WHAT TO DO ABOUT CONSPIRACY THEORIES?

ACADEMIC ENTANGLEMENTS IN CONFLICTS OVER TRUTHS

Edited by
Elżbieta Drążkiewicz and Jaron Harambam

What To Do About Conspiracy Theories?

Increasingly social activists, journalists and policy makers have expressed concern over the proliferation of conspiracy theories in the public space. There is a growing fear of their impact on social cohesion and democracy, their power to erode trust in state institutions and science. These concerns often come with an expectation that it is the responsibility of academics to engage with conspiracy beliefs by countering them. But should they?

In this book, contributors show that like everything that relates to conspiracy theories, even the answer to this question is not straightforward and can vary across disciplines and schools, can be influenced by disciplinary ethical codes of conduct, research methodologies and specific approaches to conspiracy theories. Foregrounding a variety of approaches, from across disciplines (psychology, anthropology, sociology and media studies), academic seniority (from young scholars to full professors) and countries (USA, Ireland, UK, The Netherlands, Sweden and Greece), the chapters in this book are in deep conversation with each other, offering multiple alternative takes on the issue of what should academics do with conspiracy theories. Together, the book embodies several bold and compelling provocations to dealing differently with conspiracy theories.

This timely volume introduces perspectives of scholars representing media studies, anthropology, psychology and sociology and discusses case studies concerning politics, health, environment and security. It will be a key resource for researchers, scholars and practitioners engaged in these fields and will also appeal to anyone interested in conspiracy theories and other related phenomena such as disinformation or fake news. This book was originally published as a special issue of the *Journal for Cultural Research*.

Elżbieta Drążkiewicz is an anthropologist based at Lund University Sweden where she leads the ERC project CONSPIRATIONS investigating conflicts over conspiracy theories in Europe. She specializes in organizational, political and economic anthropology. Her research also includes studies of foreign aid and development management and public health governance. She is the author of *Institutionalised Dreams: The Art of Managing Foreign Aid* (2020).

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(future) digital worlds along democratic and public values. He is the author of *Contemporary Conspiracy Culture: Truth and Knowledge in an Era of Epistemic Instability* (2020). He is editor-in-chief of the open-access Dutch-Belgian peer-reviewed journal *Tijdschrift Sociologie*, and member of the European network of scholars working on conspiracy theories, COST COMPACT.

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Stephan Lewandowsky is a cognitive scientist with an interest in how people update their memories if information they believe turn out to be false. This has led him to examine the persistence of misinformation and spread of "fake news" in society, including conspiracy theories. He has become particularly interested in the variables that determine whether or not people accept scientific evidence, for example surrounding vaccinations or climate science. Because his research speaks to important contemporary events, he also contributes to public debate through opinion pieces in the media and public engagement.

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Introduction: moving beyond debunking to better deal with conspiratorial movements, misinformation and post-truth

Elżbieta Drążkiewicz and Jaron Harambam

ABSTRACT

Many people use conspiracy theories to make sense of the changing world and its complexifying social structures (e.g. international financial systems, global bodies of governance), tragic events (e.g. terrorist attacks, man-made catastrophes, or pandemics), or socio-political and economic issues (e.g. security, migration, resources distribution, health care). This widespread popularity of conspiracy theories has spurred much interest from the academic community. There often is an expectation that it is the responsibility of researchers to engage with conspiracy beliefs by debunking them. However, like everything that relates to conspiracy theories, even the subject of debunking is not straightforward. An answer to the question whether researchers should debunk conspiracy theories varies across disciplines and schools, and is closely related to specific ethical codes of conduct, research methodologies, and disciplinary approaches to conspiracy theories. While scholars who study this cultural phenomenon from a non-normative and epistemologically neutral position might wish to refrain from debunking conspiracy theories, others who see conspiracy theories as the irrational, overly suspicious, and even dangerous ideas of people who don't quite understand what is "really" going on, might lean toward the debunking stand. In this book we explore different approaches what academics should do about conspiracy theories.

The last years have made it abundantly clear how conspiracy theories moved from the margins of public discourse toward the centers. It is almost a cliché to point to the former U.S. president Donald Trump as the quintessential symbol of the popularity of conspiracy theories. It is hard to ignore how he both performs various forms of conspiracy theorizing himself and represents a wide variety of people who distrust mainstream epistemic authorities and reject their knowledge as fake, fabricated, or biased. Trump cultivated a ferocious culture of distrust among his followers, allegedly even leading to the insurrection of the U.S. Senate in January 2021.

But conspiracy theories go beyond Trump and national populists movements led by Salvini, Farage, Orban, or Le Pen. They infiltrate international politics, for instance by informing discussions about the collusion of Russia in the internal politics of numerous countries, or about the role of China in the global political economy, in supranational organizations such as the WHO, and in various military conflicts around the world. Conspiracy theories surround dubious events such as 2010 crash of the Polish Air Force in Smoleńsk (Russia), the 2019 suicide of the influential American financier and sex offender Jeffrey Epstein's, or the burning of Notre Dame cathedral in Paris. They are related to gender-, racial-, and religion-based violence and informed gruesome mass-shootings in the United States and terrorist attacks across the world.

Conspiracy theories increasingly compete with scientific knowledge by offering alternative explanations to complex bio-medical and natural phenomena (such as climate change, or pandemics). They influence the perception of western medicine, public health authorities, and pharmaceutical industries. The popularity of conspiracy theories questioning the safety and necessity of mass-immunization campaigns is said to contribute to measles outbreaks in Europe and North America, and informed much of the resistance against the vaccination campaigns against COVID-19 (Pertwee, et al., 2022; Pummerer, et al., 2022). But many more aspects of the COVID-19 pandemic became a subject of conspiratorial theorizing (Butter & Knight, 2023; Harambam, 2023; Sobo & Drążkiewicz, 2021). Across the world, many people expressed distrust toward the constantly evolving 'official' knowledge regarding the Sars-Cov-2 virus and had serious impacts on people's attitudes toward the mitigation policies that were enforced (Birchall & Knight, 2022; Harambam, 2020b; Zarocostas, 2020). In 2022, conspiracy theories concerning pandemic gave place to those regarding Russian invasion of Ukraine. The end of 2023 has been marked by the rise of narratives concerning Israel and Palestine. Such examples of the proliferation of misinformation, fake news, and conspiracy theories are endless. Yet importantly, they are an object of increased concern for many in our governments, making efforts to address the 'problem of conspiracy theories'. The academic community researching these topics is called upon to assist in those efforts, as many national and EU agencies fund academic research to combat conspiracy theories. EU officials are also calling on social media platforms to more effectively regulate these contentious contents through such initiatives as Digital Services Act or East StratCom Task Force.

Conspiracy theories are clearly a serious issue, but as Sobo (2019) reminds us, they also have a ludic side: a playful online initiative to raid Area 51 exhilarated in the summer of 2019 millions of people worldwide. They offer excitement and mystery in popular culture (Birchall, 2006) and provide endless material for fiction writers and filmmakers to the enjoyment of the masses (Boltanski, 2014). Significantly, these more playful aspects of conspiracy theories have received far less (academic) attention, while they could be seen as important drivers of their popularity (Fenster, 2008).

To make things more complex, conspiracy theories are often hard to pin down as an empirical category: what forms of thought or practice do they refer to? And what do we actually mean when we speak about them? Essentialist definitions, such as explanations of reality that involve the covert and nefarious actions of a secret cabal, are often offered (Douglas et al., 2019). However, these do not always work in practice, which leads several scholars to define conspiracy theories in relational terms, as sets of ideas that challenge mainstream knowledge and officially sanctioned truths (Drążkiewicz & Rabo, 2021;

Harambam, 2020a; Pelkmans & Machold, 2011). This situated understanding of the concept itself highlights the central role of power in the definition of what we regard as conspiracy theories, and in the usage of the term as a political instrument of exclusion (Bratich, 2008; Husting & Orr, 2007)

In popular perception (at least in the Western world) conspiracy theories are often seen as irrational and dangerous abnormalities, a paranoid distraction from the 'proper' order of reason. Yet as most contemporary studies shows, rather than being aberration, conspiracy theories are part and parcel of everyday social, cultural, and political realities (Uscinski, 2018). Importantly, conspiracy theories are not related to specific groups of people or cultures: people from all ranks of society deploy them for many different reasons and purposes (West & Sanders, 2003). Some engage with conspiracy theories to make sense of a complex and changing world, others to contest dominant authorities, and some just for entertainment or playful mind-stretching (Harambam, 2020a). People in power endorse conspiracy theories to deflect critical attention, discount opponent's claims, bolster their authority and popularity, and deploy *alternative facts* to their own political ends (Mathur, 2015; Rosenblum & Muirhead, 2020). In spite of earlier assertions that conspiratorial thinking is a prerogative of extremist niche groups and a telltale sign of paranoia, it becomes more evident that everybody can potentially engage with conspiracy theories, and not for pathological reasons alone. Staying sensitive to these varied engagements with conspiracy theories is thus of prime importance.

Controversy in a Burgeoning Research Field

This widespread popularity of conspiracy theories has generated much interest from the academic community. Given the complex and multifaceted characteristics of conspiracy theories, much time and effort is spent on the analysis of their various manifestations and on understanding the underlying mechanisms, meanings, and reasons of this pervasive distrust in officially sanctioned knowledge (Butter & Knight, 2020). Over the last decade, a burgeoning scientific field emerged across different academic disciplines. Today there is a broad range of scholars working on the subject: from cultural and literary studies (Butter, 2014; Knight, 2002), political science (Bergmann, 2018; Uscinski & Parent, 2014), semiotics (Massimo et al., 2020), psychology (Bilewicz et al., 2015; Douglas et al., 2019), philosophy (Coady, 2019; Dentith, 2014), anthropology (Carey, 2017; Marcus, 1999; Rabo, 2020; Sobo & Drążkiewicz, 2021), religion studies (Dyrendal et al., 2019), and history (Coward & Swann, 2017). In Europe, the growth of this academic field is spurred by a national and EU funding bodies who in the last few years presented particular interest not only in conspiracy theories, but also other related topics: populist movements, misinformation, mistrust in science and expert knowledge. One of the largest initiatives of that kind has been COST Action network: Comparative Analysis of Conspiracy Theories (COMPACT), where the idea for this book was born.

There is thus strong agreement in the academic community and beyond that conspiracy theories deserve and require careful attention, but how scholars should position themselves toward this specific research subject varies greatly. Because conspiracy theories are often regarded to cause or contribute to a variety of societal problems — ranging from public health issues, political conflicts, societal polarization, extremism, and inter-group violence — there is a widely experienced expectation, from inside and outside

of academia, that scholars should position themselves *against* conspiracy theories, pre-dominantly by debunking them or through educational initiatives such as those aimed at increasing media and information literacy (Haider & Sundin, 2022). This view is largely based on the assumption that beliefs in conspiracy theories result from ignorance, misin-formation, or lack of education. Since academics are experts in their fields and have better understanding of complex issues, so goes the argument, they should take the responsi-bility to convince the public that conspiracy theories are false, and often dangerous. While debunking conspiracy theories may then seem the most logical thing to do, and many efforts have been made to explore how this is best done (Kreko, 2020; Lewandowsky et al., 2020), not all researchers agree. Do academics actually need to position themselves nor-matively toward conspiracy theories, and if so, would debunking them be the best way to do so? Can all theories be debunked? While theories concerning medical issues seem to be more easily verified by health professionals, those concerning political events are often much harder to debunk, even by political scientists who might lack an access to all informa-tion. Thus, like everything that relates to conspiracy theories, the question of what should we do about conspiracy theories, is contested as well.

Positions toward this issue vary across disciplines and schools, and are closely related to specific disciplinary ethical codes of conduct, research methodologies, and theoretical approaches. While scholars who study this cultural phenomenon from an epistemologically neutral position might wish to refrain from taking normative stands on conspiracy theories (Harambam, 2020b; Lepselter, 2016), others who see conspiracy theories as the irrational, overly suspicious, and even dangerous ideas of people who don't quite understand what is 'really' going on, might lean toward the debunking stand (Byford, 2011; Cassam, 2019; Rosenblum & Muirhead, 2020). Yet another group of scholars is willing to consider con-spiracy theories as potentially valuable approximations of truth that deserve serious scru-tiny (Bovensiepen, 2016; deHaven-Smith, 2013; Dentith, 2018). Each approach embodies more or less accepting attitudes toward conspiratorial theorizing and smaller or greater empathy toward groups and individuals engaging with conspiracy theories.

Academic attitudes toward conspiracy theories depend on our positionality as scholars as well. Academics are not neutral players, but we have professional, moral, and polit-ical interests in this debate. As scholars, we construct (scientific) explanations of societal developments and world events, some might say just like conspiracy theorists. The alter-native theories presented by those believing in conspiracy theories thus compete with our carefully crafted explanations of reality (Harambam & Aupers, 2015; Latour, 2004). This inadvertently makes our own academic position not as neutral as one may say since our epistemic authority and claims to truth are exactly at stake here. We are also citizens, educators, and some of us even social activists. Consequently, our approach to conspiracy theories is influenced by the concerns we have, and the desire we may have to provide solutions to pressing societal issues (Drążkiewicz, 2022). Our personal and professional identities can therefore not be isolated from the approach we take on this issue.

The local socio-political contexts in which conspiracy theories appear and in which scholars operate matter just as well. Academics in western Europe face rather different challenges then those in eastern Europe where governing elites curtail public and scientific debates by propagating conspiracy theories to advance their own political agendas. But this image of a clear East–West divide becomes complicated when nationalist extremism and conspiratorial attacks on mainstream media, political, and juridical institutions are

on the rise in western Europe and the United States as well. So in what way does locality exactly make a difference? And what about the specificities of the conspiracy theories under study, is that relevant too? The stakes and consequences of flat earth or UFO conspiracy theories may, after all, be significantly different to those in the studies concerning health or environmental theories. Do we need different approaches to different conspiracy theory topics? Clearly, the question of how we, as scholars, should approach conspiracy theories is simply not that easy to answer, and appears as a divisive and highly contested issue in the flourishing field of conspiracy theory studies. Yet remarkably, there has been rather limited explicit academic attention to this thorny and complex issue.

What position to take?

That is why we want to open up the discussion with this book in order to move beyond assumptions and implicit expectations. Should we convince our fellow citizens that conspiracy theories are erroneous and even dangerous beliefs, and should we actively work toward diminishing their popularity? Or instead, should we, as scholars, stay 'neutral' in the battles for epistemic authority and simply focus on descriptions of conspiracy theories, their analysis and interpretation? Perhaps it is even our responsibility to test conspiracy theories and investigate real conspiracies with much more determination? Since conspiracy theories may have real world consequences, this is not a mere academic matter. Journalists, policy makers, and civil society groups are frequently asking: are conspiracy theories dangerous? If they are, what should we do about their popularity? Where do we draw the line between 'critical thinking' and conspiracy theories, between freedom of speech and spreading false and dangerous information? How should we engage with people who propagate conspiracy theories and misinformation? What solutions can academics offer? Indeed, is there a special role for academics in today's world, and how should that look like?

   This book has therefore broader relevance than the study of conspiracy theories alone: the objectivity and impartiality of scientists, once envisioned to be a crucial and defining characteristic of modern science (Merton & Storer, 1973), is increasingly questioned (Brown, 2009). This is obviously nothing new: in the 1960s and 70s the sciences came under ideological and political attack in Western countries by various leftists groups, students included, as it was considered conservative, undemocratic, and preserving the status quo (Roszak, 1995). Nowadays, the attacks mostly come from the right leaning movements who consider the social sciences to be serving a leftist agenda, and to be part of a broader movement called Cultural Marxism that supposedly sets out to undermine and destroy Western culture and values (Jamin, 2014). Importantly, many of those attacks are targeted specifically toward disciplines such as gender studies, or more recently, especially in Eastern and Central Europe, anthropology. However, a closer look reveals that the many different *truth wars* being fought out today defy an all-too-easy left-right distinction (Lagalisse, 2019): from 'green' energy to vaccination debates, established knowledge is being challenged by a wide variety of actors and for a diverse set of socio-economic and political reasons.

