turnbull** made a **visit** to the **Gallipoli War Memorial**. He gave a speech welcoming people to the service, and **met with ANZAC veterans** and foreign leaders.

> *Extractive summary*: Prime Minister Turnbull and Lucy Turnbull visit Gallipoli War Memorial. Met with ANZAC veterans.

The words in bold above were extracted from the original text and joined to form a summary. As seen above, a common issue with extractive techniques is that the output can be grammatically awkward. To overcome these issues and to summarise in natural language requires more abstract techniques.

Abstractive Summarisation: This method builds a summary of the text, in the ways that a human would. That involves selecting ideas, building readable sentences in natural language and presenting them in a concise form. Abstractive Summarisation allows for rephrasing and does not place extractive constraints on the words that can be used. To continue the text example from above:

> *Abstractive summary*: Prime Minister Turnbull and Lucy Turnbull visited the Gallipoli War Memorial, where they met ANZAC veterans.

In this example, words and punctuation were adapted or added from the original text to make the summary more readable. Clearly, it is preferable to present well-formed abstractive summaries, but this can be extremely difficult to achieve. Parsing language accurately and consistently is one of the biggest challenges for AI. Deep Learning, however, has contributed to significant advances in text summarisation.

Deep Learning and Text Summarisation: Digital platforms, such as Google and Facebook, have been leading forces in the development and application of Deep Learning (DL) techniques to summarise text. DL models can be trained through a technique called 'sequence-to-sequence learning', which converts sequences from one domain (for example, a long text document) to sequences in another (for example, a short text summary) (Sutskever, Vinyals & Le 2014, p. 3105). The algorithms use a combination of ML techniques to iteratively improve, NLP to synthesise natural language data, and neural network infrastructure to strengthen computation. These DL models can then deliver accurate abstract summaries of longer form text. Google AI Research has provided examples of its DL summarisation model (Google 2016):

Table 1:   Google's Deep Learning summarisation model.

Input: Article 1st sentence	Model-written headline
metro-goldwyn-mayer reported a third-quarter net loss of dollars 16 million due mainly to the effect of accounting rules adopted this year	MGM reports 16 million net loss on higher revenue
starting from July 1, the island province of Hainan in southern china will implement strict market access control on all incoming livestock and animal products to prevent the possible spread of epidemic diseases	Hainan to curb spread of diseases
Australian wine exports hit a record 52.1 million litres worth 260 million dollars (143 million us) in September, the government statistics office reported on Monday	Australian wine exports hit record high in September

While deep learning abstractive summaries continue to improve, they don't yet always meet a standard comparable to human performance. For instance, a better version of the second example might be, 'Hainan to control livestock imports'. This illustrates the difficulty of the challenge. The technique is also likely to change as ML techniques continue to improve and more training data becomes available. To date, summarisation has largely been confined to relatively short text documents, such as headlines for shorter news articles. Development, however, is underway to adapt and apply these AI methods to more difficult datasets, including summaries of long-form news features and books.

There are obvious benefits to accurate summarisation in its potential to assist consumers to digest news efficiently and to help producers to summarise their content. However, there are risks. First, there are risks that summarisation may not accurately reflect the content of a document, and might thus misrepresent facts or spread misinformation, among other adverse effects. These risks will inevitably decrease as AI applications continue to improve. Second, there are risks that digital platforms will take away online traffic from news content producers by providing consumers with short summaries that have been extracted from multiple sources. This could further reduce the capacity of digital news outlets to engage readers on their own platforms and subsequently weaken their economic viability. This is a significant risk, given that a summary that draws on several sources would arguably not infringe the intellectual property rights of the original content creators. And third, widespread summarisation raises concerns of reduced in-depth engagement with news content, which ultimately can affect production and quality. If consumers increasingly read summarised versions of news content, this may compromise the incentives for news outlets to produce in-depth, quality content. Given the nascent stages of summarisation techniques, these concerns are, for now, largely speculative.

AI bias

The application of AI systems also raises issues of bias. AI systems that exhibit statistical biases in their models or algorithms can result in actions that cause undesirable, unequal and/or unfair outcomes. AI systems typically undergo a process of 'training' and 'testing' in controlled environments before they are deployed in the real world. During these stages, AI developers attempt to specify the rules and requirements of an AI system, so that it can perform well and behave as intended. Biases in AI systems, however, emerge from 'reality gaps', where the system's specifications or training inputs differ from the requirements of its real-world environment (Amodei et al. 2016, p. 2).

Biases in specification refer to scenarios where the biased judgements (conscious or unconscious) of human designers result in the incorrect specification of formal goals for an AI system (referred to as the 'formal objective function'). This fundamentally concerns *how* the AI system analyses the input data, perceives its environment and performs actions to achieve its goal. While AI systems may act autonomously once deployed, they still depend on human design, which is inherently exposed to the flaws of human judgement (Tversky & Kahneman 1974, pp. 1124-7). Therefore, the complexities associated with correctly specifying AI systems are at risk of reflecting the biases of its human designers. For example, recommender systems that are designed to place greater weightings on 'liberal' news stories, due to unconscious biases of the designers, may result in recommended news stories that are ideologically skewed.

Biases in training, however, concern situations where the data used to 'train' and inform AI systems are not representative of its operating environment. This could be a result of the training data being skewed, incomplete, or poorly labelled by humans (Hardt et al. 2016; Misra et al. 2016; Zook et al. 2017). Such biases can subsequently be reflected in the behaviours of AI systems, which can cause unintended

consequences. For example, in 2015, the image recognition AI in Google Photos classified an African American couple as 'Gorillas' (Guynn 2015). This systems error was attributed to poorly curated and biased training data during development.

Further innovation and 'affordances'

The innovation and technological change being implemented by digital platforms and news media is radical and ongoing. It is also vast in scope. As a result, this chapter has aimed to present a selective account of key developments, including algorithms and AI. In this section, we focus on specific technological innovations by Google and Facebook that have impacted the consumption, distribution and production of news. These innovations are: Google's Search Engine Optimisation, First Click Free, Flexible Sampling and Accelerated Mobile Pages; and Facebook's Instant Articles. This brief account shows how the relationship between digital platforms and news outlets is evolving, and that there is an ongoing tension that is yet to resolve itself into a thriving and mutually beneficial partnership.

Search Engine Optimisation (SEO)

Google tasks itself with the mission of 'organising the world's information'. It has become a crucial player in the news ecosystem globally, with significant influence on news production, distribution and consumption. Most obviously, its news aggregator, Google News, is particularly influential. For instance, one study has shown that local Spanish news was consumed significantly less after the 2014 shutdown of Google News in Spain, in response to a law forcing Google to pay local publishers for aggregating their content (Athey, Mobius & Pál 2017). After the shutdown, those who had been users of Google News were found to be reading less breaking news, hard news, and news not well covered by their favourite news publishers. The impacts of Google News continue to be studied.

However, Google has many other platforms and technologies that affect the production, distribution and consumption of news. For news producers, Google's Search Engine Optimisation (SEO) rankings are especially significant. As search is an important news consumption channel for Australians, how prominently news web pages are ranked in Google SEO influences the number of unique visitors who engage with content. While there are many factors that influence SEO rankings, and the Google algorithm is constantly evolving, content creation is a critical element (Google 2018); that is, adding fresh and unique content regularly helps to improve SEO rankings.

This deep appetite for content creation, driven partly by SEO rankings, comes at a time of diminishing resources for newsrooms (Carson & Muller 2017). News outlets are therefore incentivised to develop automated news production systems, such as NLG methods, to maintain or improve their SEO rankings. As discussed above, these systems can be difficult to build as they can require high levels of customisation in order meet the content demands of the news outlet. It is likely that only a small group of news outlets has the resources to invest in these systems. In this regard, the basis of

competition shifts to the ability of news producers to process and generate information into consumable content, which is supported by AI techniques.

These content generation systems are improving, but there are some concerns regarding quality and the ability to provide insight (Leppänen et al. 2017b, p. 194). While Google SEO does reward 'easy-to-read' natural language (Google 2018), a NLG-produced story can fulfil this criteria without providing useful analysis. For example, a sports story could include the score but miss controversial refereeing decisions that significantly affected the outcome. The quality of the system ultimately depends on the factor weightings of the Google algorithm, which remains ambiguous and non-transparent.

First Click Free and Flexible Sampling

In 2008, Google introduced 'First Click Free' (FCF). According to its blog, Google aimed to 'provide a better experience for Google users who may not have known that content existed', and 'provide a promotion and discovery opportunity for publishers with restricted content' (Google 2008). Under the scheme, publishers who wanted to appear on Google were required to offer readers a prescribed number of 'free' articles per day before they hit a pay wall (Ruddick 2017). Initially, there was a daily limit of 10 'free' articles, but this was reduced to five in 2009, and further reduced to three in 2015, in part because publishers complained that users could use different browsers or clear their cache to increase their sampling limit (Google 2018; Google 2015; Evans 2018). To take part, publishers were required to allow 'Googlebot' into their websites to collect information for indexing. Googlebot is a 'web crawling bot' that indexes and updates websites every few seconds; however, it cannot breach sites that have pay walls, or require login details (Google 2018).

While Google claimed that FCF was a way to 'connect users to high quality news with minimum effort' (Google 2015), European publisher Axel Springer publicly objected, and Robert Thomson of News Corp described it as a way of 'disadvantaging premium content', because 'if you don't sign up for "first click free", you virtually disappear from a search' (Ruddick 2017). Google's FCF has been described as a way of 'Google determining their [publishers'] business models' (Critchlow 2017).

In 2017, the First Click Free model was abandoned and replaced by 'Flexible Sampling', which affords publishers a range of options (Google 2018). Google's vice president of news, Richard Gingras, calls it a way for 'publishers to best determine what level of free sampling works best for them'. However, in its submission to the ACCC, News Corp says, 'it is not yet clear how Flexible Sampling will impact overall search indexing for publishers with locked content, especially if a publisher does not provide content in the AMP (Accelerated Mobile Page) format'. Clicking on an AMP link could lead users to a Google-determined site, and not the original publisher's webpage (News Corp 2018, pp. 70, 72; see below).

Flexible Sampling is a significant shift from First Click Free. It allows publishers to decide how much content users can sample for 'free'. These options include 'metering' and 'lead-in'. Metering refers to publisher's ability to choose how many complete

articles users can access before subscribing to their website. Lead-in, by contrast, allows publishers the ability to provide samples of a limited number of words per article to users. Google advises against employing a lead-in approach, stating that 'the interest in the product diminishes greatly'.

Instant Articles and Accelerated Mobile Pages

In January 2018, Facebook de-prioritised news, as discussed above. Previously, however, Facebook made changes to facilitate news consumption by introducing Instant Articles, which leverages the same technology that ensures photos display quickly in the Facebook app. Instant Articles, according to Facebook, is a mobile publishing format that loads and displays up to 10 times faster than the mobile web (ibid). Launched in 2015, it enables users to see a publisher's article within Facebook's app, even though its appearance resembles the publisher's format. However, a study published in the *Columbia Journalism Review* found that by 2018 'over half of Facebook's launch partners for Instant Articles did not use the format'. The study suggested that this may reflect the criticism by publishers that Instant Articles provides 'underwhelming monetisation, limited data usage and underwhelming options for subscription-based outlets'. Though there has been an increase of 25 per cent in Instant Articles publishers, this may simply suggest that Facebook's product is 'prioritising quantity over quality', given the amount of 'high-profile publishers moving out of Instant' (Brown 2018).

As a response to Facebook's Instant Articles, Google's Accelerated Mobile Pages (AMP) format is an open-source project designed to improve the mobile web by making pages load faster. Unveiled in 2016, AMP aims to create a better user experience and decrease bounce rates. This is achieved by simplifying the regular mobile page code (feature-heavy JavaScript) to render instant page load times.

Developers and news publishers, however, have argued that too much control is being given to Google (Lardinois 2018). Specifically, AMP pages are optimised, indexed and shown especially for Google. Additionally, websites are required to use AMP in order to be featured on the Google News 'Top Stories' carousel (Google 2018). While the integration of AMP does not currently affect websites' Search Engine Optimisation (SEO) rankings with Google Search, it does affect other metrics, such as clicks, impressions, and bounce rates, which impacts SEO. Additionally, Google's investment in the area and the growing use of AMP indicate that it could play a role in SEO rankings in the future.

The effect of AMPs on news is not yet clear, but early figures suggest Google's audiences for publishers have increased. For some websites, AMP traffic is boosting readership dramatically. In August 2018, Nielsen's Digital Content Ratings released audience results for news sites which, for the first time, included Google AMP data (Samios 2018). Supplemented by Google's Accelerated Mobile Pages data, *The Guardian Australia*'s unique audience number grew by more than one million, or 39 per cent. Big gains were also recorded by *The Daily Telegraph*, which saw a 10 per cent increase in its unique audience. *The Australian* saw its unique audience increase by

more than 700,000 to 2.23 million; and Nine.com.au's audience grew 8 per cent. The data only includes publishers who have opted in; Fairfax and the BBC are not among them (Samios 2018).

In August 2018, Nieman Lab reported that Instant Articles has fallen out of use with many publishers, but that AMP 'has contributed to Google overtaking Facebook as a traffic referral source' (Moses 2018). However, it noted that publishers are expressing concern about the benefits of AMP. The concerns include: AMP delivers limited revenue because it does not support some ad formats; it limits publishers' ability to use ambitious editorial formats; and it limits the collection of data about reader behaviour (Moses 2018). While a minority of publishers are seeing clear benefits, it seems the majority are not. According to the first formal statistical analysis of the effects of AMP on website traffic, two thirds of publishers see no clear benefit in traffic from AMP (Breaux & Doll, Chartbeat 2018):

> In sum, the prospect of AMP may not be positive for all publishers. Though the technology offers rightly lauded fast page loads, and potential opportunities in new products, with only 34 per cent of publishers seeing a clear boost in traffic and some facing substantial monetization challenges, implementing AMP may come at a high cost for publishers (ibid).

All of the specific technologies described in this section have had benefits for news consumers, distributors and producers, including in the way that unprecedented volumes of content have become accessible to consumers. The distribution channels for news have multiplied, and consumers have benefited. However, there have also been clear harms, most obviously in the way publishers have been unable effectively to monetise the use of their content by search engines, aggregators and social media.

Conclusion

The impact of technologies is complex. Indeed, with radical, ongoing changes to the media landscape, various distinctions are becoming blurred. These include the distinction between digital platforms and news media companies, the distinction between digital platforms and the internet generally, and also the distinction between news consumers, distributors and producers. Nonetheless, specific impacts on news consumers, distributors and producers can be identified, and can sometimes be clearly attributed to digital platforms. Some of these impacts are positive; some are negative; some are both at once.

A preliminary point is that technology does not determine consumer behaviour, but does play a key role in influencing and shaping online behaviour. With its 'affordances', it allows users to engage in certain ways, but not in others. And the affordances of algorithms are particularly noteworthy. For both digital platforms and news media, algorithms are widely used and highly significant, but rarely transparent. In particular, the algorithms of social media, search engines and aggregators determine which content users encounter. Their effects on consumption and distribution of news are significant; yet they also affect news producers. When social and search algorithms

change, as they often do, news content can be made more or less visible. This can leave news producers vulnerable, incentivising them to 'game the algorithm' by producing content that the algorithm will surface.

Notably, algorithmic techniques are used to *personalise* content for consumers: they underpin the recommender systems that suggest news stories; they enable social media to tailor 'newsfeeds' for each user; and they enable search engines to offer advertising and search returns specifically for each individual. As a result, the use of algorithmic techniques has raised concerns about 'filter bubbles' and 'echo chambers'. These concerns include arguments that consumers are being exposed to a diminished diversity of content, that consumer autonomy is being compromised and that a lack of transparency and accountability for the workings of these algorithms is fundamentally unfair. The evidence for diminished diversity is inconclusive, with some studies suggesting that fears about filter bubbles and echo chambers are significantly overblown. However, personalisation algorithms can have negative impacts, including on autonomy, stemming in part from a lack of transparency and accountability about how they work. These negative impacts must be weighed up against positive impacts, which include the way algorithmic techniques help consumers navigate their way through a digital landscape that is sometimes overwhelming. The proprietary interests of the companies that develop the algorithmic techniques must also be considered, but this does not of itself appear to exclude high-level explanations of the workings of algorithms.

Artificial Intelligence is also having an impact. Automated journalism is still in its infancy, but the potential is great for both news producers, and also for digital platforms to produce meaningful content. Similarly, automatic text summarisation has tremendous potential, and may enable digital platforms more easily to repurpose content from other sources. Again, such techniques potentially offer benefits for news consumers and distributors, but carry serious risks (and some potential benefits) for news producers. One emerging issue is that AI is susceptible to bias: systems are needed to minimise such bias.

Finally, we turned to various specific technologies and innovations implemented by digital platforms that have impacted news consumers, distributors and producers. Specifically, we addressed Google's Search Engine Optimisation, First Click Free, Flexible Sampling and Accelerated Mobile Pages and Facebook's Instant Articles. The familiar pattern emerges: while overall these technologies have had significant benefits for the consumption and distribution of news (and for digital platforms), the same cannot be said for news production. A tension persists between digital platforms and news producers, who together have not yet developed a healthy and mutually beneficial relationship, despite significant, ongoing technological innovation and experimentation.

Digital platforms are renowned for innovation. They are nimble and fleet, adjusting quickly to new challenges and opportunities. Yet these technologies warrant detailed, dispassionate scrutiny, as their impacts on news consumption, distribution and production are often significant and hard to discern.

3 Quality in news and journalistic content

- *Driven by a shared professional identity and journalistic values, the news industry has maintained a range of accountability instruments including industry codes of ethics and journalistic norms and practices.*

- *The contemporary media environment has introduced new challenges to journalistic quality: the 24/7 news cycle; algorithms; the blogosphere. For consumers, this represents a new information asymmetry.*

- *In response to escalating quality challenges, a number of online communities have assumed the roles of news media 'watchdog', 'fact-checker' and 'critic'.*

- *Indicators of journalistic quality can be grouped under three sets of criteria: content indicators; organisational indicators; and audience engagement indicators.*

- *The current regulatory framework for the news media is fragmented. There are ways in which digital platforms, as participants within the broader social framework for news media, could help maintain journalism's accountability schemes.*

The concept of quality journalism has long been the subject of debate among academic researchers and professional journalists, who have developed various approaches to define and measure the quality of news and journalistic content (Anderson 2014, Shapiro 2010). The issue has attracted more attention — and new approaches — during this time of rapid technological and commercial change in the news industry, a time characterised by cost-cutting, redundancies, mergers and a loss of trust in the news media in most countries, including Australia (Edelman 2018, McKewon 2018, Dawson 2017).

Anxiety over quality rises sharply at such inflexion points in the news media industry. Recently, attention to the role of quality in journalism has also caught the attention of regulators and policy-makers in the UK and the EU, as well as in Australia.[15]

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[15] See: the Council of Europe's work on Quality Journalism in the Digital Age, <https://www.coe.int/en/web/freedom-expression/msi-joq>; the European Platform of Regulatory Authorities' work on Implementing Accuracy, Objectivity and Impartiality in Practice, <https://www.epra.org/attachments/vienna-plenary-1-news-in-digital-age-the-role-of-regulators-epra-background-document>; and the UK Department of Digital, Culture, Media and Sport's Review of the Sustainability of High Quality Journalism, <https://www.gov.uk/government/news/chair-appointed-to-lead-review-of-press-sustainability-in-the-uk>.

As we will see, ideas of quality are mutable, subject to a host of issues, some definitional, most in some way affected by the transition of news media to the digital age. In this section we consider a range of approaches to the conceptualisation and assessment of quality in journalism, in particular how they are applied in the internet-based media ecology. After an initial review of the impact of digital journalism, we turn to specific attempts to assess journalistic quality and present a set of the most useful indicators.

Most of the studies and schemes described in this chapter are focused squarely on journalists and news producers, although more recently audience engagement has featured strongly in measures of journalistic quality. What is missing from much of this work – not surprisingly, given the pace of change – is an assessment of the distribution function of digital platforms. In the final part of the chapter, then, we explore whether there could be a role for platforms in helping to promote quality.

Quality in the contemporary media landscape

Professional standards and regulation

Despite the rise of digital media platforms and new media products, traditional news media still maintain a firm foothold among news consumers (Ofcom 2018, Newman et al. 2018, Klepova 2017). People still rely on news media to form opinions and make collective decisions as the civic and democratic role of media remains and the civic values of journalism look set to endure well into the future (Ellis & Thompson 2016). These normative traits appear to readily cross between online and offline news media. Van der Wurff and Schönbach (2011) confirm that practitioners in the Netherlands, for example, uphold a 'set of core standards' in their daily practices, both online and offline, and that these standards include accuracy, independence, truthfulness, impartiality, comprehensibility and transparency.

Historically, the quality of journalism has been encouraged by various accountability instruments that embody these values or standards: industry codes of ethics, journalistic norms and practices and regulatory sanctions (Fengler et al. 2015). Hence there are both informal, personal codes of conduct that drive individual journalists, and more formal (or semi-formal) codes of practice or other rules that apply on an industry basis. Van der Wurff and Schönbach (2011) describe first the 'overarching norm' in which journalists willingly accept and comply with the professional rules in their everyday practices, and second, the 'voluntary but binding code', which covers the core standards (or norms) of journalism.

In Australia, the Media Entertainment and Arts Alliance's (MEAA) Journalist Code of Ethics is usually seen as the instrument that informs journalists' own, ethical practice; the more formal accountability schemes are found in the codes of practice of the Australian Press Council (APC) and the Independent Media Council (IMC) for print and online publishers, and in the broadcasting codes of practice registered with the Australian Communications and Media Authority. The standards advocated by the APC, for example, are based on journalistic values and norms surrounding accuracy

and clarity, fairness and balance, privacy and the avoidance of harm, and integrity and transparency (Australian Press Council 2018).

These media standards schemes can be seen as one source of 'quality' in news and journalistic content. As formal, public accountability instruments, they necessarily play an important role, and we will return to them later in this chapter. First, though, we will consider some contemporary challenges to journalistic standards.

The digital challenge

We noted in Chapters One and Two that one of the core challenges to contemporary journalism is the transition to the digital news environment with its 24/7 news cycle. It has been said that the traditional journalistic 'model of verification' is being replaced by a new 'model of assertion' (Karlsson, Clerwall & Nord 2017). The verification model was based on the overarching journalistic value of accuracy, and the concomitant anxiety associated with potential sanctions that might result from inaccuracy; the new model of assertion is driven by the 24/7 news cycle in which the primary imperative is disseminating the news as fast as possible (Tambini 2017). In their study of five leading European newspapers, Ramirez de la Piscina et al. (2015) investigated the impact of new technologies on news quality; they found that the printed versions of newspapers scored more highly on quality than their online counterparts. They attributed this result to the increased demands and intensity of the 24/7 news cycle in the online environment:

> The haste with which the digital editions are written up provokes all kinds of errors, relaxes quality controls and accelerates the elaboration process of the news. All this has repercussions on the quality of the end product (p. 784).

One of the main challenges faced by British newspapers (apart from falling print circulation and revenue) is the struggle to adapt to the faster pace of the online news cycle, which has increased pressure on workers while reducing the quality of journalism products (Anderson, Williams & Ogola 2014). There is concern that the reporting of reliable facts is increasingly being replaced with less reliable information as publishers rush to push content online (Karlsson et al. 2017). Tambini (2017) views this phenomenon as a response to the breaking down of fact-checking as producers rush to publish content in the fast-paced online environment:

> In some (but by no means all) online journalism, the approach has been to 'publish now, correct later,' the idea being that the 'wisdom of crowds' or crowd-sourced fact-checking can easily correct errors in this medium (p. 8).

Some publishers have adopted strategies for making updates and corrections explicit: an online article that has been corrected may state, 'This article has been amended from the original', as is the case with *The Sydney Morning Herald,* which has had a digital-before-print policy since 2012. But online corrections by news media web sites are often not transparent, and few newsrooms offer their audience the opportunity to correct errors (Domingo & Heikkilä 2012).

Nic Newman of the Reuters Institute for the Study of Journalism, Oxford University, declared 2017 the year the news media focused its fears on how changing technology is affecting the quality of information.

Another of the challenges in this environment – for newsrooms, but also for consumers – is that questions of defining, assessing and ensuring journalistic quality apply not only to traditional news media and journalism but also to online commentary about news and the 'blogosphere'. Problems have arisen concerning the 'quality of digital content, which is a direct result of the hypertextuality, multimodality and interactivity of online communication, the general data explosion and the uneven distribution of internet access' (Eberwein & Porlezza 2016, p. 329). An earlier investigation by Frijters and Velamuri (2010) into the impact of the internet on high-quality news in the US news media discovered the emergence of two opposing trends: first, the increasing fragmentation of the news market, which has led to fewer traditional providers of high-quality news; second, the relatively stable consumer demand for quality news, despite increased competition from bloggers. Concerns about the quality of news and journalism continue to intensify in a rapidly changing landscape in which bloggers who have no ties to established media outlets now assume the role of critic and 'watchdog' of those organisations that have historically operated with (varying degrees of) consistency, accuracy and accountability.

