

# Chapter 1

## Bad Faith, Bad Politics, and Bad Consequences: The Epistemic Harms of Online Deceit



Alison MacKenzie  and Ibrar Bhatt 

### Introduction

In politics, in social media, indeed, whenever and wherever humans engage in communication, some form of deceit will commonly result. Lying, it seems, is an integral part of communication, and there are myriad opportunities for lying (MacKenzie and Bhatt 2020a). We expect politicians to lie, and we all know that online platforms are prodigiously efficient at spreading misinformation, disinformation, malinformation, lies, and similar epistemic vices. Key events in the UK and the USA, such as the 2016 UK referendum on EU membership and the 2020 US Presidential election, have inundated us with deceptions that strike us as qualitatively and quantitatively different from other times. This is mainly because of the power and reach of online platforms, which, according to the Netflix documentary, *The Social Dilemma* (Orlowski 2020),<sup>1</sup> is altering human behaviour. Google and Facebook, for example, use algorithms that create individualised versions of reality, exploit behavioural addictions (through ‘clickbait’ and ‘likes’), manipulate belief, and increase polarisation, and on which fake news spreads six times faster than other goods (Vosoughi et al. 2018).

---

<sup>1</sup> *The Social Dilemma* (Orlowski 2020) is a Netflix documentary-drama aired on 27 August 2020. It explores the dangers of social networking, using accounts from tech experts who worked for Google, Facebook, and Apple. It focuses on, among other issues, the vulnerability of teenagers to the platforms’ methods of addicting them to social media, leading to high rates of depression and anxiety.

---

A. MacKenzie (✉) · I. Bhatt  
School of Social Sciences, Education and Social Work, Queen’s University Belfast,  
Belfast, UK  
e-mail: [A.Mackenzie@qub.ac.uk](mailto:A.Mackenzie@qub.ac.uk); [I.Bhatt@qub.ac.uk](mailto:I.Bhatt@qub.ac.uk)

It is also deeply troubling that these giants have created a system that favours disinformation so that users may have no idea what is true or false (Orlowski 2020). They can control what we see, read, and believe – and we are not aware of it. We do know that lies proliferate as contagiously, it seems, as a SARS virus, and we expect to be lied to, particularly by those who govern us (Bradshaw and Howard 2017). When we critically consider the quality of the British political elite and learn how online platforms, on which we are so dependent, manipulate us, the dark realisation is that we seem to be in the grip of Machiavellian forces: scheming and self-interest, cunning and deceit, along with unprincipled lust for power, and power-for-power's sake.

In his best-known treatise on political power, *The Prince*, Machiavelli (2003), the Renaissance political philosopher, was critical of the view that a good leader was one who had moral character and exercised virtue and that by those qualities would earn respect and the right to be obeyed. 'Everyone' Machiavelli stated, 'admits how praiseworthy it is in a prince to keep faith, and to live with integrity and not with craft' (48) but goodness, he asserted, is not necessary to rule or to authority. As a political pragmatist, he understood that great princes put little faith in good conduct and circumvent the intellect of men by 'craft'. Anyone who pays attention to the sayings and doings of key political figures such as the current British Prime Minister, Boris Johnson, and the US President Donald Trump and his Republican acolytes will appreciate that they are not known for honesty or acting in good faith.<sup>2</sup>

Machiavelli also advised that the political rules of power are such that the prince must understand 'how to avail himself of the beast and the man ... and that one without the other is not durable'. And if the prince must adopt the beast, he 'ought to choose the fox and the lion; because the lion cannot defend himself against snares and the fox cannot defend himself against wolves. Therefore, it is necessary to be a fox to discover the snares and a lion to terrify the wolves' (Machiavelli 2003: 48).

Machiavelli's political realism led him to propose that '[i]f men were entirely good this precept would not hold, but because they are bad, and will not keep faith with you, you too are not bound to observe it with them'. He cites, by way of example, how many treaties and engagements 'have been made void and of no effect through faithlessness', and the prince who knows how to employ the fox 'has succeeded best' (and the UK provides a good example of this, namely, the Brexit negotiations). Nevertheless, necessary though the half-man-half beast is to maintaining power, Machiavelli cautions that it is wise to 'disguise the fox and to be a great pretender and dissembler' on the grounds that men are 'so simple, and so subject to present necessities, that he who seeks to deceive will always find someone who will allow himself to be deceived' (Machiavelli 2003: 48).

The suspension of commonplace ethics in politics is recommended, and pre-emptive lying is justified because men are 'bad' and will not keep 'faith'. Nevertheless, deception means that the prince must appear to have all the ethical

---

<sup>2</sup>See Washington Post's ongoing database of the false or misleading claims made by President Trump during his time in office: <https://www.washingtonpost.com/graphics/politics/trump-claims-database/>. Accessed 5 January 2021.

qualities desired of a leader: to appear upright, religious, humane, and faithful ‘but with a mind so framed’ (49) that, when expedient, the leader can behave contrary to appearances. Machiavelli’s analysis is compelling because he does not begin with an ideal person, an ideal theory of justice, or an ideal polity. There are no ideal states, just states in which injustice and inequality are the norm.

Social media has become one of the most significant arenas in which ‘faithlessness’ can be found. It is, on many accounts, one of the biggest enablers of deceit, conspiracy theories, disinformation, and malicious information, epistemic vices that are not ‘incompatible with [enabling] authoritarianism’ (Deibert 2019: 26). What does one do when bad faith, lying, and other vices are not aberrations, but have become the brazen norm? We contend that platforms which willingly and wilfully create systems that favour deceit over truth in order to pursue profit, erode trust, increase polarisation, threaten democratic processes, and destabilise democracy (Deibert 2019; Rid 2017). This is a grim analysis, but we need to be realistic if we are to confront the prodigality of deceit, and we will suggest some ways to epistemically resist and oppose these vexatious epistemic onslaughts.

We begin by discussing how social and mass media have been used to disseminate disinformation and its bad consequences: polarisation, distrust, and anger in the USA and the UK. The UK is often compared to the USA because of the populism and mendaciousness of Trump and Johnson. While these are the countries we know best, the analysis we present here could be readily applied to India, Brazil, Poland, Hungary, and numerous other countries. Our analyses throw up inevitable comparisons with totalitarianism and fascism, and we draw on Arendt’s (1966) incomparable analysis of totalitarianism to explore just how harmful is deceit in all its nefarious varieties. We do not, however, suggest that there is a direct comparison between Trump and Hitler, or Trump and Stalin; what is of concern is that the power of social media is such that ‘authoritarian practices are being propelled worldwide’ (Deibert 2019: 31) and public discourse is being degraded because of the interconnected nature and viral speed of the Internet.