   In many of these cases, academic scholars are caught in the fray: while they wish to study such conflicts, they often find themselves positioned in the middle of the warzone, forced to take sides and often attacked by various assailants, regardless of the position they take (Drążkiewicz, 2023). Post-truth hits science in the heart of its enterprise. We can therefore not stay insensitive to these societal pressures challenging the authority and boundaries

of science (Gieryn, 1999), but we need to engage with those in order to better situate and defend our own knowledge production and the social sciences in general. This is not to be seen as a plea for reactionary politics, but as an opportunity to discuss and explain the value of (social and humanistic) scientific knowledge, and what role representatives of those disciplines can, or should play in society.

Contents of the book

Given the complexity of the topic, and the various stands possible, it was important for us to bring a diversity of perspectives and approaches together in this book. There is no easy answer to this topic, and there are more options conceivable beyond our initial, and perhaps too simplistic, dichotomy of 'debunking or not'. How to position ourselves as scholars amidst these truth contestations is a delicate and intricate matter, especially as it involves societal conflicts over resources and (epistemic) power, which are closely related again to ideology and identity. To gain more nuanced approaches on this issue, we organized a one-day workshop in June 2019 at Maynooth University (Ireland) fully dedicated to this debate. We brought together researchers from a variety of disciplines to explore potential answers to the question what should we do with conspiracy theories? We asked contributors to pay specific attention to a number of key questions:

- How is your approach to debunking shaped by your discipline?
- Does the specific research topic – conspiracy theory – matter for the position you take? And does it make a difference whether you study UFO encounters or climate change deniers?
- How does your own positionality influence your position on this topic?
- Does the (political, economic, social, historical, cultural) context in which conspiracy theories operate matter?
- If you argue that conspiracy theories should be debunked, how is this best done and how should we deal with the people adhering to conspiracy theories?
- If you have a different stand, what strategies can you propose for engaging with conspiratorial thinking instead?

Following the workshop, and a broader call-for-papers, we ultimately selected the six most compelling takes on what to do about conspiracy theories. Our aim was to bring a variety of approaches to the foreground, and we have selected a good mix of disciplines (psychology, anthropology, sociology, and media studies), academic seniority (from young scholars to full professors), and countries (United States, Ireland, United Kingdom, The Netherlands, Sweden, Greece). The papers are in deep conversation with each other and provide multiple alternative takes on the issue of what we should with conspiracy theories. Together as a whole this book embodies several bold and compelling provocations to dealing differently with conspiracy theories.

Our book opens with an article by Stephan Lewandowsky, a cognitive psychologist who is deeply concerned by, what he calls, the 'shock and chaos' disinformation campaigns he identifies in contemporary politics in the West. Whereas before, conspiracy theories may have been verifiable, today they are merely meant to 'flood the zone' and destabilize any firm notion of truth, even of the possibility of truth. Because such radicalized post-modern arguments embedded in many contemporary conspiracy theories have considerable adverse effects on democratic societies, including distrusts of experts and threats to social

cohesion, he believes scholars have a responsibility to combat those. In order to effect-ively do so, Lewandowksy argues in 'Conspiracist cognition: chaos, convenience, and cause for concern' that academics should understand how they function beyond mere true held beliefs. Inspired by the philosophy of Hannah Arendt, he rejects a radical form of construct-ivism and demonstrates empirically that conspiracy theories do not necessarily reflect true attitudes, but that people may deploy conspiracy theories and misinformation as rhetorical tools to express and advance their political goals. Based on these observations, Lewandowsky's concludes that not all competing epistemic claims should be taken ser-iously, and that scholars can learn from extremist deradicalization research to engage with conspiracy theorists with vigilance.

While the next article by communication science scholar Eileen Culloty agrees that con-spiracy theories could pose threats to the democratic public sphere by misleading the public, she argues that they might also be necessary and informative forms of information that can actually contribute to public debate. The difficult challenge is, as she argues in 'Evaluating conspiracy claims as public sphere communication', that ascertaining the epi-stemic value of conspiracy theories is often difficult and open to various forms of manipu-lation. Using examples of conspiracy claims found in mainstream and alternative media coverage of the Syrian conflict, Culloty shows that even skilled investigative journalists and political scientists have difficulty to tell what is really going on. When new evidence arrives, some experts may advance certain conspiratorial theories, while the credibility of these sources is disputed by other actors. In a war context, conspiracy theories can be particularly dangerous as they easily fuel concrete military and political actions, yet Culloty argues that staying open to their potential truthfulness by debating and investigating them is crucial for a functioning public sphere. Provided, she concludes, that there are impartial investi-gative actors and beneficial conditions in the media environment to support such robust interrogations of conspiracy claims.

Such (geo)political conspiracy theories emerging in evolving war contexts clearly pre-sent extreme epistemic challenges for scholars, but what about cases when the truth seems easier to asses, when the science has already settled? Does the (presumed) ability to grasp the veracity of conspiratorial claims make a difference for the position scholars take in these debates? Two contributions to this book concerning medical conspiracy theories shine important light on such cases. In the first article, medical anthropologist Elisa J. Sobo uses her research and experiences with Southern Californian parents who vaccinate select-ively and those using cannabis to treat intractable epilepsy to argue for an approach that acknowledges people's concerns and critiques of powerful pharmaceutical companies, while challenging them on their ideas when they overextend into clear 'false beliefs'. In 'Conspiracy theories in political-economic context: lessons from parents with vaccine and other pharmaceutical concerns', Sobo argues that unorthodox views with empirically veri-fiable underpinnings always deserve critical scholarly attention, but when these ideas go against people's own interests and could engender serious harms (even to themselves), scholars should intervene with the cultural sensitivity an anthropologist has gained, but nevertheless pointing to their epistemic flaws. She concludes that if a community's real concerns are taken seriously, discrete scientifically untethered claims may be more easily relinquished.

These last points are also echoed in the paper by anthropologist Elżbieta Drążkiewicz. In 'Taking vaccine regret and hesitancy seriously. The role of truth, conspiracy theories, gender

relations and trust in the HPV immunisation programmes in Ireland', she examines how conflicts over HPV vaccinations in Ireland evolved over time and contextualizes these trajectories in the broader history of gender inequality in the country. Drążkiewicz recognizes the serious implications that conspiracy theories might have for the public good. Yet unlike most studies on vaccine hesitancy, she objects to reduce this to an issue of knowledge alone. Rather than seeing medical conspiracy theorizing as a problem of singular groups (patients, parents) who resist or reject vaccinations, she examines it as a relational issue and situates it in a space of conflict that connects and disconnects different stakeholders: medical professionals, families, health administrators. Consequently, she argues, potential interventions should involve not just one side (conspiracy believers) but all stakeholders involved: health administrators, medical staff, and pharmacological companies. As she demonstrates truth, 'facts about vaccines' is not all that shapes people attitudes toward vaccines. Equally important are relations with healthcare professionals, which if broken can turn people toward conspiracy theories.

The next paper in our volume, 'Towards an ecological ethics of academic responsibility: debunking power structures through relationality in Greek environmentalism', offers an interesting shift of perspective. Moving beyond simple oppositions between climate activists and climate change denialists, Elvira Wepfer's work with Greek environmentalists shows how their engagements with conspiracy theories are actually productive in the sense of forming new relationships and societal structures that challenge hegemonic power structures. Based on her ethnographic fieldwork, she identifies four qualities of engagement with conspiracy theories that all work toward transforming conspiratorial critique into a responsibility for our environment. She argues therefore that whether scholars have the responsibility to debunk conspiracy theories depends on the social processes these theories set in motion. Her provocative argument raises the questions whether we should be more forgiving toward conspiracy theories when they support social movements that work toward the greater good. In order to regain lost authority, Wepfer concludes with a call for academic scholars to practice a similar ecological ethics of responsibility expressed through place-based engagement, just like her Greek regenerative environmentalists.

Drawing on years of ethnographic research in the Dutch conspiracy milieu, sociologist Jaron Harambam warns in the last paper of this book against the prevalent societal tendency in the so-called post-truth era to debunk conspiracy theories by insisting on the truthfulness of objective facts. In 'Against modernist illusions: why we need more democratic and constructivist alternatives to debunking conspiracy theories', he counters the idea that elite groups delineating truth can restore the societal lack of trust in our epistemic authorities. He explains why academics should therefore not debunk conspiracy theories—it is not possible, not professional, and not productive—but instead should facilitate an epistemologically stronger and sociologically more effective alternative. Building from research and experiments with epistemic democracy in the field of science and technology studies, he calls for 'deliberative citizen knowledge platforms', instead of elite/experts groups alone, to assess the quality of information in the public domain. He hopes that such societally representative bodies will enjoy more legitimacy and epistemic diversity to better deal with conspiracy theories and the broader societal conflicts over truth and knowledge they represent.

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Conspiracist cognition: chaos, convenience, and cause for concern

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ABSTRACT
There has been much concern with the abundance of misinformation in public discourse. Although misinformation has always played a role in political debate, its character has shifted from support for a specific position to a 'shock and chaos' stream of misinformation and conspiracy theories. Exposure to conspiracy theories can have considerable adverse impact on society. I argue that scholars therefore have a responsibility to combat conspiracy theories and misinformation generally. Exercising this responsibility requires an understanding of the varied rhetorical roles of conspiracy theories. Here I focus on instances in which people reject unequivocal scientific evidence and invoke conspiracy theories, or radical anti-institutional positions, based on ideological imperatives. I argue that those positions do not always reflect true attitudes. Instead, people may deploy extreme rhetoric as a pragmatic tool of political expression. I investigate this possibility by focusing on the role of conspiracy theories in the rejection of science. Conspiracist cognition and rhetoric violate the epistemic standards that underpin science. Ironically, this violation of epistemic standards renders conspiracy theories useful as a rationally deployed tool that serves political purposes. I present a study that confirms that conspiracy theories can be deployed to support worldview-motivated denial of science. I provide suggestions how scholars can debunk or defang conspiratorial rhetoric.

- In an ever-changing, incomprehensible, world the masses had reached the point where they would, at the same time, believe everything and nothing, think that everything is possible and that nothing was true. (Hannah Arendt, *The origins of totalitarianism*, 1951).
- This was the largest audience to ever witness an inauguration, period … (Trump Press Secretary Sean Spicer, 21 January 2017).
- Just remember, what you're seeing and what you're reading is not what's happening. (U.S. President Donald Trump, 24 July 2018)

Democracy has an uneasy relationship with the notion of truth (Rosenfeld, 2018). On the one hand, democracy is based on the idea that truth matters. Policy making is unlikely to succeed if it ignores relevant facts, and voters in liberal democracies overwhelmingly want their political representatives to be honest (Allen et al., 2018). On the other hand, in a democracy no one has an exclusive right to determine what the truth is. Instead,

democratic truth-finding is messy and highly contested, to the extent that the very idea of fact checking has been called into question (Uscinski, 2015). Similarly, Coleman (2018) described the notion of objective political truth as a 'conceit,' calling instead for 'openness to eclectic epistemic claims' (p. 164) and the emergence of political truth 'from a sensibility towards the complexities and disparities of subjective experience' (p. 169). This approach to democratic truth-finding meshes well with the widespread view in the social sciences that knowledge, including scientific knowledge, is socially *constructed* (e.g., Berger & Luckmann, 1966).

The inherent messiness of democratic truth-seeking has always provided politicians with the space for spin, misdirection, and outright dishonesty. For example, there is evidence to suggest that the U.K. Government under Tony Blair and the U.S. administration under George W. Bush intentionally deceived the public about the evidence for the presence of Weapons of Mass Destruction (WMD) in Iraq in the lead-up to the invasion of 2003 (Herring & Robinson, 2014b, 2014a; Kaufmann, 2004).

Somewhat curiously, however, the WMD deception initially stimulated relatively little public and intellectual concern about the broader role of truth and deception in a democracy. Concern about the role of truth in politics and the state of our democracies moved centre stage only 13 years later, in 2016, as a result of two events: The U.K.'s vote to leave the European Union and the election of Donald Trump to the U.S. presidency. Trump's election caused widespread shock around the world, in part because of his record of inaccuracy during the campaign: Independent fact checkers *Politifact* identified 70% of his statements as 'mostly false', 'false' or 'pants on fire' lies. For the opposing candidate, Hillary Clinton, just over 25% of statements fell into these categories.

Closely entwined with Donald Trump's apparent inaccuracy – the *Washington Post* tallied more than 30,500 misleading or false statements during his presidency – is the supporting role of misinformation in his election. There is evidence that 'fake news', fabricated stories that are presented as news, influenced the popularity of many issues in the lead-up to the election (Vargo et al., 2018).

'Fake News' can take many forms, but they frequently involve conspiracy theories. One troubling theory involved rumours that the Democratic party was running a child sex trafficking ring out of the basement of a pizzeria in Washington D.C. This conspiracy theory surfaced in the fall of 2016 and went viral on Facebook (Kafka, 2016). The claim was accepted as being possibly true by nearly one third of Americans and nearly one half of Trump voters (Kafka, 2016). It ultimately prompted one individual to enter the pizzeria with a semi-automatic assault rifle and fire shots inside the restaurant. Political leaders are not immune to spreading conspiracy theories: For example, Donald Trump has repeatedly tweeted conspiratorial content relating to climate change, from claiming that 'scientists have manipulated data on global warming' to proposing that the 'concept of global warming was created by and for the Chinese in order to make U.S. manufacturing non-competitive' (Matthews, 2017). Trump also engages in conspiratorial discourse in other domains (Lewandowsky et al., 2018).

Neither conspiracy theories nor false media reports are new phenomena. So what explains the sudden concern with misinformation from 2016 onward, whereas an organised deception that led to the invasion of a country failed to arouse similar persistent concern in 2003? One possible answer was provided by McCright and Dunlap (2017), who argued that the last decade has witnessed a transition from 'systemic lies' to a 'shock and

chaos' regime of disinformation. Systemic lies are carefully curated attempts to convince the public of a specific falsehood, such as the existence of WMD in Iraq or the absence of climate change. Although deceptive, systemic lies at least tacitly accept an underlying reality – neither George W. Bush nor Tony Blair denied the existence of Iraq and they never made claims that were instantly and readily disprovable. Today's shock and chaos regime, by contrast, is characterised by epistemic insouciance and a blizzard of erratic, often contradictory, messages. A striking example is the Russian government's response to the downing of Malaysian Airlines flight MH17 in 2014 by a Russian-made Buk missile. Sputnik, RT (Russia Today) and other pro-Kremlin websites first denied it was a Russian missile. Then they said the missile was fired by Ukrainians. Then they said the pilot had deliberately crashed the airliner, and the plane had been full of dead bodies before impact. Finally they said it was all part of a conspiracy against Russia (Lewandowsky & Lynam, 2018).

I consider this shift, from tacit realism to epistemic insouciance, or 'a casual lack of concern about the facts or an indifference to whether their political beliefs and statements have any basis in reality' (Cassam, 2018, p. 2), to be the primary driver of current concern with 'fake news'. I have discussed the reasons for this shift elsewhere (Lewandowsky, 2020; Lewandowsky et al., 2017). Here I analyse the circumstances and consequences of this shift to develop four cascading arguments: (1) I argue that scholars have a particular responsibility in addressing the fallout from 'shock and chaos' disinformation because it appears to legitimise itself by an – unwarranted – appeal to the epistemic and social constructivism that pervades the social sciences. (2) Shock and chaos disinformation and conspiracy theories can be linked to the finding that segments of the public are prepared to take increasingly radical and anti-institutional positions. It is unclear, however, whether this extremism and other fallouts of shock and chaos reflect actual core attitudes or whether conspiracy theories are *sometimes* used to signal a political stance rather than because they are believed to be true. (3) To examine the potential signalling function of conspiracy theories I exploit the fact they are, by their very nature, antithetical to science and democracy. This is because conspiracist cognition and rhetoric violate conventional epistemic standards that underpin science and evidence-based deliberation. Accordingly, conspiracism is typically involved in all forms of science denial. (4) Ironically, it is this violation of epistemic standards that renders conspiracy theories useful as a rational rhetorical tool. I then present a study that draws these strands together. I conclude by outlining how scholars can respond to conspiratorial discourse, with a particular emphasis on differentiating between situations in which it reflects a cognitive disposition and other contexts in which conspiracy theories are deployed as a rhetorical tool.