Despite these concerns, some argue that digitisation has been a generator for *innovation* in journalistic standards and ethics. This is said to be due to the growth of media watch blogs, cyber ombudsmen and media criticism on or through platforms including Facebook and Twitter (Eberwein & Porlezza 2016). Yet while some blogs are now performing the function of media watchdog, Wischnowski (2011) points out that the blogosphere also thrives in an absence of transparency: while traditional media has 'multiple layers of editorial review each accountable to a superior editor' the blogosphere is 'inherently non-transparent' (p. 336). This highlights some ambiguity in the function of these blogs:

> Whether the internet's inherent decentralisation, along with concomitant lack of uniform editorial standards, forecloses the possibility that these blogs can be legitimate regulators of the flow of information remains hotly contested (p. 344).

Likewise, Fengler et al. (2015) write that it remains to be seen 'whether the accountability instruments emerging online like newsroom blogs, online ombudsmen and media criticism on the social web – successfully support or even replace … traditional instruments of self-regulation' (p. 250).

Innovations in journalism

Problems with quality and transparency are exacerbated when algorithmic components are integrated into news products and social networking platforms designed to assist with the optimisation, dissemination and even the production of news. Some scholars argue that the use of algorithms to curate or disseminate news should always be disclosed to news consumers (Diakopoulos & Koliska 2017).

Further complicating the issue of quality is robo-journalism, which we noted in Chapter Two. This is already being used by Bloomberg, Dow Jones and the Associated Press to create basic finance stories virtually instantaneously, based on data released as soon as firms announce quarterly results; this type of journalism has further extended to sports journalism (Newman 2017). Mindful of the current limitations of machine learning and the as-yet uncontested public acceptance of robo-journalism, companies such as Bloomberg stress that humans will work with the machines to ensure the accuracy of the news published – journalists will also have more time to concentrate on analysis, says Ed Johnson, the managing editor of Bloomberg News in Australia and New Zealand:

> Jobs will go in the industry, but a lot of them will be the humdrum, rote elements of journalism. AI will free up time for humans to focus on the 'why' – in other words, analysis of news. Automation will tackle the 'what' but it doesn't tackle the 'why' (Fray 2018b, p. 44).

Notwithstanding the opportunities afforded by smart machines for publishers to reduce or otherwise redeploy editorial staff, scholars argue that adequate funding of newsrooms to ensure quality journalism is a good investment for the media, the public and democracy (see for example White 2015, O'Donnell 2009). In response to the trend towards weakening quality standards in the news media, digital online communities have formed to signal quality and its associate, trust. Members of the International Fact-Checking Network (IFCN), a broad coalition of 50 news fact-checking websites, are required to sign a statement of transparency and accountability principles that acts as 'a badge of trustworthiness for audiences, researchers, donors and technology platforms'.

In a more direct and ambitious way, journalist and academic Frederic Filloux, a former editor-in-chief of *Libération*, is developing Deepnews.ai, a machine learning project that aims directly to link the provision of quality news with financial reward. His backers include Google, Stanford University, *The Guardian* and The Trust Project (which has developed its own 'trust tick' to encourage quality news consumption and sharing on the internet). Filloux's aim is to produce a machine learning system that scores, surfaces and financially incentivises quality journalism:

> Deepnews.ai's scoring system will interface with ad servers to assess the value of a story and price and serve ads accordingly. The higher a story's quality score, the pricier the ad space adjacent to it can be. This adjustment will substantially raise the revenue per page.

In theory, innovations such as Filloux's should help to address the problem of misinformation. Newman (2017) observes that much of the recent upheaval about journalistic quality relates to the phenomenon commonly called 'fake news'.[16] Running counter to the spread of fake news is the trend towards trusted brands – that is, traditional high-quality news organisations. Over two-thirds of the respondents to the

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[16] See Chapter One for a more detailed account of fake news, as well as a brief account of various trust-enhancing initiatives, several of which are supported by digital platforms.

Reuters Institute's 2017 *Digital News Report* believed that concerns over fake news would serve to strengthen support for traditional news providers (Newman et al. 2017). In the US in particular, the two-year period since the campaign and election of President Donald Trump has made real the opportunity identified by the economist Lisa George (2015) who suggests that the problem readers face in distinguishing informed analysis from uninformed opinion opens up a financial opportunity for 'enterprises which can establish a reputation for quality'. In her view, one approach to assessing quality is quite simply the question: are consumers willing to pay for it? Organisations that can 'credibly signal information quality' by ensuring the integrity of the information they provide, stand a far greater chance of attracting paying customers. In her analysis, she foresees a 'flight to quality news brands' prompted by the rise of fake news in the wake of Trump's election.

This contemporary affirmation of the importance of quality points to the need to find some means of characterising and measuring it.

Approaches to assessing quality

Many scholars argue that evaluating quality in journalism requires a greater effort than simply judging content in isolation (Romero-Rodriguez & Aguaded 2017; Lacy & Rosenstiel 2015; Ramirez de la Piscina et al. 2015; O'Donnell 2009; Hollifield 2006; Picard 2000). Romero-Rodriguez & Aguaded (2017) argue that content-only evaluation models of journalistic quality are inherently flawed as quality is the result of multiple factors involved in the pre-information and production stages, including the working conditions of journalists. Ramirez de la Piscina et al. (2015) note that, although many scholars have evaluated quality from an organisational perspective – for example, measuring the impact of economic and labour conditions on the quality of the product – news quality has traditionally been analysed solely through its content. However, that is not always the case.

In her review of the academic literature on journalistic quality, O'Donnell (2009) found four main approaches to evaluating journalistic quality. The **quality-popular divide** pits the 'quality press', which produces 'serious' journalism for educated readers, against the 'tabloid press', which targets a popular readership with light, entertaining content. The **newsroom resources** approach asserts that quality is the product of investment in human and material resources needed to do the job properly – editorial staffing levels top the list of newsroom indicators of quality journalism. The notion of quality in **journalism as a creative work** conceptualises journalism as an intellectual product that resists easy measurement. Finally, the approach centred on judging **journalistic commitment to democratic values** proposes that journalists should be most concerned about the ends that may or may not be achieved as a result of the content they produce. O'Donnell selects the 'creative work' and 'newsroom resources' methods as most useful in determining the factors that contribute to peak excellence in journalism:

> … taken together [they] point to key issues that need to be explored in more depth in any analysis of prize-winning journalism. They are the creative work of journalism, and its appeal to professional peers and newsreaders, as well as the newsroom resources that might sustain its production (p. 52).

O'Donnell's analysis on journalism as creative work will be further explored below.

Hollifield (2006) argues that factors indicating quality journalism can be divided into three subcategories: **content**, **organisation** and **financial commitment to the news product**. Media economist Robert Picard (2000) also argues that journalistic quality is critical for producing the range of positive externalities in the form of social, political and cultural goods that are expected of journalism in democratic societies. He says it is impossible to objectively measure journalistic quality using standards based on values such as truth, fairness and completeness, which are in essence behaviours of good journalists that do not lend themselves to ready quantification:

> Journalism is not in itself a product or service. We do well, in my opinion, to consider it the mental activity of journalists that produces value in the forms of news, features, commentary, photos, and entertainment. It is also the mental activity that creates additional value by editing, drawing parallels between stories, creating layout, and employing design to enhance the communications. It is obviously impossible to measure this mental activity, but I believe it is possible to measure activities that make these mental activities possible and affect its quality (p. 100).

Picard argues that quality is dependent upon the mental activities of journalists (echoing the 'journalism as creative work' perspective identified by O'Donnell 2009), and these mental activities are dependent on **organisational investment**, **culture** and **the focusing of resources**. His quantitative approach to journalistic quality assessment will be discussed in greater detail below.

In the most recent academic research on media quality, González-Gorosarri and Tolosa (2019) present a framework of three categories of assessment criteria based on reviewing European and American academic research. The first category, **'format quality'**, includes 'technical error-free supply', 'artistic values' and 'originality format' (p. 174). The second category is **'content quality'**, which includes diversity, usefulness and reduction of complexity/increase of comprehensibility. The third category of **'social quality'** assesses the media's community impact. This category relates to the final media product and the social roles of journalism including 'monitorial, radical, collaborative and facilitative roles' (p. 175). The framework of González-Gorosarri and Tolosa (2019) is designed for cross-platform application and can be used to assess the quality of various types of news and journalistic content.

Lacy and Rosenstiel's (2015) review of the scholarly work in this area identifies three approaches to assessing quality in news and journalistic content: the first is to specify the **characteristics of quality-oriented news organisations**; the second is to specify the **content attributes that reflect the output of these organisations**; the third is to analyse **engagement data** to see what kind of qualities resonate with audiences. Given the increasing imperative to engage news audiences and explore their

perceptions of quality, the following sections borrow Lacy and Rosenstiel's basic structure of organisational, audience and content indicators of journalistic quality.

Organisational quality indicators

The quality of journalism is said to be strongly influenced by organisational factors and financial commitment to quality (Hollifield 2006). Organisational factors include editorial independence, staff professionalism, impartiality, editorial courage and community leadership. Meanwhile, a news organisation's financial commitment to quality can be measured by indicators such as the amount of copy in news production, advertising, the number of reporters, readers and other indicators (Hollifield 2006).

An economics-based approach to measuring quality can be found in the work of Ying Fan (2013), whose modelling of ownership consolidation in the US daily newspaper market considers whether mergers and acquisitions improve or diminish content quality. Her work simulates the merger of two newspapers in Minneapolis (blocked in real life by the Department of Justice on anti-competitive grounds) to conclude that 'if the merger had occurred, both newspapers would have decreased the news content quality, the local news ratio, and the content variety'. While analysing Fan's work is beyond the scope of this report, we note that her simulation includes development of a content quality index based on the specific internal characteristics — the endogenous values — of news media and organisational factors of newspapers, such as the number of reporters.

Furhoff (1973) argues that there is a causal link between quality, commercial success and audience: in essence, stronger newspapers with bigger readerships, more journalists and advertising support are better able to guarantee quality standards than those with narrower audiences. This view is supported by Gabszewicz, Resende and Sonnac (2015) who found that size and scale were often prerequisites for quality. Bogart (2004) questions the direction of the causal relationship, noting that journalistic excellence clearly serves financial success; nevertheless, he acknowledges that more investment in a news operation will further enhance the quality of its journalism.

In New Zealand, Gibbons (2014) used content analysis of four print newspapers with large circulations to explore the relationships between ownership, content and quality — and the relationship between quality and readership. Gibbons' findings support the theory that newspapers have used different investment strategies to attract readers: 'quality newspapers' have by and large sought to link the number of reporters to the quality of the news provided, with more of the former leading to higher quality of the latter. As discussed earlier, such thinking may oversimplify issues around quality; but, as other studies have shown, it is commonplace in the news media industry.

Delivering the Andrew Olle Media Lecture in Sydney in October 2017, *The New York Times* managing editor Joseph Kahn argued that his newspaper successfully navigated the triple threat of digital disruption to its business model, the proliferation of fake news and relentless attacks from US President Donald Trump. Kahn said that the paper sharpened its focus on investigative journalism and resisted the temptation to become partisan; *The New York Times* increased its investment in reporters and gave them the

time they needed to break important news stories, including those that exposed unchecked sexual harassment and resulted in the downfall of powerful public figures such as Bill O'Reilly and Harvey Weinstein. Kahn said the newspaper's strategic plan had been focused on continually improving the quality of its journalism, and it is now cultivating a much larger national and global audience (Meade 2017).

Picard's (2000) quantitative method tackles concepts that are not measureable in themselves by using proxies. For example, a quality indicator such as accuracy relies upon an understanding of events or issues, so Picard includes measureable proxies that correlate with accurate journalism. The proxies for quality indicators such as completeness and breadth include: a higher number of interviews; greater time spent gathering information; personal attendance at events; greater time spent background reading; and greater time spent thinking during the preparation of the journalistic product.

Audience engagement quality indicators

In the digital era, an increasing number of scholars are turning their attention to the engagement and participation of news audiences; hence, the issue of audience engagement with news content now sits at the centre of debate about journalism quality. The audience-focused approach of Meijer (2013) values the role of news consumers' ratings, likes, shares and circulation statistics. While journalists may prefer to ignore audience ratings, they tend to use engagement data to measure the audience's level of interest in content. As Meijer observes, there is a 'complex discrepancy' between the viewpoints of journalists and their audiences about quality. Her work suggests a key question in any discussion about different perceptions of news quality: can the news media truly satisfy audience expectations for pleasure, representation and engagement? In other words, can the expectations of the audience align with that of practitioners?

Meijer (2013) calls her audience-centred approach 'valuable journalism', in which she aims to extend the concept of journalistic quality to include the perspectives of news producers and consumers. Her perspective is aligned with the broad concepts of journalism as a service, a highly contested idea in the digital era. Zelizer (2017) gets straight to the heart of the tension between news producers (who are protective of their autonomy and their professional identity as journalists) and news consumers:

> … the metaphor of service in many cases [is] less attuned to the notion of the public good and more to the ability to give select audiences what they want … In that regard, platforms as wide-ranging as Facebook and Reddit articulate satisfying the audience as part of their mission … As the *Nieman Reports* succinctly put it, 'what interests the public … is not the same as public interest' (Tremblay 2010, p. 23).

Van der Wurff and Schönbach (2014) have continued their study of journalism quality from the perspective of audience's expectations in the Netherlands, exploring the idea that audiences could share with journalists the responsibility of securing high-quality journalism in the future. In their own country, the crowd-sourced and crowd-funded

news website, *De Correspondent*, is showing promise. The concept may well be better placed to succeed in countries such as the Netherlands, owing to its 'democratic-corporatist model of journalism' and audiences who maintain a strong interest in current affairs. However, their results underscore that many news consumers align closely with the role played by professional journalism. The quantitative survey of 20,000 adults showed that the audience places high importance on the professional role of journalism. Respondents say they consider the independence of journalism to be crucial. Digging deeper, audiences are categorized in two groups: the better educated and lower educated groups. Each has different demands for journalism. The better-educated audience have more 'civic demands', or demands for quality news that combine audience expectations on traditional information and the democratic role of media. The lower-educated audience have more 'citizen demands'. They want journalists to take into account their experiences, contributions, desires and needs.

The findings of Van der Wurff and Schönbach (2014) provide valuable insights into how audiences engage with the news. As a counterpoint to studies based in the US, where there is a 'complex discrepancy' between the viewpoints of news producers and consumers, European audiences (at least in the Netherlands) appear to have a higher level of respect for the functions of journalism in democratic society.

The connection between the democratic function of journalism and audience engagement underpins the work of Finnish journalist Johanna Vehkoo (2010). She proposes conceptualising quality journalism based on the consensus of scholars and journalism professionals, who agree on the two primary functions of journalism: that of power monitor and that of 'servant of citizens'. Vehkoo argues that, while journalism can exist without democracy, democracy cannot exist without journalism. She strengthens her argument by quoting Scheuer (2008):

> If journalism serves a core democratic function, without which democracy itself is all but inconceivable, then journalistic excellence must also factor into the quality of democracy. Journalistic excellence – and not just freedom of speech and the press – must be a basic democratic value (Scheuer 2008, p. xi).

Vehkoo (2010) argues that 'truth' could be the most important feature to differentiate journalism from other media products, but that this is not enough. She wants quality journalism to give priority to the context of the news by answering the questions of 'how' and 'why'. But in thinking about quality, she offers a broad definition: quality news is almost everything that satisfies the public. This, her definition of quality journalism, doesn't require a set of standards, but simply demands that news should:

> … make sense of the chaotic world around us. It gives context and background to events. It interprets, analyses, and strives to give meaning to all the babbling that's going on. It looks beyond the obvious and behind the trickery, but also forward, to where we are being led by the ones who are in power (p. 22).

Content quality indicators

Although Romero-Rodriguez & Aguaded (2017, pp. 1331-3) warn that journalistic quality cannot be assessed based only on content, they nevertheless offer a number of criteria that can be used to assess the quality of content: verification of information; evidence/presence of investigative journalism; feedback, reader rights and citizen participation; use of international news agencies; self-obtained photographs; references to primary (direct) sources; sufficient documentation and contrasting information; clear identification of corporate sources; different types of information in edition/issue; geographical diversity (e.g., outside capital cities) and balance of opinions featured.

Ramirez de la Piscina et al. (2015, p. 770) define quality journalism as achieving a series of minimum standards related to selection, elaboration and social contribution. Their method analyses both qualitative and quantitative aspects of journalistic content. The absence or presence of the qualitative attributes is simply noted, not measured (or even measurable objectively); these indicators include dimensions of format quality such as technical aspects, aesthetic considerations and functional considerations. The quantitative indicators are grouped into three sub-categories. First is the selection process, which includes: mention of the source of the news; the character of the sources; factuality of the reported fact (event or statement); degree of factualness; and newsworthiness (the degree of interest in the news item). The second and most important sub-category involves the elaboration process which includes: accuracy (correspondence between the headline and the body of the item); depth (who, what, when, where, why); presence of different perspectives within the item; contributions made by other informative elements (photographs, graphics, infographics, etc.); and correctness of journalistic language (errors in the text). The third and final sub-category is social contribution, which takes inspiration from the UNESCO International Principles of Professional Ethics in Journalism (1983). This final category includes: power watchdog; promotion of social debate; respect for human dignity; presence of cultural references from other countries; and combating of social marginalisation.

Drawing on the theoretical work of Bogart (2004), in which journalism is conceptualised as creative work, O'Donnell (2009, p. 51) considers 14 indicators of excellence in journalism, most of which are content-based: integrity, fairness, balance, accuracy, comprehensiveness, diligence in discovery, authority, breadth of coverage, variety of content, reflection of the entire home community, vivid writing, attractive makeup, packaging or appearance, and easy navigability. Taking into account her empirical study of the criteria used by the Walkley Foundation to bestow its prestigious awards for excellence in journalism, O'Donnell (2009) proposes that these quality indicators might be best reclassified into three subsets: professional journalism skills (newsworthiness, research, writing, production and incisiveness); social/democratic priorities (impact, public benefit and ethics); and creative values (originality, innovation and creative flair). She concludes:

> 'Quality journalism' … needs to be defined and studied in ways that open up the conceptual complexities and tensions, rather than only trying to reduce them to quantifiable variables (p. 57).

Other scholars have continued to expand the body of literature on assessing the quality of journalistic content. In a more recent review of studies on journalism quality, Lacy and Rosenstiel (2015, pp. 27-8) propose seven characteristics of high quality journalism:

- Presentation quality: High quality journalism should have high production quality and be accessible to a wide-range of community members.

- Trustworthiness: High quality journalism should be accurate and credible, which can be measured in various ways.

- Diversity: High quality journalism should be diverse in the number of sources, issues, topics and ideas within information bundles and across the community.

- Depth and breadth of information: High quality journalism should provide a deep and broad understanding of issues and trends. In addition to looking in depth at important issues, this involves efforts to provide context through both news reporting and opinion. This could be said to include, according to the API data, a range of story presentation styles, as that correlates to broader and deeper audience engagement.

- Comprehensive: The bundle of quality journalism available in a community should cover the range of important community events, issues, and trends. This is measured at the community level, whereas depth and breadth are measures of range at the publication and story level.

- Public affairs: Bundles of information from outlets should include a strong emphasis on public affairs reporting and opinion about government, politics, schools and other activities that affect the quality of life in the community.

- Geographic relevance: Bundles of journalism should devote a significant amount of their content to events, issues and trends of importance to people in their primary geographic coverage areas.

Gladney, Shapiro & Castaldo (2007) explore the attributes of journalistic quality applied to online news and compare these standards with those of traditional print. Thirty-eight criteria of news standards were categorized in six groups, each with its own theme: Content, Interactivity, Look and Feel, Navigation, Functionality and Community Relevance. This list, comprising a mix of content and non-content indicators, represents the first 'comprehensive' set of quality standards combining key criteria applied in online media and traditional media. After analysing the survey results

provided by 121 online news editors in the United States and Canada, the authors found that online editors place the traditional standard of news first, with the content category ranked at the top. This category includes credibility, utility, immediacy, relevance, ease of use, fact-opinion separation, clear paths and simplicity. The typical attributes of websites such as reach, bandwidth, customization, user choice/control, interactive reading, community dialogue and civic/public discourse are rated by editors at the bottom of the list (Gladney, Shapiro & Castaldo 2007, p. 61).

This study builds on the work of Gladney (1996), which involves a broad survey asking newspaper editors and readers to rank and rate 18 standards of news excellence. Gladney's (1996) analysis is based on the responses of 257 senior editors working at large, medium and small daily and weekly newspapers in the US, as well as the responses of the newspapers' readers. Gladney's key finding is that readers and editors both agree on six key standards essential to newspaper quality: integrity; strong local news coverage; impartiality; accuracy; editorial independence; and good writing.

Anderson, Ogola & Williams (2014, p. 26) examine the quality of journalism in the modern strained environment of fast-paced newsrooms, cost-cutting and job reductions. They propose 'the five Cs and one A' framework to help news producers effectively monitor the quality of news content: comprehensibility; context; causality; comparativeness; comprehensiveness; and accuracy. This framework draws on the quality matrix developed by Anderson and Egglestone (2012) after evaluating BBC online journalism. The 'five Cs and one A' framework suggests equations that can be used to measure quality journalism.

Although some contemporary studies include new indicators for assessing the quality of journalism in the rapidly changing media landscape, it is interesting to note that one of the most technologically advanced sources – Frederic Filloux's deepnews (mentioned above) – uses some of the most simple quality indicators based on traditional journalistic values:

> We define quality narrowly; in its simplest terms, we look for value-added journalism. This means coverage built on a genuine journalistic approach: depth of reporting; expertise; investigation; analysis; ethical processes; and resources deployed by the newsroom.

Table of quality indicators

In the following tables we present what we consider to be the most useful quality indicators discussed in the academic literature in the above section. While the combined studies contain an extensive list of quality criteria, there are some cases of similarity or overlap. Other indicators, such as 'comprehensiveness', seem unattainable – so the more realistic indicators of 'in-depth reporting' and 'diversity (content) have been included instead. This table attempts to distil the most effective quality criteria into a manageable and organised list. The selected indicators are divided into three categories that reflect the structure of the above section: content attributes; audience engagement; and organisational factors. The content indicators (the largest category) is then shaded to reflect the following sub-classification:

A. Core standards of practice

B. Core professional practice indicators

C. Broader social functions

The individual indicators should not be required to carry equal weight; the table is a guide to factors that can be taken into account. Keeping in mind O'Donnell's warning against trying to reduce conceptual complexities to quantifiable variables, a table of quality indicators that helps to build a picture of overall quality is likely to be useful. We acknowledge, however, that development of a more dynamic matrix to suit the contemporary environment requires separate research.

Table 2.   Quality Indicators – Content Attributes

Indicator	What it indicates	Indicator	What it indicates
A. Core Standards of Practice		**C. Broader Social Functions**	
Accuracy	Content is factual, verified and not misleading; opinion is based on accurate information and does not omit key facts; material presented in the body corresponds with the headline.	*Power watchdog*	Scrutinises the activities and conduct of powerful interests so they can be held democratically and socially accountable.
Clarity	Easy to understand; distinguishes fact from opinion.	*Public sphere*	Facilitates deliberative, rational and representative public discourse.
Fairness	Material is fairly presented; persons or groups unfavourably portrayed given right of reply.	*Critical Information Needs (CINs)*	Gives details of emergencies, risks, health, welfare, education, transportation, economic opportunities, environment, civic information and political information.
Privacy and protection from harm	Respects privacy; avoids causing substantial offence, distress or risk to health or safety (unless it is in the public interest).	*Geographical relevance*	Provides original local news voice for local communities; reports on local institutions, decision-making processes and events.
Balance	Presentation of contrasting information and viewpoints from different sources.	*Usefulness*	Provides citizens with information they can use to make effective decisions that benefit their personal and civic lives.
Integrity and transparency	Avoids or discloses potential conflicts of interest; content has not been produced via unethical or deceptive means.	*Diversity (social)*	Positive coverage of minority groups; variety of content appeals to a range of social groups; multicultural references.
B. Core Professional Practice Indicators			
Immediacy	Publication and updating of breaking news as soon as practicable (after fact-checking) for each given format.	*Analysis*	Rational, knowledgeable and insightful interpretation of events and issues that helps people make sense of their world.
Authority	Stories use the expertise of authoritative and reliable sources; corporate or partisan sources are clearly identified.	*Originality*	Content is produced in-house through original research, interviews, verification of information, self-taken photos.
Depth and breadth of coverage	Explaining background context, causes and consequences involved; range of content from range of genres.	*Creativity*	Written and illustrated with creative flair; innovative use of technology; evinces multimedia richness (e.g., websites).
Ethical conduct in newsgathering	Uses fair honest, responsible means to gather material.	*Presentation*	Uses a gratifying narrative and layered information; format is captivating, aesthetically pleasing, well-illustrated, technically and textually error-free, and easy to navigate (e.g., websites).

Table 3. Quality Indicators – Audience Engagement

Indicator	What it indicates	Indicator	What it indicates
Representation	Takes into account the concerns, views, experiences, contributions, desires and needs of audience members.	*Community*	Provides space and infrastructure to host audience fora and communities; facilitates community dialogue and public debate.
Participation	Content takes account of the individual and collective wisdom of the audience.	*Customisation*	Provides means for audience to control and customise their user experience.
Interactivity	Provides links to related content; invites comments and actionable feedback.		