We explore how useful it is to counter the ‘polariser’s toolkit’ (Cassam 2020) with the humanist version, since retaliating in anger against anger or in calling the duped ‘stupid’ will get us nowhere. Contrary to Machiavelli, there are no proxies for truth, since truth and truthfulness are critical to a healthy polity.

## **Bad Politics and the Media: Beware Overlooking the Mass Media in Strategic Disinformation Campaigns**

Months before the 2020 US Presidential campaign, President Trump began to claim that the 2020 election would be fraudulent and rigged against him, claims he continued to make after the election was called for Biden and despite the election being judged as one of the ‘most secure in American history’ by the Cyberspace and Infrastructure Security Agency (2020) on 3 November. The Security Agency Chief, Chris Krebs, was soon after fired from his post for contradicting Trump’s claims.

During a White House press briefing on the 23 September 2020, Trump declined to say whether he would transfer power peacefully to Biden should he lose the election. Instead, he responded saying: ‘We’re going to have to see what happens, you know that. I’ve been complaining very strongly about the ballots, and the ballots are a disaster’ and continued ‘[t]he ballots are out of control. You know it. And you know who knows it better than anybody else? The Democrats know it better than anybody else’ (The Guardian 2020). His assertions about voter fraud were also shared by Republicans. According to Benkler et al. (2020: 2), citing a Pew poll from 16 September 2020, 61% of Republicans whose major source of news was Fox News or talk radio thought voter fraud by mail was a ‘major issue’. By contrast, only 4% of Democrats who relied on the New York Times, the Washington Post, NPR, CNN, or MSNBC thought voter fraud was a problem. There were and are starkly different views about the safety of the election and whether mail-in votes and counting machines in counties and states that voted for Biden are legitimate. This is no surprise. As Benkler et al. (2020) demonstrate, Trump and his supporters engaged in a strategic disinformation campaign to undermine trust in the legitimacy and security of the election.

Benkler et al.’s (2020) research examines how political beliefs and attitudes are shaped at mass population scale. They engaged with three common conceptions about how public opinion is shaped by mass and social media. The first, and most common, is that social media is the driving force in shaping beliefs and attitudes by platforms such as Facebook which enable the dissemination of fake news, falsehoods, disinformation, and so on and through which propaganda, trolls, and bots proliferate. Actors who are neither political nor members of the media elite are empowered by these media to influence public perception. The second conception accepts that social media is the origin of falsehoods, which can be spread through mass media by influencers and which can transform public discourse through activism. Videos of police violence and Black Lives Matter protests are the most recent and powerful examples of mass media. The third conception is that social media has had less of an impact on political beliefs than is generally supposed and that political elites drive the agenda through mass media, while social media recirculates activist agendas (Benkler et al. 2020: 3).

The best example of this kind of mass media influence, according to the researchers, is mail-in ballots, voter fraud, and the legitimacy of the 2020 election. As Benkler et al. state: ‘[d]ecisions that mass media journalists and editors make about what they cover and how appear to be more important than what happens on Facebook’. Notably, given the analysis in the previous section, these decisions ‘appear to be driven by the actions of political and media elites, principally President Trump’ (4). Moreover, the ‘largely-ignored’ TV networks such as ABC, CBS, NBC, local TV, and CNN appear to be the primary source of news for the ‘least politically pre-committed one-third of Americans’ and, in the case of local TV, ‘the least politically knowledgeable’ (3).

The basis of Benkler et al.’s analysis rests on fifty-five thousand online media stories, five million tweets, and seventy-five thousand public posts on Facebook. This analysis is consistent with their earlier findings about the American political

media ecosystem from 2015 to 2018, in which they found that ‘Fox News and Donald Trump’s own campaign were far more influential in spreading false beliefs than Russian trolls or Facebook clickbait artists’ (Benkler et al. 2020: 4).

The fundamental insight that the researchers offer us is that polarised beliefs about mail-in voter fraud ‘is an elite-driven, mass media leads model’ (Benkler et al. 2020: 9). Trump, in particular, has driven the media agenda. His statements in tweets, press conferences, and television interviews have driven the debate over mail-in voting and were given credence by the communications teams of the White House and his re-election campaign, the Republican National Committee, and by leading Republican officials at federal and state levels. Benkler et al. (2020: 9) suggest that the coordinated messaging was part of a ‘strategic disinformation campaign’, motivated by fear that increasing voter participation during the Covid-19 pandemic would harm Republican chances of re-election – which it did. The disinformation was supported by a right-wing media ecosystem that ‘marginalizes or suppresses dissenting views within the conservative sphere that try to push back against the mail-in voting fraud narrative’. The relationship between Trump and the media was one of mutual benefit. The President of CBS in an interview conducted after Donald Trump was elected said that his election win ‘May Not Be Good for America, but It’s Damn Good for CBS’ (Bond 2016).

The ‘cure’ for elite-driven mass media disinformation campaigns? It’s not fact-checking, since ‘facts’ have their alternatives and can be readily denounced as untruths or shameless propaganda. The situation is too polarised for fact-checking alone. Rather, Benkler et al. (2020: 10) suggest that what is necessary is ‘aggressive editorial counteraction’ by media editors and journalists of the Associated Press, television networks, and local TV news. They can make choices about how they cover the ‘propaganda efforts of the President and his party, and how they educate their audiences’.

## **Mass Media and Social Media Consumption Driven by Dis/Mistrust**

But is there something more to this disparity between mass media and social media? Newman et al. (2015) argue that this needs to be set in a context of wider news consumption and digital practice, the extent of which is significantly affected by age. As part of the annual study of the Reuters Institute for the Study of Journalism, Newman et al. (2015) found that when examining people’s main sources of news split by age, for every group under 45, online news was deemed more important than television news, with Facebook holding the dominant position of the platform through which most young people access news and opinion. Since online news can be of all ideological stripes, including hyper-partisan, centrist, and mainstream, and given that a news consumer’s exposure to online and alternative news is likely to be increased by greater levels of scepticism and mistrust of mainstream and traditional sources such as newspapers and television (see Elvestad et al. 2018), there is a need

to better understand how and why people make news choices and how alternative news sources have risen to the ranks of the most trusted (Edelman's Global Trust Barometer 2017).