From academic constructivism to the hyperconstructivism of 'shock and chaos'

There is widespread agreement in the social science literature that much of knowledge is socially *constructed*, and that it is the objective of the social sciences to understand this constructive process (e.g., Berger & Luckmann, 1966). A commitment to constructivist epistemology became entrenched in American higher education, and science education in particular, between the 1960s and 1980s, arguably propelled by seismic societal shifts –

such as the civil rights movement – that emphasised cultural pluralism (Cobern & Loving, 2008). A corollary of constructivism is relativism, because 'in constructivism, the classical notion of truth is replaced by the notion of viability. This notion implies that there may exist alternative constructions, none of which can ever claim truth for itself' (Roth & Roychoudhury, 1994, p. 7). It follows that 'different social formations may well construct their realities quite differently' (Miller, 2019, p. 444).

Contemporary purveyors of shock and chaos disinformation frequently resort to that relativist defence when their claims are challenged. For example, Trump's counsellor Kellyanne Conway famously declared that she was in possession of 'alternative facts' when being challenged on Trump administration claims that Donald Trump's inauguration crowd was the largest ever (it was not). Likewise, Trump attorney Rudolph W. Giuliani proclaimed on national TV that 'truth isn't truth' when seeking to explain why the president had delayed an interview with special counsel Robert Mueller. In the U.K., rightwing personality Katie Hopkins declared that 'Fact is an antiquated expression … There is no such thing as fact any more.' Also in the U.K., populist leader Nigel Farage claimed that 'One man's fact is another man's lie.' McVittie and McKinlay (2018) coined the phrase 'ontological gerrymandering' to describe those attempts to escape accountability by invoking an extreme constructivist and relativist notion of truth. The apparent onto-logical shift from tacit realism to an unbounded constructivism by purveyors of shock and chaos has been noted repeatedly (e.g., McCright & Dunlap, 2017; Waisbord, 2018).

Some scholars have suggested that academic constructivism ploughed the fields on which shock and chaos disinformation, and its enabling ontology of truth, found a fertile ground (e.g., Dennett, 2000). In a 2017 *Guardian* interview, Dennett was particularly blunt: 'I think what the postmodernists did was truly evil. They are responsible for the intellectual fad that made it respectable to be cynical about truth and facts' (https://www.theguardian.com/science/2017/feb/12/daniel-dennett-politics-bacteria-bach-back-dawkins-trump-interview). Aupers (2012) also highlighted the link between postmodernism and the delegitimization of objective science in the public's eye.

Shock and chaos and 'post-truth' as the 'Rosemary's Baby' of the social sciences? The language of academic constructivism undoubtedly bears resemblance to shock-and-chaos ontological gerrymandering. There are, however, important differences. The recognition that scientific facts are socially constructed, and often contested, does not entail a licence to invent facts to one's own liking. As Waisbord (2018) put it: 'Sure, we should approach facts and expertise critically, contest self-appointed arbiters of truth, believe truth is misty and manifold, conceive truth-telling as a complex process, be sensitive to multiple perspectives, and doubt any confident claims to truth. Such sensibility, however, is completely different from the conviction that facts and rigour do not matter, that all truth-telling is wrong, and that subjective beliefs are sufficient proof of reality' (p. 21). Or in Miller (2019)'s succinct terms: 'relativism does not mean that … murder is just as good as chocolate' (p. 442).

Accordingly, even scholars who argue against the existence of objective political truths (Coleman, 2018) refer to Trump's inauguration crowd claim as 'manifestly incorrect' (p. 158). Nonetheless, the deployment of relativist language by 'post-truth' defenders has caused considerable discomfort. Some prominent constructivist scholars, such as Bruno Latour, have recognised that ' … dangerous extremists are using the very same argument of social construction to destroy hard-won evidence … ' (Latour, 2004, p. 227). Latour

(2004) suggests that this unintended consequence of constructivism was facilitated by 'the mistake I made, … to believe that there was no efficient way to criticize matters of fact except by moving away from them' (p. 231). Latour (2018) has therefore called for the return of some of the authority of scientific expertise. Similarly, Angermuller (2018) has called for a 'strong' programme of discourse studies that 'recognizes that not all knowledges are equal. Some knowledges have more truth value than others' (p. 2).

I suggest that the proper response to Latour's concern and Dennett's accusation is for social scientists to recognise their responsibility in combating shock and chaos disinformation. Recognising this responsibility does not require an acceptance of blame or of a causal role of constructivism in creating the 'post-truth' world. On the contrary, constructivism may be one tool to help us understand the origins of shock and chaos disinformation (Fischer, 2019). Another tool is empirical research, and the study reported below illustrates how behavioural data can assist social scientists in exercising their responsibility to combat shock and chaos disinformation.

Shock and chaos and its fallout

The link between shock and chaos disinformation and tyranny was recognised long ago. As Hannah Arendt put it in 1967: 'the result of a consistent and total substitution of lies for factual truth is not that the lies will now be accepted as truth, and the truth be defamed as lies, but that the sense by which we take our bearings in the real world – and the category of truth vs. falsehood is among the mental means to this end – is being destroyed' (Arendt, 1967). This disorientation may have two mutually reinforcing consequences: First, if people no longer find anything believable they may end up believing – and saying – anything. Second, if people believe anything or nothing, they may end up finding nothing worthy of preservation. Both consequences are empirically discernible in contemporary American society.

Evidence that people will believe, or say that they believe, demonstrable falsehoods was provided by Schaffner and Luks (2018). In their study, participants were shown two side-by-side photographs of the inaugurations of Barack Obama in 2009 and Donald Trump in 2017 and were asked to pick the photo with more people. Far more people attended Obama's inauguration than Trump's, with some estimates pegging Obama's crowd at 2–3 times the size of Trump's. Schaffner and Luks (2018)'s study was conducted immediately after Trump's press secretary, Sean Spicer, had claimed that Trump's inauguration crowd was the largest ever, thereby turning attendance into a political issue. The study revealed that among non-voters and Clinton voters, 3% and 2% of respondents, respectively, chose the incorrect picture (i.e., the picture from Trump's inauguration with far fewer people). Among Trump voters, this proportion was 15%. The results identify a clear instance in which people's partisan identity overrode unambiguous perceptual evidence.

The results of Schaffner and Luks (2018) mesh well with public opinion data. Several polls during the Trump presidency have shown that Republicans considered Donald Trump to be truthful or honest, notwithstanding fact-checkers' data to the contrary. For example, an NBC poll of April 2018 revealed that 76% of Republicans thought that President Trump tells the truth 'all or most of the time' (compared to only 5% of Democrats).

The idea that the very notion of evidence and truth itself may be compromised by shock and chaos is supported by public opinion data, such as a Pew poll (July 2017) that showed that a majority of Republicans, by a 58% to 36% margin, considered colleges and universities to have a *negative* effect on the way things are going in the U.S. Among Democrats, opinion was split in reverse, with a 72% (positive) to 19% (negative) margin.

There is also evidence that some people no longer consider democratic institutions worth preserving. Petersen et al. (2018) developed a 'need-for-chaos' scale that probes people's willingness to 'burn down' all democratic institutions in order to 'start over'. The idea of a national 'rebirth' after complete destruction – thereby eliminating perceived decadence and decay – is known as palingenesis and is a pervasive element of fascist ideology (e.g., Colasacco, 2018). Echoes of palingenesis can be found in Donald Trump's slogan 'Make America Great Again'. Petersen et al. (2018) found that up to 40% of Americans either endorsed or did not object to the idea that democratic institutions should be torn down or burned to the ground. The events of 6 January 2021, when an armed mob of Trump supporters, incited by the president and his allies, stormed the U.S. Capitol provide a vivid confirmation of how willing some Americans are to 'burn down' institutions.

The insidious fallout from shock and chaos disinformation is particularly pro-nounced when the material is packaged as a conspiracy theory. Conspiracy theories flourish under conditions of ontological insecurity (Aupers, 2012) and in times of societal crisis (van Prooijen & Douglas, 2017). The centrality of conspiracy theorising in shock and chaos disinformation is therefore unsurprising. Yablokov (2015) has argued that the Russian government is deliberately using conspiratorial content in its main news channel, RT (Russia Today), as a political instrument to legitimise its own policies while delegitimizing American positions. In the west, far-right disin-formation is also tightly coupled with conspiracy theories that target Islam or are anti-Semitic (Bennett & Livingston, 2018).

There is now considerable evidence that the mere exposure to conspiratorial material adversely affects people's reasoning and attitudes (Jolley & Douglas, 2013; Jolley et al., 2019). To illustrate, exposure to conspiracy theories about immigrants to Britain from the European Union has been shown to exacerbate prejudice towards this group (Jolley et al., 2019). And when people are exposed to anti-Semitic conspiracy theories, prejudice increases not just against Jewish people but towards other outgroups as well (Jolley et al., 2019). Conspiracy theories can also give rise to vandalism and violence: In early 2020, the conspiracy theory that linked 5 G broadband to COVID-19, the disease caused by a novel coronavirus, resulted in vandalism of telecommunications installations in the U. K. and elsewhere (Jolley & Paterson, 2020). And the violent attack on the U.S. Capitol in early 2021 was inspired by the conspiracy theory that the 2020 U.S. presidential election had been 'stolen' from Donald Trump by agents of the 'Deep State', a position held by the majority of Republicans (Pennycook & Rand, 2021).

I interpret the results just reviewed as revealing the coupling between shock and chaos disinformation and adverse societal outcomes. There is, however, another possibility. This alternative view holds that people sometimes respond not on the basis of true beliefs but in order to signal support for a political viewpoint. For example, perhaps some of the 51% of Republican respondents who told pollsters in 2015 that they thought President Obama had been born abroad (Barr, 2015) did not believe this to be true, but used that response

to express dissatisfaction with Obama's policies. This view finds further support in the fact that highly educated Trump voters were more likely to pick the wrong photo in the inauguration-crowd task than Trump voters with lower education, even when no president's name was mentioned in the experiment (Schaffner & Luks, 2018). To explore this possibility further, I examine the role of conspiracy theories in people's rejection of well-established scientific propositions.

Conspiracy theories as antithesis to science

Conspiratorial cognition is almost invariably involved whenever people deny well-established scientific propositions, such as the link between the HIV virus and AIDS (e.g., Kalichman, 2009), the benefits of vaccinations (e.g., Briones et al., 2012), or the fact that greenhouse gas emissions cause climate change (Lewandowsky et al., 2013c). I suggest that there are two reasons for the affinity between science denial and conspiratorial cognition. First, the conspiracist reasoning is identifiably different from standard cognition and arguably less useful for truth-seeking. To illustrate, conspiracy theorists typically exclude the possibility of accidents. Small random events are taken to constitute evidence for the preferred theory, such as intact windows at the Pentagon after the 9/11 attacks which are interpreted as evidence for the involvement of the Bush administration (Swami et al., 2009). Conspiracist cognition is also inherently self-sealing: that is, evidence that counters a theory is re-interpreted as evidence *for* that conspiracy, on the notion that the stronger the evidence against a conspiracy, the more the conspirators must want people to believe their version of events. Conspiracy theories therefore undermine evidence-based democratic debate (e.g., Sunstein & Vermeule, 2009) and, when they become focused on a fantasmic enemy, may 'become a vehicle for the rise of totalitarian forms of rule' (Heins, 2007, p. 789).

The second reason for conspiratorial science denial may be more pragmatic. When people are motivated to reject well-established science for political or personal reasons – for example, because they fear that cutting greenhouse gas emissions will undermine free enterprise (Bohr, 2016) – they face a dilemma. By definition, well-established science is supported by an overwhelming scientific consensus, and this consensus must either be denied or explained away to enable denial of the scientific facts. One way in which the consensus can be ignored is via a presumed conspiracy among researchers (Diethelm & McKee, 2009). If scientists agree on climate change not because of scientific evidence but because they wish to introduce a world government through pricing of carbon emissions, then the consensus can be dismissed.

Rational deployment of conspiracist rhetoric: an empirical examination

If conspiracy theories are deployed to explain away an inconvenient scientific consensus, then this should be detectable on the basis of variables that are known to determine opposition to the science, rather than dispositional factors that drive people towards endorsement of conspiracies more generally. That is, whereas a range of personality variables such as schizotypy and paranoid ideation are known to predict belief in conspiracy theories generally (e.g., Darwin et al., 2011), such a dispositional tendency towards

conspiracism may be relatively less important in situations in which a conspiracy is invoked to explain away a scientific consensus that is inconvenient for other, unrelated reasons. The following study explored this possibility.

The study also examined various aspects of people's naive ontology of truth; that is, whether truth is knowable at all and by what means it is best established. The study also futher explored people's need for chaos and how this palingenetic belief related to their ontology of truth, conspiratorial disposition, and scientific understanding.

Method

Participants

The 200 participants were recruited online from Amazon's MTurk in May 2019 using the TurkPrime interface (Litman et al., 2017). MTurk is an online labour market where 'workers' choose from a pallette of available tasks that they perform in exchange for payment. MTurk has become a staple source of participants for much behavioural research. All participants were U.S. residents, had an approval rating of 98% or better, and had participated in at least 5,000 previous tasks (HITs) on MTurk.

Participants were paid 1.10 USD for completion of the survey, which took 10 minutes on average (median 8 minutes). One repeated submission from the same IP number was eliminated. A further 4 participants failed an attention check (i.e., they reported a different age when asked a second time), yielding a final sample of 195 participants for analysis (105 female and 90 male, mean age 44.23, range 22–73).

Questionnaire and constructs

The study was administered using the Qualtics platform.

After an attentional 'captcha' to guard against non-human responders, participants provided consent and basic demographics (age and gender). Participants then responded to the items shown in (Table 1). Items were presented in the order shown, except that items 1–5; 6–8; 9–11; and 12–31 were randomised separately for each participant. Unless otherwise noted, all items used a 7-point response scale ranging from 'Strongly disagree' to 'Strongly agree', with the midpoint 'Neither agree nor disagree.' Items with the suffix 'REV' in the label (second column in Table 1) were reverse scored for analysis.

The questionnaire targeted 6 attitudinal constructs. The labels for the items in each construct share a common prefix in the second column in (Table 1). (a) Political attitudes (prefix 'Political') were measured by a subset of 5 items from a scale developed by Thomas Scotto and Jason Reifler for their ESRC project 'Public Opinion and the Syrian Crisis in Three Democracies' (ES/L011867/1). (b) The presumed knowability of truth ('Knowable') was measured by presenting 3 quotes from public figures who questioned that truth or that facts could be unequivocally ascertained. The first two statements were made by Katie Hopkins, a columnist for UK tabloids, and the third statement was made by Donald Trump's attorney, Rudy Giuliani. Participants indicated their agreement or disagreement with each statement. A further two items queried the presumed knowability of truth directly. (c) Conspiracism ('Conspir') was measured using 5 items taken from Imhoff and Bruder (2014). These items do not target belief in specific conspiracies but probe a broader, likely dispositional, tendency to engage in conspiracist cognition (d) Reliance on sources of knowledge ('Source') was measured by 4 items developed by my team. (e)

Table 1. Items used in the questionnaire.