Table 4. Quality Indicators – Organisational Factors

Indicator	What it indicates	Indicator	What it indicates
Independence	Editorial staff enjoy independence from commercial and political interference.	*Newsroom resources and measures of journalistic activities*	Number of reporters relative to size of operation; sufficient number of reporters with at least five years' experience; time allowed for gathering and analysing information and attending events; ratio of space devoted to copy vs space devoted to advertising; ratio of space devoted to original news; ratio of staff-written content vs news agencies content.
Community leadership	Influence with opinion leaders; ability to inform public opinion and debates.		
Price & circulation, reach, or number of unique visitors	Consumers' willingness to pay; news market penetration.		

Quality and regulation in Australia

As noted above, the literature shows that one measure of quality is the extent to which media content can be regarded as meeting certain standards of practice. While there is some variation in what these standards should be, elements common to most standards schemes are qualities such as accuracy, fairness, transparency (or avoiding conflicts of interest) and respect for privacy. These are represented in the table above as Set A or the content indicators. As they are the subject of various government and industry-based regulatory regimes, with many years of implementation and critique, they are the easiest (or perhaps the least difficult) aspect to measure. However, these schemes vary greatly, even within Australia. Accordingly, in this section we briefly explain how these standards are established in Australia; we then give some indication of how quality is considered in the handling of complaints under these schemes; and we conclude by considering their suitability for a digital platform environment.

Fragmentation: Fourteen separate codes of practice

Australia's system of media standards is fragmented. The principal division is between broadcast media and print/online, but there are separate schemes even within those sectors.

In the broadcast environment, there are eight separate sets of rules as each type of broadcasting service (e.g., commercial television, commercial radio) has its own code of practice, as does each of the national broadcasters.

For print and online news and comment, most large publishers and some smaller publishers are members of the Australian Press Council (APC) and therefore subject to its two statements of principles (together the equivalent of a broadcast code of practice). The exception is Seven West Media, which established the Independent Media Council (IMC) with its own standards and complaints scheme.

Overlaying all of this is the code of ethics operated by the journalists' union, the Media, Entertainment and Arts Alliance.

The current list of codes is as follows:

1. Commercial Television Industry Codes of Practice 2015 (March 2018)
2. Commercial Radio Codes of Practice March 2017 (March 2018)
3. ABC Code of Practice 2011 (March 2016)
4. SBS Codes of Practice 2014 (October 2018)
5. Community Radio Broadcasting Codes of Practice 2008
6. Community Television Codes of Practice 2011
7. Subscription Broadcast Television Codes of Practice 2013 (March 2018)
8. Subscription Narrowcast Television Code of Practice 2013 (March 2018)
9. Open Narrowcast Television Codes of Practice 2009
10. Subscription Narrowcast Radio Codes of Practice 2013
11. Open Narrowcasting [Radio] Codes of Practice
12. Australian Press Council Statement of General Principles/Statement of Privacy Principles (2014)
13. Independent Media Council Code of Conduct (2012)
14. MEAA Journalist Code of Ethics (1999).

Rulemaking, complaints and enforcement

Regulatory framework

Broadcasting

The media standards schemes for broadcasting can be said to be 'co-regulatory' because the rules are developed by industry (via the respective industry bodies) then registered with and enforced by the statutory regulator (the ACMA) under the *Broadcasting Services Act 1992* (BSA). Complaints go to the broadcaster (not the industry body) in the first instance but the complainant may take their complaint to the

ACMA if they do not receive a response within 60 days or if they consider the response inadequate.[17]

The key legislative provision is section 123 which explains that it is Parliament's intention that representative industry groups, in consultation with the ACMA, develop codes of practice.[18] The section specifies the following as one of the matters to which the codes may relate: 'promoting accuracy and fairness in news and current affairs programs'. This is against the backdrop of Object 3(1)(g) of the Act:

> (g) to encourage providers of commercial and community broadcasting services to be responsive to the need for a fair and accurate coverage of matters of public interest and for an appropriate coverage of matters of local significance …

Under s 123 the representative industry groups develop the codes and ACMA is then given the decision to approve and register them (which in turn gives it an enforcement role). In fact, under this section the ACMA has no choice to approve a code provided a group representing that section of the industry develops it and that the ACMA is satisfied that

i. the code of practice provides appropriate community safeguards for the matters covered by the code; and

ii. the code is endorsed by a majority of the providers of broadcasting services in that section of the industry; and

iii. members of the public have been given an adequate opportunity to comment on the code.[19]

The enforcement provisions are somewhat convoluted and not of relevance here, but it should be noted that the formal enforcement tools given to the ACMA are not available in the case of the national broadcasters; nevertheless, the complaint and investigation process is similar, with ACMA only hearing complaints after an attempt by the ABC or SBS to resolve them.[20]

Print and online

In contrast to the broadcasting scheme, both the Australian Press Council and the Independent Media Council are industry-based self-regulatory schemes with no statutory component. They are funded by publisher members, but community (public)

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[17] This is set out in s 148. Although under s 147 complaints about matters addressed directly in the Act or in ACMA-made rules (e.g., a program standard, as distinct from an industry code) go to the ACMA in the first instance, almost all of the matters under discussion here are covered in the codes. Complaints about disclosure of commercial agreements in commercial radio current affairs programs are an exception to this: see the *Broadcasting Services (Commercial Radio Current Affairs Disclosure) Standard 2012*.

[18] These arrangements apply only to broadcasting services, not to content on websites. Streamed versions of broadcast content are also excluded.

[19] The nature of public and consumer participation in communications industry codes of practice is the subject of current research by Derek Wilding and Karen Lee under the Australian Communications Consumer Action Network Research Grant Fund.

[20] This difference in approach arises from s 13(5), restricting the application of the BSA in relation to the national broadcasters (which also operate under separate legislation), in conjunction with Division 2 of Part 11 which specifies complaint and investigation processes and powers.

members are involved in both drafting the code rules and hearing complaints. Publisher members are required to publish adjudication outcomes, but there is no statutory enforcement. Whereas the IMC was established in 2012 and applies only to the publications of Seven West Media, the APC was established in 1976 and applies to most print/online publishers and also to a number of digital-only publishers.

The MEAA Code of Ethics has wide recognition among journalists but its low-key complaints scheme is infrequently used. In contrast to the publisher schemes, the obligations under this code are placed upon individual journalists as members of the MEAA.

Code rules

It is not practicable here to reproduce all the code rules relevant to news and current affairs. In addition, variations in terminology mean that the provisions are not directly comparable across schemes. To provide some insight into how quality is promoted within these regulatory environments, we set out below the key rules for accuracy (and the correction of errors) and fairness and impartiality in three of these schemes: APC print/online, commercial television and commercial radio.

Print/online (Australian Press Council)[21]

Accuracy and clarity

1. Ensure that factual material in news reports and elsewhere is accurate and not misleading, and is distinguishable from other material such as opinion.

2. Provide a correction or other adequate remedial action if published material is significantly inaccurate or misleading.

Fairness and balance

3. Ensure that factual material is presented with reasonable fairness and balance, and that writers' expressions of opinion are not based on significantly inaccurate factual material or omission of key facts.

4. Ensure that where material refers adversely to a person, a fair opportunity is given for subsequent publication of a reply if that is reasonably necessary to address a possible breach of General Principle 3.

Commercial Television[22]

3.3 Accuracy and fairness

3.3.1 In broadcasting a news or Current Affairs Program, a Licensee must present factual material accurately and ensure viewpoints included in the Program are not misrepresented.

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[21] The requirement under the General Principles is to 'take reasonable steps to comply with' these principles.
[22] Under clause 3.1.2, clause 3.1 is to be read 'taking into account all of the circumstances at the time of preparing and broadcasting the material, including: a) the facts known, or readily ascertainable, at that time; b) the context of the segment … in its entirety; and c) the time pressures associated with the preparation and broadcast of such programming.'

3.3.2   Clause 3.3.1 applies to material facts and material misrepresentations of viewpoints only.

3.3.3   Licensees must make reasonable efforts to correct or clarify significant and material errors of fact that are readily apparent or have been demonstrated to the Licensee's reasonable satisfaction in a timely manner.

3.3.4   If a Licensee makes a correction in an appropriate manner within 30 days of a complaint being received or referred to the ACMA (whichever is later), then the Licensee will not be in breach of clause 3.3.1 in relation to that matter.

3.3.5   A correction under clause 3.3.4 may be made in one or more of the following ways:

a) during a later episode of the relevant Program;

b) on a Licensee's news website;

c) on the official website of the relevant Program; or

d) any other way that is appropriate in the circumstances.

3.4   Impartiality

3.4.1   In broadcasting a news Program, a Licensee must:

a) present news fairly and impartially;

b) clearly distinguish the reporting of factual material from commentary and analysis.

3.4.2   Nothing in this Section 3 requires a Licensee to allocate equal time to different points of view, or to include every aspect of a person's viewpoint, nor does it preclude a critical examination of or comment on a controversial issue as part of a fair report on a matter of public interest.

3.4.3   Current Affairs Programs are not required to be impartial and may take a particular stance on issues.

Commercial Radio[23]

3.1 In broadcasting News Programs, a Licensee must use reasonable efforts to:

3.1.1 present news accurately and impartially;

3.1.2 present news in a way that is not likely to create public panic, or cause serious distress to reasonable listeners, unless it is in the public interest to do so; and

3.1.3 distinguish news from comment.

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[23] Under clause 3.10, this clause is to be read 'taking into account all of the circumstances at the time of preparing and broadcasting the material, including: 3.10.1 the facts known, or readily ascertainable, at that time; 3.10.2 the context of the material within the News Program or Current Affairs Program in its entirety; 3.10.3 the time pressures associated with the preparation and broadcast of News Programs and Current Affairs Programs; and 3.10.4 in relation to a Current Affairs Program, the format and style of the Current Affairs Program.'

3.2 In broadcasting Current Affairs Programs, a Licensee must use reasonable efforts to ensure that:

3.2.1 factual material is reasonably supportable as being accurate;

3.2.2 factual material is clearly distinguishable from commentary and analysis; and

3.2.3 viewpoints expressed to the Licensee for broadcast are not misrepresented or presented in a misleading manner by giving wrong or improper emphasis on certain material or by editing material out of context.

[…]

3.4 A Licensee must make reasonable efforts to correct or clarify significant and material errors of fact which would be readily apparent to a reasonable person in the Licensee's position or which have been demonstrated to the Licensee's reasonable satisfaction in a timely manner.[24]

3.5 There will be no breach of the accuracy requirements at 3.1.1 or 3.2.1 if:

3.5.1 the Licensee can establish on the balance of probabilities that the news or factual material is accurate; or

3.5.2 a disputed fact was not a material fact; or

3.5.3 a correction, which is appropriate in all the circumstances, is made within 30 Business Days of the Licensee receiving either a Code Complaint, or notice of a Code Complaint being referred to the ACMA (whichever is later).

3.6 A correction under this section 3 may be made in one or more of the following ways:

3.6.1 during a later episode of the relevant Program or a comparable Program;

3.6.2 on the Program's website, the station's home page or the Licensee's main website as appropriate; or

3.6.3 in any other way that is appropriate in all the circumstances.

3.7 For the purposes of 3.2 above, a contribution made to a Current Affairs Program by a talkback participant will not be considered factual material, unless it is factual material that is endorsed or adopted by the Presenter. 'Talkback participant' means a member of the public who contributes to open-line discussions via the Licensee's dedicated talkback line or by other communication methods accepted by the Licensee.

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[24] Footnote to clause 3.4: 'For the avoidance of doubt, a Licensee will not breach this provision by failing to correct errors of fact which are of a trivial or minor nature.'

3.8 Nothing in this section 3 obliges the Licensee to allocate equal time to different points of view, nor to include every aspect of a person's viewpoint, nor does it preclude a critical examination of, or comment on, a controversial issue as part of a fair report on a matter of public interest.

3.9 Current Affairs Programs are not required to be impartial and may take a particular stance on issues. However, a Licensee must provide reasonable opportunities for significant alternative viewpoints to be presented when dealing with controversial issues of public importance, while the issue has immediate relevance to the community.[25]

Complaints

As an indication of how these standards schemes are actually applied to publishers and broadcasters in Australia, in the table below we present complaint numbers for the past five years for the news and current affairs complaints made to the APC about print and online media and made to the ACMA about commercial radio, commercial television and the public broadcasters (the ABC and SBS). As variation in the codes and principles means it is sometimes difficult to make a direct comparison, we have mapped the broadcast standards against the general categories used by the APC.[26]

We have compiled this table on the number of issues – not on the number of complainants, investigations or adjudications. Where a single matter raised more than one issue, it is recorded against each separate category i.e., one investigation or adjudication might have an accuracy aspect and a separately-recorded fairness aspect, so it would be counted in the column for 'accuracy and clarity' and in the column for 'fairness and balance'. However, we have not counted multiple instances of the same issue i.e., three inaccuracies in the one article. This means the total will be *greater* than the total number of complainants, but *less* than the total number of issues. We acknowledge this makes our representation of complaints numerically different from the counts used by the regulators, but our purpose is to give an indication of when these markers of quality have been considered rather than to establish trends over time or the workload of broadcasters, publishers and regulators in handling complaints.

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[25] Footnote to clause 3.9: 'For the purposes of this provision, "reasonable opportunities" can be accommodated within the same Program or a similar Program. The requirement does not impose an obligation on Licensees to allocate equal time to different points of view, nor to broadcast all viewpoints expressed to it.'

[26] A copy of the current APC General Principles is available at <https://www.presscouncil.org.au/standards/>. We have not included complaints concerning its Privacy Principles (as privacy is also covered in the General Principles) or its specific standards such as the suicide reporting standards. We have mostly relied on the ACMA's tables recording investigation outcomes, checking investigation reports where there appeared to be some ambiguity on the issue or its classification. As the APC principles and some of the broadcasting code rules changed during this five-year period, and as judgment is involved in classification across different instruments, the results in the table should be regarded as indicative only.

Table 5.   Complaints about quality

	Accuracy and clarity		Fairness and balance		Privacy and avoidance of harm		Integrity and transparency	
	No. of issues	Upheld	No. of issues	Upheld	No. of issues	Upheld	No. of issues	Upheld
TV – commercial	40	8	17	2	30	6	0	0
TV – public	34	0	50	3	20	0	1	0
Radio – commercial	16	4	4	0	15	1	0	0
Radio – public	12	0	14	0	7	0	0	0
Publishers (print/online)	113	81	115	76	85	46	17	4

Upholding complaints about quality

Below we extract some of the statements used in these decisions to provide a glimpse of how the regulators speak of quality in news and current affairs.[27]

Adjudication 1741: David Gallagher/*The Sun-Herald* (June 2018). The complaint concerned a front-page article headed 'The deadly hidden disorder inside our university colleges', featuring a large photograph of the complainant's deceased daughter and the daughter's mother. The full article began on page eight, headed 'Deadly conditions hidden inside unis', followed by the subheading: 'Students living on campus could be heading into a culture that makes eating disorders worse …' The article was also published online, headed 'The deadly hidden disorder inside our universities'.

> The Council notes the public interest in reporting matters of public health and safety; for instance, in exposing potential risk factors for young university college students. However, the publication was aware of the complainant's wish that the article not be published. The Council considers that the complainant and Rebecca's mother had a reasonable expectation of privacy and that the details relating to them would not be published. As the publication did not take reasonable steps to avoid intruding on the complainant's reasonable expectations of privacy, and there was no public interest justifying this, the publication breached General Principle 5.

> The Council notes that the publication of the article occurred on the eve of Rebecca's birthday, a year after her death. The Council accepts that this exacerbated the complainant's distress, as did the inclusion of details relating to him and Rebecca's mother. The statement in the online article that the family was contacted prior to publication implied they cooperated with the publication. This would also have exacerbated their distress. In such circumstances, the Council concludes that the publication failed to take reasonable steps to avoid

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27 Adjudications by the APC can be found at <https://www.presscouncil.org.au/adjudications-other-outcomes/>. Investigation reports and a table of findings by the ACMA can be found at <https://www.acma.gov.au/theACMA/Library/Industry-library/Broadcasting/broadcasting-investigation-reports>.

causing substantial distress to the complainant and his family, without sufficient public interest justifying this. Accordingly, the publication breached General Principle 6.

Adjudication No. 1572: Complainant/news.com.au (September 2013) Article published on 23 November 2012. This consisted of a headline and article, both bringing attention to the fact that an 'autistic man' had been convicted of murdering his mother. The complainant argued that this suggested that the autism was a contributing factor to the crime. The complainant remarked that the autism had not been mentioned in the judgment.[28]

> The Council considers that it was justifiable to make some mention of autism when reporting the outcome of the trial itself. However, the headline and the first sentence were likely to have led many readers to conclude that autism had been found to be the main cause of the murder, or at least one of the causes. Nothing in the remainder of the article would have corrected this misunderstanding.

ACMA Investigation Report No. BI-54 –Network TEN – *Ten Eyewitness News* **– Broadcast on 15 April 2015.** The news report focussed on a police request for men living in an assault victim's area to provide their DNA samples voluntarily. The complainant was shown on film talking about the victim. The complainant alleged that the report contained inaccurate information and had invaded his privacy. He considered that Channel Ten's offer of an online apology and correction, to be published on Ten's TEN play website, was inadequate because people who viewed the broadcast may not have access to that website. The complaint was upheld on accuracy and invasion of privacy.

> The ACMA considers that a report about a serious assault is a matter of public interest, but the broadcast of inaccurate information relating to a police investigation of a serious assault is not in the public interest. The complainant's image was not pixelated and he was not otherwise de-identified. The information about the assault and the success of the call for volunteers to give a DNA sample could have been provided without visually identifying the complainant. The disclosure was not proportionate or relevant to the public interest matter disclosed. The visual identification of the complainant could have been avoided without the segment losing any coherence or meaning.

ACMA Investigation report no. BI-325 – Seven – *Today Tonight* **– Broadcast on 7 March 2017.** Bloomex Australia argued that a segment 'misrepresented a viewpoint by using misleading emphasis, withholding available facts, and editing out of context'. The complaint was upheld on accuracy and fairness.

> ACMA considers that Commissioner Stowe's interview comments about online flower sellers generally and about Bloomex's appearance on the Register lacked specificity, formality and force. At their strongest, Commissioner Stowe's

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[28] The relevant principle at the time was principle 8: the prohibition against placing gratuitous emphasis on the race, religion, nationality, colour, country of origin, gender, sexual orientation, marital status, disability, illness, or age of an individual or group, unless relevant in the public interest. Now, the relevant principle would be principle 6.

statements urge consumers to 'take heed' of the fact that Bloomex is on the Register as having received more than 10 complaints in a given month. They do not amount to the Commissioner issuing a public a warning to consumers not to use Bloomex.

ACMA Investigation report no. BI-305 – ABC – *ABC News* **– Broadcast on 19 November 2016.** This report focussed on child sexual abuse allegations against Dr Flynn, who had been imprisoned in India in 1995-96 but, according to the complainant, never charged with offences against children. The complaint was upheld on impartiality.

> Given the very serious nature of the allegations and the fact that Dr Flynn had previously denied them, both publicly and to ABC News, the ACMA also considers that an explicit statement that Dr Flynn had denied the allegations should have been made.

> The ACMA considers that the way the report was framed strongly suggested to the reasonable viewer that Dr Flynn was a criminal who had not been brought to justice. Allegations of child sexual abuse are among the most serious claims that can be made against a person. Because of the seriousness of claims of this kind, particular care should be taken when reporting on such matters.

Conclusion

The news industry is subject to a wide range of accountability instruments, including codes of ethics and journalistic norms and practices, all of which promote quality in news and journalistic content. As we have seen, indicators of journalistic quality can be grouped under three sets of criteria: content indicators; organisational indicators; and audience engagement indicators. Yet aspects of digitisation such as the 24/7 news cycle, algorithms and the blogosphere have introduced new challenges to the pursuit of quality and to the effectiveness of these accountability schemes. In some cases, this enables online actors and communities to assume roles that traditionally belonged to news media, including those of 'watchdog', 'fact-checker' and 'critic'. This in turn raises concerns about how such online actors and communities are accountable. They may fulfil roles traditionally played by journalists, while not subject to the industry's accountability instruments.

We make two observations about Australia's abundance of standards schemes. First, they are actively implemented, accessed by the public, and enforced by the regulators. Second, however, the impact of fragmentation produced by multiple schemes may be felt in several ways. In addition to the well-recognised problem of convergence — where a single piece of content published across different platforms might be subject to different standards and complaints schemes — this disjointed approach to one aspect of quality is unlikely to inspire confidence or boost the credibility of news providers.

It is difficult to characterise the role of platforms in this, but it is certainly the case that harm which is caused by the publication of inaccurate or unfair material, or a report that unnecessarily invades a person's privacy, is likely to be amplified in an environment

where it is shared widely. Further, that harm is unlikely to be undone, although it may be ameliorated, where a correction is made or other remedial action is taken by the publisher.

This, however, is a secondary effect of digital platforms and the literature on this topic does not support a sweeping conclusion that it is digital platforms themselves – as opposed to digitisation – that threatens quality. (This is aside from the risks to business viability posed by the loss of advertising revenue, which we have not been asked to consider.) The exception to this, noted in Chapter Two, might be in the production of shorter and more emotive content, specifically designed for sharing via digital platforms.

Continuing to attach accountability obligations to the production of news and journalistic content seems to be justified. However, this observation should not be taken to suggest that platforms should be free of responsibility – merely that their responsibilities may be of a different order.

In this regard, it is interesting to note Philip Napoli's (2015b, pp 755) characterisation of the contrast between the approach to standards taken by publishers and that of platforms. He has characterised the public interest elements of social media governance as 'restrictive' rather than the 'affirmative' approach adopted by news media. He argues that in social media the concept of 'the public interest' is:

> … much more oriented around the activities that the operators of these platforms *should not* be engaged in (in order to protect the public), and the type of content flows that need to be restricted … rather than on articulating, imposing or adopting specific formulations of activities that *should* be engaged in, or content flows they *should* be facilitating, in order to effectively serve users' information needs.

In this way, the removal of offending content from platform sites is an act that might contribute to the quality of public discourse. In their distributor capacity, there may be other ways in which platforms could support, more specifically, the quality of news and journalistic content. At the time of the Leveson Inquiry in the UK, Lara Fielden (2011) proposed a hierarchical scheme involving tiers of standards regulation, with opt-in arrangements. A News Media Council was then recommended by the Convergence Review (2013), as a scheme that could be industry-based, rather than statutorily administered, relieving the ACMA of this responsibility and removing largely ineffective statutory remedies. Such a scheme was intended to prioritise mediated outcomes and, where these fail, establish a clear obligation for the news producer prominently to publish the outcome of adjudications and investigations.

In an environment that now includes search, aggregation and social media, the 'prominence' of published outcomes is far more likely than in an analogue world. It may be possible that digital platforms could contribute, at least financially, to journalism's accountability schemes, in recognition of their role as distributors of news and journalistic content.

This is a theme to which we return in the next chapter, on plurality and diversity.

4 Choice and diversity

- *'Choice' in competition law has a close parallel in media regulation where 'availability' is a measure of media diversity; as a framework for assessing the digital media environment, media diversity can account for the public functions of journalism.*

- *Media regulation in Australia takes a narrow approach to diversity, based on availability of traditional media, while omitting all online news, pay TV and public media.*

- *Australian regulation only considers the supply aspect of availability; measurement systems used in the EU and the UK take account of consumption and impact, and this offers a richer picture of choice.*

- *These contemporary approaches are based on a concept of 'plurality' or 'pluralism', rather than 'diversity', but internationally there is no consensus on the most suitable term for regulation.*

- *The more targeted concept of 'media plurality' used in the UK is likely to be more suitable for application in Australia than the expansive concept of 'media pluralism' used in the EU.*

- *Even these recent attempts at measuring plurality or pluralism have only limited success in accounting for the impact of algorithmic delivery of news and the use of recommenders; this is now the focus of international research on diversity and pluralism.*

The Terms of Reference for the Digital Platforms Inquiry include the impact of platforms on 'the level of choice and quality' of news and journalistic content. In its Issues Paper, the ACCC (2018, p 6) indicates it will specifically consider diversity of choice and content, noting that media choice and diversity can be measured in different ways. The Commission acknowledges a couple of well-recognised measures: 'the number of independent media voices present in the relevant region and the range and diversity of perspectives typically covered by those media voices'.

As these statements indicate, 'choice' and 'diversity' are not identical concepts: diversity is generally regarded as broader in scope than level of choice, which is essentially a numerical account of the number of sources that might be consumed. In this way, choice is very closely aligned to the concept of availability used in the field of media regulation. Competition law and media regulation both use the concept of 'concentration' to describe the narrowing of choice when patterns of ownership and control are taken into account; the notion of a media 'voice' is used to identify commonly controlled media outlets.

In this chapter we explore these concepts and work towards a way of measuring them and of accounting for the place of digital platforms in the contemporary media

environment. A key consideration is the extent to which regulatory approaches adopted internationally have moved beyond the measure of availability and the overlay of ownership and control; in other words, moving beyond 'voice'.

We begin with an outline of how the concept of diversity is understood in Australian law and regulation.