According to Edelman's Global Trust Barometer (2017), trust in mainstream broadcast media has declined precipitously in recent times. When faced with a choice between different sets of 'facts' offered by mainstream and 'alternative' online media, there is a need to ask: What ideals do audiences associate with their preferred go-to source? Why do seekers of news online turn to news purveyors such as Breitbart, InfoWars, and Blaze instead of more mainstream and legacy outlets like the BBC, Newsweek, or Aljazeera? Is it distrust, antipathy, or downright derision?

Two notable studies may offer some answers – and these accord with our analysis so far: Jonathon Ladd's *Why Americans hate the Media* (2012) and Mann and Ornstein's *It's Even Worse Than It Looks: How the American Constitutional System Collided With the New Politics of Extremism* (2012). According to Ladd (2012), lack of trust and confidence in mainstream media in the USA is closely related to democratic electoral processes and the kind of political messages consumed in the run up to elections. Since the 1970s, as political parties became more polarised and messages more intense, public acceptance of, and trust in, mainstream mass media has declined, and more partisan sources of news have emerged as salient in the development of citizens' views. He argues that much of this mistrust has been nurtured by elite media criticism of the media, particularly Republican Party elites, a process that intensified under the Trump administration.

Political analysts Mann and Ornstein came to a similar conclusion. They place the blame squarely on the contemporary Republican Party, characterising it as 'an insurgent outlier – ideologically extreme; ... scornful of compromise; unpersuaded by conventional understanding of facts, evidence and science; and dismissive of the legitimacy of its political opposition' (Mann and Ornstein 2012: xiv). Importantly for our argument, the authors also caution against acerbic campaign approaches perpetuated by the mass media and the resultant steer towards the erosion of democratic accountability in the US politics.

Almost a decade later, there is now a much more complex relationship between mainstream journalism, alternative and online political news, and citizen knowledge. Media distrust and the rise of algorithmically mediated hyper-partisan alternatives has had significant civic and political ramifications. People who do not trust the media and who subsequently access hyper-partisan alternative sources are less likely to access accurate information and more likely to vote along partisan lines. It is, therefore, necessary to explore public responsiveness and people's credibility perceptions of online news consumers in order to ensure full exercise of democracy.

Most people access political messages via digital media, and digital infrastructures have become inextricably part of society's structures. This is the genesis of a 'postdigital' conception that there is no opposition between a 'virtual' or 'cyber' world and a corresponding 'face-to-face' world. Instead, the digital is now 'integrated and imbricated with our everyday actions and interactions' (Feenberg 2019: 8). Its structures and divisions, mediated by human behaviour but exacerbated by

algorithms, are the very drivers which shape the conditions of knowledge production, circulation, and consumption. As we mentioned earlier, the documentary-drama, *The Social Dilemma* (Orlowski 2020), offers a powerful explanation of how these systems operate to manipulate our beliefs and behaviours.

Instead of a unified public sphere of ‘the masses’, people are now targeted with political messages as a multitude of very particular niche groups or micro-populations (Maly and Varis 2016). This has led to a decidedly algorithmic populism (Maly 2018) in which there is not a singular or exclusive ‘mass media’ instrument by which a linear flow of propaganda and political messages will flow. As a case in point, the Brexit referendum in the UK was won in favour of the UK leaving the European Union by the coming together of people from across the political spectrum, described by Blommaert (2020: 393) as the ‘loose, temporal and unstable coalitions between ... micro-audiences’.

Another attempt at such digital micro-marketing of political messages was the campaign to deter Afro-Americans from voting for the Democratic party in the 2016 US election. The highly sophisticated campaign divided a data set of 200 million voters in to 8 different subcategories for niche targeting of political messages. One sub-group, labelled as ‘Deterrence’, consisted overwhelmingly of black and other groups of colour and were fed anti-Clinton adverts which focussed on out-of-context quotes to discredit her record on race relations (Channel 4 News Investigations Team 2020). The National Association for the Advancement of Colored People (NAACP) called the report an example of ‘modern-day voter suppression’ (Derysh 2020).

Mass media still has a place in political messaging, as Benkler et al. (2020) and others (Maly and Varis 2016) have argued. Today’s public must, however, contend with a double-whammy of political messages from both mass media and social media sources. Mass media will also utilise social media platforms and their infra-structural logics to drive traffic to their pages and circulate information. According to Jarvis (2008), it is sometimes a case of ‘blogs all the way down’ in a model of information flow dubbed as a ‘link economy’. In this model, news sources will borrow content from blogs and other online sources, sometimes with little or no verification, and add a layer of commentary as part of a ‘new’ story. The burden of proof can differ considerably compared to print and televised news, and as news providers contend with tighter deadlines and reduced staff, traditional standards for verification become much more difficult to sustain.

The case of a fake quotation attributed to the deceased French composer Maurice Jarre is one example. In this case, an Ireland-based student experimentally posted a fake quotation on the deceased composer’s Wikipedia page shortly after his death. The quotation then appeared in the Guardian, BBC Music Magazine, and Australian newspapers. The hoax only came to light after the student contacted offending newspapers to tell them that the quotation was in fact a fabrication concocted by him as an experiment to ‘show how journalists use the internet as a primary source and how people are connected especially through the internet’ (Carbery 2009).

## Polarisation for One's Own Bad Faith Ends: The Cynic's Toolkit and the Humanist's Response

Worryingly, these analyses show that we are living in highly polarised societies and that media of whatever kind are powerful instruments in driving and sustaining that polarisation, abetted by the kinds of deceptions we have adumbrated. There is no doubt too, of course, that the deep cynicism of politicians such as the British Prime Minister, Boris Johnson<sup>3</sup> and the former United States President, Donald Trump, and all their enablers, nutrify polarisation. As Edsall observed in the *New York Times* (2018), '[h]ostility to the opposition party and its candidates has now reached a level where loathing motivates voters more than loyalty' (2019). Polarisation can be used as a political strategy to further political ends (re-election, English nationalism, protection from criminal prosecution, question the legitimacy of elections). Polarisation is also driven by propaganda that predates on religious, ethnic, political, economic, moral fears, and preferences for social/mass media. To counter polarisation, and the vices that accompany it, such as mistrust, deceit, epistemic blindness, and so on, we need to know the strategies and tactics that are employed to keep populations divided, angry, and mistrustful. Machiavelli's foxes and lions need to be rendered less cunning, mendacious, and treacherous.