Number	Item label	Item text
1	Political_left_right	People sometimes use the labels 'left' or 'left-wing' and 'right' or 'right-wing' to describe political parties, party leaders, and political ideas. Using the 0 to 10 scale below, where the end marked 0 means left and the end marked 10 means right, where would you place yourself on this scale?
2	Political_ideology_1	People are better off in a free market economy.
3	Political_ideology_2	This country would have far fewer problems if there were more emphasis on traditional family values.
4	Political_ideo_3_REV	The world is always changing and we should adjust our views of moral behaviour to those changes.
5	Political_ideo_4_REV	Socialism has many advantages over Capitalism.
6	Consens_AIDS	Out of 100 medical scientists, how many do you think believe that the HIV virus causes AIDS? (Enter a number between 0 and 100)
7	Consens_Vax	Out of 100 medical scientists, how many do you think believe that vaccinations provide safe and effective protection against infectious diseases? (Enter a number between 0 and 100)
8	Consens_Climate	Out of 100 climate scientists, how many do you think believe that CO_2 emissions cause climate change? (Enter a number between 0 and 100)
9	Knowable_1_REV	"There is no truth, only the truth of the interpretation of the truth that you see."
10	Knowable_2_REV	"Fact is an antiquated expression. All reporting is biased and subjective. There is no such thing as fact anymore."
11	Knowable_3_REV	"Facts are in the eye of the beholder."
12	Conspir_1	There are secret organisations that have great influence on political decisions.
13	Conspir_2	Most people do not see how much our lives are determined by plots hatched in secret.
14	Conspir_3	There are certain political circles with secret agendas that are very influential.
15	Conspir_4_REV	I think that the various conspiracy theories circulating in the media are absolute nonsense.
16	Conspir_5	Secret organisations can manipulate people psychologically so that they do not notice how their life is being controlled by others.
17	Source_Science	The scientific method is a reliable and effective method to establish the truth.
18	Source_Politics	Politics is an unreliable and ineffective method to establish the truth.
19	Source_Common_REV	Common sense is a reliable and effective method to establish the truth.
20	Source_Intuition_REV	Intuition is a reliable and effective method to establish the truth.
21	Need_for_Chaos_1	I fantasise about a natural disaster wiping out most of humanity such that a small group of people can start all over.
22	Need_for_Chaos_2	I think society should be burned to the ground.
23	Need_for_Chaos_3	When I think about our political and social institutions, I cannot help thinking "just let them all burn".
24	Need_for_Chaos_4	We cannot fix the problems in our social institutions, we need to tear them down and start over.
25	Intuitive_2_REV	Sometimes evidence unnecessarily overcomplicates simple truths.
26	Intuitive_3	I must know the facts to know the truth.
27	Intuitive_5_REV	When I feel something is true, I am normally right.
28	Intuitive_7	People rely too much on their "sixth sense" for the truth instead of evidence.
29	Intuitive_8	Gut reactions are useless to establish the truth.
30	Knowable_5	The truth exists even if it is unknown to us.

(*Continued*)

Table 1. (Continued).

Number	Item label	Item text
31	Knowable_Explicit_T	Even in a complex situation, it is possible to get to the bottom of the truth.
32	WhyConHIV	
33	WhyConClim	
34	WhyConVax	

Need for chaos ('Need') was measured using 4 items from the scale developed by Petersen et al. (2018). (f) Reliance on intuition ('Intuitive') as a source of knowledge was measured using 5 items developed by my team.

All scales, including those developed in my lab, had been used in prior research and have been found to have satisfactory properties. Scales were scored by averaging responses to all items, rescaled to the range 0–1, after reverse-scoring. Scales were coded such that higher scores indicated greater conservatism, greater endorsement of the knowability of truth, higher levels of conspiracism, greater reliance on trustworthy sources of knowledge, greater need for chaos, and greater reliance on intuition. Items 1–31 were presented one at a time on separate screen pages.

The questionnaire additionally examined two aspects of scientific consensus. People first indicated their perceived scientific consensus (items with prefix 'Consens', using a percentage scale) for the link between HIV and AIDS, the link between CO_2 and climate change, and the safety and efficacy of vaccinations. At the end of the questionnaire (items 32–34) participants were presented with accurate information about the scientific consensus (e.g., 'Virtually all medical scientists agree that HIV causes AIDS'), followed by the question 'How much do you think each of the following reasons contributes to this scientific agreement?' The question was accompanied by the 6 response options in (Table 2). Options were presented together on the same screen and participants could choose any number of options on a 5-point scale ranging from 'Not a reason' to 'The only reason'.

After all items in (Table 1) had been presented, participants were again asked to indicate their age, followed by a question probing how much attention they paid. Any participants who indicated that they were not 'paying much attention' or did not want their data to be used for other reasons would have been eliminated (none did).

Results and discussion

(Figure 1) shows the distribution of estimates of the scientific consensus for the three domains. People on average recognise the existence of a strong consensus, with mean estimates 94.85, 93.04, and 84.14 for AIDS, vaccination, and climate change, respectively.

Table 2. Response options for items 32–34.

Scientists independently assessing the evidence and coming to the same conclusion
Scientists responding to availability of government funding
Scientists falling into the trap of 'group think'
Scientists succumbing to political pressure from government or society
Scientists pursuing their own political agenda
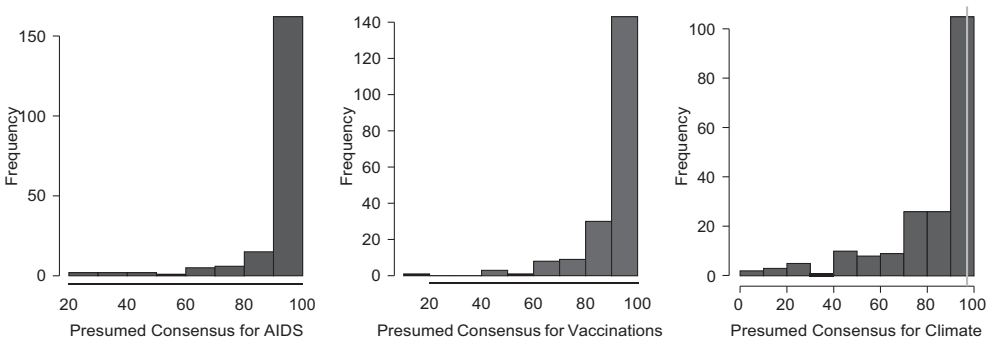Scientists suppressing dissenting sceptical opinions

Figure 1. Distribution of estimates for the scientific consensus on AIDS, climate change, and vaccinations (responses to items 6–8 in Table 1). The vertical orange line for climate change indicates the true scientific consensus, estimated to be 97%.

Although those values are high, the estimate for climate change falls below the true value of 97% (Cook et al., 2016).

(Figure 2) shows the correlation matrix for all attitudinal constructs (composite scores) and the consensus estimates. Only significant correlations ($p < .05$) are shown. The icons above the diagonal visually indicate strength and direction of the correlation, and the lower diagonal shows the exact values of the correlation coefficient. Several aspects stand out.

First, the three consensus estimates are substantially correlated. This replicates previous results (Lewandowsky et al., 2013b). Second, the constructs related to ontology fall into two distinct clusters: The notion that truth is knowable is positively associated with reliance on evidence-based sources and the three consensus estimates, and it is negatively correlated with constructs in the opposing cluster, namely conspiracism, need for chaos, and the belief that intuition is a good guide to truth. Correpondingly, the latter constructs correlate with each other but tend to be negatively associated with the consensus estimates. Third, at a more detailed level, the correlations between conspiracism and the consensus estimates range from non-significant (for AIDS), to modest ($r = -.15$ for climate change) to substantial ($r = -.36$ for vaccinations). The differences between those magnitudes turn out to be diagnostic.

The remaining analyses focused on the final items in the study (Items 32–34 in Table 1) that queried people's perceived reasons underlying the scientific consensus. The data are shown in (Figure 3). People clearly endorsed the non-conspiratorial reason that invoked independent assessment of the evidence more than any of the conspiracist options. Of even greater interest are the correlations between those presumed reasons and conservatism (Figure 4) and conspiracism (Figure 5). Considering conservatism first, it is clear that political attitudes had no effect on people's presumed reasons for the consensus about HIV/AIDS. None of the 6 correlations are significant. By contrast, political views were a modest determinant for vaccinations and a major determinant for climate change.

The more conservative people were, the less likely they were to accept that the scientific consensus on climate change was based on evidence, and the more likely they were to ascribe the consensus to various potentially conspiratorial factors, such as 'group think' or the suppression of dissent. A very different pattern is obtained for the

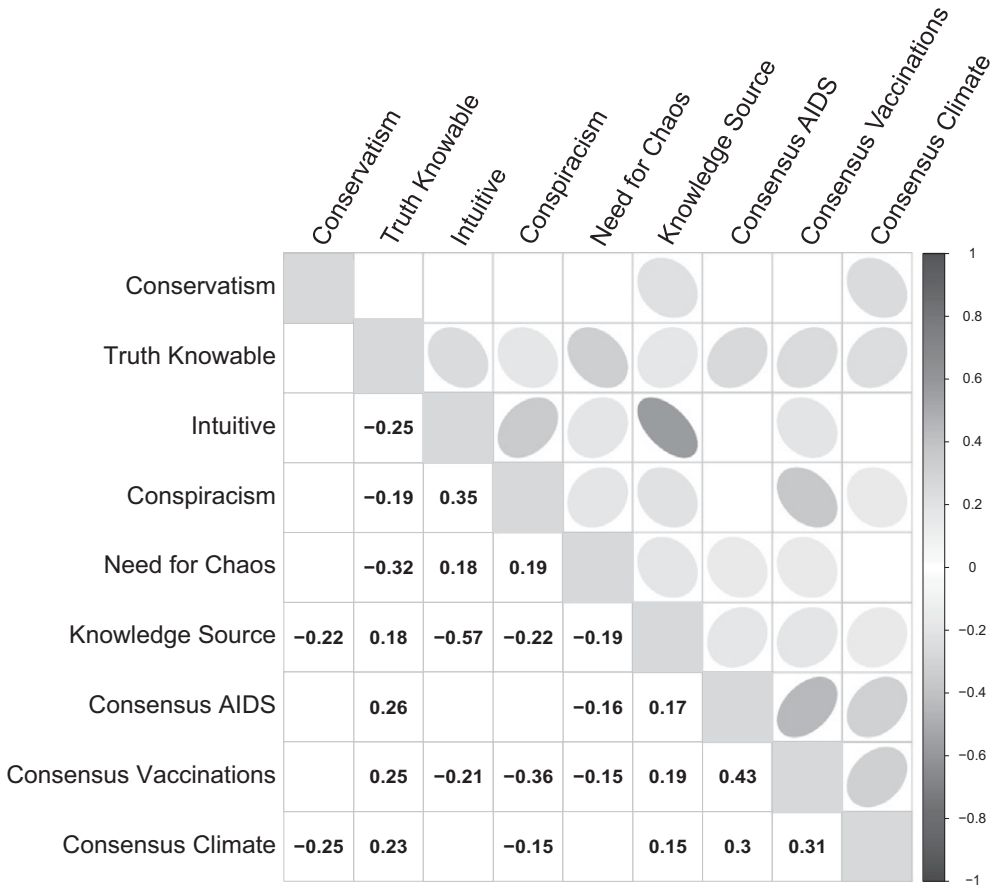|	Conservatism	Truth Knowable	Intuitive	Conspiracism	Need for Chaos	Knowledge Source	Consensus AIDS	Consensus Vaccinations	Consensus Climate
Conservatism									
Truth Knowable									
Intuitive		−0.25							
Conspiracism		−0.19	0.35						
Need for Chaos		−0.32	0.18	0.19					
Knowledge Source	−0.22	0.18	−0.57	−0.22	−0.19				
Consensus AIDS		0.26			−0.16	0.17			
Consensus Vaccinations		0.25	−0.21	−0.36	−0.15	0.19	0.43		
Consensus Climate	−0.25	0.23		−0.15		0.15	0.3	0.31	

Figure 2. Correlation matrix for all attitude constructs and perceived consensus. Only significant correlations ($p < .05$) are shown. The icons above the diagonal visually indicate strength and direction of the correlation using the temperature scale on the right. The lower diagonal shows the exact values of the pairwise correlation coefficient r.

correlations involving dispositional conspiracism. For climate change, those correlations are non-significant or small, whereas many are at least modest for AIDS and all are large for vaccinations.

The data permit three conclusions. First, overall people largely accept that scientists arrive at a consensus through evidence rather than on the basis of other variables that point to an underlying conspiracy (Figure 3). Second, the degree of preference for an evidence-based over a conspiratorial explanation is associated both with people's political views (Figure 4) and their dispositional tendency to accept conspiracies (Figure 5). Third, the strengths of those associations differ considerably between domains in a manner that is commensurate with worldview-triggered rhetorical deployment of conspiracy theories. I explore the last point further.

I define deployment as the difference between the endorsement of an evidence-based consensus and the other 5 potentially conspiratorial reasons. Specifically, I compute the difference between the correlation for the evidence-based explanation and the average of
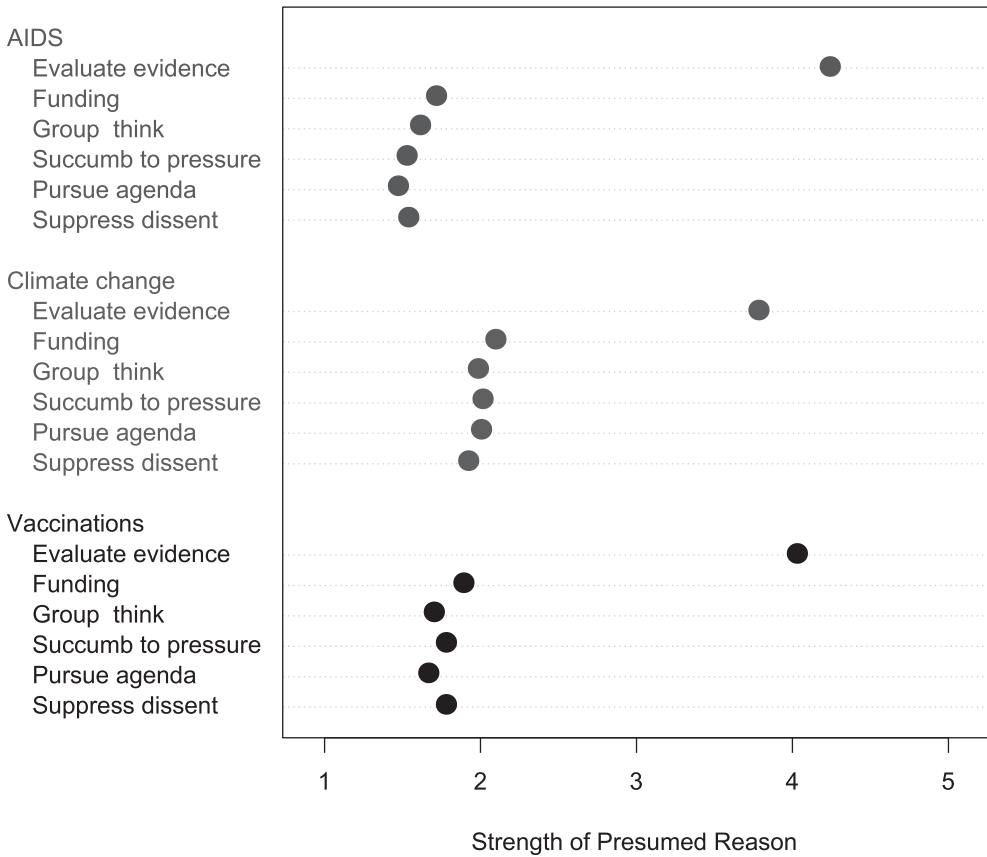
Figure 3. Strengths of presumed reasons for the existence of a scientific consensus. For each domain, the 6 dots refer to the response options in (Table 2).

the other 5 correlations for each domain in (Figures 4 and Figures 5). The greater that difference, the more people tend to deploy a conspiracy to explain the consensus. The variables that are associated with deployment are conservatism and conspiracism. For example, conservatism is a strongly associated with deployment for climate change, but ineffective for AIDS and only modestly associated for vaccinations. I next relate these deployment indices for climate change and vaccinations to data from the literature that have examined the association between science denial and worldviews or conspiracism (I was unaware of data for AIDS).