The Australian regulatory environment

This section provides an outline of sector-specific regulation in Australia. As such, it does not refer to the application of competition law in a merger environment,[29] which may, in some circumstances, have a similar or even additional effect to media regulation.

Overview of the regulatory environment

For the most part, media regulation in Australia is the responsibility of the Federal Government rather than state or territory governments.[30] A provision of the Constitution has been held to give the Federal Government the power to regulate broadcasting services as well as online services. This power does not directly extend to print media, although newspapers have been regulated under related powers concerning laws relating to corporations, as well as by means of their association with broadcasting services.[31]

The regulatory framework is based on four tiers:

- Legislation passed by Parliament. The principal Act of Parliament is the Broadcasting Services Act 1992 (BSA). Its companion act is the Radiocommunications Act 1992, although other, supplementary acts also deal with specific issues (for example – until its repeal in 2017 – the Television Licence Fees Act 1964).

- Government regulation, such as 'content standards' decided by the regulator, the Australian Communications and Media Authorty (ACMA), under Part 9 of the BSA (eg, the Broadcasting Services (Australian Content) Standard 2016) or by the Minister under a specific power (eg the Broadcasting Services (Events) Notice (No. 1) 2010 – the 'anti-siphoning list' regulating the acquisition of sports rights by pay TV).

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[29] The ACCC's approach when applying s 50 of the *Competition and Consumer Act 2010* is set out in its *Media Merger Guidelines* (ACCC 2017). The Guidelines (p. 6) explain that the Commission takes into account the level of concentration in a market, including the market power before and after the merger. The class of participants considered by the ACCC is broader than the 'media operations' regulated under the *Broadcasting Services Act 1992*.

[30] There are nevertheless numerous state and territory laws that apply to media organisations, some of which vary in significant ways across Australian jurisdictions e.g., rules applying to the recording and broadcasting of private conversations under surveillance devices legislation. In addition, the common law continues to apply in areas such as defamation.

[31] The 'communications power' – the power to regulate 'postal, telegraphic, telephonic, and other like services' – is found in section 51(v), *Commonwealth of Australia Constitution Act*. See Raiche (2001) for an explanation of its application to broadcasting and Kildea and Williams (2013) for its application to online media. The 'corporation's power' is s 51(xx). The 'association' of newspapers with broadcasting services is explained below.

- Co-regulation – regulatory instruments developed by industry participants and registered and enforced by the ACMA under Part 9 of the BSA (eg the Commercial Television Industry Code of Practice 2015).

- Self-regulation – regulatory instruments developed and enforced by industry participants (eg the Statement of General Principles issued by the Australian Press Council or the Advertiser Code of Ethics issued by the Australian Association of National Advertisers with complaints and enforcement handled by Ad Standards).

Media diversity is substantially a top-tier issue in Australia, meaning it is the subject of legislation, but there are elements of all of these forms of regulation, as explained below.

Sector-specific rules

The Objects of the BSA give some indication of the ways in which diversity is accommodated within the Act (emphasis added in the excerpt below).

> 3 Objects of this Act
>
> (1) The objects of this Act are:
>
> (a) to promote the availability to audiences throughout Australia of a **diverse range** of radio and television services offering entertainment, education and **information**;
>
> (c) to encourage **diversity in control** of the more influential broadcasting services; and
>
> (ea) to promote the availability to audiences throughout Australia of television and radio programs about **matters of local significance**; and
>
> (g) to encourage providers of commercial and community broadcasting services to be responsive to the need for a **fair and accurate coverage of matters of public interest** and for an appropriate coverage of **matters of local significance** …

Three aspects of regulation, set out below, enact these objects and can be regarded as contributing to media diversity.

1. The **broadcasting licensing scheme** creates different categories of broadcasting service – recognising for example, not-for-profit community services as well as private, commercial services and public service broadcasting – along with the reservation of radiofrequency spectrum for those services. This statutory form of regulation attempts to produce a level of diversity in industry structure. The seven categories of broadcasting service set out in Part 2 of the BSA are:

- national broadcasting services (the public service broadcasters, the Australian Broadcasting Service [the ABC] and the Special Broadcasting Service [SBS]);

- commercial broadcasting services (both television and radio);

- community broadcasting services (not-for-profit services, now almost exclusively radio services);

- subscription broadcasting services (pay TV);

- subscription narrowcasting services (mostly used for niche pay TV channels, but also satellite services from overseas);

- open narrowcasting services (free-to-air radio services that do not amount to full, commercial services);

- international broadcasting services (services broadcasting internationally from Australia).

2. Statutory **media ownership rules**, in certain circumstances, attempt to prevent further consolidation in an already concentrated market. Though structural in the sense that this form of regulation is designed to ensure at least a minimum number of industry participants, there are behavioural aspects such as those which regulate conduct that might amount to 'control' within the meaning of the Act. This aspect is explained further below.

3. **Content regulation** imposes rules relating to accuracy, fairness, the representation of opinions and other aspects that are sometimes regarded as measures of 'quality' (discussed in Chapter Three, above), as well as quotas and related rules which require certain services to be provided as well as the promotion of localism. This regulation is all behavioural in character, although it takes all four forms of regulation. Examples are:

- statutory rules in Part 5, Division 5B of the BSA requiring disclosure of cross-media relationships;

- a statutory licence condition in Schedule 2 that requires a licensee to provide a service that, when considered together with other broadcasting services in the licence area, 'contributes to the provision of an adequate and comprehensive range of broadcasting services';

- licence conditions made by the ACMA (as required under Division 3 of Part 4 of the BSA) for local presence and local content levels of regional radio, as well as legislative requirements for local programming imposed on both regional radio and regional television under Divisions 5B and 5C of Part 5;

- codes of practice for broadcasting services (containing rules about accuracy, fairness etc), developed by industry participants and registered by the ACMA under s 123 of the BSA; the industry-based equivalent of these codes of practices developed for print and online media by the Australian Press Council.

Media ownership rules

The media ownership rules in Australia apply only to commercial television, commercial radio and newspapers 'associated with' the licence areas of these categories of

service.[32] Even before the emergence of online news, the exclusion of pay TV from this scheme was notable, and reflects the foundations of Australia's media ownership regime in the late 1980s. At this time, a prohibition on the formation of television networks from licences held in more than two capital cities was replaced by a national 'reach rule' that effectively required separate commercial television networks in regional and metropolitan areas, along with a prohibition on cross-media ownership in local areas. The new cross-media rule applied to control of more than one of the regulated platforms in a single licence area.[33]

These rules commenced in 1986 and after amendment in 1987, remained intact until the recasting and scaling back of the cross-media ban so that it permitted control of two of the three regulated platforms as well as the removal of foreign ownership limits, which came into effect in 2007. However these aspects of deregulation were accompanied by a new 'minimum voices rule' that stops further consolidation in regional areas when certain concentration levels in the regulated platforms are reached.

These arrangements remained in place until a further round of legislative change in 2017, which repealed the 'two-out-of-three' cross-media rule and the 75 per cent national reach rule.[34]

Following the most recent round of changes, Australia's media ownership rules are confined to the following:

- the limit of one commercial television licence in a commercial television licence area (s 53(2), with some exceptions for smaller markets)

- the limit of two commercial radio licences in a commercial radio licence area (s 54)

- the 5/4 minimum voices rule (ss 61AG and 61AH) which established the concept of 'an unacceptable media diversity situation' based on a points scheme in ss 61AB and 61AC (established by way of the Register of Controlled Media Groups) that applies a floor of five points in metropolitan licence areas and four points in regional licence areas, after which transactions resulting in further concentration are prohibited.[35]

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[32] The categories of service and ownership and control rules are found in Part 4 and Part 5 respectively of the BSA. An associated newspaper under s 59 is one that is entered in the register kept for this purpose on the basis that, among other factors, at least 50 per cent of its circulation is in the applicable licence area. The definition of 'newspaper' in s 6 further restricts the class to English language newspapers published at least four days per week with at least 50 per cent of their circulation by way of sale.

[33] There were several other important aspects to these changes, as well as significant, preceding developments concerning the 'equalisation' of the number of commercial television services in regional and metropolitan areas. Paul Chadwick (1989) provides a detailed analysis of the policy motivations and political manoeuvres involved in the highly charged environment of the late 1980s.

[34] See respectively: ss 61AMB and 61 AH; ss 61AMA and 61AMB.

[35] For comment on this scheme and how it would apply to various potential transactions, see Derek Wilding's submission (March 2016) to the Senate Environment and Communications Legislation Committee on the Broadcasting Legislation Amendment (Media Reform) Bill 2016. Jock Given (2007) comments on the legislative changes that

Assessing diversity within this framework

On this measure of diversity, Australia has long been regarded as a highly concentrated market, partly due to the very small number of print media (now print and online) providers.[36] The ACMA's 'Media Interests Snapshots' infographic records 'the main interests in major commercial television and commercial radio networks and associated newspapers'.[37] The graphic shows only 'substantial shareholders' (five per cent or more) in 'major media players', excluding fund managers who 'hold shares on behalf of others and do not do not exercise control over them'. Without commenting on the level of concentration, the ACMA provides some insight into the ten 'media interests' that meet these criteria. They can be grouped as follows:

> **Rupert Murdoch** and **Lachlan Murdoch**, with the latter being a controller of the Nova Entertainment radio network as well as News Corp Australia, publisher of a number of metropolitan, regional and suburban newspapers and part owner of pay TV provider, Foxtel.

> **Fairfax Media Limited**, which publishes a number of metropolitan, regional and suburban newspapers and which owns several radio stations, some in partnership with **Macquarie Media**.

> **Kerry Stokes** and **Seven Group Holdings Ltd**, controllers of the Seven Network as well as the metropolitan daily newspaper in Perth and a number of other Western Australian newspapers and radio stations.

> **CBS Corporation**, controller of the Ten Network.

> **Bruce Gordon**, owner of the WIN regional television network, as well as having a 14.9 per cent stake in both the Nine Network and the Prime regional television network.

> **Bill Caralis**, controller of the largely regional, family-owned Super Radio Network.

> **Janet Cameron**, controller of the largely regional, family-owned Grant Broadcasters.

This type of analysis is useful in identifying the key media organisations in any market.[38] When considering the level of choice under competition law, the listing of independently owned media suppliers may also help in characterising the level of market power held by any one firm. However, the current media regulatory framework

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introduced these schemes. On the development of the policy underpinning these changes, see Dwyer et al (2006) and on a failed earlier attempt to change the laws, see Wilding (2003).

[36] Franco Papandrea and Rod Tiffen (2016) provide a recent attempt to represent the level of concentration in Australia, albeit before the acquisition of regional newspaper group APN News and Media by News Corp Australia. Until 2005, the Communications Law Centre published a regular Media Ownership Update as a special issue of its journal, *Communications Update*. The last of these was issue 168 (2005).

[37] The ACMA's '"Media Interests" Snapshot' is available at <https://www.acma.gov.au/theACMA/media-interests-snapshot>.

[38] The criteria for defining 'media interests' mean that this particular analysis by the ACMA omits some key media participants, such as Southern Cross Austereo which controls commercial television and radio licences.

provides only a limited understanding of diversity in Australian media. There are three reasons for this.

First, 'diversity' as it is used within the BSA only relates to media ownership and control; it does not tell us anything about viewpoint diversity, for example, or even how significant a source is in terms of the supply of news and journalistic content. Diversity within this framework is a purely numerical concept. This means that a 'classic hits' format radio station is allocated the same, single point within the diversity points scheme as a regional daily newspaper that employs local journalists.[39] Supply of news and local information is, to some extent, a separate policy goal for commercial radio and commercial television, but its application in regulation is uneven across the various states and population centres of Australia.

Second, while this numerical approach gives some indication of the number of voices available within a local area, it omits key sources within that environment – for example: national newspapers such as *The Australian* and *The Australian Financial Review*; pay TV, including Sky News; public broadcasters, the ABC and SBS; online-only and other digital media sources such as *Guardian Australia*, *Buzzfeed*, *Daily Mail Online* and small, local services; community and narrowcasting radio stations; non-daily and free newspapers; ethnic press and other media targeting culturally and linguistically diverse communities.

Third, as a measure of available voices, it takes no account of consumption, impact or context – including, for example, how platforms might be used to access and share news.

This leads us to ask whether there is a more useful approach to media diversity, better placed to evaluate the contemporary media environment.

The meaning of diversity, plurality and pluralism

At this stage, it may be helpful to refer back to the principles outlined in Chapter One and the argument that the supply and consumption of news and journalistic content may need to be considered differently from other goods and services. A commitment to this idea underpins regulation for media diversity internationally, and it is exemplified in the following statement from the UK House of Lords Select Committee on Communications (2014, p. 77):

> Achieving a workable approach to plurality, particularly in provision of news and current affairs, is generally considered fundamental to a well-functioning democratic society, ensuring as far as possible informed citizens and a media without any single set of views or individuals wielding too much influence over the political process.

It will already be evident that there are multiple interpretations of 'diversity', 'plurality' and 'pluralism'. In this section we consider the meaning of these terms as we continue

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[39] This assumes that these individual media operations are not part of a media group, in which case the group as a whole – rather than each individual operation – is allocated the diversity point.

to work towards a method for measuring choice in a way that takes account of the public good function of news and journalistic content and any impact of digital platforms.

Multiple meanings

At the commencement of their study of media ownership and control across several jurisdictions, Suzanne Rab and Alison Sprague (2014, p. 1) note:

> … internationally, there is no consensus in terms of the manner and scope of interventions that are appropriate to protect competition and pluralism in media markets.

This lack of consensus on the mode of regulation is matched by – and perhaps partly explained by – the different understandings of what constitutes diversity, plurality and pluralism. As Helberger, Karppinen and D'Acunto (2018, 193) put it:

> Despite decades of debate on diversity as a policy objective … there is no consensus on a generally accepted, consistent definition of what constitutes 'diversity' or 'pluralism', even at the level of supply.

Below we discuss some ways in which various aspects of this subject have been classified.

Structural regulation and content regulation

Lesley Hitchens (2015, p. 253) has noted that in Australia, we generally refer to 'diversity', a term usually reserved for content rather than structure in the UK and Europe. In earlier work, Hitchens (2006, p. 9) presents a review of the various terms, suggesting it is first helpful to understand that regulation can essentially be characterised as either structural regulation or content regulation. She uses the term 'pluralism' to describe two kinds of structural regulation and the term 'diversity' to describe two types of content regulation. The two types of structural regulation are ensuring a number of different types of media (e.g., commercial television) and ensuring a number of different owners. The two types of content regulation are diversity of opinions and diversity in the range of programs (e.g., information, entertainment).[40]

Kari Karppinen provides examples using Hitchens' categorisation of structural regulation (licensing, competition regulation, subsidies, public service media) and content regulation (accuracy and fairness, right of reply, political airtime etc.) Jonathan Levy (2015, pp. 278-79), in speaking of three categories of government policy applied to media, nominates structural regulation and behavioural (content) regulation, in a similar way to Hitchens and also Gillian Doyle (2002, p. 12), but adds subsidy as a separate category (whereas Hitchens includes this as a structural mechanism).

A different approach, but one which assists in understanding connections between structural and content regulation, is taken by Mihaly Gálik (2010, p. 235) who notes that in the US the Federal Communications Commission defines five types of diversity

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[40] This is similar, but not identical, to the Council of Europe's use of 'media pluralism' to mean structural pluralism and 'diversity' 'to signify diversity of media content or a diversity of voices in media content' (Jakubowicz 2015, p. 26).

relevant to media ownership policy: viewpoint, outlet, program, source and minority and female ownership.[41] Two of these deserve mention because they have historically been seen across many jurisdictions as the central elements of regulation for media diversity. These are viewpoint diversity (which might be addressed via content regulation, in the terms described above) and outlet diversity or a variation on it e.g. 'number of voices' (the subject of structural regulation). Only the second of these is a part of media regulation in Australia.

In the research and policy work below, we show how understandings of diversity or plurality have developed beyond this approach, but even at this stage it is worth noting some variation among scholars on the importance of 'viewpoint' diversity as a single measure and, specifically, the link between it and ownership diversity. Levy (2015, p. 291) reviews various studies on this point and concludes that taken together they seem either inconclusive or tend to point to an absence of evidence that market structure influences viewpoint diversity. In addition, Karppinen (2013, p. 94) notes the difficulty in empirically establishing a link between ownership and viewpoint diversity, and – although he ultimately disagrees with the underlying proposition – notes that some have advanced the view that consolidation of ownership is benign or even desirable in circumstances where resources are needed for the production of quality journalism or a variety of services.

External pluralism and internal pluralism

A further distinction which relates to aspects of pluralism itself, rather than regulation, is the characterisation of external and internal pluralism (see, for example, Hitchens 2006; Doyle 2002; Karppinen 2013, p. 100). Hitchens (2006, p. 9) characterises structural regulation in relation to external pluralism and content regulation in relation to internal pluralism or diversity. Doyle (2002, p. 12) uses 'external pluralism' to denote a range of suppliers (i.e., diverse ownership) and 'internal pluralism' to denote pluralism within a single supplier (which therefore is essentially about diversity of content).

Doyle (2002) goes on to distinguish between 'political pluralism' and 'cultural pluralism': political pluralism concerns 'the need, in the interests of democracy, for a range of political opinions and viewpoints to be represented in the media', whereas cultural pluralism concerns 'the need for a variety of cultures, reflecting the diversity within society, to find expression in the media'.[42] This is similar to the distinctions made by Valcke, Picard & Sükösd (2015, p. 5), who speak of the cultural, political and geographic dimensions of pluralism as well as content and format.

The addition of consumption and exposure diversity

In recent years, the aspect of consumption has taken a central place in both scholarly and regulatory consideration of media diversity, although it was an element of Phillip Napoli's (1999) influential classification of diversity as: source diversity, content diversity and exposure diversity (what people actually use). Sjøvaag (2016, 179)

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[41] FCC (2003), *Report and Order and Notice of Proposed Rulemaking*.
[42] Both Hitchens and Doyle were writing before the work by Ofcom and the EU on their expanded concepts of pluralism examined here.

locates it (using the term 'reception') within the external/internal classification, describing two types of external pluralism (structure and reception) and three types of internal diversity (organisational, production, output).

The more recent attention to aspects of consumption (which we will see below in the regulatory initiatives) has evolved over time. This Natalie Helberger's recent work (2018) is an example of how exposure diversity is applied in a digital platform environment.

We will examine this aspect of consumption or exposure diversity more closely in relation to recent regulatory initiatives below. We will also return to the contested issue of ownership regulation. For now, to the extent that media regulation can assist in understanding and measuring 'choice' in competition terms – and we think that it can – it is worth noting that there are several additional factors besides number of voices and range of viewpoints that are the subject of contemporary scholarly and regulatory consideration.

Further, in our attempt to formulate a conceptual framework for measuring choice via the concept of media diversity, we could also not the range of meanings attached to the term 'diversity', and the tendency for this term to be specified or qualified in some way ('viewpoint diversity', 'ownership diversity' etc). We now also need to note a key difference in how 'pluralism' and 'plurality' are used in regulation.

'Pluralism' in the EU and 'plurality' in the UK

This difference is seen in practice when comparing two of the current measurement tools. These are the Measurement Framework for Media Plurality used by Ofcom in the UK and the Media Pluralism Monitor used by the Centre for Media Pluralism and Freedom in European territories (both are described in more detail below). Whereas Ofcom's tool, and the policy objective that drives it, is concerned with plurality, the EU's tool is concerned with pluralism, of which 'market plurality' (which is focused on media ownership) is only one measure.

The instruments that give rise to these policy tools are important in informing their design and scope: Article 11.2 of the *EU Charter of Fundamental Rights* states 'the freedom and *pluralism* of the media shall be respected'; whereas section 58 of the *Enterprise Act 2002* UK refers to 'a sufficient *plurality* of views in newspapers' and 'a sufficient *plurality* of persons with control of the media enterprises'.[43]

The breadth of the concept of 'pluralism' as it is regarded in the EU can be seen in a recent statement by the European Parliament's Committee on Legal Affairs in response to the proposals of the Committee on Civil Liberties, Justice and Home Affairs (2018, p. 31) in its *Report on Media Pluralism and Media Freedom in the European Union*. In the report, the Legal Affairs committee makes the point that

> … media pluralism embraces many aspects, including merger control rules, content requirements in broadcasting licensing systems, transparency and

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[43] See sections 58[2B] and 58[2C] respectively. Emphasis added in each case.

limited concentration of media ownership, the establishment of editorial freedoms, the independence and status of public service broadcasters, the professional situation of journalists, the relationship between media and political actors, as well as economic actors, the access of women and minorities to media content, diversity of opinions, etc …

In contrast, 'plurality' is defined by UK regulator Ofcom (2015, p. 6) using the following twin elements (emphasis added):

Ensuring that there is diversity in the viewpoints that are available and consumed, across and within media enterprises. There should be a diverse range of independent news media voices across all platforms, a high overall consumption across demographics and consumers and active use of a range of different news sources.

Preventing any one media owner, or voice, having too much influence over public opinion and the political agenda. This can be achieved by ensuring that no organisation or news source has a share of consumption that is so high that there is a risk that people are exposed to a narrow set of viewpoints.[44]

Which term is most suitable for Australia?

Ofcom's approach shows that accounting for 'news media voices' requires an understanding of more than just ownership. This suggests there is an inherent limitation in the Australian regulatory approach, as 'media diversity' is understood in Australian legislation to mean ownership and control. Accordingly, 'diversity' might not be the most useful term to capture something that can also take account of the impact of platforms.

Another persuasive reason to avoid 'diversity' as an umbrella term is its increasingly strong connection with cultural diversity. Added to this is the European regulatory and scholarly practice of associating diversity with media content, meaning that 'media diversity' is used by researchers and activists in Australia to bring attention to a range of concerns from the number of women in film and TV production through to the representation of people often excluded from media content.[45] In journalism, even as long ago as 2001, the Australian Broadcasting Authority's research on sources of news and current affairs showed confusion on the part of media practitioners:

The notion of 'diversity' was interpreted variously by news producers. Some linked it with ownership and control, and viewed it as an indication of the number of voices expressed through the news and current affairs media. Others linked it with multiculturalism, and the extent to which different ethnic sectors of society had expression through the media (pp. 193-94).

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[44] This definition and the matrix that accompanies it have now been applied to a small number of merger applications, two of which are mentioned below. It was heavily relied upon by the Competition Commission in New Zealand in 2017 when considering the proposed merger of NZME and Fairfax in New Zealand (also mentioned below).

[45] See, for example, the work of the non-profit group Media Diversity Australia.

We suspect this confusion has only increased over time. 'Diversity' is perhaps better avoided as an overall regulatory concept, although it remains useful when combined with any number of qualifiers such as in 'ownership diversity'.

Hence for the purposes of this report:

> **Media diversity** generally will be used with a qualifying term to refer to specific aspects such as viewpoint diversity, cultural diversity, ownership diversity and exposure diversity.

This leaves us with the terms 'plurality' (used in the UK) and 'pluralism' (used in the EU).

Before suggesting which of those is more useful in the Australian context, we should consider one final aspect of the way in which either term may be used by different actors. While legislators and regulators are likely to seek a term that allows for a very pragmatic deployment, even allowing for a more expanded meaning such as those considered above, academics and activists may well seek a much more comprehensive approach to reforming media coverage, participation and representation.

On this basis, Karppinen (2013) explains his own use of the terms:

> … media diversity is understood in a more neutral, descriptive sense, as heterogeneity on the level of contents, outlets, ownership or any other aspect of the media deemed relevant; whereas media pluralism, as a broader socio-cultural and evaluative principle, is understood as referring to the acknowledgement and preference of such diversity, which also required some schematization of its relationship to democracy or other social values (p. 3-4).

Karppinen's approach is based on a review of different approaches to democracy itself. His study advances a view of 'radical pluralism' – in contrast both to liberal pluralism (based on freedom of the individual and the marketplace of ideas) and deliberative democracy (based on an understanding of the public sphere) – which we do not wish to adopt here. The concept of the public sphere developed by Habermas (1989)[46] is something that has been used and adapted by many media scholars from the disciplines of law, media, journalism and associated research fields. A more expanded form is recognised by Karppinen arising out of Habermas' later work, and this is seen, for example, in the recent work of McNair et al. (2017) on democracy, politics and the media in Australia.

For present purposes, however, Karppinen's analysis is helpful in that it associates 'pluralism' but not 'plurality' with a much broader, normative concept:

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[46] Habermas criticised the commercialisation of the press, arguing that it had become driven by advertising and the profit motive to become undemocratic. In theory, the internet offers the promise of an equitable public space. Although Habermas has made few pronouncements about this, his rare comments have been negative (see Fortunat and O'Sullivan, 2016). Others have been more outspoken with their pessimism. Marxist scholar Christian Fuchs, for instance, argues that the only way to make Twitter properly democratic is to transform it into a 'non-commercial, non-profit platform that stops using advertising, does not aim at accumulating capital, and substitutes the focus on the logic of accumulation with the logic of trying to foster sustained political communication' (Fuchs, p. 245). Yardi and Boyd agree: 'Twitter is hardly a medium for deliberative democracy' (2010, p. 317).