Core features of the 'polarisation toolkit', according to Cassam (2020), consist of the following: mythmaking, stereotyping, propaganda, othering of an out-group, conspiracy theories, and polarising speech. Mythmaking, at which the Nazis excelled and with which our ardent Brexiteer politicians and spads (special advisers) have been busy, consists in creating mythic pasts which have been lost but which can be recreated in the future if we take the right action (e.g. leave the EU) and stand our ground (defy EU intransigence). Mythmakers also use myths to explain present divisions, discord, and lack of sovereignty (in the case of Brexit), the 'them' and 'us'. By 'taking back control', the mantra of the British Conservative Party under Johnson, the UK can, we are told, become a great nation again. It is aberrant nonsense, in our view, but recourse to rational debate, facts, and truthfulness seem to have no purchase among such supporters (see Parris 2020: fn 3). As Arendt pointed out, the ideal subjects of totalitarian rule 'are people for whom the distinction between fact and fiction (*i.e.*, the reality of experience) and the distinction between true and false (*i.e.*, the standards of thought) no longer exist' (1966: 474) (emphasis from the original).

---

<sup>3</sup> See Philip Stephens of the *Financial Times* (2019) who opines that Johnsons' lies are 'plunging Britain into a dark morass' at <https://www.ft.com/content/645d8786-d9f2-11e9-8f9b-77216ebe1f17>; and Mathew Parris of *The Times* (2020) who says of him that 'in his lonely soul he is darkly cynical' at <https://www.thetimes.co.uk/article/were-heading-for-a-true-believers-brexixgknhv16x>. Accessed 6 January 2020.



Mythmakers also create stereotypes, or generics, about disfavoured or out-group people, such as immigrants, Muslims, Blacks, or George Soros<sup>4</sup> (Cassam 2020). They are vilified as endangering treasured ways of life and of threatening our services, stealing our jobs, putting the Othered at serious risk of violence, discrimination, or loss or denial of citizenship. Another polarising trick is to assert, indignantly, that anyone who does not support the national effort to, for example, ‘take back control’ or to Make America Great Again (MAGA), is charged with not being ‘patriotic’. Polarising speech is called into the services of mythmaking and stereotyping to provide loci around which to accuse that ‘they’ are not like ‘us’. As political propaganda, mythmaking, stereotypes, and polarizing speech ‘uses the language of virtuous ideals to unite people behind otherwise objectionable ends’ (Stanley 2018: 24).

And no toolkit would be complete without conspiracy theories. Conspiracy theories ‘function to denigrate and delegitimize their targets, by connecting them, mainly symbolically, to problematic acts’ (Stanley 2018: 58). Among the best-known conspiracy theories are those concerned with Covid-19, vaccinations, and the Deep State in the USA, a hidden government within the legitimately elected government that is based on cronyism and corruption, all of which interfered with Trump’s agenda and election success. But why are people so susceptible to what appears to most of us as insane nonsense? Is it, as Arendt suggested, the

unexpected and unpredicted phenomena as the radical loss of self-interest, the cynical or bored indifference in the face of death or other personal catastrophes, the passionate inclination toward the most abstract notions as guides for life, and the general contempt for even the most obvious rules of common sense? (1966: 316)

Radical loss of self-interest and bored indifference might be seen in Britain’s exit from the EU, despite all the warnings of how damaging it will be to country’s economy; being stirred by the abstract notion of sovereignty when, in fact, striking favourable trade deals are all about managing interdependence, not safeguarding sovereignty; and refusal, by some, to accept the existence of Covid-19 and to refuse vaccination, in contravention of the obvious rules of scientific common sense: vaccines have been around for a long time and are considered by the medical and pharmaceutical industry to be safe.

## The Allure of Deception

It is baffling why so many people are allured by the patently false and why, when confronted with what seems incontrovertible evidence time and time again, they dogmatically persist with the false belief. This persistence may be explained by

---

<sup>4</sup>The right wing in the United States is obsessed with George Soros, who is caricaturised by every anti-Semitic stereotype. Besner (2018) writes that that ‘the red-meat crowds ... view him as a “sort of sinister [person who] plays in the shadows” ... Even to conservatives who reject the darkest fringes of the far right, Breitbart’s description of Soros as a “globalist billionaire” dedicated to making America a liberal wasteland is uncontroversial common sense.’

confusion and fear and the consequent need for certainty from the chaos of opinions and endless streams of information. Another reason is fanaticism and insecurity. In her typically perspicuous analysis of the rise of totalitarianism in Nazi Germany and the Stalinist Soviet Union, Arendt (1966: 305) noted that Hitler believed that the bedlam of opinions could be ‘avoided by adhering to *one* of these many opinions with “unbending consistency”’ (emphasis from the original), despite the fact that one of the permanent features of the fascist and communist movements was their brazen and arbitrary lack of continuity. Totalitarian propaganda was also ‘invariably frank as it was mendacious’ (307) and routinely forged history. Even when the movements started to devour their own members through purges, mass deportations, and industrial scale murder, even when it turned on its own members, Nazism and Bolshevism retained mass support, not because of masterful propaganda and lying, stupidity, or ignorance, but because of the attraction of evil and mob mentality (307) and, more significantly, the ‘selflessness of its adherents’.

Idealism could not explain this phenomenon since ‘foolish or heroic’ idealism ‘springs from some individual decision and conviction and is subject to experience and argument’ (307) and can outlive the movement. Fanaticism, however, cannot, but while the movement holds together, fanaticised members who adhere with total conformity ‘cannot be reached by experience or argument’ (308). Once the leader loses or dies, the movement dies with him, though that does not mean that Nazism or Stalinism disappears altogether; the lure of fascism survives in far-right groups and in populism (The Proud Boys, in the United States, for example). We see similar effects when people disappear ‘down the rabbit hole’ and into the mendacious embraces of conspiracy theorists, mythmakers, and peddlers of prejudicial stereotypes, to become trapped in alternative realities produced by echo-chambers and pernicious epistemic bubbles (Nguyen 2018).