Correlations between worldview, variously defined as conservatism or endorsement of free-market economics, and denial were reported by Lewandowsky et al. (2013c), Lewandowsky et al. (2013a), and Hornsey et al. (2018a) for climate change, and by Lewandowsky et al. (2013a) and Hornsey et al. (2018b) for vaccinations. The same studies also reported associations betweeen science denial and conspiracism. (Figure 6) shows the relationship between deployment observed in the present study and the strengths of associations observed in the literature. The left panel considers conspiracism (i.e., deployment computed from Figure 5) and the right panel examines the role of worldviews (Figure 4).
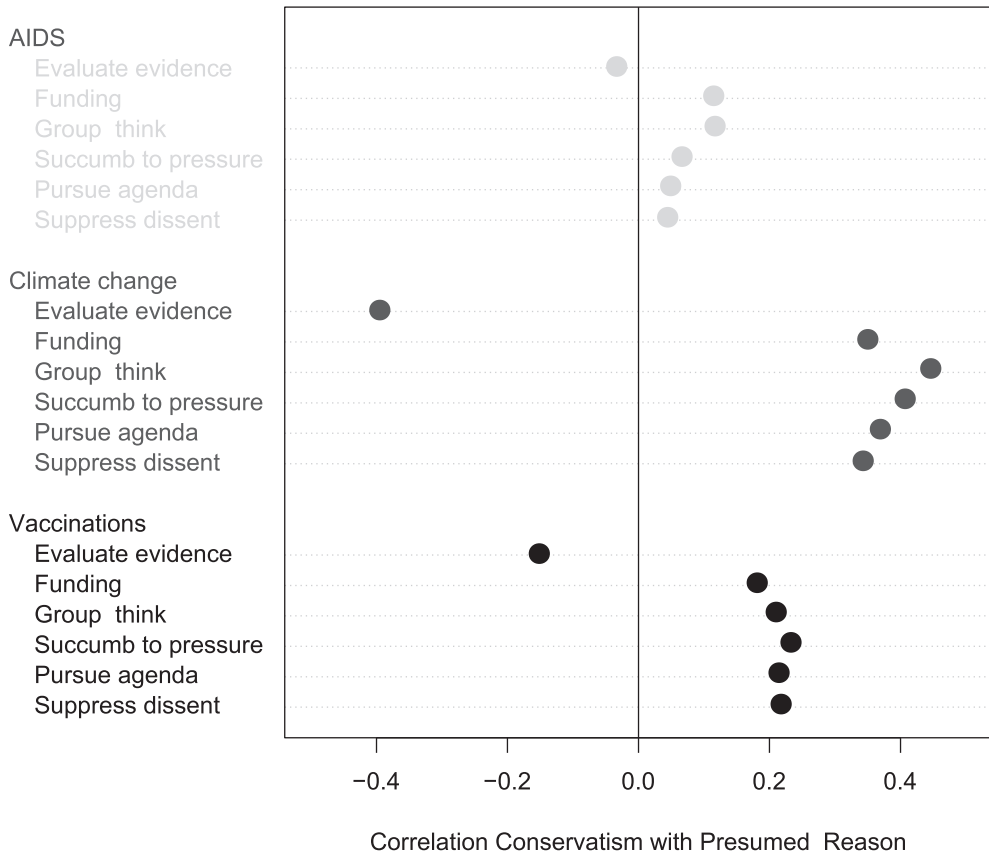
Figure 4. Correlation between conservatism and the presumed strength of reasons for the existence of a scientific consensus. For each domain, the 6 dots refer to the response options in (Table 2). Non-significant correlations ($p > .05$) are greyed out.

The most striking aspect of (Figure 6) is the reversal of deployment for vaccinations and climate change between the two panels. The left panel shows conspiracism-associated deployment as a function of the association between conspiracism and denial in prior research. The stronger that association, the more a conspiratorial explanation was deployed in the present study. This is unsurprising and best considered a replication and extension of previous research. People will engage in a conspiracy-based explanation of the consensus to the same extent that their attitudes are determined by their conspiracism. The right panel shows worldview-related deployment – that is, the extent to which people will invoke a conspiracy to explain a scientific consensus as a function of their worldview. Worldviews are a major determinant of attitudes towards climate change but play a lesser role with vaccinations. Accordingly, we find that worldview deploys conspiracism to a far greater extent for climate change than for vaccinations. This arguably reflects a strategic choice: people whose worldviews render climate change particularly threatening will invoke a conspiracy instead of accepting an evidence-based explanation for the consensus, and they will do so to a greater extent than their predisposition towards conspiracism would suggest.[1]
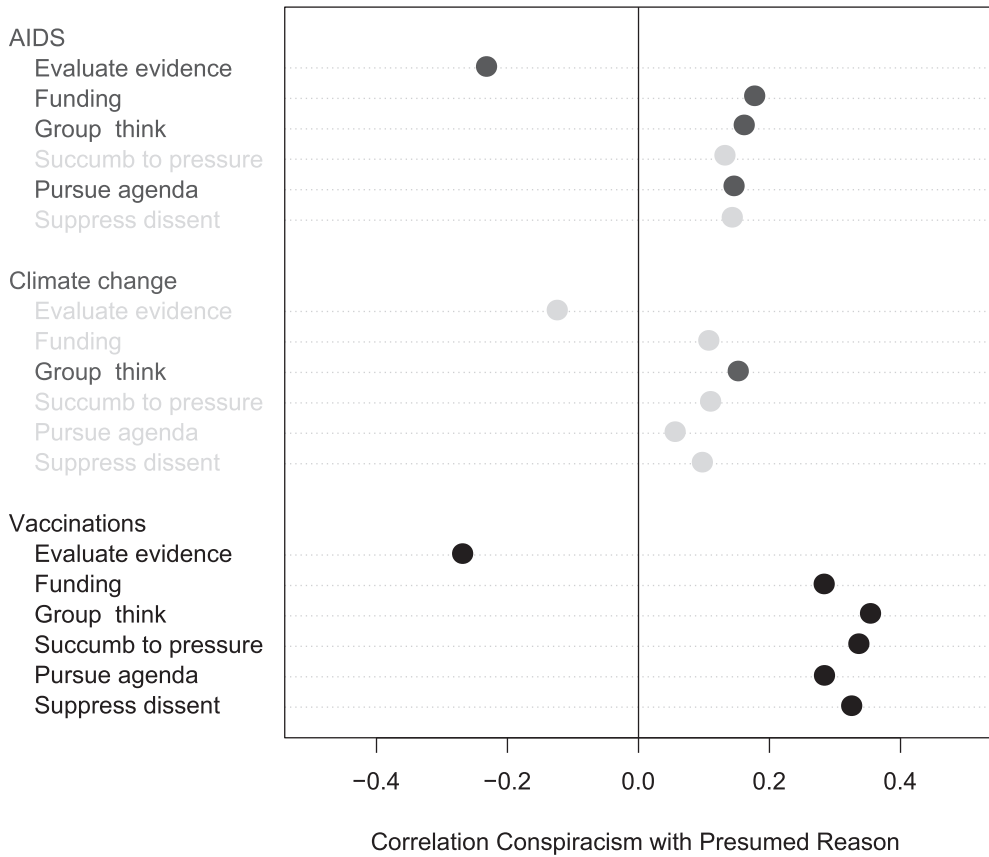
Figure 5. Correlation between conspiracism and the presumed strength of reasons for the existence of a scientific consensus. For each domain, the 6 dots refer to the response options in (Table 2). Non-significant correlations ($p > .05$) are greyed out.

Implications of the findings

Political truths are often difficult to ascertain and competing claims may co-exist (Coleman, 2018). Harambam and Aupers (2015) have shown that these difficulties are emphasised and exploited by people in the conspiracy milieu. People in this milieu 'argue that the ideal of objectivity is highly problematic: scientific "facts" are not so much "discovered" but "constructed" and this knowledge production is intimately related to political power and economic interests' (Harambam & Aupers, 2015, p. 474). The analysis and data presented in this paper caution against an uncritical acceptance of this avowedly constructivist perspective and instead suggest that social scientists have a responsibility to rebut conspiracy theories and shock-and-chaos disinformation to guard society against collateral damage.

I accept that social construction plays a role in generating scientific knowledge and in democratic fact-finding. However, I reject a radical form of constructivism, such as Fuller (2017)'s embrace of the post-truth world as a welcome consequence of the creative deployment of 'social and epistemological constructivism in an increasingly democratised
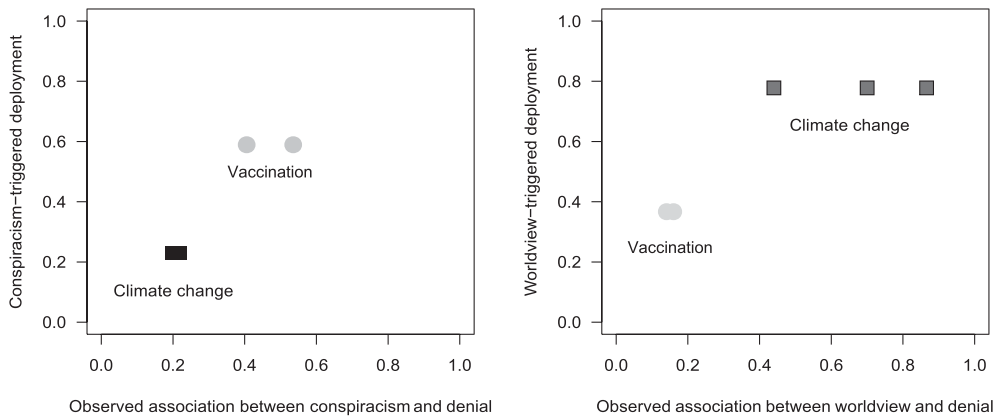
Figure 6. Left panel shows the observed associations between dispositional conspiracism and denial from the literature (X-axis) and the conspiracism-driven deployment of conspiratorial explanations in the present study (Y-axis). Values on the X-axis are from Lewandowsky et al. (2013c), Lewandowsky et al. (2013a), and Hornsey et al. (2018a) (U.S. data) for climate change, and from Lewandowsky et al. (2013a) and Hornsey et al. (2018b) (U.S. data) for vaccinations. Right panel shows the observed associations between worldviews (free-market endorsement and conservatism) and denial of climate change and vaccinations from the literature (X-axis) and the worldview-driven deployment of conspiratorial explanations in the present study (Y-axis). Data on the X-axis are from the same sources as for the left panel. See text for explanation of how deployment (Y-axis) was computed.

context' (p. 42). I object to the implied 'anything goes' relativism that sets all knowledge claims on an equal footing. Similar to Baker and Oreskes (2017), I reject the idea that truth (without scarequotes) is a gratuitous and pointless add-on to social construction. This position is supported by the three lines of argument posited at the outset, now buttressed by the results of the study.

The first argument concerns the collateral damage from shock and chaos disinformation and conspiracy theories. I cannot discern any societal, social, epistemic, or ontological benefit in the fact that exposure to conspiracy theories reduces people's willingness to be politically engaged (Jolley & Douglas, 2013), to lose trust in their local schools (Einstein & Glick, 2015), to become more prejudiced (Jolley et al., 2019), to vandalise vital infrastructure (Jolley & Paterson, 2020), or to storm the U.S. Capitol. In the present study, collateral damage was discernible in the associations between need for chaos and conspiracism and intuitive truth seeking. It should be concerning that reliance on feelings to find truth and the endorsement of conspiracism – both elements of shock and chaos disinformation – is associated with an increased belief that society and its institutions should be burned to the ground.

The second argument notes the antithetical relationship between scientific and evidence-based democratic truth-seeking on the one hand, and conspiracy theorising on the other. Recent analyses of this incompatibility have been provided by Lewandowsky et al. (2015), Lewandowsky et al. (2016), and Lewandowsky et al. (2018). The present study adds to this by showing that dispositional conspiracism is a significant predictor of conspiracist explanations for a scientific consensus.

Turning to the third argument, the present study shows that conspiracist explanations are sometimes deployed to explain away a scientific consensus that is denied for political

reasons. At first glance this finding seems to contradict the first two arguments: If conspiracism is deployed as a rhetorical tool, rather than reflecting a disposition, do we still have to be concerned about collateral damage and do we need to worry that conspiracist reasoning is antithetical to evidence-based reasoning? Closer inspection reveals this contradiction to be more apparent than real. Collateral damage from shock and chaos is not limited to *believing* in conspiracy theories The observed collateral damage extends to people who are not particularly predisposed to conspiracism and is observed after mere exposure to conspiratorial content (e.g., Jolley & Douglas, 2013; Jolley et al., 2019). Whether people articulate a conspiracy theory for convenience or because they believe it based on their psychological disposition is irrelevant to the effect it has on third parties. Likewise, pragmatic intentions are irrelevant to the epistemic status of conspiracy theories and their incompatibility with scientific reasoning: Lewandowsky et al. (2016) showed that climate denial, like conspiracy theories in general (Wood et al., 2012), is internally incoherent and hence non-scientific. The fact that climate denial is deployed for entirely rational political reasons, namely to preserve the economic status quo (Lewandowsky et al., 2016), is irrelevant to its epistemic status. Pragmatic intentions relating to deployment are, however, relevant to the choice of countermeasures.

Responding to shock and chaos disinformation and conspiracy theories

How should social scientists respond? Misinformation is often difficult to correct (e.g., Lewandowsky et al., 2012), and this difficulty is exacerbated in the context of conspiracy theories whose. self-sealing nature makes them particularly resilient to debunking (Sunstein & Vermeule, 2009). The results of the present study highlight the importance of audience segmentation: if a conspiracy theory is deployed for pragmatic reasons, communicative efforts will be met with a different echo than if someone believes in a conspiracy theory for dispositional reasons.

Communicating with the public at large

In light of the collateral damage from conspiracy theories, the best response is prevention rather than cure – that is, the best way to control conspiracy theories is to prevent them from spreading. Some psychological interventions are promising. For example, Lutzke et al. (2019) showed that sharing of conspiratorial climate-denial posts on Facebook was reduced by a simple intervention that encouraged people to ask four questions about the material before sharing it: (1). Do I recognise the news organisation that posted the story? (2). Does the information in the post seem believable? (3). Is the post written in a style that I expect from a professional news organisation? (4). Is the post politically motivated?

   When efforts to contain the spread of a conspiracy fail, a two-pronged approach can be employed. The first prong involves interventions that occur *before* people are exposed to conspiratorial content. The second prong involves debunking after people have become familiar with a conspiracy theory.

Empowerment and inoculation

Endorsement of conspiracy theories is associated with feelings of reduced control and perceived threat (Uscinski & Parent, 2014). This link appears to be causal (Whitson &

Galinsky, 2008) as well as bidirectional – if people are given a sense of empowerment, their resilience to conspiratorial material is increased. For example, van Prooijen and Acker (2015) showed that if people's sense of control is primed (e.g., by recalling an event from their lives that they had control over), then their endorsement of a conspiracy theory is reduced. in comparison to a control groups that recalled the previous night's dinner. Considering variables outside the laboratory, education yields empowerment by enabling people to feel more in control of their lives, and this has been shown to lead to reduced endorsement of conspiracy theories (Van Prooijen, 2017). At the political level, citizens' general feeling of empowerment can be instilled by ensuring that decisions by government or other officials are perceived to follow fair procedural justice principles (Van Prooijen, 2018).

A related approach relies on inoculation – that is, alerting people that they may be misled and familiarising them with the techniques that disinformers are using. Jolley and Douglas (2017) demonstrated the success of inoculation in an experiment involving people's attitudes towards vaccinations. Jolley and Douglas (2017) found that when people were inoculated by first receiving anti-conspiratorial material, they were no longer adverselyaffected by subsequent conspiratorial rhetoric. By contrast, if the conspiratorial material was presented first, the countering material was less effective. Similarly, Banas and Miller (2013) found inoculation to be successful against a 9/11 conspiracy.

Debunking

When there are no opportunities for inoculation or empowerment, communicators have to resort to corrections. Fortunately, debunking efforts with participants who are unlikely to accept conspiracy theories in the first place, such as university students or members of the public at large, are often at least partially successful. For example, Schmid and Betsch (2019) showed that conspiratorial denial of the efficacy and safety of vaccinations can be defanged by rebuttal messages. Orosz et al. (2016) compared three debunking techniques: evidence-based rational counterarguments, ridicule of the people who believe conspiracy theories, and compassionately calling attention to the targets of conspiracy theories. The evidence-based and ridicule interventions were found to significantly reduce acceptance of a conspiracy theory that had been presented to participants at the outset. The empathy manipulation was unsuccessful.