> I use the concepts of diversity or plurality primarily when referring to the empirical fact of plurality, while pluralism, as an *ism*, refers more explicitly to a value orientation that considers multiplicity and diversity in ideas and institutions a virtue (pp. 3-4).

This understanding helps us in finding a suitable term to use in relation to regulation in Australia. For the reasons described above, we have already recommended avoiding the term 'diversity' when speaking of something more than just ownership. We can now add to this a desire to avoid, at least for regulatory purposes, the sweeping, normative 'ism' represented by 'pluralism'.

For the purposes of this report**:**

> **Media pluralism** will be used as a broader, normative concept – an *ism* – that embraces the more philosophical aspects associated with a vibrant, democratic media environment.

This brings us to the term 'plurality', which captures the sense of *factual heterogeneity*, while avoiding the narrowness of 'diversity' and the expansiveness of 'pluralism'. It therefore moves us one step closer to understanding the elements that might comprise a measurement tool.

For the purposes of this report**:**

> **Media plurality** will be used as a core regulatory concept that captures at least some of the variations of diversity mentioned above (such as viewpoint diversity and ownership diversity), but expands to embrace elements of Ofcom's framework such as consumption and impact, as well as influence over public opinion and the political agenda.

We now turn to the ways in which media plurality might be assessed and measured.

Measurement

Despite some common themes, there is still wide variation in how, and even whether, regulation should be used in promoting a free and pluralistic environment. Klimkienwicz (2010, xiii) characterises such a divergence, even across the territories of Europe, in the following terms:

> … the fundamental divide between the belief in efficiency of market forces or deregulation to create a free and diverse media environment, versus the belief that regulation is needed in order for social, cultural and democratic needs to be met and communication rights to be fully exercised.[47]

These differences are further accentuated in the contrast between European and US traditions. In the US, regulation has been more limited and directed at effective

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[47] Klimkienwicz cites various sources including P J Humphries (2008), 'The Principal Axes of the European Union's Audiovisual Policy' in I. Fernandez Alonso & M. de Mogaras i Spa (eds), *Communication and Cultural Policies in Europe*, Barcelona: Universitat Autonoma de Barcelona.

competition of commercial participants, in contrast to a longstanding investment in public broadcasting in the UK and Europe (see, for example, Metykova, 2016, p. 4):

> In Western European countries public service broadcasting foregrounded the public interest in communication from its inception, while the United States supported competition in a marketplace of ideas that was independent from the intervention of the state.

This contrast between a liberal free market, 'marketplace of ideas' approach to regulation and the more interventionist, social democratic, public service style approach is also noted by Karol Jakubowicz (2015, pp. 33-35), among others.

Given the variation in approaches to media plurality, and the different rationales for regulating in this area, it is not surprising that measurement is still an evolving field and is itself characterised by significantly different approaches. Having described the goal of the FCC's approach to diversity as being 'instrumental', meaning 'it is designed to provide citizens with the information they need to discharge the obligations of citizenship', Jonathan Levy (2015, pp. 278, 280) characterises the policy challenge in the following way:

> First, defining a performance metric is hard; second, deciding what level is acceptable involves judgment; third, at least part of what affects citizens is *consumption* of media content, something that generally cannot be regulated.

In this report we do not have scope to include an assessment of the FCC's approach to diversity, but we note Napoli (2015a, p. 146) provides a review of the agency's unsuccessful attempt in the early 2000s to create a Diversity Index (with an appeal court commenting on its failure to differentiate between media outlets that provide local news content and those that do not).[48] Doris A Graber and Johanna Dunaway (2018, p. 47) comment on what they see as the FCC's failure to use its power to define what is meant by 'programming in the public interest', and to develop rules about public service and local interest programs, as well as to monitor and enforce existing standards. Asserting that 'political cross-pressures are strong', they describe the 'very light hand' applied in comparison even to Europe, Canada and Australia (p. 48).

The remainder of this section will discuss two leading approaches to measurement of media plurality, with comments also on the way in which aspects of the UK approach have been used in New Zealand.

EU: The Media Pluralism Monitor

On one level, the European Union is a leader in recognising the importance of media pluralism and in implementing a program for measuring it. The European Commission funds a program that annually reviews media pluralism across the EU. The program is administered by the Centre for Media Pluralism and Media Freedom at the European University Institute in Florence. The CMPF is responsible for the Media Pluralism

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[48] Jock Given (2007) compares developments in cross-media ownership regulation in the US and Australia following legislative change in 2006.

Monitor (MPM), which resulted from work commissioned by the EC a decade ago, with a version of the MPM first published in 2009, then subject to review and development, including input from a group of expert advisors.[49]

On another level, however, the overall European approach (as distinct from the MPM itself) has been criticised for comprising substantial monitoring with little in the way of regulatory response. The principle regulatory instrument, the EC Merger Regulation, concerns concentration of undertakings that would 'significantly impede effective competition', but does not concern media plurality, which is left to member states. This is said to be due to the need for the EU to allow its member states some degree of autonomy over a sensitive aspect of culture and regulation.[50]

Nevertheless, the MPM appears to have considerable support, at least in parts of the EU and among members of the European Parliament. A 2018 report (mentioned above) of its Committee on Civil Liberties, Justice and Home Affairs (2018, p. 17) called on the European Commission to allocate permanent, adequate funding for the MPM to be used in considering candidate countries for admission to the EU, with the MPM results to 'have an actual bearing on the progress of the negotiation process'.[51]

How the MPM works

The MPM program essentially comprises country reports on the 28 EU member states and now two 'candidate counties' (Turkey and Montenegro), along with an overall Policy Report for the year, which analyses the country data under several themes. The country-level assessments are undertaken by independent researchers, mostly based in the applicable territories. The researchers use a set of 20 indicators of media pluralism that have been developed by the CMPF and others who have worked on the development of the MPM over several years.[52] The results for each indictor, along with sub-indicators that overall provide 200 variables, are then analysed by the CMPF to provide a risk level (low, medium, high) for each.

The indicators are then arranged into four generalised 'areas' (basic protection; market plurality; political independence; social inclusiveness), which are also given a risk level. In the Policy Report, the results of all territories are collated to give a pan-European assessment on the indicators, sub-indictors, and the generalised areas. The results are presented in tables, risk meters, and maps.

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[49] See K.U. Leuven et al (2009). On the development of the MPM, see Valcke et al (2010). See also the EC's own webpage on the project, <ec.europa.eu/digital-single-market/en/media-pluralism-monitor-mpm>. For current work, see the CMPF's site, <cmpf.eui.eu/media-pluralism-monitor>.
[50] *Council Regulation (EC) No 139/2004 of 20 January 2004 on the Control of Concentrations between Undertakings*. Jan Oster (2017, 448) notes this reservation of EU member rights in relation to the application of the Merger Regulation. Martin Moore and Damian Tambini (2018b, p. 3) note the political sensitivity and that attempts to introduce media pluralism protections have failed.
[51] See Motion 50. Examples of other recent work in the EU are the EC's focus on media pluralism and democracy for its 2016 Annual Colloquium on Fundamental Right, and the work of the Council of Europe's Committee of Experts on Media Pluralism and Transparency of Media Ownership.
[52] CMPF (2017). The researchers are given a questionnaire. Most of the responses are yes/no/not applicable/no data, although some ask for specific values (e.g. market share). The methodology is summarised on page six of the 2017 Policy Report which gives results for 2016 data gathering. MPM Figures 5 and 1.2.4 below are taken from this report.

The MPM is a substantial undertaking and much could be said about it. As this report does not seek to comprehensively assess competing approaches to media pluralism, the various elements will not be discussed at length, but its target issues are readily apparent from the matrix of indicators and areas below.

Figure 2. **MPM FIGURE 5 – List of indicators per area**

BASIC PROTECTION	MARKET PLURALITY	POLITICAL INDEPENDENCE	SOCIAL INCLUSIVENESS
Protection of freedom of expression	Transparency of media ownership	Political control over media outlets	Access to media for minorities
Protection of right to information	Media ownership concentration (horizontal)	Editorial autonomy	Access to media for local/ regional communities and for community media
Journalistic profession, standards and protection	Cross-media concentration of ownership and competition enforcement	Media and democratic electoral process	Access to media for people with disabilities
Independence and effectiveness of the media authority	Commercial & owner influence over editorial content	State regulation of resources and support to media sector	Access to media for women
Universal reach of tradition-al media and access to the Internet	Media viability	Independence of PSM governance and funding	Media literacy

Given the limited scope of the current inquiry, it is most useful to mention Market Plurality. The overall assessment of the EU territories is represented in the map below.
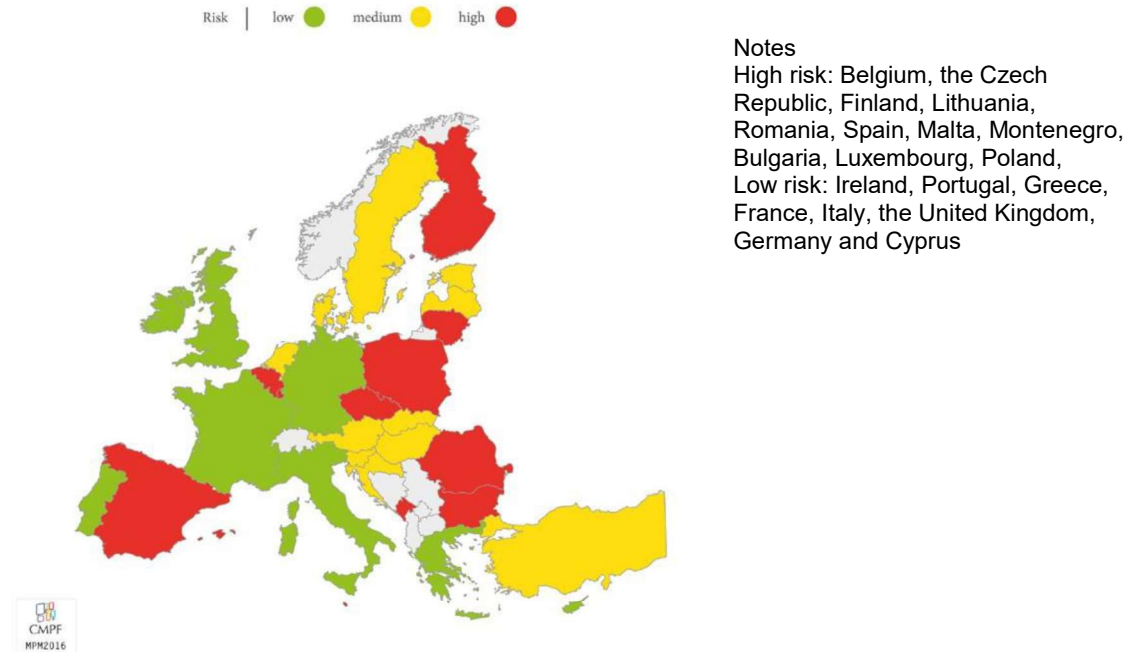
Figure 3. **MPM FIGURE 1.2.1 Media Plurality area – Map of risks per country**
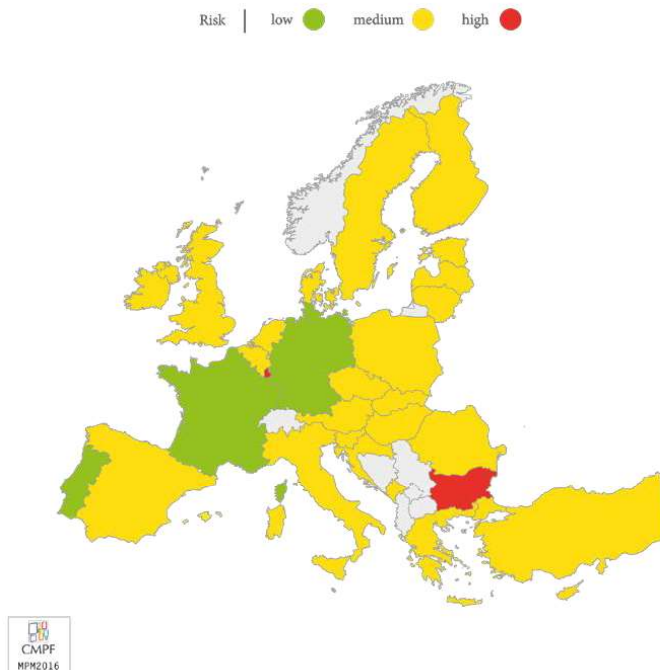
Greater levels of risk were seen in one of the indicators for this area, that of cross-media concentration of ownership and competition enforcement, as shown in the figure below.

Figure 4. **MPM FIGURE 1.2.4 – Cross-media concentration of ownership and competition enforcement – Map of risks per country**

Notes
High risk: Belgium, the Czech Republic, Finland, Lithuania, Romania, Spain, Malta, Montenegro, Bulgaria, Luxembourg, Poland, Low risk: Ireland, Portugal, Greece, France, Italy, the United Kingdom, Germany and Cyprus

The indicators in this topic area are discussed briefly below in relation to some factors that might be relevant to an assessment of media pluralism in Australia, using the tool.

- 'Transparency of media ownership' would take account of aspects such as the control notifications under the Broadcasting Services Act and information presented in the Register of Controlled Media Groups and other ACMA databases and information sources, as well as access to shareholding information from ASIC registers and information provided by the ACCC in merger consultations.

- 'Horizontal control of media ownership' would take account of the limits in the BSA on control of commercial radio and commercial television licences in the same licence area, but would also take into account actual concentration levels, including market share.

- 'Cross-media concentration of ownership and competition enforcement' would take account of the repeal of Australia's cross-media rules, but would go beyond this to look at how competition law is enforced and its potential to prevent cross-media ownership to the extent that it harms pluralism. In Ireland, for example, the Competition and Consumer Protection Act 2014 involves the Minister for Communications, the Broadcasting Authority and the Competition and Consumer Protection Commission. In the 2017 Policy Report (p. 29), the CMPF says:

> …even if a (merger) transaction and/or unilateral conduct do not raise competition concerns, they may raise concerns over media pluralism. In certain countries these concerns are addressed by subjecting the outcome of competition enforcement to pluralism-related considerations.

- This indicator would also take account of support for public media and community broadcasting.

- 'Commercial and owner influence over editorial content' is a more difficult matter to consider. The CMPF (2017, pp. 31-32) has said not all concentration harms pluralism (for example, it can save a publication from folding), but it may where 'the power that stems from ownership is used to influence editorial content'. Australian mechanisms might include charters of editorial independence and rules about separation of editorial content.

- 'Media viability' is seen by the CMPF as an even more difficult measure, not only because of the variety of dissimilar initiatives that might be taken into account, but because of the difficulty of obtaining data and making predictions. A number of the 'non-traditional revenue streams' cited in relation to European territories can be seen in Australia: new apps for tablets and smartphones; 'package subscriptions' for print and digital; crowdfunding; podcasts; event management.

- The comments above are intended as a guide only; while Hitchens (2015) notes some aspects of the Australian environment relevant to the MPM criteria, there has been no systematic application of the MPM here. For the UK, the 2016 UK country report (Dzakula, 2016) provides this assessment:

Table 6.   UK Country report table 3.2 – UK Market Plurality Area
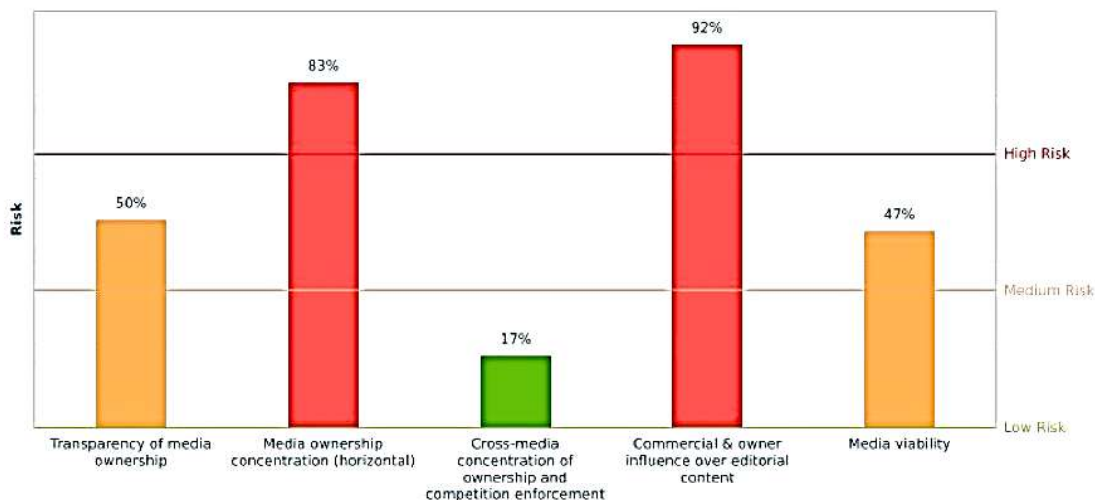
The researcher who prepared this report was Jelena Dzakula from the University of Westminster.[53] She concluded that overall in the UK 'risks to media pluralism are low', but commented on the possible impact of Brexit, as follows: 'there is the need to maintain positive provisions that aim to protect media plurality once the UK leaves the EU' (11). She provided the following observations on Market Plurality, the one area where she regarded there to be medium risk level.

- In relation to transparency, although there are legislative requirements for disclosure of company interests, this occurs through annual reports, so there is no specific obligation to notify Ofcom. Furthermore, as shareholders are sometimes large investment funds, 'it takes research and knowledge to establish who owns which media company despite these transparency requirements' (p. 6).

- Restrictions on horizontal concentration are limited to television, while cross-media restrictions only apply to control of a Channel 3 television service and national newspapers (see below). The report does, however, mention the application of the public interest test in the Enterprise Act 2002 (described in more detail below).

- In terms of regulatory authorities and procedures, the report cited with approval the involvement of Ofcom, the Competition and Market Authority and the Competition Appeal Tribunal, noting 'these bodies have sufficient powers and have been seen as efficient' but argued that the system overall is complex and that 'the issue might not be the efficiency of the bodies involved but rather the ideology that has underpinned the relaxation of the rules over the years since the Broadcasting Act 1996' (p. 6).

- On actual levels of concentration, the report (p. 7) commented on the prominence of the 'top four' enterprises in various parts of the sector – a standard measure used by the CMPF – and noted the following:

    - the top four audiovisual media owners command 92 per cent of revenues and 74 per cent of audiences;

    - the top four newspaper owners command 75 per cent of revenues and 71 per cent of readership;

    - the top four internet providers command 59 per cent of revenues and 90 per cent of subscribers.

- On viability, while noting challenges for the sector, the report (p. 7) noted the emergence in the UK of crowdsourcing initiatives as well as 'community-driven hyperlocal journalism websites'.

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[53] *Media Pluralism Monitor 2016 Monitoring Risks for Media Pluralism in the EU and Beyond Country Report: United Kingdom*. Written by Jelena Dzakula. See cmpf.eui.eu/media-pluralism-monitor/mpm-2016-results/united-kingdom

There are other aspects of the MPM that take it outside the territory most Australian critics, and probably all regulators, would consider suitable matters for inclusion, in some cases because the criteria are inevitably subjective with little evidence available. Editorial autonomy, for example, is an indicator appearing under the 'political independence' category, separate from the aspect of commercial/owner influence over content. The social inclusiveness indicators are perhaps the clearest examples of the difference in approach in the EU (at least at the point of research and debate, if not in terms of regulation). Some Australian policy or regulatory initiatives – captioning requirements for commercial, public service and pay television; the cultural diversity objectives of SBS radio and TV; the funding of the National Indigenous Television service – could perhaps be regarded as part of a more comprehensive concept of media pluralism. However, they are far removed from the ownership and control focus of Australian law. While international experience suggests Australia might need to expand its concept of 'media diversity' to account for the contemporary digital environment, aspects of social inclusiveness might be better regarded as separate policy and regulatory initiatives rather than as a part of a regulatory framework for media plurality.

UK: The Ofcom framework

The work by Ofcom in developing a framework for measuring media plurality across several dimensions and across media platforms is world-leading. As this is an environment that has at least some similarities to the Australian environment (in its legal and parliamentary framework as well as the presence of both private, commercial media and public service broadcasting), it is a good point of comparison in any consideration of how this topic should be approached in Australia.

In contrast to Australia, the UK retains a cross-media rule which operates at a national level and prohibits a newspaper operator with a national market share of 20 per cent or more from holding a Channel 3 licence or a stake in a Channel 3 licensee company that is greater than 20 per cent. This is the key ownership rule aimed at plurality, but it is accompanied by rules relating to the independent supply of national news services by Channel 3 licensees; rules that disqualify certain persons and groups (such as advertising agencies and political associations) from holding licences; and the Media Public Interest Test applied in relation to mergers.[54] In addition to these rules, Ofcom (2015b, pp. 22-23) nominates the fit and proper person test[55] and the content requirements in the Broadcasting Code as 'other regulatory tools' that address plurality.

Ofcom's work on measuring pluralism, which resulted in the Measurement Framework, was initiated in 2011. Ofcom itself (2015, p. 8) has noted the importance of the Leveson Inquiry, which reported in 2012, in shaping the form of its Framework. Nevertheless, it and its predecessors had long held responsibilities for monitoring and regulating media ownership and control. Aside from decisions on media ownership

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[54] The cross-media rule is found in Schedule 14 of the *Communications Act 2003*. See Ofcom's most recent media ownership review for an outline of how these rules fit together (Ofcom 2015b, 9).
[55] Sections 3(3) and 86(3) of the *Broadcasting Act 1990* and sections 3(3) and 42(3) of the *Broadcasting Act 1996*.

laws, in 2003, plurality became a 'public interest consideration' included in the *Enterprise Act 2002*.[56] This meant that in certain media merger assessments, the Secretary of State could ask either or both the broadcasting regulator (Ofcom) and the competition regulator (now the Competition and Markets Authority) to report on the potential effects of a merger on media pluralism.[57]

Although newspapers and broadcasting services are treated separately, in both cases there is a core test for a 'sufficient plurality'. For newspapers, this is (where reasonable and practicable) 'a sufficient plurality of views' (s 58[2B]), whereas for radio and television it is 'a sufficient plurality of persons with control of the media enterprises serving that audience' (s 58[2C][a]). And in a demonstration of the ways in which plurality, quality and standards are interwoven, the Secretary may also issue an intervention notice in relation to: accurate presentation of news and free opinion in newspapers (s 58[2A]); a wide range of broadcasting services 'of high quality and calculated to appeal to a wide variety of tastes and interests' (s 58[2C][b]); and a genuine commitment to broadcasting standards (s 58[2C][c]).[58]

A merger environment is of course a key moment at which a plurality assessment might be made. However, it is not the only such environment and in this report we are concerned not with mergers but with a more general assessment of media plurality. To this end, we note that Ofcom has a statutory responsibility to review media ownership rules at least every three years and, in the US, the FCC has a statutory responsibility to review media ownership rules every four years.[59] While these reviews assess the operation, effectiveness and relevance of the rules, not the state of plurality per se, Ofcom has conducted extensive work in response at the request of government.

In its 2012 advice to the Minister on measuring plurality, Ofcom (2012, p. 28) responded to specific questions on how a plurality review might be triggered in the absence of a merger. Ofcom identified two types of triggers for a plurality review outside of a merger environment, which would be able to take account of organic growth and other developments, not simply proposed transactions. These comprised:

> **A metric-based trigger**, which would require a plurality review to be carried out if organic growth resulted in a specific metric being breached.

> **A time-based trigger**, which would require a plurality review to be carried out automatically on a periodic basis.

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[56] Section 58 sets out the public interest considerations, while sections 42 and 67 give the Secretary of State the power to issue an 'intervention notice' or a 'European intervention notice' respectively if one or more of the public interest grounds in section 58 is activated.

[57] In a recent matter, the CMA (2018) explained that it takes Ofcom's framework as 'an appropriate starting point' (p. 97) in the plurality analysis; however, it notes that there is limited external guidance on the subject and that the framework does not establish a benchmark for what is a 'sufficient' level of plurality (p. 13). See Competition and Markets Authority, *21st Century Fox, Inc and Sky Plc: A report on the anticipated acquisition by 21st Century Fox, Inc of Sky Plc*, May 2018.

[58] In the UK there is also a 'fit and proper person' test which applies to the holders of broadcasting licences: Broadcasting Act 1990 s3(3) and Broadcasting Act 1996 s3(3). This test is more far-reaching than Australia's 'suitable licensee' test at section 41 of the BSA. This test has been applied by Ofcom in recent matters but will not be considered here.

[59] The UK responsibility is found in section 391 of the *Communications Act 2003* while the US responsibility is found in section 202(h) of the *Telecommunications Act 1996*.

For reasons that include the difficulty of developing a metric-based trigger and the additional certainty provided to industry participants through the use of a time-based metric, Ofcom favoured the latter. This position was echoed by the House of Lords Select Committee on Communications (2014, 54) in its report on media plurality which recommended a statutory periodic review by Ofcom every four to five years.

Finally, in its own consultations on the development of a measurement framework, the Department of Culture, Media and Sport explicitly recognised the need for a 'baseline market assessment of media plurality in the UK' (DCMS 2014, p. 7).