It is tempting to believe that Arendt’s analysis is relevant only to a particular time in the twentieth century European history. However, her analysis has a foreboding cogency to our current situation. There has been alarm that Trump’s pathological lying, solipsistic fantasies, amorality, vulgarity, misogyny, and inability to concede defeat, enabled by what appear to be fanatical Republican devotees, were examples of fascistic tendencies (see Applebaum 2020; Kendzor 2020). Indeed, there have been calls to pay very close attention lest the USA lose her democracy. Had Trump won a second term, there was real concern that he would be unleashed, free to do whatever he liked, including changing the constitution so that he could go on being President in 2024, 2028, 2032: ‘Trump Forever’.

As with Hitler, we were warned: ignore Trump at our peril. Hitler entered the political world legally, through democratic elections; Trump entered his likewise and on a conspiracy theory – the birther movement. Obama was declared to be a non-American and was therefore not the legitimate president: he was, the conspiratorialists claimed, a fraud; and 72% of registered Republicans believed this regardless of whether they were high or low knowledge republicans (Clinton and Roush 2016). One third, Applebaum wrote, not only believed this absurdity, but that one third went on to become Trump’s infamous base.

Over four years, they continued to applaud him, no matter what he did, not because they necessarily believed everything he said, but often because they didn't believe anything at all. If everything is a scam, who cares if the president is a serial liar? If all American politicians are corrupt, then so what if the president is too? If everyone has always broken the rules, then why can't he do that too? No wonder they didn't object when Trump's White House defied congressional subpoenas with impunity, or when he used the Department of Justice to pursue personal vendettas, or when he ignored ethics guidelines and rules about security clearances, or when he fired watchdogs and inspectors general. No wonder they cheered him on when he denigrated the CIA and the State Department as the 'deep state,' or laughed and smiled when he called journalists 'enemies of the people.' (Applebaum 2020)

Trump could do all this because many Americans had lost faith in democracy, and Trump exploited this distrust, primarily through Twitter and Fox News. Even now, at the time of writing, having lost the electoral college and the popular vote, despite the baseless court litigations that the election was stolen from him, Trump continues to sow distrust in and to demean not just respected figures and institutions but also the democratic process itself.<sup>5</sup> This is no accident. Biden, like Obama, will be regarded as an illegitimate president. The vilification of democratic processes and legitimate leaders continues, and that serves the interests of Trump and his enablers in the Republican Party.

How did the USA get to this, and will it ever recover? Arendt's own analysis of totalitarianism is that it emerges from, and requires, not classes but the masses (or 'the base' of MAGA).<sup>6</sup> Democratic governments rest on the silent approbation and tolerance of the indifferent and inarticulate sections of the country (Arendt 1966: 312), social atomisation and extreme individualisation, and apathy and hostility of the social strata who were exploited and excluded from active participation in politics. 'Chief characteristic of the mass man is not brutality or backwardness, but isolation and lack of normal social relations.' (317)

In the USA of today, and on Kendzor's (2020) analysis, many Americans believe they are not culturally or politically represented (as the masses in Germany and the Soviet Union were not). The masses lack economic clout; they feel betrayed. Kendzor also suggests that authoritarianism is networked and powerfully positioned to 'bombard users with propaganda, conspiracy theories and personal attacks' (Kendzor 2020: 154). Hostile states, as Putin's Russia is continually alleged to be, are prepared to use digital technology not only to attack their own citizens but also to transform democracies into their own authoritarian likeness (Brexit, India, U.S.A.).

---

<sup>5</sup>One can follow the twists and turns of Trump's actions and claims by looking up any news outlet. For example, The Independent at <https://www.independent.co.uk/news/world/americas/us-election-2020/electoral-college-2020-trump-republicans-senate-ron-johnson-b1781745.html>. Accessed 6 January 2020.

<sup>6</sup>'The base' refers to Trumps' committed supporters. Rather than making America great again, the base seem to support efforts to destroy the Republican Party, institutions, electoral processes, and the health of the nation by refusing to wear mask or socially distance to prevent the spread of Covid-19.

The extent, reach, and phenomenal responsiveness of social media and the highly fragmented mass of people for whom messages are mediated by complex micro-marketing algorithms means that we are contending with a troll epidemic, mass online harassment, and the spread of toxic online culture in ways that cannot be readily monitored or policed. These vices are accompanied by a most brazen aspect of our social media lives – colossally impudent lies and insane conspiratorial theories. Spread by bots, propaganda ministries, validated by retweets and trending topics, and repeated through aggregated content, lies corrode trust. The elite, as well as the ‘base’, the ‘mob’, or whomever counts as the disaffected, must bear responsibility for the harms of lying. To return again to Arendt, this time to her analysis of the elite’s delight in the destruction of respectability and the undermining of history which was regarded anyway as a façade to fool the people:

the terrible, demoralizing fascination in the possibility that gigantic lies and monstrous falsehoods can eventually be established as unquestioned facts, that man may be free to change his own past at will, and that the difference between truth and falsehood may cease to be objective and become a mere matter of power and cleverness, of pressure and infinite repetitions. Not Stalin and Hitler’s skill in the art of lying but the fact that they were able to organise the masses into collective unit to back up their lies with impressive magnificence, exerted the fascination [of the elites] ... an atmosphere in which all traditional values had propositions had evaporated ... made it easier to accept patently absurd propositions than the old truths which become pious banalities, precisely because nobody could be expected to take the absurdities seriously ... those who traditionally hated the bourgeoisie ... saw only the lack of hypocrisy and respectability, not the content itself. (Arendt 1966: 333–34)

The modern variants of the alliance between the elite and the mobs are those who want to ‘drain the swamp’ in US politics and ‘free’ the UK from the EU. The elite are able to appeal to and command support from a significant portion of the population. Delusional and destructive though these mass appeals appear to be, they hold a fascination, and the leaders of these movements are indisputably popular. The appeal of lies and conspiracy theories can partly be explained by the fact that they offer simple answers to complex problems, shield us from confusion and complexity, and assure us that what happens in the world is not mere chance. They can offer, indeed impose as some authoritarians have sought to do, an alternative reality, though one that is far removed from that in which the majority lives. Lies and conspiracy theories also, of course, sow fear, anger, and mistrust (Deibert 2019).