Communicating with people who believe in conspiracy theories

The community of people who are identifiable 'believers' is quite heterogeneous. In an analysis of 2.25 million comments posted on the Reddit site *r/conspiracy*, Klein et al. (2018) discovered that the vast majority of the community was interested in only one or a small subset of conspiracy theories, and engaged in rhetoric that was occasionally only mildly conspiracist. This meshes well with the notion developed here, that deployment of conspiratorial rhetoric may be driven by pragmatic considerations. Klein et al. (2018) also found that around 5% of commenters endorsed a multitude of different theories. Although small, this group was responsible for 64% of all comments (The most active author wrote 896,337 words, twice the length of the *Lord of the Rings* trilogy). Because their influence may be considerable, engagement with this small group of committed conspiracy theorists may occasionally be required.

Lessons for how to engage with this small group can be gathered from research into extremist deradicalisation. Conspiracy theories are an inevitable ingredient of political extremism (Kundnani, 2012), and research on deradicalisation has yielded several recommendations. First, counter-messages created by former members of an extremist community ('exiters') are evaluated more positively and remembered longer than messages from other sources (Schmitt et al., 2018). Second, approaches should be empathic and seek to build understanding with the other party (without conceding intellectual ground). Because interventions rest on developing the participants' open-mindedness, the communicators must lead by example (Ponsot et al., 2018). Third, people who hold conspiracist beliefs perceive themselves as critical thinkers who are not fooled by an official account (e.g., Harambam & Aupers, 2017; Lewandowsky et al., 2015). This perception can be leveraged by messages that affirm the value of critical thinking but then redirect this examination towards the conspiracy theory (Voogt, 2017).

Conclusions

The observed pragmatic deployment of conspiracist explanations meshes well with the expressive responding observed by Schaffner and Luks (2018) in the inauguration-crowd task. The fact that unequivocal perceptual evidence was rejected *more* by highly educated Trump supporters points to rhetorical deployment rather than an actual perceptual or cognitive deficit. In that sense, the present data confirm the role of social processes in the construction of political 'truths.' However, it does not follow that the 'truths' constructed in this manner deserve equal recognition as claims arising from scientific investigations or fact checking (Graves, 2017). On the contrary, the very fact that arguments, explanations, responses to perceptual questions, or indeed conspiracy theories can be constructed and deployed for reasons other than genuine belief highlights the risks of considering those manifestations as good-faith socially-constructed knowledge claims.

These risks can be brought into sharp focus by considering instances of corporate deception. There is overwhelming evidence that the tobacco industry knew of the harms arising from their products from the 1950s onward, but that they continued to deny those harms in public (Oreskes & Conway, 2010). Likewise, as analysis of internal documents has revealed (Supran & Oreskes, 2017), ExxonMobil accepted the scientific consensus on climate change a long time ago but its public-facing statements continued to express doubt about global warming. It was clearly in the commercial interests of the tobacco industry and of ExxonMobil to publicly doubt and deny inconvenient scientific knowledge. The fact that those statements were knowingly deceptive carries two implications. First, as noted by Baker and Oreskes (2017), the behaviour cannot be readily explained without invoking a notion of truth. If truth or truth-seeking were wholly extraneous to the construction of knowledge, why would ExxonMobil and the tobacco industry *knowingly* engage in deception? Why would they construct two 'truths', one for the public and an opposing one for their own internal purposes? Second, supposing we had remained ignorant to this day of the duplicity of the tobacco industry and ExxonMobil, any interpretation of the industry's public-facing statements as a 'socially-constructed knowledge claim' would have been deeply flawed.

Another very recent example involves the claims made by Donald Trump and his allies that the 2020 presidential election had been marred by fraud and was 'stolen' from him.

Although those claims found sufficient traction in the public for 65% of Republicans to believe that Trump had actually won the election (Pennycook & Rand, 2021), none of the over 60 law suits launched (and lost) by Trump and his allies to overturn the election mentioned fraud in the courtroom. Bound by professional ethics rules – potentially enforceable by disbarment – Trump's lawyers jettisoned accusations of fraud, focusing instead on inconsequential minutiae (e.g., Berenson, 2020).

Democratic truth-finding is messy. But not all competing epistemic claims should be taken seriously. On the contrary, when claims are made on the basis of convenience or deception, they should be eliminated from consideration. January 6th, 2021, vividly illustrated the consequences of failing to eliminate bad-faith conspiracist discourse and 'reprehensible' epistemic insouciance (Cassam, 2018) from public life.

Note

1. Qualitatively identical results are obtained if each participant's endorsement of an evidence-based consensus is subtracted from the average of the other 5 conspiratorial reasons, and those individual deployment scores are simultaneously regressed on conspiracism and conservatism for each domain. The pattern of standardised regression weights mirrors that shown in (Figure 6).

Disclosure statement

No potential conflict of interest was reported by the author.

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Evaluating conspiracy claims as public sphere communication

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ABSTRACT
Conspiracy theories have become a ubiquitous feature of contemporary culture. From a communication studies perspective, conspiracy theories undermine democratic communication by misleading the public. However, the normative concept of a democratic public sphere also upholds the values of giving visibility to diverse perspectives and facilitating reasoned debate. Thus, academics can acknowledge the harms of conspiracy claims while being open, in principle, to their potential contribution to public debate. The challenge, of course, is to evaluate the public sphere implications of conspiracy claims; implications that may be difficult to ascertain and may change over time as new evidence emerges. This position is elucidated through an analysis of the conspiracy claims found in mainstream and alternative media coverage of the Syrian conflict. Much of the debate centres on ideas about the trustworthiness and impartiality of journalists and experts whereby efforts to establish the facts are superseded by received ideas about the credibility of sources. Ultimately, the Syrian conflict indicates that conspiracy claims can be valuable for the public sphere provided there are impartial actors willing to investigate conspiracy claims and provide clarification to the public.

Introduction

Aided by digital media, conspiracy theories have become a ubiquitous feature of contemporary culture. Popular conspiracy theories assert that commercial aircraft spread chemical agents to control the weather; that a Jewish elite is intent on displacing Europe's white populations; and that medical cures are suppressed by the pharmaceutical industry. More recently, the Covid-19 pandemic brought an onslaught of conflicting reports, hoaxes, and conspiracy theories. The World Health Organisation (WHO) called it an 'infodemic': an overabundance of accurate and inaccurate claims that left many people confused about what to believe. Scholarly interest in 'conspiracy culture' (Aupers, 2012; Byford, 2011) is now heighted by wider concerns about the post-truth era of political debate (Bennett & Livingston, 2018; Lewandowsky et al., 2017) and the online spread of disinformation (Wardle & Derakhshan, 2017). Unsurprisingly, a sense of crisis has become entrenched among policymakers, scholars, technologists, and others (see Farkas & Schou, 2019).

Within communication studies, conspiracy theories are frequently discussed in conjunction with other digital media phenomena such as 'fake news', hate speech, and ideological polarisation. Given the corrosive influence of these phenomena on democratic societies,

conspiracy theories are often characterised for their negative impact on the public good. Put simply, conspiracy theories are considered harmful because they mislead the public and thereby undermine public communication and democracy. In contrast, some philosophers argue that conspiracy theories may be beneficial for holding authorities accountable (Dentith, 2016) and, as such, may be recognised as an essential component of democratic discourse (Moore, 2016). Applying this view to the Syrian conflict, this article examines how conspiracy claims intersect with contemporary media practices.

Communication studies has much to offer for conspiracy theory researchers. After all, contemporary conspiracy theories typically develop and gain support through digital media. Moreover, the discipline has been challenged to develop new concepts and methods to address a rapidly changing communication environment in which digital technologies have destabilised the authority of experts, the status of truth, and the influence of traditional mass media (Pfetsch, 2018). By focusing on the production, distribution, and reception of digital content, communication scholars provide insight into the blurred distinctions between public knowledge and private opinion (Van Zoonen, 2012); the bias of digital media production in favour of sensational and extreme content (see Benkler et al., 2018); and the dynamics that influence the spread of false information (Sharma, Yadav, Yadav, and Ferdinand, 2017; Vosoughi et al., 2018).

The above research areas are important for contextualising the visibility of conspiracy theories including the conspiracy claims surrounding the Syrian conflict. They also complicate the means through which public debate occurs. In the mass media era, journalists and mainstream news outlets exercised a near monopoly over the flow of public information. Now, they compete with an array of alternative news outlets including dedicated conspiracy theory outlets as well as new media actors such as those specialising in leaks and whistle-blowing (e.g. Wikileaks) and citizen journalism investigations (e.g. Bellingcat). Each of these actors play a key role in shaping public sphere debates about conspiracy theories.

Although definitions of the public sphere vary, most posit the following normative conditions: that diverse opinions and perspectives are made visible to the public; that disagreements are negotiated through a process of reasoned argumentation; that public debate is free from domination by vested interests; and that there is equal access to participate in public debates (Curran, 1996; Dahlberg, 2018; Habermas et al., 1974).

There is insufficient scope to examine how conspiracy theories intersect with each of these conditions; not least because there are enormous differences in the plausibility of different conspiracy claims and in the intensity of endorsement among the people who espouse them. The important point is that the articulation of conspiracy claims may sometimes form part of a healthy public debate by raising questions about potential corruption and by exposing those claims to investigation and argument (Dentith, 2016; Moore, 2016). Crucially, the value for the public sphere is predicated on this openness to evidence and scrutiny and the existence of actors, such as journalists, who will conduct impartial investigations and provide clarity to the public.

The challenge then from a communications perspective is to negotiate the parallel roles conspiracy theories can play in democratic society: they may be harmful in mislead-ing the public or they may be constructive in contributing to public debate. To complicate matters, these roles may change over time as new evidence emerges. In the case study described below, I analyse claims and counterclaims about the Syrian conflict to demon-strate the shifting contexts of conspiracy claims. Arising from this, I conclude that scholars

need not adopt a position on conspiracy claims per se, but on the contribution of those claims to democratic debate. To contextualise this argument, the following section outlines the case for evaluating the plausibility of conspiracy claims and draws on an important distinction between the articulation of conspiracy claims (i.e. making claims for public consideration) and the articulation of conspiracy thinking (i.e. affirming conclusions irrespective of the evidence).

Understanding Conspiracy Claims

Conspiracy theories have been studied from philosophical, psychological, and socio-cultural perspectives. These disciplines provide valuable insights into the phenomenon including philosophical insights into the reasoning errors that typify conspiracy thinking (Cassam, 2019; Dentith, 2016 psychological insights into the cognitive and individual-level factors that influence conspiracy endorsement (Berinsky, 2017; Goertzel, 1994; Grzesiak-Feldman, 2013; Miller et al., 2016; Swami et al., 2011; Wood et al., 2012); and socio-cultural insights into the role of conspiracy theories as a means of contesting power and fulfiling social and political needs (Aupers, 2012; Byford, 2011; Fenster, 2008; Harambam & Aupers, 2017; Van Prooijen, 2019; West & Sanders, 2003).

There are also notable differences between these approaches. Philosophical and psychological researchers tend to dismiss conspiracy theorists as harmful, irrational actors and rarely investigate the purported evidence put forward in support of conspiracy claims (Leander, 2014; Uscinski & Atkinson, 2013). In contrast, socio-cultural approaches are highly attuned to the context of claims, but sometimes appear to idealise the intention behind conspiracy claims. For example, Byford (2011: 3) argues that conspiracy theories are a 'means of articulating an opposition to the forces of international capitalism, globalisation, America's military and political supremacy, and the more general rise of a transnational political order'. From a public sphere perspective, both approaches may be appropriate depending on the context of individual cases. To evaluate individual cases it is helpful to begin by clarifying the differences between a conspiracy, a conspiracy theory, and conspiracy thinking.

Conspiracy Theory and Conspiracy Thinking

A *conspiracy* concerns 'a secret arrangement between a small group of actors to usurp political or economic power, violate established rights, hide vital secrets, or illicitly cause widespread harm' (Uscinski & Atkinson, 2013: 58). In other words, a conspiracy is an act that advances the interests of a select group while working against the common good. Such acts are only recognised as conspiracies because they have been exposed. Consequently, it is not controversial to call the Watergate scandal a conspiracy because the facts were verified and exposed by investigative journalists. It follows that there may be many conspiracies which have yet to be exposed.

A *conspiracy theory* presents a causal explanation for events by alleging the existence of a conspiratorial act. For example, some conspiracy theorists conducted investigations to 'prove' that the 9/11 terror attacks were false-flag operations coordinated by the Bush administration. It is possible, however unlikely, that an administration insider might

one day come forward with compelling evidence to substantiate this claim. In this scenario, people who had considered the conspiracy theory *plausible* would find their suspicions confirmed. In contrast, those who fully endorsed the conspiracy theory will have gained little because they reached the correct conclusion based on conspiracy thinking rather than evidence. In other words, *conspiracy thinking* assumes a corrupt conclusion without evidence because. As Barkun (2006:4) observes, such thinking is typified by three maxims: nothing happens by accident; nothing is as it seems; and everything is connected.

Applied rigidly, these principles are a recipe for paranoia. Yet, a more relaxed under-standing of their application provides a useful heuristic for thinking about the world. After all, it underpins the work of investigative journalism, which is guided by questions such as 'who benefits?' and 'where does the money go?'. Moreover, there are good reasons to suspect that powerful groups – especially political and corporate elites – are acting in ways that are contrary to the common good. Moreover, 'the exposure of real conspiracies since the 1970s has strengthened the plausibility of even the most far-fetched theory' (Aupers, 2012: 24). Following a succession of major revelations – from the Iran Contra affair in the 1970s to the mass surveillance conducted by the US National Security Agency in the 2000s – it would be extremely naïve for an informed citizen to conclude that powerful actors are not worthy of suspicion. It is in this context that we can begin to assess the endorsement and plausibility of conspiracy claims.

Endorsement of Conspiracy Claims

To advance a more nuanced understanding of conspiracy theories, it is necessary to move past the dismissive characterisation of all conspiracy theorists as paranoid extremists. While some certainly merit this description, it does not reflect the diverse nature of conspiracy endorsement. There is an important difference between the 'crippled episte-mology' (Hardin, 2002) of conspiracy thinking and concerned scepticism about the powerful. Consequently, there are many cases in which the boundary between a ('paranoid') conspiracy claim and a ('legitimate') critique is hard to define (Harambam & Aupers, 2015; Huneman & Vorms, 2018).

A degree of scepticism is generally considered a positive trait for democratic citizens. In fact, teaching scepticism about official narratives and media content is a common feature of media literacy programmes and academic critiques of power; although this approach is also criticised for leaving students with a simplistic mistrust of elites (see boyd, 2017; Van Zoonen, 2012). Nevertheless, research has shown that people who espouse conspiracy claims often see themselves as model citizens who are willing to think for themselves rather than blindly accept the authority of experts (Hobson-West 2007; Versteeg, Te Moulder, and Sneijde 2018). Similarly, Imhoff and Bruder (2014) found that conspiracy thinking is linked to an attitude of prejudice towards the intentions of powerful groups and, in some scenarios at least, a positive desire for social change. As noted, there are many compelling reasons to be suspicious of the powerful and the freedom to ask questions of the powerful is a fundamental condition of a functioning public sphere.

An important, additional consideration is the status of marginalised groups; groups that have been denied access to and equal representation in the democratic public sphere. For example, Washington (2006) forcefully argues that the history of covert,

medical experimentation on African Americans makes conspiracy claims about medical-treatments a plausible consideration for that community. As these conspiracy claims are the product of historical corruption, we may recognise them as an imperfect means of challenging authority and highlighting historical injustice. Although the claims are flawed, making them visible in the public sphere and understanding the motives and concerns of their exponents is imperative for a democratic society.