It is in this context that we present information on the Ofcom arrangements, even though at times we provide illustrations of the application of the framework tests by reference to UK merger decisions.[60] We will also return to the concept of 'sufficient plurality' later in this chapter, as it has value outside of the merger environment, along with the proposal for a baseline assessment.

In one final point before considering the elements of the framework, it is worth noting the different methodologies involved in this assessment. Most of this work is quantitative, with Ofcom drawing on commercial consumer research data and its own surveys. In 'contextual factors', and in seeking to understanding other aspects, Ofcom will adopt other approaches to information gathering. In a recent inquiry, for example, it needed information on news supply arrangements at the wholesale level in order to determine the reach for various competitors at the retail level. It spoke to commercial radio news suppliers to understand these arrangements, including the extent to which they produce their own news and adapt the supply from one of the parties to the transaction. Ofcom also conducted content sampling and, for digital news, obtained commercial data on use of news sites via desktop, laptop and mobile devices.[61]

Elements of the Measurement Framework

The Ofcom Measurement Framework is based on the key elements of availability, consumption, impact and 'contextual factors' (represented in the table below). 'Market context', meaning the relevant media environment, is also considered. This involves an extensive review of aspects of the national media market, including the results of recent surveys which showed relative use of the relevant media platforms (television, radio, newspapers and internet); the average weekly reach of these platforms by age group; cross-platform audience reach; and use of digital intermediaries, which Ofcom groups into three categories: aggregators (such as Google News); search engines (such as Google and Yahoo); and social media (such as Facebook and Twitter).[62]

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[60] We note that in Australia the idea of a three-yearly review of media diversity (and also localism) was raised by the Public Interest Journalism Foundation in its submission to the Senate committee examining the 2016 Media Reform Bill (see PIJF, 2016).

[61] See *Public Interest Test for the Proposed Acquisition of Sky Plc by 21st Century Fox, Inc: Ofcom's Report to the Secretary of State*, 20 June 2017 (Ofcom 2017, referred to below as 'Sky/21C Fox report), p. 58.

[62] This was the approach taken in the Sky/21C Fox matter (Ofcom 2017).

Figure 5.   Ofcom figure 1 - Media plurality measurement framework

Category		Metrics	Description	Source	What it indicates
Availability	Availability and consumption metrics to be calculated at retail and wholesale levels to allow analysis of media ownership. Consumption metrics to also be calculated at intermediary level to reflect use of intermediaries	Number of providers	A count of the number of entities providing news sources	Industry data	An indication of the potential for diversity of viewpoints
Consumption		Reach	By platform – TV, Radio, Newspapers, Internet By provider within platform	Industry measurement systems, consumer research	An indication of the variety of viewpoints disseminated
			Cross platform	Consumer research	As above. Cross media reach establishes the capability for each provider to reach the population regardless of platform
		Share of consumption	By platform – TV, Radio, Newspapers, Internet By provider within platform	Industry measurement systems, consumer research	An indication of the potential concentration in patterns of consumption Note: This would be calculated from time spent for each platform as measured by the industry measurement systems
			Cross platform Cross platform by provider	Consumer research	As above Note: this can be in the form of the share of reference metric that captures the reach and frequency of consumption
		Multi-sourcing	By platform and cross-platform	Consumer research	An indication of the extent to which consumers are sourcing their news from one or a range of sources
Impact	Personal importance		By platform By provider	Consumer research	Provides one proxy for measuring the potential to influence opinion
	Perceived impartiality, reliability and trust and the extent to which a news source helps people make up their minds about news		By platform By provider	Consumer research	Provide additional context to the metric of personal importance
Contextual factors	A range to be considered		A description of the qualitative differences between news sources and organisations	Multiple sources. Examples of relevant factors include, but are not limited to: Internal plurality Internal governance processes Editorial policy Impartiality requirements Market trends and future market developments	Elements relevant to an understanding of plurality that are not able to be quantified by metrics

If relevant, in this market context review Ofcom may also include information such as newspaper circulation and advertising revenue across different platforms. In one recent matter involving newspapers, the market context discussion included information on the overall number of newspapers in the UK at both a national and local level, and the number of suppliers; the information on the four main platforms and top 20 news sources; as well as information on newspaper circulation, readership and revenue.[63]

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[63] *Public Interest Test for the Acquisition by Trinity Mirror Plc of the Publishing Assets of Northern and Shell Media Group Limited: Ofcom's Advice to the Secretary of State*, May 2018 (Ofcom 2018c, referred to below as the Trinity Mirror report). Among other assets, the transactions brought together *The Daily Mirror* and a large number of regional titles (Trinity Mirror) and *The Daily Express* and *The Daily Star* (Northern and Shell).

Availability

This is a quantitative measure of the number of news sources available in the identified market, across different platforms. It is described in the framework as 'a count of the number of entities providing news sources' and is assessed using industry data.

By analysing availability at the wholesale level as well as a retail level, the Framework provides a picture of content supply by prominent media groups.

Ofcom stresses it is only one measure of plurality and offers an indication only of the *potential* for diversity of viewpoints. In advice to the Secretary of State, Ofcom (2012b, p. 18) described this measure as a reflection of 'the "shelf space" occupied by titles or news organisations'. In pointing to its limitations, Ofcom said:

> At the most extreme, adopting a count of the number and range of owners of media enterprises, without taking account of their ability to influence opinion would mean that all news and current affairs providers would be included as contributing to plurality simply by being available, regardless of whether they were used by several million or very few consumers (p. 19).

Figure 6 below shows the snapshot of available sources recorded by Ofcom in a 2017 matter.[64]

Although Ofcom comments indirectly on ownership when assessing the possible impact on availability, a more explicit approach to ownership diversity was taken in a recent application of the elements of the framework in New Zealand. The Commerce Commission noted that in an international ranking of 41 countries on the basis of contribution of media ownership structure to media pluralism, New Zealand ranked equal last with Romania and Turkey. The Commission also looked at the number of journalists and editorial staff at the two companies subject to the transaction, as well as at a rival organisation.[65]

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[64] Sky/21C Fox report (Ofcom 2017, p. 49).
[65] See NZME Limited and Fairfax New Zealand Limited [2017] NZCC 8 (2 May 2017). In New Zealand there are no sector-specific media ownership laws and no formal framework for considering media plurality. The Commerce Commission's decision to take this into account was challenged by a party to the transaction but both the Commission's jurisdiction and its findings on plurality were upheld by the High Court. See NZME Limited v Fairfax Media Limited [2017] NZHC 3186, [231], [306].

Figure 6. **Ofcom figure 5.1 – Multiplatform scope of the news offer provided by different news operators (at retail level – UK)**

News outlet	Television (broadcast/online)	Radio (broadcast/online)	Newspapers / print	Online news*
BBC	✓	✓		✓
Sky	✓			✓
Channel 4	✓			✓
Channel 5	✓			✓
ITV	✓			✓
Daily Mail and General Trust			✓	✓
News UK		✓	✓	✓
Guardian Media Group			✓	✓
Trinity Mirror Group			✓	✓
Lebedev Foundation			✓	✓
Telegraph Media Group			✓	✓
Northern & Shell			✓	✓
Johnston Press			✓	✓
Nikkei			✓	✓
Global		✓		✓
Bauer		✓		✓
Buzzfeed.com				✓
Huffington Post				✓
Vice	✓		✓	✓
Fox/Sky/News Corp	✓	✓	✓	✓

*dedicated news channel online, including digital extension of traditional news providers: website, social media, app

Consumption

The consumption measure marks a significant point of departure from traditional ways of assessing plurality, including the approach adopted in Australia. It represents a shift away from supply, towards the kind of 'exposure diversity' that has been identified as a crucial factor in a more effective assessment of plurality. Ofcom itself has described consumption metrics as 'the most useful starting point of any plurality assessment' (2015a, p. 12).

In the Measurement Framework, Ofcom explains that its consumption metrics measure 'the *number* of people using news sources and *the frequency and/or time* that they spend consuming it' (2015a, p. 12). This inquiry involves measures of **reach** used within different sectors of the industry (for example, number of people who spent at least five minutes watching television at a particular time; print circulation; number of 'likes' on Facebook). But Ofcom has enhanced these results by taking account of time spent watching (for example) and consumption across different platforms. It looks at 'multi-sourcing', a measure of the average number of sources a consumer uses across different platforms across a specified period.
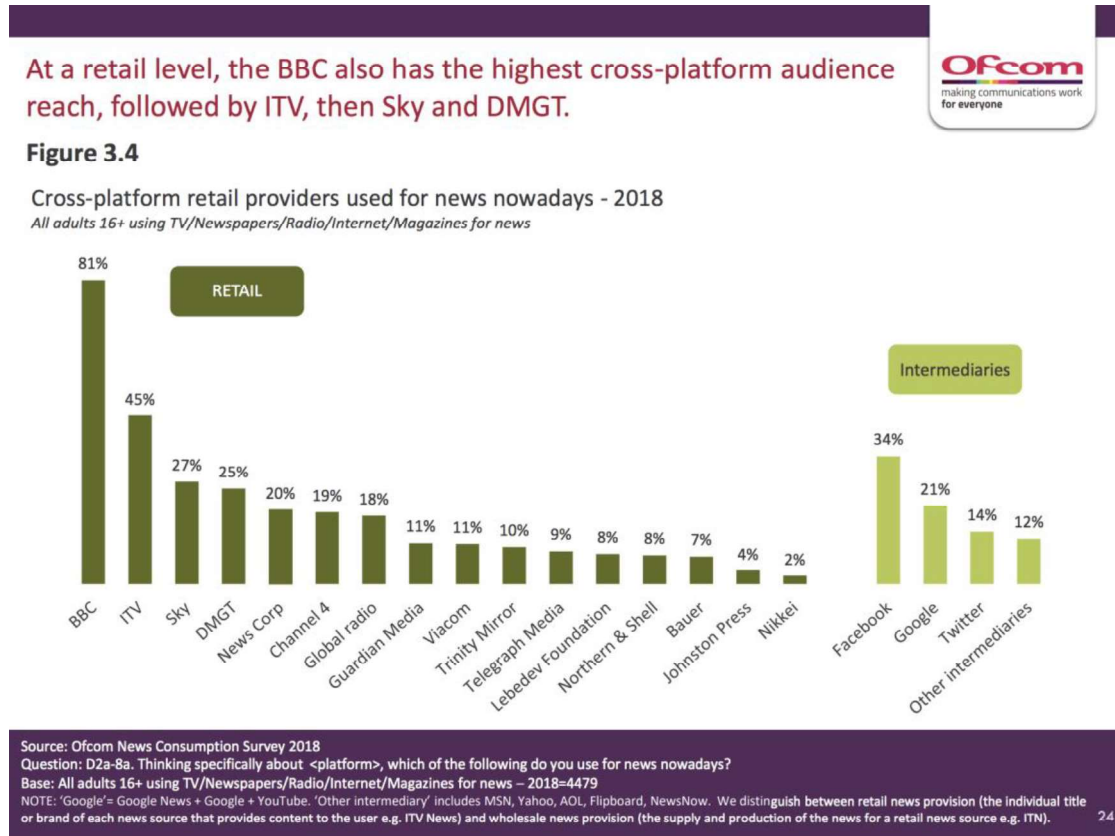
In 2018 it published the following chart ('slide 24') on reach at a retail level, including digital intermediaries:[66]

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[66] *News Consumption in the UK: 2018*, slide 24.

Figure 7.   Ofcom slide 24 – Cross platform audience

At a retail level, the BBC also has the highest cross-platform audience reach, followed by ITV, then Sky and DMGT.

Figure 3.4

Cross-platform retail providers used for news nowadays - 2018
All adults 16+ using TV/Newspapers/Radio/Internet/Magazines for news

RETAIL

Intermediaries

Source: Ofcom News Consumption Survey 2018
Question: D2a-8a. Thinking specifically about <platform>, which of the following do you use for news nowadays?
Base: All adults 16+ using TV/Newspapers/Radio/Internet/Magazines for news – 2018=4479
NOTE: 'Google'= Google News + Google + YouTube. 'Other intermediary' includes MSN, Yahoo, AOL, Flipboard, NewsNow. We distinguish between retail news provision (the individual title or brand of each news source that provides content to the user e.g. ITV News) and wholesale news provision (the supply and production of the news for a retail news source e.g. ITN).

In moving beyond the measure of reach, Ofcom has developed its own measure known as 'share of references'.

Ofcom describes this approach in the following terms (2015a, p. 12):

> Share of references is calculated by asking people which news sources they use and the frequency with which they use them. Each reference is then weighted for the frequency of use, and summed. The share of each source or provider can then be calculated based on their total number of references as a proportion of all references for all news sources, regardless of the platform or media.

Ofcom calls this result **share of consumption**. It uses this tool in its annual consumption survey to produce various snapshots of this aspect of plurality.

For example, in 2018 it published the following chart ('slide 83') on share of references at a retail level, including digital intermediaries:[67]

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[67] *News Consumption in the UK: 2018*, slide 83.

Figure 8.   Ofcom slide 83 – Share of references
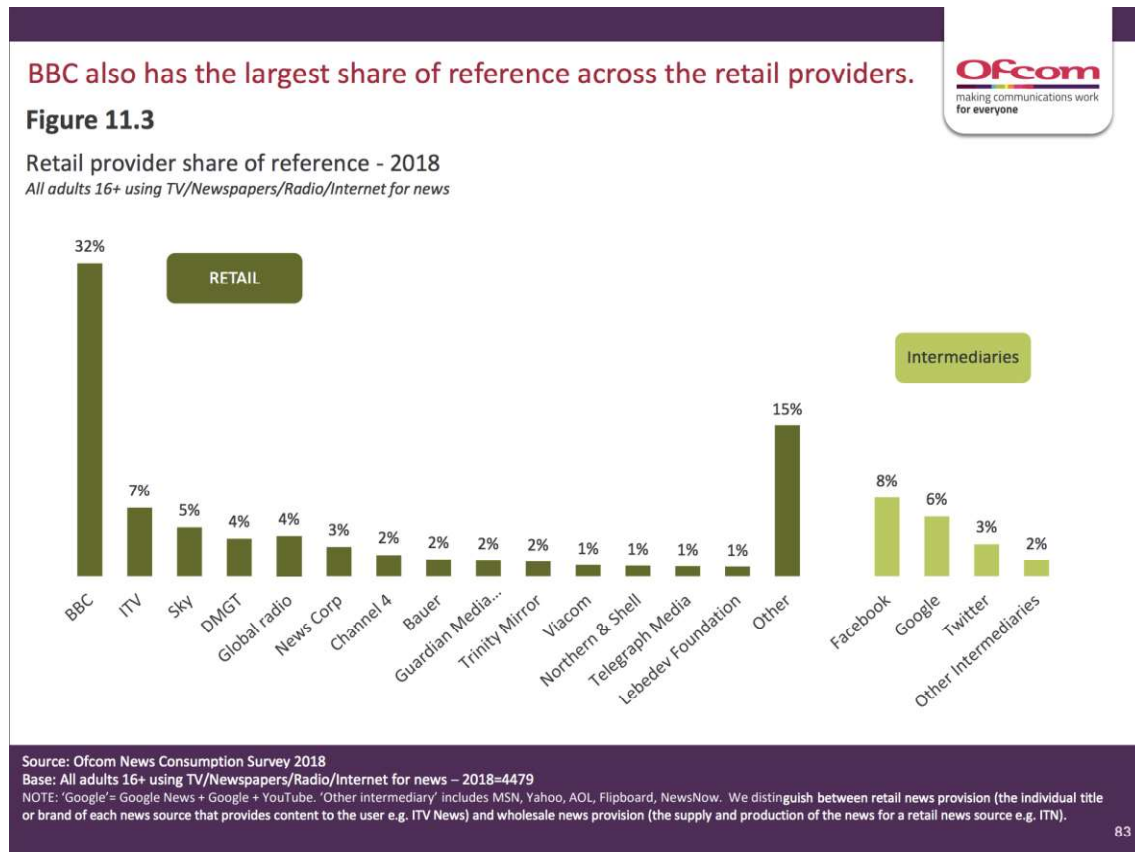
The value of this more sophisticated measure that combines 'use' with 'frequency of use' can be seen when this chart (slide 83) is compared with the cross-platform analysis of reach (slide 24). This comparison shows ITV, for example, has a reach measure of 45 per cent (just over half that of the BBC), but when frequency is added and the results are weighted to give a 'share of references' measure (as shown in Ofcom's Figure 11.3, above), ITV's share drops to less than one quarter of that of the BBC (7 per cent compared to 32 per cent for the BBC).[68]

In a recent merger assessment (where Ofcom takes account of ownership by combining the shares for the separate sources subject to the transaction), this form of analysis was used to show that the print sources subject to the transaction would have a *combined share of references* of 3 per cent (compared to 42 per cent for the BBC) even though they had a *combined reach* of 10 per cent (compared to 77 per cent for the BBC).[69]

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[68] These results are at the retail level. They differ slightly from the results at the wholesale level, mostly on account of the role of ITN as a wholesale supplier of news to ITV. The wholesale results for ITN/ITV are 53 per cent reach and 10 per cent share of references. The results for the BBC, Facebook, Google and Twitter are the same at wholesale level.
[69] Trinity Mirror report (Ofcom 2018c, pp. 26-27).

The other interesting aspect of this comparison of 'share of references' to 'reach' is that **platforms appear less significant**. In the 2018 news consumption results, Facebook's share (for news, not all social media), when considered just as the total number of people reporting they use it for news, is 34 per cent. But when frequency of use is added and considered relative to all other news sources, Facebook's share drops to 8 per cent. Applying the same approach, Google's share (which in this measure comprises Google search, Google News and YouTube) drops from 21 per cent to 6 per cent.

In a report published as part of the development of the Framework, Ofcom (2012b) explained how these various aspects work together to provide an overall picture of consumption:

> Share of consumption (using single-sector measurement systems, where this is possible, and bespoke cross-media 'share of references') is a good proxy for measuring *influence in the news media market*.

> Reach (particularly cross-media, using bespoke quantitative research) and multi-sourcing (using the same) are good proxies for *diversity of viewpoints* consumed (p. 21, emphasis added).

This kind of analysis of consumption is not conducted in Australia. The news media offering for Australian consumers in more narrow than that in the UK; nonetheless, it would be illuminating to understand the local market in these terms – in particular, to understand the share of consumption and references of the digital platforms in a more concentrated yet no more fluid market.

Impact

Impact is designed to extend the measure of consumption and allows for some insight into the influence of a media source. Ofcom acknowledges that influence and impact are difficult concepts to measure, and that certain proxy measures should be used to gauge them. Ofcom uses 'personal importance' as a principal measure, complemented with 'perceived impartiality', 'reliability', 'trust' and 'the extent to which sources help make up their mind about the news'.

Referring to one of these measures, Ofcom (2018, p. 32) has said, 'News providers may have a particular impact on the people who use them if they are trusted by their readers, viewers or listeners and can influence their opinions'. Prompts such as 'offers a range of opinions', 'helps me make up my mind', and 'is of high quality' are used in consumer surveys.

The table below, from the 2018 consumption survey, provides a useful indication of some of these points for selected digital news sources:

Figure 9.   Ofcom slide 98 – Impact

In the Trinity Mirror matter, Ofcom noted that affected titles rated relatively low on these measures. However, in the Sky/21C Fox matter, Ofcom (2017, p. 70) used its data to conclude:

> … the evidence suggests that Sky News is held in similar regard to the public service broadcasters in terms of importance, trustworthiness and impartiality. We may therefore be more concerned about a transaction involving Sky News than we would be were a less trusted news provider involved.

Contextual factors

Ofcom (2015a, p. 13) explained, 'The importance of contextual factors arises from the fact that the operating environment can differ between news sources and news organisations.' To this end, while quantitative metrics such as those considered above are an important part of assessing plurality, 'a purely mechanistic approach' may fail to appreciate these differences between news organisations.

It gave the example of news standards on a matter such as impartiality differing across platforms and applicable rules. In its framework document, Ofcom gave the following (non-exhaustive) list of examples of contextual factors:

i. governance models – such as trusts, publicly limited companies with shareholders, private companies, statutory corporations;

ii. funding models – such as advertising revenues, circulation revenues, subscription fees, public funding;

iii. the potential power or editorial control exercised by owners, proprietors or senior executives within news organisations;

iv. internal plurality – i.e., how far an organisation enables, supports or promotes a range of internal voices and opinions;

v. market trends and potential future developments; and

vi. regulation and oversight, in some cases based on statutory obligations – e.g., Ofcom's Broadcasting Code or the BBC's own editorial or regulatory processes and compliance.

Ofcom has noted (2015a, p. 13) the importance of the 'due impartiality' rule that applies to television services under the Broadcasting Code. This observation is worth repeating, given the similarity with the Australian environment, where broadcasting services are also subject to content rules under codes of practice enforced by the broadcasting regulator, the ACMA (even though in the UK it is the regulator that formulates the code):

> From a regulatory perspective, broadcasters are subject to impartiality requirements, while newspapers and websites are not. Ofcom's Broadcasting Code requires that 'news in whatever form, must be reported with due accuracy and presented with due impartiality'. The requirement for 'due impartiality' is not absolute and broadcasters have a degree of editorial discretion in the selection of the news agenda. We recognise that the impartiality rules may contribute as a safeguard against potential influence on the news agenda by media owners, but they cannot themselves necessarily ensure against it.

We will return to the relationship between media standards and plurality, but for now it is worth noting a difference in the contribution of contextual matters seen in Ofcom's application of the framework in two recent matters.

In the Trinity Mirror matter, Ofcom did not identify any internal plurality concerns. It noted a study (Cushion et al., 2016) of coverage of the 2015 UK election which indicated the newspapers that were the subject of the review were cited far less frequently in broadcast coverage, indicating a lower level of influence.

In the Sky/21C Fox matter, after conducting its assessment of the availability, consumption and impact elements, and before considering contextual factors, Ofcom (2017, p. 78) examined the aspect of 'preventing any one media owner or voice having too much influence over public opinion and the political agenda'.[70] Ofcom considered the potential for influence by individuals within the media group following the proposed

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[70] This aspect of agenda setting and influence is noted above. It is the second of two limbs used by Ofcom (2015, p. 6) in its definition of plurality.

transaction, taking account of its findings on reach etc; comments made in submissions to it; the observations of Lord Justice Leveson in the 2012 inquiry; and the results of the study by Cushion et al. 2018. Ofcom (2017, p. 87) concluded there was a risk that the editorial stance of Sky News could be made to align with other news sources in the combined group 'through the selection and omission of stories or through the choice of commentators invited on to Sky News'. Ofcom also considered whether there were aspects of internal plurality that could mitigate this level of influence. These included the impartiality rules in the Broadcasting Code, the likely adverse reaction of audiences to any interference, and a culture of editorial independence at Sky. Ofcom considered these were not sufficient to address its concerns about the potential for influence.

This aspect was also considered in the decision of the New Zealand Commerce Commission mentioned above (2017, pp. 324-28). The Commission did not consider editorial policies and codes of practice to be sufficient safeguards. It also noted how internal correspondence from a related company in Australia demonstrated that centralisation may decrease internal plurality through the adopting of joint editorial positions.

Criticism of the Ofcom Measurement Framework

These arrangements have not been without criticism. In relating two matters subjected to the plurality regime up to 2013, Rab and Sprague (2014, pp. 67-68) note that although divestments of interests were required, in both cases this was to meet competition law requirements.[71] In the second case the Secretary did issue an intervention notice prompting a review on public interest grounds. Ofcom recommended against referral to the (then) Competition Commission on media plurality grounds, even though it was referred on competition grounds. Rab and Sprague regard this as revealing the unsatisfactory nature of plurality regulation, while also raising the risk of political interference.

Both Steven Barnett (2015) and Rachael Craufurd Smith (2015) characterise the changes in UK law as a move away from fixed ownership limits (or 'bright-line regulation') with, as Crauford Smith puts it, a 'flexible, multi-faceted approach' for assessing media plurality (p. 310). Nevertheless, Barnett (2015, pp. 51-56) forcefully makes this point when criticising Ofcom's 'share of references' methodology which he notes resulted in 2013's conclusion that in overall news sources the BBC had a 44 per cent share of references while the News Corp newspapers had 4 per cent (p. 53). Among other points, Barnett notes the campaigning nature of the newspapers and a tendency towards a more balanced and detached tone in BBC news reports. He concludes:

> … the power to exercise ... passion and thus to influence hearts and minds is missing from [Ofcom's] purely consumption-based and perception-based calculation based on responses to consumer surveys (p. 54).

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[71] The two matters are BSkyB's interest in news provider ITV and Global Radio's acquisition of GMG Radio Holdings. Rab and Sprague also mention News Corp's 2010 proposal to acquire additional shares in BSkyB, noting this proposal was withdrawn. The subsequent attempt at this transaction in 2017 is explained above.

Crauford Smith has also outlined problems with the three quantitative criteria used by Ofcom to measure plurality in local areas (2015, p. 316) while Gibbons (2015, p. 28) proposes his own formulation based on the question, 'Are media users exposed to all significant standpoints of opinion?'[72] Craufurd Smith (p. 321) argues that the system offers little protection for local audiences, leading her to conclude that after about 10 years of this system, the UK should consider moving back to 'bright-line' regulation. The level of discretion on the part of the minister is one of the drawbacks she identifies (pp. 313-15). Peter Humphreys (2015, p. 163) argues the case for a 'dedicated and politically independent media pluralism monitoring body with the final say, thereby removing the element of ministerial discretion in the decision making'. His conclusion is that in the UK such a body could be 'housed' in Ofcom.