Alternative realities may pose a further threat: delusional cognitive omnipotence to create a reality according to one’s will and whim, and to which supporters must subscribe, prevents its adherents from learning from others and, indeed, from escaping from its shackles (Kendizor 2020). Trump appears to exercise a hold on the Republican party, even despite his absurd attempts to overturn the election, because they fear his vindictive rage should he return in 2024. Trump will not forget those who did not support him, and so, in an unprecedented move in US history, 126 House Republicans formally asked the Supreme Court to overturn the election results in four swing states (Michigan, Minnesota, Pennsylvania and Georgia). The Supreme Court unanimously rejected the lawsuit in a brief, one-page order, as having no standing under Article III of the Constitution. The promise of cognitive

omniscience likewise poses a similar threat: it disables us from learning from others and from sharing our epistemic resources. The powerful (those who control the means of dissemination) seek to ‘undermine the powerless in their very humanity – to undermine reason and deny them the capacity to give knowledge’ (Fricker 2007: 44).

## Countering Bad Consequences of Deception: Reducing Harm

Political theories or moral philosophies which presume justice as the norm may keep everyday injustices hidden, contribute to practices of ignorance, and desensitise our critical faculties. It is wise, perhaps, to begin one’s analysis of online (and offline) deceptions with the assumption that we will inevitably have to contend with all manner of deceptions perpetrated by wolves and lions and, of course, the naïve and indignant.

Lying about one’s enemies, successes, mistakes, agenda, and reality is a prevalent feature of human engagement (Bok 1999). Political parties or heads of states will go to great lengths to dehumanise, discredit, or delegitimise what is contrary to, or advances their interests. ‘Crooked Hillary’ or ‘Sleepy Joe’, ‘Remoaners’, ‘Libtards’, and ‘Antifa’ are now well-known derogatory epithets which can be chanted or repeated ad nauseam to underscore their supposed cunning or their threat to the polity. We have ample evidence that all moral scruple will be thrown to the wind if the circumstances demand it; and we understand more fully than we ever did, the power of propaganda to subvert and dupe reason. Lies can spread rapidly online not just because of the casual way in which reality is distorted and the justification for calumny given but also because of the emotional, titillating, or outrageous tone of the lie.

Lying could be justified if it prevents harm and if white supremacists are roaming the city streets looking for Antifa or Black Lives Matter to shoot or intimidate. However, we need to be careful, because casual lying is harmful and calls for clear evidence that lying to one’s enemies is warranted, particularly if paranoia plays a role in the justification for lying to one’s adversaries: how has the enemy become the ‘enemy’? Paranoid individuals or states may see enemies where none exist but righteously insist that their lies are merited because of the adversaries’ bad faith (and why we must caution against Machiavellian arts). However, lying may not just result in prejudicially stereotyping the adversary so that bias is inevitable, but also in retaliations and sanctions, until one approaches a state of war or cold war hostility, or withdrawal from political, economic, and health unions (the European Union or the World Health Organisation) and polarisation: lying can spectacularly backfire. As Bok (1999: 142) warns, when governments ‘build up enormous, self-perpetuating machineries of deception in adversary contexts’, lies while occasionally excusable ‘are weighted with very special dangers; dangers of bias, self-harm, proliferation, and severe injuries to trust’ (143). Indeed. Antisemitic and anti-Muslim tropes are such dangers.

We also hear much about online epistemic bubbles and echo chambers which, in their worst effects, perpetuate the spread of lies, conspiracy theories, and propaganda, enchanting and emboldening – enslaving – the mind with the belief that these channels espouse the truth (Nguyen 2018). In effect, however, they come to resemble the brainwashed who develop a ‘peculiar’ kind of cynicism which is:

an absolute refusal to believe in the truth of anything, no matter how well it may be established. In other words, the result of a consistent and total substitution of lies for factual truth is that the lie will now be accepted as truth, and truth be defamed as lie, but that the sense by which we take our bearings in the real world – the category of truth versus falsehood is among the mental means to this end – is being destroyed. (Arendt 1968: 252)

Pernicious propaganda feeds, develops, and spreads false claims: it aims to transform critical faculties such that our judgements, values, and actions are enlisted into the forces of ‘systematic falsification’ (Ellul 1965: 61) of the kind that supports misinformation, disinformation, malinformation, misdirection, omissions, forgeries, exaggeration, underemphasis, and de-emphasis of information and seedy solipsism at which the former President of the USA excels. This is realism, a normal part of our everyday discursive lives, in which it seems impossible to argue for ideal theory or ideal states of being.

How do we counter the baneful effects of the vices we outlined above? Cassam (2020) suggests that, just as propaganda can be used for bad ends with its false, deceitful, and manipulative messages, it can also be used positively to humanise what has been dehumanized or distorted. Humanising propaganda means ethically and kindly engaging with people’s emotions to understand why people are fearful, angry, or mistrustful, and why they are so ready to be duped by the absurd or the seemingly true. As has been well established, by themselves facts and evidence are not enough to make people understand why they are mistaken, misguided, or misinformed. McRaney explains what happens:

Once something is added to your collection of beliefs, you protect it from harm. You do this instinctively and unconsciously when confronted with attitude-inconsistent information... When someone tries to correct you, tries to dilute your misconceptions, it backfires and strengthens those misconceptions instead. Over time, the backfire effect makes you less skeptical of those things that allow you to continue seeing your beliefs and attitudes as true and proper. (2014: 145)

Few like to be mistaken. Facts and evidence that are, therefore, presented in an empathic, non-judgmental way supported by critical questioning are more likely to be effective in encouraging the other person to be open to alternative views. Using ‘eloquent’ rhetoric (Cassam 2020) that rests on compassion or sympathy can help form prosocial beliefs and attitudes (and see also Dennett 2013).

Nevertheless, idealists and cynics alike will recognise that the polarisation toolkit is, as Cassam (2020: 20) observes, ‘far superior to the depolarization toolkit’. It is ‘a depressing thought’ that eloquent rhetoric infused by compassion or sympathy is not enough to topple the power of dupery, even while compassion can provide a ‘bridge’ from the self to others not closely associated to us, reducing the distinctions between disparate groups of people. Polarisation is effective because ‘polarizers

have all the best tools' (Cassam 2020: 20) – myths, stereotypes, the power to other, polarising speech, and propaganda. These tools can trigger fear, loathing, and anger and also, critically, a sense of identity (e.g. as found among MAGA supporters).