The Plausibility of Conspiracy Claims

If it is accepted that the difference between conspiracy thinking and concerned scepticism is one of degree and that some conspiracy claims may be valuable for democratic debate, then it is necessary to investigate the merits or perceived plausibility of specific conspiracy claims rather than make assumptions about a general category of conspiracy theories. Regarding plausibility, there is clearly a pronounced difference between the claim that the British royal family are reptilian humanoids (as proposed by David Icke) and the claim that 9/11 was a false-flag operation (as proposed by the 9/11 Truth movement). The former is a peculiar and unreasonable claim because there is no scientific evidence to suggest the possible existence of shape-shifting reptilians. In contrast, the latter is at least physically possible. It is also conceptually plausible insofar as its proponents can cite evidence of historical false-flag operations and construct arguments about motives based on statements by leading Bush administration figures such as references to the potential benefits of a 'catastrophic and catalysing event' (PNAC (Project for a New American Century), 2000:51).

Some conspiracy claims are absurd because there is overwhelming evidence against them. For example, it is relatively to disprove the theory that the earth is flat (Whittaker, 2017). In contrast, conspiracy theories about contemporary events are often much harder to disprove because the facts have not gone through the same, lengthy process of institutional confirmation. Moreover, they concern political truths rather than scientific truths and 'political truth is never neutral, objective or absolute' (Coleman 2018: 157). In other words, the conclusions people reach are bound up with ideological assumptions. In these instances, there may be considerable value in opening-up conspiracy claims to public scrutiny and debate.

The question of ideology, rather than facts alone, is central to any conspiracy claims about social or political reality. As Coleman (2018:158) argues, 'verifying the status of basic facts is one thing but questions about what facts mean and how they relate to reliable accounts of political reality cannot be reduced to the mechanics of automatic affirmation.' Here, it is helpful to consider John Searle's (1995) distinction between institutional facts and brute facts. Brute facts are intrinsic features of physical reality; they exist independent of, and unaltered by, human observation. In contrast, institutional facts are interpretations that rely on social conventions and agreement for their truth-value. A brute fact becomes an institutional fact through language; specifically, the language of those endowed with the power to make institutional declarations. That is, the bombing of a town remains a brute fact, but the institutional labelling of that fact – as a hoax, a false flag, or a war crime – requires institutional consent. The conspiracy claims and counterclaims surrounding the Syrian conflict concern both brute facts (what happened?) and institutional facts (what does it mean?). Much of the debate centres on ideas about the trustworthiness and impartiality of journalists

and experts whereby efforts to establish the facts are superseded by received ideas about the credibility of different sources.

The Syrian Conflict

In 2011, Syria experienced a wave of opposition to the regime of Bashar Assad. The ensuing civil war engaged complicated geopolitical alliances. Put simply, a myriad of opposition groups and the Islamic State of Iraq and the Levant (ISIS) fought Assad while Kurdish forces, the US, and the Gulf League fought ISIS. Iran and Russia supported the regime while the US threatened to intervene against it. This multi-sided conflict produced heated debates about the legitimacy of all actors; the attribution of responsibility for causalities; and the response of the international community. Of central concern for this article are the disputes surrounding the use of chemical weapons by the Assad regime; specifically, in Ghouta in August 2013, in Khan Sheikhoun in April 2017, and in Douma in 2018.

As foreign journalists were banned from entering Syria, war reporters were heavily dependent on online footage created by Syrian activists (see Andén-Papadopoulos and Pantti, 2013; Sienkiewicz, 2014). Unsurprisingly, this prompted controversy about the transparency and independence of news sources (Mast and Hanegreefs 2015; Sienkiewicz, 2014; Smit et al., 2017). Veteran correspondents including Patrick Cockburn (2017) have suggested that Western news organisations 'almost entirely outsourced their coverage to the rebel side'. Cockburn is careful to note that this 'doesn't necessarily mean that the reports in the press about the devastating effects of shelling and bombing were untrue'. The core issue is about the lack of standards for investigative reporting. Meanwhile, in the British press, critics of the official Western narrative were frequently dismissed as conspiracy theorists and stooges for Russian propaganda (Hammond et al., 2019).

Many of these critics argued that Western media outlets appeared to be facilitating regime-change propaganda akin to the media coverage prior to the 2003 Iraq invasion. Proponents of this view included British journalism professor Piers Robinson who co-founded the Working Group on Syria, Propaganda and Media to investigate media coverage. Operating from a very different ideological perspective, Russian propagandists, pro-Assad activists, and far-right populists also questioned the authenticity of Western media coverage (Flaherty & Roselle, 2018; Starbird, Arif, Wilson et al., 2018). The Russian state-funded broadcaster RT advanced conspiratorial claims to legitimise Russia's foreign policies while delegitimizing the policies of the US (Yablokov, 2015). Of course, there were also dubious accounts opposed to the Assad regime; a blogger posing as a 'Gay Girl in Damascus' received considered attention from Western media, but was untimely unveiled as a 40-year-old American man living in the UK (BBC, 2017, April 07). It is against this backdrop that various kinds of expert questioned the visual evidence purporting to show the use of chemical weapons in Syria.

Social media evidence

On 21 August 2013, the Syrian opposition accused the regime of using sarin gas in an attack on Eastern Ghouta, a suburb of Damascus. The US and many of its allies blamed Assad while Assad and Russia accused the opposition of staging the attack to draw international condemnation and US intervention. Significantly, in 2012 US president

Barack Obama had opaquely threatened to intervene if the regime crossed the 'red-line' by using chemical weapons. Thus, prior to any detailed analysis of the evidence, the issue of plausibility was the subject of much speculation among international relations experts and media commentators more generally: was it plausible that Assad would risk US intervention and was it plausible that the opposition would try to provoke intervention?

The only evidence for the use of chemical weapons emerged from Syrian civilians and activists. This shocking footage depicted civilians struggling to breathe amid a sea of dead bodies. However, Russian authorities initially maintained that evidence for the attack was fabricated. To support this view, they cited an analysis by Agnes Mariam de la Croix, a Christian nun based in Syria. De la Croix argued that the victims were merely posing, but was later discredited for misunderstanding YouTube timestamps (Leander, 2014). One month later, the UN produced a scientific report which concluded that the weapons must have been launched from regime held territory (United Nations, 2013). In response, Russia's political leaders no longer questioned whether the attack had occurred, but did question the independence of the report.

Many figures with varying kinds of expertise offered their own analyses of the footage instigating a protracted chain of reports, arguments, and counter-arguments. Efforts to verify and interpret the social media footage was undertaken by scientific, medical, human rights, and international relations experts. Consequently, the nature of expertise, including which field of expertise was most appropriate or most credible, became crucial to the debates (see Leander, 2014). Notable here are the contributions of three people who would go on to play prominent roles in coverage of subsequent attacks: Theodore Postol, a professor of science, technology and national security policy at Massachusetts Institute of Technology; Seymour Hersh, an investigative journalist who won a Pulitzer Prize for his exposure of the 1968 Mai Lai massacre; and Elliott Higgins, a widely-praised citizen-journalist and founder of the open-source investigation outlet Bellingcat.

Following an analysis of *YouTube* footage, Postol concluded that the rockets were launched within a three-kilometre range and therefore Assad was unlikely to be responsible for the attack. Bolstered by his status as an MIT professor and a ballistic missiles expert, Postol's views were reported in the news media including *The New York Times* (Chivers, 2013). They were later as cited in Hersh (2014) in an article for the *London Review of Books* which proposed that a Syrian jihadi group, aided by Turkey, most likely carried out a false flag attack to draw the US into the conflict. These claims were also reported by *Die Welt*. For his part, Higgins and his collaborators strongly contested these arguments by conducting their own investigations into the social media footage. Higgins demonstrated that the type of munitions used in the Ghouta attack could be seen in videos depicting the Syrian Army and that there was no video evidence of the opposition using these munitions. His views on the matter appeared in *The Guardian, The New Yorker, The Telegraph*, and *Foreign Policy* magazine.

Thus, in the months following the Ghouta attack, an ordinary citizen with an interest in news from Syria was confronted with contradictory claims from different experts across the news media. They were asked to consider competing theories of plausible motivations and, in reference to social media footage, to evaluate detailed arguments about chemistry, engineering, and the movement of weapons. What's important, however, is that the initial lack of certainty gave way to in-depth investigations into the conspiracy claims and produced compelling evidence to counter those claims.

Moreover, it should be noted that critiques of visual evidence are widespread among media and communication scholars. Chouliaraki (2015: 1326), a leading scholar of conflict and humanitarian media, observes that online footage raises inherent doubts 'about the status of death images (are they authentic?), our relationship to them (what should we feel towards them?) and the power relationships within which they are embedded (who dies and how does this matter?).' Similarly, citing controversial footage of an American soldier shooting an Iraqi man, the filmmaker Erroll Morris (2004) argued that images are 'physical evidence' which 'provide a point around which other pieces of evidence collect. They are part of, but not a substitute for, an investigation.' As such, an evidence-based interrogation of the digital media footage was necessary for a functioning public sphere.

Conspiracy Narratives

By the time of the sarin gas attack on Khan Sheikhoun in April 2017, the same debates were more clearly inflected with conspiracy theories and two entrenched camps of media activists. In the four days following the attack, Twitter activity concentrated on two hashtags: #SyrianGasAttack was used by those accepting the view that the regime had used chemical weapons while #SyriaHoax was used by those claiming the attack was another false flag (White, 2018). This hoax accusation was now tied to wider set of conspiracy claims concerning the White Helmets and mainstream media manipulation more generally. Starbird et al. (2018) identified a multi-layered 'echosystem' that promoted these hoax claims. Pushed by Russian outlets such as *RT* and *SputnikNews*, the hoax claims were taken up and re-packaged by other actors including the conspiracy websites *Infowars* and *21st Century Wire* along with other sources advocating anti-imperialist, libertarian, and far-right views.

Importantly, those advocating the hoax view – including Postol and Hersh – were not necessarily pro-Russian although they were accused of fuelling Russian-back conspiracy theories (e.g., Monbiot, 2017; Shachtman & Kennedy, 2017). In a report for *Die Welt*, Hersh claimed that the strike on Khan Sheikhoun was the result of a conventional bomb not sarin gas, but his reporting faced criticism for relying on an anonymous US intelligence source (Bloomfield, 2017; Massing, 2018; Shalom, 2017). Although journalists often cite anonymous sources, the practice is considered suspect; especially if the journalist fails to provide additional corroboration for the anonymous source's claims.

Moreover, Hersh's account of Khan Sheikhoun pushed the boundaries of plausibility. As Shalom (2017) explains,

> To accept Hersh's account requires us to believe that Assad and Russia never undertake unnecessary actions, that every respected NGO has compromised itself on behalf of Trump, that the UN and France are in Washington's pocket, that the [Organization for the Prohibition of Chemical Weapons] produces bogus reports, … and that even though many members of the military and the intelligence community are furious that Trump rejected and falsified evidence, Hersh could find no one willing to speak on the record (Shalom, 2017).

As articulated by Shalom (2017), Hersh's reporting now typified conspiracy thinking insofar as it manifested 'the unnecessary assumption of conspiracy when other explanations are more probable' (Aaronovitch, 2009: 5). Hersh's motives and credibility were now exposed to scrutiny by his peers. Journalist Steve Bloomfield (2017) observed that 'after

decades of exposing lies told by the American government' Hersh appeared to operate on the assumption that his government is always lying. This allows him 'to jump from the fact that America has denounced an atrocity to suspecting that it never happened' (ibid).

Postol, the MIT professor, also accused the US administration of relying on false information to justify airstrikes on Syria. Meanwhile, a source Postol had used for his Ghouta investigation had risen in prominence on social media, prompting some journal-ists to investigate her credibility and, by association, Postol's. The Syrian-Australian blogger Maram Susli (also known as Syrian Girl and Partisan Girl) advocated a pro-regime stance on Syria and endorsed conspiracy theories about 9/11 Truth, the Holocaust, and the New World Order (Shachtman & Kennedy, 2017). She became a regular Infowars contributor and appeared on far-right media with white supremacists including the leader of the Ku Klux Klan (ibid). With mounting reasons to suspect the claims and ideological motivations of Hersh and Postol, the public value of reporting their views without qualification diminished.

However, questions about the responsibility for the Khan Sheikoun attack, and the legitimacy of the US airstrikes, remained open in the news media. *Deutsche Welle* (Schultz, 2017) reported division among EU leaders and noted the hesitation of Hans Blix, the UN Weapons inspector best known for his opposition to the US case for the invasion of Iraq. The article quoted Blix's unease with the lack of evidence: the 'pictures of victims that were held up, that the whole world can see with horror, such pictures are not necessarily evidence of who did it' (ibid.). Where Blix merely expressed caution, others proffered alternative explanations. On the BBC's flagship current affairs programme, a former British ambassador to Syria speculated that the Khan Sheikhoun attack was the result of a conventional airstrike hitting a jihadi arms dump BBC, 2017, April 07). Months later, *Newsweek* reported that US Secretary of Defence James Mattis admitted to a lack of evidence regarding the use of sarin gas by the Syrian regime (Wilkie, 2018). In response, investigative journalists at Bellingcat continued to debunk these claims with counter evidence.

Leaked evidence

This pattern of claims and counterclaims continued to animate subsequent attacks including the chemical weapons attack on Douma on 7 April 2018. Russian media outlets again claimed the attack was a 'false flag' operation. Six days later, prior to any official investigation, President Trump ordered a missile strike on a research centre and weapons facility in Syria. The Organisation for the Prohibition of Chemical Weapons (OPCW) published its final report in March 2019 noting 'reasonable grounds' that 'the use of a toxic chemical had taken place'.[1] However, the credibility of this report has been subject to much speculation including criticisms levelled by experts working for the OPCW.

Ian Henderson, an OPCW ballistics inspector, claimed his views were excluded from the OPCW's final report. He argued that there was insufficient evidence to conclude that the missiles were dropped from aircraft, which opened the possibility that a source other than the Assad regime placed them there. His views were reported by a British columnist for the *Mail on Sunday* (Hitchen 2020).

Later in 2019, a second whistle-blower known as 'Alex' claimed that the OPCW had doctored its report to implicate Assad while also suppressing dissenting voices within the

organisation. WikiLeaks published internal OPCW files to support this claim. Commenting on these revelations, journalist Robert Fiske (2020) noted that: 'to the delight of the Russians and the despair of its supporters, an organisation whose prestige alone should frighten any potential war criminals is scarcely bothering to confront its own detractors'.

While the integrity of the OPCW and its conclusions are now open to serious question, there is also no evidence to support the conspiracy theory explanation that Douma and the preceding attacks were the result of a 'managed massacre' and 'crisis actors'. Writing in 2018, the Working Group on Syria, Propaganda and Media already concluded that 'observations favour a managed massacre rather than a chemical attack as the explanation for the Douma incident' (McKeigue et al., 2018). The whistle-blowers revelations may provide ammunition for this view, but they do little to prove it.

Discussion and conclusion

The Syrian conflict has unfolded with pronounced epistemological uncertainty and against a backdrop of concerns about the intentions of states and the justification for international intervention. Recalling Searle's distinction between brute and institutional facts, the Syrian conflict was complicated by two key factors: evidence for the brute facts largely consisted of digital media footage rather than on-the-ground verification and there was frequent hesitation within the international community regarding the designation of institutional facts. In this context, it is unsurprising that conspiracy claims played a prominent role in media coverage. Ultimately, exposing these claims and counterclaims to public scrutiny was valuable for the public sphere as it revealed the ideological dynamics influencing public perceptions of the conflict.

Viewed in their original context, the 2013 claims by Postol and Hersh merited public visibility. At this point, there was a fine line between conspiracy claims questioning the authenticity of official narratives and the journalistic imperative to also question official narratives. Moreover, their claims were not absurd insofar as they rested on plausible, and widely discussed, arguments about motive. In addition, Postol and Hersh put forward claims that could be subjected to verification and investigation. As such, their contributions stand in contrast to more obvious efforts to mislead the public by the Russian state, professional conspiracy theorists, and far-right activists.