Some of these points of criticism will be considered below in relation to the suitability of the international measurement frameworks for Australia. First, though, we will examine one other aspect which appears to need further thought: the place of platforms with a plurality framework.

The place of platforms

As noted at the start of this chapter, a framework for measuring media plurality can assist in understanding the level of choice experienced by consumers, and beyond this, the contribution of media sources to a diverse and dynamic news environment. It can also help to identify threats to existing levels of plurality. However, the tools examined above were not designed specifically to account for the place of digital platforms and the algorithmic delivery of news. We therefore need to consider whether they have capacity to address some of the factors identified in Chapters One and Two – for example, enhanced exposure through availability of more sources, or reduced exposure through the funnelling of audiences to certain providers.

Influence of algorithms of public affairs

Natali Helberger's (2018a) work on the need to take account of 'digital dominance' is helpful in trying to understand the role of platforms in relation to pluralism.[73] She argues:

> The true source of digital dominance is the ability to control the way people encounter and engage with information and the ability to steer their choices through the sheer knowledge about their interests and biases. More than ever, diversity has become the result of social dynamics, dynamics that are carefully orchestrated by one or few platforms (p. 156).

The significance of Facebook as the dominant social media platform was seen in Ofcom's recently released 2018 consumption survey results: 76 per cent of

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[72] Gibbons (2015, p. 27) does, however, note a potential problem with his test based on users' exposure to all significant standpoints of opinion (a 'sufficiency' test) in that it involves close scrutiny of substantive media content. He says that should not be too much of a problem given Ofcom already does that in, for example, testing local plurality.
[73] Helberger's work we draw on here is part of a new collection edited by Martin Moore and Damian Tambini (2018) under the title *Digital Dominance: The power of Google, Amazon, Facebook, and Apple*.

respondents cited Facebook as a social media source they use 'nowadays' for news, with Twitter, the next most popular, a distant second at 32 per cent (Ofcom 2018, p. 47). As noted above, this does need to be considered alongside Ofcom's findings of Facebook's lower share of all news sources in the market.

Perhaps more significantly – to take up Helberger's point about platforms' ability to 'steer the choice' of users, Ofcom's research (2018, p. 51) on how Facebook users receive news showed a large gap between active following of news producers and 'seeing news stories that are trending':

Actively follow online-only news organisations	19 per cent
Actively follow traditional news organisations	34 per cent
See news stories that are trending	55 per cent

These results can be seen in the light of findings from other research, mentioned in Chapter Two, about the channelling of users to certain sites and the concern over a loss of autonomy, or rather, a compromised autonomy. Hindman's early research (2007) on search engines commented on the 'funnelling' of users via search engines to a relatively small number of news sites, while his later work (2015) on social media found Facebook also favoured large, national news outlets. For consumers, this suggests a potential narrowing in diversity of exposure, but it also has implications for news producers. The pre-programming of recommender systems can also favour large providers, and while global news organisations do offer additional choices, they compete with the local news gatherers for advertising or subscription revenue.

As we noted above, research on this subject is still relatively new and at this stage evidence on these effects is insufficient. Nevertheless, as the potential harm from such risks is great, it is important to at least acknowledge it and be aware of the possible impact on public affairs. This is not to say that digital platforms as corporations are motivated by a desire to influence public affairs, and that this is in a sense beside the point. In his characterisation of platform power, John Naughton (2018, p. 376)[74] points to forms of direct power (such as the power overs users who have little choice but to agree to standard terms of use) and the indirect power that comes from their role in public affairs. While this might seem like a rather theoretical point of discussion, it is also relevant to regulation; in fact, it is the basis of the second limb of Ofcom's definition of plurality, cited above:

> *Preventing any one media owner, or voice, having too much influence over public opinion and the political agenda.* This can be achieved by ensuring that no organisation or news source has a share of consumption that is so high that there is a risk that people are exposed to a narrow set of viewpoints (Ofcom 2015, p. 6, emphasis added).

Naughton cites two examples of algorithmic, indirect power and the response it prompted. The first is the controversy generated by Google's autocomplete search

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[74] 'Platform power and Responsibility in the Attention Economy', in Moore and Tambini (2018), pp. 371-395).

function in December 2016 when it was found that 'evil' was one prompt for completing the query, 'Are Jews …' The algorithm was rapidly modified by Google, with the company pointing out that it was mechanically generated and did not reflect the company's own beliefs.

The second example is the gaming of Google search in May 2017 by sources seeking to promote President Trump and discredit former President Obama. A legitimate article, critical of President Trump, was published by *The Washington Post*. The pro-Trump response was false and had been disproved five years earlier, but searches on the topic returned the recent, false reports as the first six search results. Naughton explains that the method of achieving this result is widely understood and involves writing stories in ways that do not appear to be grossly exaggerated and in ways that encourage sharing: 'After that, Google's algorithms (which privilege up-to-date and widely shared content) will do the rest' (p. 378).[75]

Naughton's point in citing these events is not to condemn Google or its algorithms, but to observe that those algorithms 'have the power to shape the public sphere' (p. 377). This *public* impact needs to be considered alongside the *personal* impact we noted in Chapter Two – how channelling consumer choice can compromise personal autonomy. However, as we have noted, the evidence is not sufficiently established and at this stage it is difficult to speak with authority about the effects of digital platforms on news consumers in Australia, and of algorithmic delivery more generally. Justin Scholsberg (2018, p. 211) , for example, has argued that 'major news algorithms might be having *both* a personalizing and an aggregating impact on news agendas', noting that some studies suggest algorithms are responsible for limiting exposure to diverse content while others suggest user choice plays a greater role. Moller et al (2018, 901) note that different research outcomes can have different understandings of diversity or plurality underpinning them: social sciences studies usually take account of the 'inclusion of counter attitudinal information' whereas computer science studies tend to look at the 'inclusion of unexpected items'.

This leaves us with a contemporary conundrum. On the one hand, digital technology offers opportunities for publication and platforms offer opportunities for distribution that were unknown in the pre-internet era, substantially reducing some of the barriers to entry that have characterised this industry; possibilities for exposure to new sources are opened. On the other, algorithmic practices can narrow the field of consumption, closing opportunities for enhanced exposure as a smaller number of the most popular sources of news are prioritised; meanwhile, changing business models mean even these most popular news producers are squeezed for revenue.

As we have noted above, this report does not directly explore the revenue side of news production, distribution and consumption. But we can categorically say that – partly as a result of digitisation and partly owing to the emergence of digital platforms – the

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[75] A variation on this practice has been described by News Corp Australia (2018, pp. 87-88), in which new, unique and original material published by *The Australian* following a significant investment of resources including funding a journalist to travel to Argentina appeared 'anywhere from second to sixth in research results depending on the query and the timing of the search'.

game has changed for conceptualising diversity or plurality in the supply and consumption of news and journalistic content. Helberger describes this shift, at least in relation to social media, as follows:

> … social media platforms are instrumental in a more conceptual shift from mass-to-personalized modes of distributing media content. This is a shift in which it is not so much ownership and control over content that matters, but knowing the users, and establishing the knowledge, relationships, and technical infrastructure to trigger the engagement of users with particular types of content (Helberger 2018, p, 163).

It is important to note that in asserting the importance of control over user engagement, Helberger is not claiming that content itself is unimportant, only that ownership of that content is far less significant. And Valcke, Picard & Sükösd (2015, p. 2) say:

> ... the concentration of where the audience goes – in terms of aggregators and sites – is every bit as damaging to pluralism as limitations on spectrum and concentration of ownership.

When approached from this perspective, the concept of concentration adds a new dimension to 'consumer choice' in competition law or 'diversity and plurality' in media regulation.

While there have been previous attempts to expand the regulatory understanding of media diversity in Australia, they have not resulted in any meaningful reform.[76] The first of these, by the Productivity Commission, proposed (2000, p. 366) that a media-specific public interest test should be introduced into competition law (then the *Trade Practices Act 1974*), administered by the ACCC but with a requirement for the ACCC to take advice from the broadcasting regulator (then the Australian Broadcasting Authority) on 'social, cultural and political dimensions of the public interest'.[77] As part of its review, the Productivity Commission (2000, pp. 353-55) explored ways in which the level of concentration in a market could be considered. These included: the number of licences controlled by a single business; financial measures (e.g., revenue and market power); and audience-based measures (actual use of media). It is interesting now to note that, writing in 2000, the Productivity Commission observed that the UK government had recently considered a 'share of voice' measure which would assess perceived influence, but abandoned the idea and 'opted for a mix of more traditional policy instruments' (p. 355). As we have seen above, a share of influence approach was later adopted in the UK and became a central part of the Ofcom Measurement Framework in 2015.

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[76] These reviews include: the Productivity Commission's (2000) inquiry into broadcasting; the Convergence Review's (2012) recommendations concerning 'content services enterprises'; the Gillard Government's unsuccessful presentation of a media reform package, including the Broadcasting Legislation Amendment (News Media Diversity) Bill 2013; and the Department of Communications and the Arts' policy background paper on ownership and control (DOCA 2014) and final report on the review of the ACMA (DOCA 2016). For discussion of some of these matters, see for example: Hitchens (2015); Brevini (2015); Rab and Sprague (2014); Flew and Swift (2013);
[77] In the Productivity Commission's recommendations, the public interest test was to be accompanied by the repeal of foreign ownership restrictions and other non-technical (i.e., other than to do with aspects such as spectrum management) caps on the number of broadcasting licences that could be issued. When these steps had been taken, the cross-media ownership limits in the BSA were also to be repealed.

As mentioned, neither this nor various other reform proposals has been adopted in Australia and the law continues to depend on ownership and control as the determinant of media diversity. At this stage then, the question remains: does ownership have any continuing relevance in an environment of digital platforms and algorithmic decisions about the relevance of news to individual consumers?

The role of ownership and control

The role of ownership and control rules was at issue in the recent wave of media reform in Australia that resulted in the repeal of the cross-media rule and the 75 per cent reach rule. The place of this form of structural regulation is still hotly contested. Earlier, we mentioned that some in the UK are of the view that strict 'bright-line' regulation should be reintroduced (Crauford Smith, 2015), and structural regulation still has support in Australia (see, for example, Dwyer, 2016). So there remains uncertainty around the appropriate ways to consider concentration in the news industry, and the emergence of platforms appears to give this additional relevance. On the one hand, as Australia already has a small number of adequately resourced producers of original journalism with an influential role on public affairs, any narrowing of opportunities for exposure via algorithmic decision-making is likely to be of concern. On the other, policy interventions directed at encouraging a range of competing news producers might, in some circumstances and if they go too far, harm the thing they are seeking to protect by making the separate resourcing of local newsgathering unviable.

Gillian Doyle (2002, p. 172), even while asserting the importance of upper restraints on ownership, notes that 'Restrictions on ownership could, for example, result in replication of resources which prevents the industry from capitalizing on all potential economies of scale'. On a related point, Raymond Kuhn (2015, p. 185) suggests some concentration may be desirable 'especially if a strong commercial presence is to be secured in transnational markets and/or the domestic market is to be protected from challenges posed by foreign companies'.

This last point was of course a central argument in the need to review Australia's ownership laws. However, Helberger's characterisation of the issue provides an indication of how rapidly conditions within this field are developing – even since the arguments for Australian media reform were advanced. Helberger (2018a, p. 158) also argues that enhanced diversity of supply can sometimes result in reduced diversity of exposure[78] but, as shown above, her reasons are more to do with algorithmic delivery of news.

The implications of this, according to Helberger, are that the regulatory toolbox for protecting diversity must include mechanisms for scrutinising and, if necessary, intervening in, the arrangements platforms make with media companies. On the kind of benchmarks that might be applied when assessing diversity in a digital environment, she says:

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[78] Helberger draws here on the research of Napoli (1999); Ferguson and Perse (1993); Cooper and Tang (2009); and Wojcieszak and Rojas (2011).

> … new benchmarks need to be developed that include the amount of consumer data, characteristics of the recommendation algorithm, and number of users, activity of users, and also the balance in the contractual conditions between platforms and media companies, the level of independence of the media from platforms, and the existence of an equal level playing field. Doing so may also require new forms of monitoring and measuring diversity, for example, in order to be able to ascertain the level of diversity that different categories of users on different platforms are eventually exposed to (p. 165).

All of this is a significant departure from current practice, suggesting not that regulation of ownership should be abandoned, but that it is only one element and that mechanisms such as Australia's diversity points scheme may have less significance in an algorithmic, platform environment.

We now turn to consider whether some of these elements might provide the basis for measuring plurality in Australia – and providing a richer understanding of choice.

Suitability of these schemes for Australia

We previously discussed in some detail two separate schemes for measuring media plurality: the Media Pluralism Monitor used in the EU and Ofcom's Measurement Framework for Media Plurality used in the UK.

In some ways, the MPM provides a more comprehensive account of the role of platforms, as its criteria are broader in nature and allow for opportunities as well as limitations to be considered. We note above that this same quality – breadth of coverage – means it may not fit well within the Australian policy and regulatory environment, where aspects of social inclusiveness, for example, are pursued as separate policy objectives. Its strength probably lies in its facility for comparing jurisdictions within the EU. When applied to a single jurisdiction such as Australia, indicators such as 'media and democratic electoral process' are unlikely to provide much insight or guidance to regulators.

Accordingly, in this section we consider the utility of the Ofcom Measurement Framework in the Australian environment and the extent to which it could be adapted to embrace a more explicit assessment of the impact of digital platforms on the range of choices available to consumers. Of course, serious attempts to develop a matrix or other framework have called on expert assistance and have undergone substantial consultation. Expert assistance, for example, would be needed on the specific survey tools used in some of the quantitative research methods, but also on the best ways in which algorithmic distribution can be assessed.[79] However, in the light of issues raised as part of the current Digital Platform Inquiry, we think some observations on the suitability of the Ofcom Framework are likely to be helpful.

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[79] The Australian Research Council-funded Media Pluralism Project at University of Sydney and University of Technology Sydney is developing a metric for online news consumption. It is testing existing policy approaches to media pluralism against a series of innovative news practices.

Applying the Ofcom metrics

We note the House of Lords Select Committee's (2014, p. 45) description of the broad acceptance of 'three families of metric', being the quantitative measures of availability, consumption and impact, along with the qualitative measure of context factors such as applicable media standards and internal plurality. This is the approach adopted by Ofcom, and we consider each of these below.

> **Market context** would take account of current commercial arrangements for news and journalistic content in Australia, including profitability and business models. It would take into account media ownership arrangements at a high level (e.g., number of regional radio networks) and the presence of international news organisations, as well as the presence and remit of public broadcasters. In addition, it would recognise the conditions under which content is produced, including mechanisms for encouraging high quality content and meaningful engagement with consumers. It could also take account of contribution to the news cycle, an aspect of impact that is not directly related to consumption metrics (see below).

> **Availability** would carefully document the media market at a national and local level (for example, using the ACMA's commercial radio licence areas as the basis for the local market analysis). It would chart, in as much detail as possible, the presence of new digital-only sources of news and local information as well as more established media sources, acknowledging that start-ups featuring strongly in one plurality review might be replaced in a future review. The output of these media sources would be described against criteria recognising aspects such as local production, type of content (e.g., investigative reporting, comment and analysis). It would also examine the extent to which the ownership patterns examined in market context have any relationship with the range of news offered at a local level. Digital platforms could be considered directly in this category, although below we explore an alternative approach based on distribution that might more fully account for their role.

> **Consumption**, following the lead of Ofcom, could be measured in part through existing data on reach of television networks, for example. These data start to provide a picture of consumption, but the snapshot offered here would need to be supplemented by surveys accounting for consumers' use of different platforms to obtain news, and the frequency with which they use those sources. The construction of a share of consumption measure may require a bespoke metric developed specifically for this purpose.[80] Above we noted the insights into the BBC's place in the UK market when the metric moved from 'use nowadays' (i.e., reach) to include time spent and frequency of access. In Australia, measuring consumption across platforms and taking account of time and frequency could provide some understanding, for example, of the significance of News Corp's control within Sydney of a metropolitan daily

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[80] This is an assumption made without knowledge of the full range of consumption measures currently available from commercial sources such as Roy Morgan's Single Source data, or the Nielsen Digital Content Ratings.

newspaper, suburban titles, a national newspaper (and all their online platforms) along with news.com.au and Sky News. Similarly, it could account for the place of the ABC as a provider of television, radio and digital content.

Impact – a separate category in the Ofcom framework – could possibly be accommodated within the consumption category, as its relevance is increasingly seen in terms of audience engagement and response. Further, the methods used to gauge this (e.g., survey indicators such as 'helps me make up my mind') are closely related to the other consumption metrics. In a regional Australian environment where there may only be one or two commercial television stations providing local news, supplemented by short radio news bulletins, data on how residents regard the trustworthiness and impartiality of these sources in reporting on local government, for example, could help regulators and policy-makers to gain a realistic understanding of the extent of choice available to consumers.

Other contextual factors would include relevant aspects from the Ofcom category such as: whether organisations are a part of news standards schemes (such as those identified in Chapter Three); other relevant editorial policies (e.g., how native advertising is approached); arrangements for separate editorial oversight of different news-producing arms within a media group (e.g., commercial radio stations and print mastheads); editorial positions and the extent to which a range of viewpoints appears in opinion articles.

Accounting for platforms

As noted above, while the Ofcom framework provides a much fuller picture of media plurality than, say, the diversity points scheme under the Broadcasting Services Act, it is only partially successful in accounting for the role of platforms in the contemporary media environment. Its share of reference metric goes some way towards differentiating consumption of news on Facebook from the overall use of Facebook as a platform and measuring consumption of news through Facebook as a proportion of consumption of news via all news sources. However, these methods do not look behind the means of distribution to examine the originators of news content. Further, as the work of Helberger and others (noted above) suggests, the impact of algorithmic delivery of news and journalistic content and its potential to shape the public sphere may require deeper and separate consideration. It is important to note that news media organisations themselves use algorithms and recommender systems in addition to the editorial decisions made by humans – for example, in the promoting of particular news stories based on a reader's initial selection. Accordingly, below we review some of the commentary on how algorithmic delivery might be measured, whether by publishers or platforms; we conduct this review through the framework of 'distribution'.

Distribution as a discrete media plurality metric could cover network arrangements and syndication of content, but also the arrangements that news producers have with platforms and the conditions under which revenue is earned from content. It could also look at conditions under which content is supplied to consumers, including the use of

recommender systems and other ways in which algorithms govern the delivery of content. It could include the 'digital gateway' access issues (Valcke et al, 2015, pp. 2-3; Jakobuwisc 2015, p. 41) associated with aggregators, search engines, multiplexes, electronic program guides and conditional access schemes.

Foster (2012, p. 49) proposes the following indicators of consumption and impact when both the positive effects and the risks to diversity associated with digital intermediaries are accounted for:

— the share of news consumed via intermediaries collectively and via any single intermediary;

— the extent to which users can easily switch between intermediaries or choose other ways of accessing news;

— levels of user satisfaction and trust associated with intermediaries;

— the extent to which intermediaries provide access to a sufficiently wide range of news, in an easily accessible format;

— the extent to which intermediaries enable easy access to sources of impartial news and other news deemed to be of public interest.

More specifically, Helberger, Karppinen and D'Acunto (194-95) suggest basic indicators could include session length, navigation behaviour (links followed etc) and number of likes and shares, while a more sophisticated measure of diversity could include user engagement with opposing political views, cross-ideological references or social media connections between people with opposing views.[81] This is similar to the work noted by Moller et al (2018) on the effects of algorithms, including studies examining how ideologically opposing content is presented to a user, different categories of articles presented, or the number of articles per news outlet. They noted a study by O'Callagham et al (2015) which found that 'the YouTube recommendation system is likely to recommend extreme right wing content if a user has just watched an extreme right-wing video'. Helberger (2018b) has provided a useful way of categorising these recommender systems when considering their role in promoting diversity, which may be of use in reviewing specific examples in a plurality review:

Liberal recommender: informs about politics, shows political alternatives, makes expert citizens more clever, and for the rest gives people what they want

Participatory recommender: maps diversity of ideas and opinions in society, responds to differences in information needs, styles and preferences

Deliberative recommender: nudges to encounter different perspectives, serendipity, activates people to comment, share, engage, like, dislike

Constructionist recommender: nudges people to encounter and acknowledge minority opinions, but also supports finding and engaging with like-minded [people].

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[81] These factors could also be applied to publishers' own news sites, and may be regarded as aspects of consumption. We have placed them in the distribution category here because we are exploring how the role of platforms could be considered more fully, and these indicators do still relate primarily to the ways in which consumers are presented – by platforms – with content created by news producers.

In another study, Helberger, Kappinen and D'Acunto (2018, 202) draw on the work of Hansen and Jespersen (2013) in suggesting that algorithms may 'nudge' users to make a decision or change a view; some of these actions can be seen to help stimulate reflection, while others are considered to interfere with user autonomy.

Additional comments

As noted above, we are only attempting here to consider the ways in which a leading international measurement framework might be used in or adapted for Australia in order to better understand the concept of consumer choice in an environment of algorithmic news delivery, including via digital platforms. We have attempted to take into account local industry configurations, the regulatory framework, and certain policy objectives. Four additional comments or caveats are needed.

Acknowledging content producers

First, even though media has changed profoundly in recent years, it appears that attributing news and journalistic content to its originating media 'platform' (in the old sense of the term) is still important. The Ofcom work shows that for consumption metrics it is necessary to ask whether a consumer accessed a news report from smh.com.au or from *The Sydney Morning Herald*, or from a Seven Network news broadcast or its catch-up service. Similarly, it is important to know if it was accessed by Facebook or a news aggregator. But we also need to understand where the newsrooms are. This may require a mapping of news producers as part of the 'supply' measure, at a local level and, where there is syndication or sharing, tracing the origins of the content. Despite the changes to the media landscape – and provided different measures are used for supply and consumption – it appears the following categories are still useful in identifying where consumers access news and where it is produced: television; radio; print (including print and online); digital-only news sites; aggregators; search; social media. Consumers will of course access content across these platforms and they will access content that is not (geographically) targeted at them. These categories will still be useful, however, as a means of tracing the origins of content crediting those who produce it.

'Sufficient' plurality

Second, we note the difficulty in drawing conclusions about the overall level of plurality. Both Ofcom (2012, pp. 37-38) and the House of Lords Select Committee (2014, p. 45) commented on the absence of any statutory guidance for the term 'sufficient plurality' in the Public Interest Test in the Enterprise Act 2003. Both suggested Parliament might provide some additional guidance while leaving the final determination to Ofcom.[82] This approach may well be contentious and also unnecessary unless the test was deployed in the context of a merger scenario. If subsequent media plurality reviews were conducted after an initial baseline review, it might be possible to make some assessment of plurality levels against the findings of the baseline study, but in the first

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[82] See also the earlier discussion of this concept by Arnott (2010, pp. 245-75).

instance a plurality review would presumably only need to map the existing media environment and produce only observations against its objectives. Some possible objectives for a review of media plurality (to be tested through consultation) could be:

- to document and assess the most significant sources of news and journalistic content;

- to provide a broad evaluation of the level of plurality (in the sense of overall 'heterogeneity', as mentioned earlier);

- to identify any specific areas where the community might be underserved or the integrity of news and journalistic content might be impaired;

- to identify areas where the viability of news production might be threatened as a result of distribution arrangements; and

- to assess whether any action might need to be taken to address any identified problems.

This exercise might produce a guide that sets out certain expectations about the conditions under which news and journalistic content is produced, distributed and consumed. For example, the following table was developed by Helberger, Kleinen-von Konigslow and van der Noll (2014, pp. 28-29).[83]

Table 7. **Impact of different information intermediaries on diversity of supply and exposure**

	Diversity of supply	Diversity of exposure
News websites	+ contextual recommendations - personalised content (= opportunities for discovery)	+ no (explicit) ideological selection possible - no control of criteria/switch off
News aggregators	+ range of news sites - focus on popular news sites	+ no evidence of increased passive selective exposure + generate traffic to news websites - traffic primarily to mainstream websites (= most familiar)
Search engines	+ range of result list - ranking based on link structure/popularity + journalists use to identify sources for contra arguments	- users focus on first items -/+ generate traffic to mainstream news websites (= most familiar)
Social media	+ access to unfamiliar news channels - participation through like-minded networks + access to sources for journalists	+ cross-cutting exposure and dialogue occurs - preference for like-minded users
App stores	- news providers have to agree to app stores' terms of service - limited news offer	+ facilitates access to news on mobile

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[83] The entries in the cells for 'News websites – Diversity of supply' and 'Search engines – Diversity of exposure' have been edited slightly to adjust what appears to be a problem in translation; the edits were not intended to alter the meaning.

Encouraging digital platform initiatives

Third, it would seem important to acknowledge any initiatives taken by distributors of news and journalistic content to improve transparency and the veracity of information available to consumers. We mentioned some recent initiatives in Chapter One. To date, these have not addressed the concerns of news producers about the impact on their business model. These concerns are crucial considerations in the continuing viability of news producers. However, they may not necessarily be the same as those of consumers and citizens. Platform initiatives that promote media plurality may deserve consideration and recognition even if, of themselves, they do little to address publishers' financial concerns.