## Conclusion

The suspension of commonplace ethics in politics and online environments and pre-emptive lying because men are 'bad' and will not keep 'faith', as Machiavelli advised, has bad consequences. Ethical conduct, such as truth-telling, is critical to democracy and positive human relations; it is also critical in online environments. The answer to the onslaught of dupery in social and mass media is not the curtailment of free speech which would not, in any case, work since suppression or oppression rarely eradicate belief and may simply confirm the correctness of the belief or stir resentment and determination to hold fast on to the belief, as we discussed above (see Özdan, this volume, for an excellent human rights analysis of this issue; for an alternative view, see Wright, also in this volume). There are legitimate concerns about perceived loss of identity, the state of our democratic processes, the economic impact of Covid-19, and in whom we can trust when our societies seem so divided. It is a truism to say that education is critical, particularly awareness-raising around our own everyday digital practices in our current complicated and overwhelming information landscape (see, e.g. Bhatt and MacKenzie 2019; MacKenzie and Bhatt 2020a, b).

In the current postdigital times, our context has altered so radically that to fall back on standard educational approaches would be futile. Neither can we rely on existing information intermediaries (e.g. mainstream media and social media), though online platforms could do more to develop ethical technology that tries to inhibit the patently false and harmful. For example, Twitter has recently responded to calls that they put disclaimers on tweets that are clearly and evidentially false, such as President Trump's claims about electoral fraud. We need to enable people to be exposed to differing perspectives and to engage substantively across existing social divides. But we also need to understand that disarming conspiracy theorists, propagandists, peddlers of myths, and lies mean getting to the source of what animates their beliefs, listening with empathy to those concerns, while asking critical questions, activities which can yield ethical epistemic goods on which we can effectively act.

Francis Bacon told us that truth-telling is the 'sovereign good of human nature' (in Bok 1999: 262) and a fundamental principle of justice. Shabby or elaborate deceits impair the distribution and sharing of these goods. Goodness, contrary to Machiavelli's claim, is surely necessary to rule and to authority. Whether Machiavelli exhorted tongue in cheek that the Prince lie, or sought to do so in all seriousness, divorcing politics from ethics has consequences: such a polity cannot flourish. Further, appearing to have the ethical qualities desired of a leader but with a mind

primed, when expedient, to behave contrary to appearances sows distrust, as we have sought to show here.

Lying is a vice that must be treated with the greatest caution and should never be done simply because it suits us. Lies undermine the political system, public trust in government and institutions, and trust in each other and, in the process, polarise society (Bok 1999). For these reasons, no ethically minded person should ever employ Machiavellian statecraft, however expedient. However, we must again be realistic. We have to acknowledge that there are many who admire the leader who ‘avail[s] himself of the beast and the man’ in the combined guise of the fox and the lion. Many MAGA supporters are loyal to Trump because he has created the illusion that he can ‘drain swamp’ because he is ‘super smart, a genius’.<sup>7</sup> We also know that there is a calibre of politician who will resort to the dark arts of statecraft to exploit as many means possible to gain advantage, and they have most powerful mechanism ever available to us: social and mass media. We need to know how to begin to resist these forces.

## References

- Applebaum, A. (2020). Trump Won’t Accept Defeat. Ever. *The Atlantic*, 6 November. <https://www.theatlantic.com/ideas/archive/2020/11/trumps-forever-campaign-is-just-getting-started/617021/>. Accessed 1 December 2020.
- Arendt, H. (1966). *The Origins of Totalitarianism*. San Diego, CA: Harcourt Inc.
- Arendt, H. (1968/2006). *Between Past and Future. Eight Exercises in Political Thought*. USA: Penguin Group.
- Benkler, Y., Tilton, C., Etling, B., Roberts, H., Clark, J., Faris, R., Kaiser, J., & Schmitt, C. (2020). *Mail-in Voter Fraud: Anatomy of a Disinformation Campaign*. Research Publication No. 2020–6. October 2, 2020. Cambridge, MA: Berkman Klein Center for Internet & Society. <https://doi.org/10.2139/ssrn.3703701>.
- Besner, D. (2018). The George Soros Story – and its Fatal Flaw. *The Guardian*, 6 July. <https://www.theguardian.com/news/2018/jul/06/the-george-soros-philosophy-and-its-fatal-flaw>. Accessed 25 December 2020.
- Bhatt, I., & MacKenzie, A. (2019). ‘Just Google it’: Digital Literacy and the Epistemology of Ignorance. *Teaching in Higher Education*, 24(3), 302–317. <https://doi.org/10.1080/13562517.2018.1547276>.
- Blommaert, J. (2020). Political Discourse in Post-Digital Societies. *Trabalhos em Linguística Aplicada*, 59(1), 390–403. <https://doi.org/10.1590/01031813684701620200408>.
- Bok, S. (1999). *Lying. Moral Choice in Public and Private Life*. New York: Vintage Press.
- Bond, P. (2016). Leslie Moonves on Donald Trump: ‘It May Not Be Good for America, but It’s Damn Good for CBS’. *The Hollywood Reporter*, 29 February. <https://www.hollywoodreporter.com/news/leslie-moonves-donald-trump-may-871464>. Accessed 13 December 2020.
- Bradshaw, S., & Howard, P.N. (2017). *Troops, Trolls and Troublemakers: A Global Inventory of Organized Social Media Manipulation*. Computational Propaganda Research Project. Working Paper No 2017.12. Oxford: University of Oxford. <https://comprop.oii.ox.ac.uk/wp-content/uploads/sites/89/2017/07/Troops-Trolls-and-Troublemakers.pdf>. Accessed 6 January 2021.

<sup>7</sup>For a brief survey of why Trump’s supporters have remained loyal to him, despite the drift towards authoritarianism, see Lempinen (2020).



- Carbery, G. (2009). Student's Wikipedia Hoax Quote Used Worldwide in Newspaper Obituaries. *The Irish Times*, 6 May. <https://www.irishtimes.com/news/student-s-wikipedia-hoax-quote-used-worldwide-in-newspaper-obituaries-1.759391>. Accessed 13 December 2020.
- Cassam, Q. (2020). The Polarisation Toolkit. In A. Tanesini & M. P. Lynch (Eds.), *Polarisation, Arrogance and Dogmatism: Philosophical Perspectives*. Abingdon, Oxon: Routledge.
- Channel 4 News Investigations Team (2020). Revealed: Trump Campaign Strategy to Deter Millions of Black Americans from Voting in 2016. Channel 4 News, 28 September. <https://www.channel4.com/news/revealed-trump-campaign-strategy-to-deter-millions-of-black-americans-from-voting-in-2016>. Accessed 13 December 2020.
- Clinton, J., & Roush, C. (2016). Poll: Persistent Partisan Divide Over 'Birther' Question. NBC News, 10 August. <https://www.nbcnews.com/politics/2016-election/poll-persistent-partisan-divide-over-birther-question-n627446>. Accessed 13 December 2020.
- Cyberspace and Infrastructure Security Agency (2020). Joint Statement from Elections Infrastructure Government Coordinating Council & The Election Infrastructure Sector Coordinating Executive Committees. 12 November. <https://www.cisa.gov/news/2020/11/12/joint-statement-elections-infrastructure-government-coordinating-council-election>. Accessed 1 December 2020.
- Deibert, R. J. (2019). The Road to Digital Unfreedom. Three Painful Truths about Social Media. *Journal of Democracy*, 30(1), 25–39. <https://doi.org/10.1353/jod.2019.0002>.
- Dennett, D. (2013). *Intuition Pumps and Other Forms of Thinking*. London: Penguin Books.
- Derysh, I. (2020). Data Leak: 2016 Trump Campaign Listed 3.5 Million Black People it Wanted to Stop from Voting. Salon, 29 September. <https://www.salon.com/2020/09/29/data-leak-2016-trump-campaign-listed-35-million-black-people-it-wanted-to-stop-from-voting/>. Accessed 13 December 2020.
- Edelman. (2017). 2017 Edelman Trust Barometer: Global Report. <https://www.slideshare.net/EdelmanInsights/2017-edelman-trust-barometer-global-results-71035413>. Accessed 12 December 2020.
- Edsal, T. B. (2019). What Motivates Voters More than Loyalty? Loathing. *New York Times*, 1 March. <https://www.nytimes.com/2018/03/01/opinion/negative-partisanship-democrats-republicans.html>. Accessed 6 January 2020.
- Ellul, J. (1965). *Propaganda: The Formation of Men's Attitudes*. New York: Random House.
- Elvestad, E., Philips, A., & Feuerstein, M. (2018). Can Trust in Traditional News Media Explain Cross-national Differences in News Exposure of Young People Online? A Comparative Study of Israel, Norway and the United Kingdom, *Digital Journalism*, 6(2), 216–235. <https://doi.org/10.1080/21670811.2017.1332484>.
- Feenberg, A. (2019). Postdigital or Predigital? *Postdigital Science and Education*, 1(1), 8–9. <https://doi.org/10.1007/s42438-018-0027-2>.
- Fricker, M. (2007). *Epistemic Injustice. Power & The Ethics of Knowing*. Oxford: Oxford University Press.
- Jarvis, J. (2008). The Link Economy v. the Content Economy. Buzzmachine, 18 June. <https://buzzmachine.com/2008/06/18/the-link-economy-v-the-content-economy/>. Accessed 13 December 2020.
- Kendzior, S. (2020). *Hiding in Plain Sight: The Invention of Donald Trump and the Erosion of America*. New York: Flatiron Books.
- Ladd, J. M. (2012). *Why Americans Hate the Media and How It Matters*. Princeton, NJ: Princeton University Press.
- Lempinen, E. (2020). Despite drift toward authoritarianism, Trump voters stay loyal. Why? Berkeley News, 7 December. <https://news.berkeley.edu/2020/12/07/despite-drift-toward-authoritarianism-trump-voters-stay-loyal-why/>. Accessed 6 January 2021.
- Machiavelli, N. (2003). *The Prince*. London: Penguin Classics.
- Mackenzie, A., & Bhatt, I. (2020a). Opposing the Power of Lies, Bullshit and Fake News: The Value of Truth. *Postdigital Science and Education*, 2(1), 217–232. <https://doi.org/10.1007/s42438-019-00087-2>.

- Mackenzie, A., & Bhatt, I. (2020b). Lies, Bullshit and Fake News: Some Epistemological Concerns. *Postdigital Science and Education*, 2(1), 9–13. <https://doi.org/10.1007/s42438-018-0025-4>.
- Maly, I. (2018). Populism as a Mediatized Communicative Relation: The Birth of Algorithmic Populism. *Tilburg Papers in Culture Studies*, paper 213. <https://www.tilburguniversity.edu/research/institutes-and-research-groups/babylon/tpcs>. Accessed 13 December 2020.
- Maly, I., & Varis, P. (2016). The 21st Century Hipster: On Micro-populations in Times of Superdiversity. *European Journal of Cultural Studies* 19(6), 637–653. <https://doi.org/10.1177/1367549415597920>.
- Mann, E. T., & Ornstein, N. J. (2012). *It's Even Worse Than It Looks: How the American Constitutional System Collided with the New Politics Of Extremism*. New York: Basic Books.
- McRaney, D. (2014). *You are Now Less Dumb: How to Conquer Mob Mentality, How to Buy Happiness, and All the Other Ways to Outsmart Yourself*. New York: Gotham Books.
- Newman, N., Levy, D. A. L., & Nielsen, R. K. (2015). Reuters Institute Digital News Report 2016: Tracking the Future of News. Oxford: Reuters Institute for the Study of Journalism. <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/research/files/Digital%2520News%2520Report%25202016.pdf>. Accessed 13 December 2020.
- Nguyen, T. C. (2018). Echo Chambers and Epistemic Bubbles. *Episteme*, 17(2), 141–161. <https://doi.org/10.1017/epi.2018.32>.
- Orlowski, J. (2020). *The Social Dilemma* [Documentary Film]. Los Gatos, CA: Netflix.
- Parris, M. (2020). We're heading for a true believers' Brexit. *The Times*, 12 December. Accessed 6 April, 2021.
- Rid, T. (2017). Why Twitter Is the Best Social Media Platform for Disinformation. Motherboard, 1 November. <https://www.vice.com/en/article/bj7vam/why-twitter-is-the-best-social-media-platform-for-disinformation>. Accessed 5 January 2020.
- Stanley, J. (2018). *How Fascism Works: The Politics of Us and Them*. New York: Random House.
- The Guardian. (2020). Trump Refuses to Commit to a Peaceful Transfer of Power: 'There Will Be a Continuation' [Video]. <https://www.theguardian.com/us-news/video/2020/sep/24/trump-refuses-to-commit-to-a-peaceful-transfer-of-power-there-will-be-a-continuation-video>. Accessed 1 December 2020.
- Vosoughi, S., Roy, D., & Aral, S. (2018). The Spread of True and False News Online. *Science*, 359(6380), 1146–1151. <https://doi.org/10.1126/science.aap9559>.