Accordingly, we note a recent development by Microsoft in which the 'Spotlight' function in its search engine Bing attempts to provide access to more diverse news sources, including alternative perspectives on controversial issues.

An article published by Nieman Lab (Owen 2018) provided an illustration:

Figure 10.   Bing Spotlight
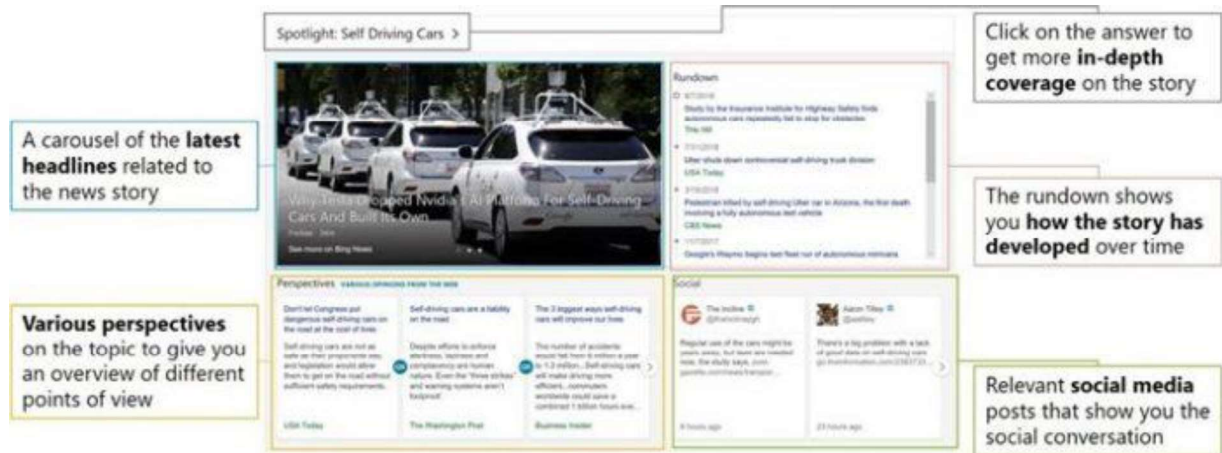
Microsoft was quoted as follows:

> We look at various user signals such as queries and browser logs, and document signals from publishers such as how many publishers cover a story, their angles, and how prominently they feature the story on their site. For controversial topics, in the Perspectives module, we show different viewpoints from high-quality sources. For a source to be considered high quality, it must meet the Bing News PubHub Guidelines, which is a set of criteria that favors originality, readability, newsworthiness, and transparency. Top caliber news providers identify sources and authors, give attribution and demonstrate sound journalistic practices such as accurate labeling of opinion and commentary.

This facility is new and not yet available in Australia, although there does appear to be a variation of the approach in the latest version of Google News headlines. The

screenshot below shows a lead article followed by alternative reports on the same topic:[84]

Figure 11.   Google news

A further variation is seen in the way in which Facebook gives links to competing news sources.

In the example below, a user accessing the Facebook page for WIN News in Toowoomba is offered links to WIN's competitors, Seven News, the ABC and The Chronicle:[85]

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[84] Google News, Headlines, 16 September 2018, 6.20 pm. <https://news.google.com/?hl=en-AU&gl=AU&ceid=AU:en>.
[85] WIN News Toowoomba, Facebook page, 19 September 2018, 5pm. <https://www.facebook.com/WINNewsToowoomba/>.

Figure 12. WIN Facebook page

The effect of these methods of presenting alternative media sources is difficult to assess but merits further consideration. The initiatives appears at face value to be a positive step at the level of consumption; whether they addresses the interests of news producers – and the broader interests of the community in having viable news media businesses – is a different question.

Regulatory intervention

As we have not been asked in this report to consider options for regulation, we limit our comments to some general observations on regulatory intervention in other jurisdictions.

As noted above, there have been calls for algorithmic regulation, or at least the identification of the circumstances under which regulators might intervene if there was a finding of insufficient plurality. Earlier we mentioned the possibility of *explanation* of how algorithmic decisions come to present a user with certain content. If successful,

such an approach might be an alternative to a formal, regulatory obligation for transparency in algorithmic design.

Napoli (2015b, p. 758) asks whether 'a commitment to the circulation of diverse ideas and viewpoints from a diverse array of sources' might be required as an aspect of algorithmic design. Helberger (2018a, p. 168) also points to this type of initiative, suggesting that it is possible to 'program for diversity'. And Karen Yeung (2017, p. 28) has said

> … it seems *theoretically* possible that systems of algorithmic regulation might be imagined and designed in ways that are more egalitarian and progressive in their values, orientation and operation.

Yeung gives the example of computer-mediated contracts which give opportunities for genuine negotiation of terms.

More comprehensively on the aspect of regulatory intervention (although not specifically on algorithms), the House of Lords Committee (2104, p. 46) referred to Ofcom's own advice to it on the subject of broader intervention:

> They can be grouped into five broad categories: structural remedies that raise levels of external plurality; behavioural rules that may help to increase levels of internal plurality; behavioural rules that impose standards on providers of news; behavioural remedies that improve access by citizens to providers of news; and positive interventions to encourage more news provision. There is unlikely to be a 'one size fits all' approach.

Ofcom (2012, p. 23) represented these approaches in the following diagram:

Figure 13.   Ofcom figure 4 – Suitability of remedies, by nature and significance of plurality concerns
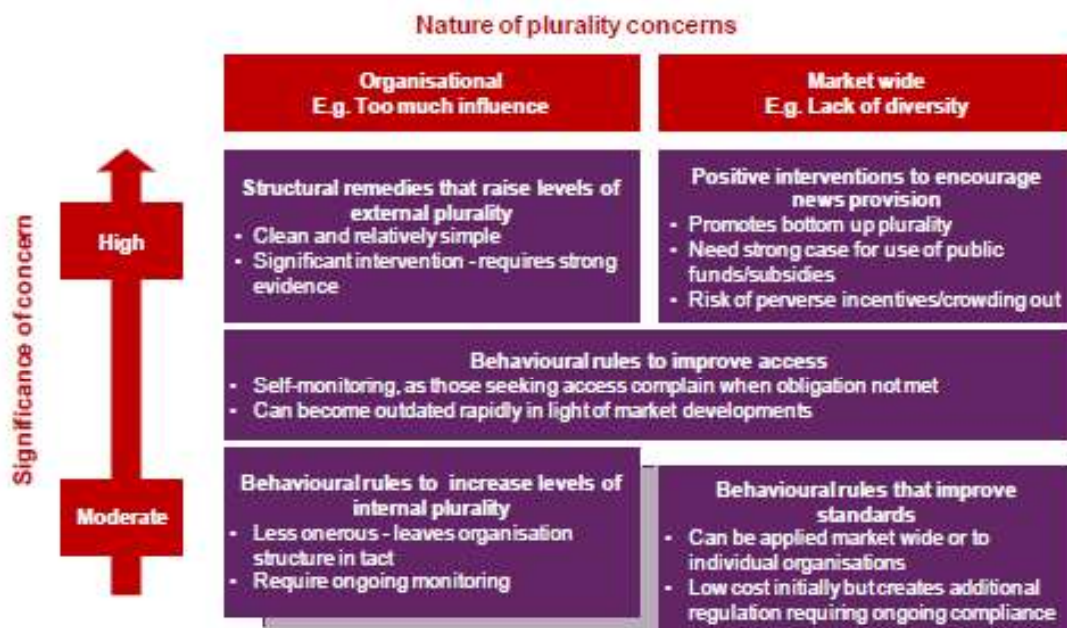
In commenting on Ofcom's approach, Foster (2012, pp. 49-50) suggested remedies for an insufficient degree of plurality could be grouped as:

Access commitments: for example, 'digital intermediaries found to be affecting plurality could be required to guarantee that no news content will be blocked or refused access, unless for legal or other good reason, such reason to be explained with reference to publicly available criteria'; or more proactive requirements such as requiring a number of different news sources or public interest sources in search results;

Independent boards: for example, to review algorithmic transparency;

Commitments to invest: for example, to an independent news fund to support high-quality journalism.

We also note that Helberger, Kleinen-von Konigslow and van der Noll (2014, p. 19) combined the proposals of Foster (2012) and Danckert and Mayer (2010) in summarising possible interventions to safeguard media plurality:

a) objective point system for ranking search results;

b) an obligation to always list a pre-defined number of different news sources on the first page of a search result;

c) add a search result box on the front page which is designed to find news and views specifically from a range of 'non-mainstream' sources;

d) require one 'public interest' news source on the front page of any news search;

e) internal pluralism safeguards in the form of 'program windows';

f) routinely check for each search query whether the online offers of the press or broadcaster have something meaningful to say, in which case a link should be made to their offers.

As an alternative to ex ante approaches which specify plurality-enhancing obligations, an outcomes-focussed approach would set certain objectives and provide a regulator with ex post enforcement powers.[86] In this environment, the objective might be similar to the concept of 'sufficient plurality' in the UK *Enterprise Act 2002*.

As noted above, we have not been asked to recommend regulatory options. We note only that, if regulation is proposed, possible interventions could range from encouragement of industry initiatives to licensing and content regulation.

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[86] This observation was made (in a personal capacity) by Nick Morris (2018) from KPMG London when commenting on the practical difficulties of algorithmic regulation, although not specifically in relation to media plurality.

Summary and observations on the role of regulation

The preceding discussion of the regulatory framework in Australia, key features emerging from scholarly research on media plurality and the regulatory application of a plurality test allow for some general observations about the conditions under which news and journalistic content is produced, distributed and consumed in Australia.

1. Whether the issue is defined as 'diversity', 'plurality' or 'pluralism', an understanding of the extent of choice faced by Australian consumers requires consideration of **more than just ownership and control and the structural regulation of the market**.

2. A contemporary approach to media plurality – one that offers a richer understanding of consumer choice – would **extend beyond availability** of media sources. This is a point that was made by Doyle in 2002 (p. 12), commenting on the limited definition of pluralism used by the Council of Europe: 'According to MM-CM's definition, pluralism is about diversity within what is made available, rather than within what is actually consumed'.[87] Since then, in the UK, Ofcom (2012, pp. 19-21) has said that consumption should form the foundation of a plurality assessment because availability, while still relevant, offers only 'limited insight' and on its own is insufficient as a measure of plurality. In the Australian legislative version of 'diversity', even in the complicated scheme for protecting 'voices' in regional licence areas, a numerical count is all that is required, with no regard to the news output of those sources, let alone the ways in which they are used by consumers. The monitoring and reporting involved in the application of a plurality framework such as Ofcom's would provide a gauge of plurality, and a richer understanding of consumer choice.

3. All attempts to conceptualise media plurality recognise in some way **the element of power and influence over the political process**. As is made clear in the two-part definition used by Ofcom and in its application, there is a difference between encouraging a range of different viewpoints on public affairs, and preventing one firm or person from – in the words of the House of Lords committee – 'wielding too much influence over the political process'.[88] For many years, Australia's cross-media rules were seen as a proxy for this kind of protection. What remains – the licence area caps of one commercial TV licence and two commercial radio licences, and the diversity points scheme for regional areas – would hardly be considered, by international standards, as safeguards against the concentration of power.

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[87] Doyle is referring here to the approach of the Council of Europe though it's Committee of Experts on Media Concentration and Pluralism (MM-CM). Mihaly Galik (2010, p. 234) has noted that attempts by the Council of Europe to promote pluralism and limit competition date from the mid-1970s.
[88] See also Zrinjka Perusko's (2010, p. 262) observation that what's behind 'market concentration' is, 'framed in political terms, problems of excessive control over the media'. 'The Link that Matters: Media Concentration and Diversity of Content' in Klimkiewicz, pp. 261-73.

4. **Relying on public service broadcasters alone is not enough**. Public service broadcasters have obligations to reflect Australian society and opinion, and Hitchens (2015, p. 253) notes 'the almost complete reliance on the non-commercial broadcasting services to fulfil the normative pluralism dimensions'.

5. **Media ownership is still a relevant, although insufficient element**, in protecting media plurality. Despite the advent of streaming and catch-up services, at least while broadcast television figures strongly in the Australian media environment, the three-licence 'moratorium' and the accompanying concentration ('one-to-market') rule are effective mechanisms for promoting at least three core newsgathering networks. It may be that a fully developed power to consider media plurality and take action where needed, coupled with these existing concentration provisions, could replace the existing points scheme for 'media diversity' in the Broadcasting Services Act.

6. Despite this observation that ownership rules still have a part to play, **in some cases increased concentration may be the best option** – the approach most in the public interest. Doyle (2002, pp. 172, 179) argued that 'effective and equitable upper restraints on ownership are vitally important tools that no responsible democracy can afford to relinquish', while still recognising that in some circumstances restrictions on ownership can impede effective exploitation of economies of scale. And in a platform environment, increased supply does not necessarily lead to increased exposure.

7. The potential for platforms to influence public discourse hinges on their intermediary or distributor role; they are an increasingly influential means by which Australians receive news and journalistic content. The use of platforms to spread misinformation has been well-documented, but **on the issue of media plurality, current evidence does not appear to establish a harmful impact by platforms**. Some recent initiatives could in fact enhance plurality, although the effect of search, aggregation and social on advertising revenue (not examined here) may have an indirect negative impact on consumer choice.

8. Even though a research base on algorithms, digital platforms and plurality is still developing, it is clear that platforms do have considerable power over the way in which consumers access and use content and, by extension, how news producers structure their businesses. Many aspects of these arrangements are opaque; what is clear is that intermediaries or distributors now loom large in the frame for media plurality in Australia. Although existing approaches do not deal explicitly with this issue, **the 'distributor' function of digital platforms appears to offer a mechanism for inclusion within measurement frameworks for media plurality and effective consumer choice**.

9. **A baseline measure of media plurality** at a national and local level, with platforms assessed separately from publishers – in their capacity as distributors of news and journalistic content – would offer a richer understanding of media pluralism and could assist in addressing specific concerns about the narrowing of choice for consumers.

Conclusion

We started this report by noting the contested and fraught nature of the contemporary news media landscape. The stakes are high: journalism is a vital part of our democratic discourse, a check on power and a means of ordering and understanding the flow of information Australians receive. Without it, our nation would be much poorer and more vulnerable to all manner of manipulations, distortions and disruptions.

We are not seeing journalism's death. But we are witnessing it stretch and strain under the weight of expectation, loss of revenue, demands of its audiences and the multiple challenges thrown up by the digital platforms and by digitisation more generally. We are seeing its influence under direct and constant challenge.

This report is about the impact of digital platforms on news and journalistic content. As we have shown, this impact is profound and complicated. Just as journalism is produced in different environments (from print to broadcast to digital), platforms themselves work differently and the impact of social media is different from that of search, which is different again from that of aggregators. What's more, there are significant differences within those categories. Facebook, Twitter and Snapchat are all social media (as is YouTube), but their impacts are radically different. As we have documented, each type of platform offers unparalleled opportunities for the distribution of news on the one hand but threatens the relationships and reach that news producers have with their audiences on the other. The migration of advertising revenue from producers to distributors simultaneously threatens the business model for news producers.

The literature examined in this report indicates a shift in modes of communication, from the mass (which suited the news media) to the personalised (which strongly favours the platforms). As Natali Helberger notes, in this shift, control over content may not matter as much as 'knowing the users, and establishing the knowledge, relationships and technical infrastructure to trigger the engagement of users with particular types of content' (2018a, p. 163). This is a fundamental change for those previously responsible for both the production and distribution of news and journalistic content. In our account of technology (see Chapter Two), we saw how well-equipped the platforms are to have an impact on every aspect of what consumers read, watch and hear, from choice and quality to diversity.

The digital platforms are now the distributors of much of the news and often the mediators of the relationship between news media and its audiences. The algorithms they own and control have an immediate impact on what we read. As documented in this report, changes to these algorithms can have both a positive and negative influence on news creators, on their income streams and their level of audience engagement. In this way and in others, digital platforms are having both positive and negative effects on the choice and quality of news and journalistic content available to consumers. Positive effects stem from the platforms' ability to distribute, filter and

curate news for consumers; negative effects include the platforms' influence on the types of news being produced.

More specifically: on the positive side, there is the undeniable consumer benefit provided by search as a means of navigating vast amounts of information; of news aggregation as a means of collating content from different sources; and of social media as a means of sharing content and engaging with others on matters of concern to social groups and the wider community. As we have shown, digital platforms are working to enhance the health of the news media industry and deliver credible, quality information to news consumers. Aggregators, such as Google News, are offering different 'takes' on the same story, potentially aiding diversity (if also duplication). Facebook has released and promotes tools to help publishers capture digital subscribers, a potential key to the industry's ongoing financial health. And Facebook and Google are actively improving the integrity of the content they provide with initiatives designed to promote journalist-created news content over its facsimiles.

But we have also seen downsides in digital platforms assuming the role of distributors of news and journalistic content – and many publishers would argue that the platforms, in supporting the integrity initiatives cited above, are simply attempting to fix problems they themselves created. There is some justification in this, given the platforms, particularly social media, have provided the environment for the rapid distribution of misinformation. In addition, the literature we reviewed pointed to the following aspects that are arguably attributable to platforms:

— social media in particular is said to promote shorter and more emotive content as encouragement to click through;

— atomisation brought on by social media but also by search and aggregation means individual articles or bits of information are valued, without the context often provided by accompanying reports or comment, and with problematic effects for revenue streams for news producers;

— for those who are the subject of content which intrudes upon privacy or harms someone in some way, the effects are likely to be amplified in an environment of wide and rapid sharing;

— hypervisibility of journalists' work promoted by social media in particular can mean that stories develop in the context of other reports, leading to duplication and recycling rather than the creation of new material;

— in search, the demands of search engine optimisation (SEO) call for a constant supply of new (if not necessarily original) content, with timeliness sometimes outranking quality;

— the need to promote content, especially though social and SEO, diverts resources away from newsgathering and into a new form of content marketing as well as consumption analysis;

— the form of walled-garden consumption in which readers and viewers follow links but never leave the domain of the platforms enables a form of control over consumption, including important (and potentially lucrative) knowledge of reader practices and preferences.

These are all aspects of the relationship between news producers, digital platforms and consumers identified by researchers. Some of them are being addressed by platforms, but there are other factors that affect journalism and its role in the community that are largely the result of digitisation itself, rather than of digital platforms. The demand for volume of content and the need for immediacy, for example, are manifestations of the movement away from print and broadcast environments where the producer/distributor established publication deadlines and the scheduling of new content.

Hence, as we have discussed throughout this report, there are both positive and negative outcomes for news producers and consumers in the current news media environment. Some of these – on both sides of the equation – can be attributed to digital platforms. Others cannot. For audiences, there are opportunities to access new sources and new perspectives. As we saw in Chapter Two, there are also concerns over the channelling of consumer choice though recommenders and the consequential narrowing of public debate. The available evidence for these effects – the proliferation of filter bubbles and echo chambers – does not seem to support a conclusion that platforms have themselves been responsible for a degraded public sphere, but the potential for significant harm remains real.

What the literature does show is that beyond the specific negative impacts listed above, digital platforms are now key actors in the shaping of social relations and that this does not just involve how we engage with friends, family and colleagues; it influences how we receive and act on information about our community, governments and the corporations and institutions with which we deal. The circumstances under which we engage with public issues have changed and in this way digital platforms have acquired a degree of influence that is not the same, but may in time be as substantial, as those who produce the news.

This difference suggests that platforms are right to seek to be distinguished from publishers. This distinction is important for platforms and it may also be in the broader interests of the community. We would not encourage giving platforms an institutional status that is inappropriate; exemptions from certain statutory obligations enjoyed by the news media, for example, do not lend themselves to digital platforms. At the same time, it would seem counterproductive to drag platforms into the mire of defamation litigation, for example, any more than they are now. To settle for that solution would be to address only what Judge Judith Gibson (2018, p. 119) recently referred to as 'the challenges of yesterday'.

But just as it may be desirable to sidestep the issue of publisher status, the evidence we have reviewed points to a different kind of responsibility on the part of platforms.

As we noted in Chapter One, Tarleton Gillespie (2018, pp. 31-33) puts the case that social media exceed the 'intermediary' category as it has been understood historically (in the sense of the trusted conduit such as the telephone company or post office, which we trust not to monitor content), yet are not fully media content producers. He argues for recognition and appropriate regulation on the basis of their 'hybrid' status. It is worth restating the application of his guiding principle, specifically in relation to Facebook:

> … the moment that a platform begins to select some content over others, based not on a judgment of relevance to a search query but in the spirit of enhancing the value of the experience and keeping users on the site, it has become a hybrid. As soon as Facebook changed from delivering a reverse chronological list of materials that users posted on their walls to curating an algorithmically selected subset of those posts in order to generate a News Feed, it moved from delivering information to producing a media commodity out of it. If that is a profitable move for Facebook, terrific, but its administrators must weigh that against the idea that the shift makes them more accountable, more liable, for the content they assemble — even though it is entirely composed out of the content of others.

We are attracted to this approach because it recognises that responsibility arises at some point, but not at the outset and not always. It is not in our brief to consider such intervention in the Australian environment — although we note that in August 2018 Germany's broadcasting authority proposed specific regulatory amendments recognising the category of 'media intermediary', which would carry with it explicit responsibilities (Rundfunkkommission 2018).

We do wish to highlight two specific aspects of this new role that we have noted in this report. First, a common, constant and legitimate complaint from news media companies is that the producers of news and journalistic content simply don't know what comprises the algorithms of digital platforms and when they will change. Publishers are subject to the whims of organisations that are primarily motivated not by notions of serving the public with news, rather than by maximising profits — in part by using that news content to do it. Of course, this is essentially what publishers did with news in the pre-digital era; they used it to attract advertisers with the proposition that they (the publishers) had all the audience any advertiser might need. However, the change is that now the producers of news are often not the distributors of news. The roles have been de-coupled. In this context, the public interest motive is crucial. And it is easy to see why unpredictable changes made by a company over which producers of news and journalistic content have no say would cause consternation among those who rely in large part on those companies to distribute their product.

In Chapter One, we observed how the 'product' of news is fundamentally different from others. All manner of businesses can be harmed by algorithmic changes that affect communication with their customer base; but with news media – an industry already struggling with the economic challenges of producing a public good in a multisided market – the impacts can be more widespread. For citizens, these impacts can affect relationships with business, government and each other. In this environment, there is a case for digital platforms to be more transparent, at least by explaining to consumers as well as to the producers of news and journalistic content the ways in which decisions on content delivery are made. The public benefit which distinguishes news media from other businesses establishes a strong case for requiring platforms to give advance warning of changes which significantly affect news media business operations and revenues. In more general terms, it is reasonable to regard digital platforms as having a duty not to harm the public benefit provided by news and journalistic content.

Second, as we noted in Chapter Two, both Google and Facebook are making great strides in the automation and summarisation of editorial content using AI-powered deep learning. These systems will be capable of automatically delivering to audiences digestible nuggets of news. There are obvious benefits to such a machine-driven service: time-poor consumers need news; the platforms deliver it to them in easy bites, rapid fire. But there are potential downsides. One is the risk that any summarisation may not accurately reflect the content of the document it draws upon, and might thus misrepresent facts or spread misinformation. But such risks will diminish as the AI behind them improves. Perhaps the greater risk is to the production of original journalism: there are legitimate concerns that automation will reduce online traffic to news content producers. We see potential here for ongoing conflict between news producers and the digital platforms as the ability of publishers to monetise content on their own platforms is further eroded. There is unquestionably a need for journalism; regardless of who employs the journalists, the devaluation of their work through summarisation cannot be in the public interest.

Earlier, we cited Philip Napoli's distinction between how social media platforms and the news media (2015b, pp 755) consider the concept of public interest. In short, the platforms are more concerned with restricting inappropriate content than affirming the creation of quality content. Various programs supported by the platforms in areas such as media literacy and fact-checking indicate that these attitudes are changing. But, as we detail in Chapter Three, it appears the platforms can do more to actively contribute to the quality of news media and recognise their role in filtering and distributing news media content. As we note above, this does not necessarily require platforms to be treated as publishers; simply that they could be seen for what they are – participants in the expanded social framework for news and journalistic content. In Chapter Four, where we offer a framework for approaching the concept of consumer choice via the measure of media plurality, we suggest that a mechanism which measures only supply of regulated media operations and omits platforms will give an inadequate perspective on choice, and no insight into identifying the important sources of news and journalistic content and the ways in which they are used within the Australian community.

Finally, we return to the work of C. Edwin Baker (2002), who has spoken of the importance of other people's media consumption in democratic societies and the huge externalities this produces. He observed:

> … people who want to live in a well-governed democracy are the third party beneficiaries (or victims) of the extent and quality of other people's media consumption (p. 45).

This short statement shows the importance of choice and quality, and of the need to look at what is available and how it is used and consumed within society. In the digital platform era, news and journalistic content continue to play a vital role in our society. However, the impact of digital platforms on news and journalistic content is profound and complicated. If the negative impacts we have described can be countered, and if the positive impacts can be encouraged, the beneficiaries will be all citizens of our democracy, even including those who choose never to engage with the news.

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