Investigative journalists exposed Postol's and Hersh's claims to intense scrutiny. In the process, these journalists introduced a greater degree of certainty to the public debate about the conflict and overtime this certainty diminished the value of giving visibility to conspiracy claims. Consequently, the claims of Postol and Hersh in 2017, whatever their ideological motives, were more clearly equivalent to efforts to misinform the public. In retrospect, we may re-evaluate their 2013 claims in light of this new information, but this does not detract from the value of debating and investigating those claims at the time. In effect, the debate that occurred across the news media typified a functioning public sphere: plausible conspiracy claims gained visibility through the news media, were subjected to scrutiny, and ultimately contested with evidence. Similarly, current claims about the integrity of the OPCW merit further investigation without the accusation that those who do so are conspiracy theorists.

It is impossible to consider the value of conspiracy claims for the public sphere without the role of investigative journalism to interrogate those claims. The disputed claims at the

centre of the Syria case presented complex arguments about ballistics and chemical residue; matters which are far beyond the expertise of most members of the public including academics such as the author of this paper. We may assume that most members of the public had neither the time nor the ability to evaluate these claims and, consequently, were likely to rely on received ideas about the trustworthiness of those putting forward the claims. The role of experts is notable feature of the case. Barkun (2006: 26) has argued that conspiracy theories are a form of 'stigmatised knowledge' that is marginalised by the 'institutions that conventionally distinguish between knowledge and error – universities, communities of scientific researchers, and the like' (ibid). In this case, however, academic experts such as Postol and Piers Robinson and high-profile investigative journalists such as Seymour Hersh were key exponents of conspiracy claims. This underscores the importance of journalists willing to interrogate claims and provide clarification to the public.

From a communication studies perspective, this paper has argued that conspiracy theorists can play a dual role within the democratic public sphere: they are potentially harmful in misleading the public and they are potentially constructive in advancing reasoned debate about important issues of the day. On this basis, I argue that academics do not have to adopt a position on conspiracy theories, but on the value of debating those theories in the public sphere. However, this is not an easy task as it is often difficult to ascertain the merits of different claims and the value of claims may change over time as new evidence emerges. Being open to the possible value of conspiracy theories is also difficult given what we know about the prevalence of disinformation campaigns, hate speech, and ideological polarisation on social media.

However, being open to conspiracy claims is a long way from endorsing those claims and it does not preclude harsh critiques of the evidence put forward by conspiracy theorists upon whom the burden of proof is a heavy weight. Moreover, we may make distinctions between the plausibility of different claims and the credibility of their exponents in order to assess their potential relevance for the public sphere. Crucially, we must also consider the robustness of the news media in its ability to respond to conspiracy claims and to investigate the evidence. While journalists played a key role in interrogating claims about Syria, there is no guarantee that this will always be the case. Consequently, the position I advocate on conspiracy theories is highly relative to wider conditions in the media environment and may become untenable if those conditions no longer support robust interrogations of conspiracy claims.

Note

1. https://www.opcw.org/media-centre/news/2019/03/opcw-issues-fact-finding-mission-report-chemical-weapons-use-allegation.

Disclosure statement

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Conspiracy theories in political-economic context: lessons from parents with vaccine and other pharmaceutical concerns

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ABSTRACT

Profit-boosting manipulation and subterfuge is axiomatic to late-stage US capitalism, even in healthcare. I demonstrate how acknowledgements of this can overextend into 'false beliefs' using data from Southern Californian parents who vaccinate selectively and those treating intractable paediatric epilepsy with cannabis; and I explore appropriate responses. Both groups' discourses referenced corporations' self-interested duplicity, such as in sham invitations for patient engagement. Parents also pointed to contemporary measures of good health and citizenship moored to the US political economy's expectation for independent, self-responsible, 'productive' adulthood (ableism). Rejecting normative and epistemological relativism yet attending in good faith to parents' experiences and concerns, I recommend a Utilitarian approach to spurious claims – one that leverages culture's potential fluidity while accounting for the ideological and material matrices of such claims' emergence. Although unorthodox views with empirically verifiable underpinnings always deserve consideration, those unmoored to scientifically assessable reality can and should be challenged, with cultural sensitivity, in proportion to the degree to which their promulgation could underwrite harm. Moreover, interventions must bring the deep critiques that conspirational worries encapsulate to the attention of those with power to address them. If a community's real concerns are taken seriously, discrete scientifically-untethered claims may be more easily relinquished.

> Neutrality helps the oppressor, never the victim.
>
> −Elie Wiesel, *Nobel Acceptance Speech*, 1986

Western, post-Enlightenment thinking dismisses mystery, yet humans retain 'an impulse, palpable across the face of the planet, to reveal the hidden workings of power – and to uncover its tangled complicities' (Comaroff & Comaroff, 2003, p. 288). Health failings can form a magnet for this impulse; indeed, the anthropological record is rife with conspiracist theories of sickness. I wish to explore the signification entailed in such theories as well as the response required of researchers in the context of US paediatric healthcare.

Debunking debunking

Conspirational ideas vary widely – as do researchers' disciplinary and theoretical lenses; accordingly, scholars disagree on how to handle resistant counterfactual claims (Drążkiewicz & Harambam, this issue). Some see academic inquiry as necessarily neutral. Others cast counterfacts as the enemy of informed scholarship, marking them and the narratives they may be part of with the 'conspiracy theory' (CT) label. Unfortunately, such opposition intensifies misunderstanding, proliferating false binaries of 'us vs. them' and 'truth vs. fiction' even within the academy, foreclosing real advances in how scholars think about – and respond to – the marked ideas. As Drążkiewicz and Harambam ask, 'What do we do'?

Building on findings from my US-based research on vaccine selectivity and on cannabis treatment for paediatric epilepsy, referenced below, I argue that truly counterfactual details can and should be challenged in proportion to the degree to which their promulgation could underwrite widespread harm, subverting the greater good. Although all parties involved should have a say in defining *harm*, social justice and basic human rights must take precedence (see American Anthropological Association Committee for Human Rights, 1999). This Utilitarian-influenced line of thinking, which prioritises the greater good (e.g., public health) over individual proclivities, holds that if harm potential is low, regardless of empirically verifiable or 'substantive' facts (about which, see Harambam, this issue), there is *no need* to impose one's own culturally conditioned version of 'the truth.' Rather, we should ask what adherents of low-harm counterfacts can teach us about being human. If a counterfact's harm potential is high, however, we must try, carefully and with an eye to social justice, to reduce that element's salience for believers. Moreover, we must address harmful falsities in ways that support so-called CTs' broader functions.

This approach to the query 'what do we do' bridges split vantages on 'debunking' while asserting a non-oppositional model of human meaning-making. It favours an inclusively universalist perspective and assumes a common good. Accordingly, the 'we' who would 'do' – i.e., scholars in the Western tradition willing to accept current, unvested, expert scientific consensus while remaining cognisant of the contingent nature of such consensus and wary of Western supremacism and relativism's nihilistic potential – must acknowledge indigenous experiential expertise, prioritise subject perspective, and support lay participation in public discourse (regarding the 'we' question see Chua & Mathur, 2018).

Respectful conversation is key to this framework, which rests on Harambam's argument that *democracy* provides a 'normative standard' for knowledge contestation by ensuring all groups have a fair opportunity to help establish what is true (Harambam, 2017, pp. 273–274). In this view, even unorthodox hypotheses cultivated through ethically sound empirical investigation deserve dissemination and further scrutiny. Indeed, that is how science and society advance.

Interventions bearing in mind potential harm and the need for democracy provide an ethical answer to Drążkiewicz and Harambam's question. Harm-reduction begins with the explication of the critiques that so-called CTs articulate, tracing core concerns expressed down to their roots. Far from 'just rumours' or 'crazy talk,' CTs can index deep-seated social-structural dilemmas or group-specific, locally-recognised legacies of maltreatment, such as those linked to racism or colonialism. Indeed, an imputed CT is sometimes just a small part of a larger set of complaints related to structural violence. In keeping with a democratic impulse, these complaints merit publicising; indeed, broadcasting them is

our responsibility (see Briggs, 2004). In giving them air, we may alleviate some of the suffering stemming from marginalisation – and we may mitigate a group's need to cleave to counterfactual details that have the potential for harm.

I arrived at this framework by placing extant CT literature in conversation with my research on vaccine selectivity (e.g., Sobo, 2015b, 2016) and cannabis treatment for paediatric epilepsy (e.g., Sobo, 2017, in press). Both practices are undertaken by parents to protect children's developmental potential in service of ensuring their future independent economic productivity – an invaluable aspect of US social adulthood. Further, discourses around both reference expectations of state-backed corporate manipulations, some very nefarious. Despite these shared 'master factors' notable distinctions in number and intensity of 'false' facts and potential for harm shaped the terms of my response to Drążkiewicz and Harambam – but before discussing the data, or presenting my response in further detail, a bit more background is necessary.

Background

So-called conspiracy theories (heron, simply CTs) are fluid networks of ideas deployed against the grain of accepted understandings to argue that specific events do not unfold at random or as the secondary fall-out of mundane social processes or day-to-day, disinterested bureaucratic decisions. Rather, agents work covertly and malevolently backstage, pulling strings. Some CTs include claims or conclusions presently ungrounded scientifically.

Power and truth

The label 'CT' is both a lumping device for dissenting narratives and a reciprocating technology of doubt production: it denounces as implausible if not ridiculous the sceptical views a CT promotes. The CT label attempts to impose if not reinforce marginalisation by barring ideas from authorised public circulation, (Briggs, 2004; see also Martin, 2015; Mathur, 2015).

Pelkmans and Machold highlight the 'distorting effects of the fields of power through which theories travel' (Pelkmans & Machold, 2011, p. 77), noting that CTs begin in an unmarked state, as all theories do. The label's application – or not – imposes a definition of the situation favouring those who apply it; and if they have more power than CT proponents, particularly if a CT's truth claims are weak, the label is likely to stick. Likewise, theories of powerful groups repel the CT label; for instance, the theory that Saddam Hussein was secretly holding weapons of mass destruction and conspiring with Al Qaeda, never was labelled a CT – not even after being disproven (Pelkmans & Machold, 2011; and see; Keenan, 2006).

A heterogenous, critically revelatory, generative lot

CTs vary, for instance, by intensity of belief as well as by the size and distribution of the community of believers. Some have little more in common than suspicions regarding secret operations. Even then, the degree of concealment, the agentic strength concealed, and the reach of agentic action may range from 'possibly some' to 100 percent. Further, CTs may contain multiple individually false claims; or they may spuriously connect

substantively well-justified or 'true' facts (regarding this qualified definition of truth see Harambam, this issue).

Many CTs express bigotry; others respond to this. For instance, African American worries that the Ku Klux Klan (KKK), a white supremacist organisation, owned Church's Fried Chicken and doctored its food to neuter male patrons index, critically, tensions rooted in the legacy of slavery, the genocidal eugenics programmes of the early twentieth century, and the stress of living in a racist society (Turner, 1993).

CTs are generative too. They shape as they are shaped by our world-views (see also Harambam, 2017, pp. 26–27). They can also be important for social belonging: people tend to favour ideas held by respected friends and relations if rejecting such ideas means losing social support (Kahan, 2013; Kahan et al., 2012). Indeed, smaller, tighter-knit, self-segregating groups may have low permeability to outside information, leaving a limited, skewed set of (accepted) ideas circulating (Sobo 2015b). Put on the defensive, particularly regarding ideas central to group identity, these groups may close ranks (Kahan, 2013); their ideas may become 'self-sealing' (Sunstein & Vermeule, 2009, p. 204). That said, a group's members can hold richly diverse and sometimes contradictory positions in support of the same core concern (see Harambam, 2017; Harambam & Aupers, 2017).

CTs further vary in the degree to which collective sense-making leads to material action (Franks et al., 2013), such as being purposefully unbanked. Further, CTs may promote social change by undergirding issue-based social movements. Simultaneously, some of their counterfactual assertions may underwrite widespread harm to human rights or the greater good, fostering violence or scapegoating already marginalised groups, or undermining public health (Sobo & Drążkiewicz, in press, considers COVID-19 CTs in this light).

Ludic conspiracism

People also can play with CTs (Sobo, 2019). Sometimes games, novels, and films leverage CTs for entertainment. Fenster highlights 'the joy of plunging headlong into conspiracy theory' in the context of such amusements (Fenster, 2008, p. 180). People often engage conspiracy theories fancifully even without such props, ruminating on them at no obligation, much as children enjoy trying on social roles in make-believe.

Like shared earnest dissent, ludic conspiracism can feed one's identity as someone 'in on the secret' regarding whose version of reality counts (see also Boltanski, 2014). Further, toying with CTs involves stretching our critical faculties pleasurably – a laudable pastime given contemporary expectations of discernment. Parker playfully proposes that scholarly social theories are themselves CTs, as they emphasise hidden links and beneficiaries (Parker, 2001).

Current context: infrastructural grounds of lay expertise

Exploratorily or earnestly, various CTs are palpably popular today, having migrated from the fringe into the very fabric of Western society. Academics typically explain this migration as rooted in a wider, structurally fostered tendency towards doubt in expert systems that surfaced in the mid-twentieth century, as per Beck (1992) and Giddens (1991). Enhanced communications and computing technologies ushered in subjective doubt regarding the 'grand narratives' of authorised experts (see Lyotard, [1979] 1984).

This has enabled the recently accelerated promotion, within US health services, of 'patient activation'. Instructions to self-educate and ask providers questions regarding treatment options as well as the doubt-sustaining demand that patients (now, consumers) consent to and assume the risks even of medically-indicated procedures became widespread. Such 'technologies of doubt' (Carey & Pedersen, 2017) extend the axiom *caveat emptor* ('buyer beware') – a warning tied to the rise of capitalism, in which the profit motive trumps all other market aims.

The technocultural environment of the internet intensifies the situation by democratising the 'knowledge-power hierarchy' (Kirmayer et al., 2013, p. 180), reinforcing an expert-doubting subjectivity. In the US, distaste for any concentration of power (Fenster, 2008), an emphasis on free thinking, and the sanctity of free choice further deepen distrust of authority. The good citizen does not follow blindly.

Mainstream US culture's neoliberal, individualist focus may explain why Hellinger found American CTs to 'veer away from the structural and toward instrumental views of power', introducing 'subjectivity and individualized forms of responsibility into the otherwise impersonal, structural forces that … move our world' (Hellinger, 2003, pp. 205, 208). Take pop-up internet bogey Momo, who promotes child self-harm – and looks uncannily like an exhausted mom. In the US this CT indexes 'good parent' worries, diverting attention from harsh structural factors (e.g., a need for two jobs) that make screens appealing babysitters (Herrman, 2019).

Anthropology's quiet contribution

Political science, psychology, and sociology dominate CT scholarship. Yet, much early anthropology explicates dissenting standpoints on reality expressed through religion, magic, witchcraft, and gossip, often practiced or circulated in relation to colonising regimes. Resistance and rumour garnered dedicated scholarly interest in the later twentieth century as 'dark anthropology' gained popularity; this occurred in sync with the 'brutal' rise of neoliberalism and the growth of income inequality (Ortner, 2016). Entering the new millennium, scholarship embraced post-socialist, post-cold war discourses. Essays collected by West and Sanders (2003) contrasted the situation on the ground with rhetoric regarding political and economic 'transparency' favoured by this new world order; those collected by Marcus (1999) probed new forms of Hofstadter's famed 'paranoid style.'

A more recently emergent stream of inquiry, unabashedly focused on CTs, probes mimesis and narrative. For instance, Vine and Carey explain that conspiricism 'espouses the contours of the infrastructural environment in which it emerges.' In the US this includes not only intensive capitalism and the accompanying technocultural environment described above but the 'bureaucratic machine', complete with its 'modular, distributed and arborescent' shape and rational, impersonal, control- and expansion-hungry quality and opaque goals (Vine & Carey, 2017, pp. 53–54).

Another ground for mimesis is an entrenched emplotment script hinging on identification of correspondences or uncanny coincidences. Skinner explores African-Caribbean conspiracism in these terms. Quoting Tuckett, he explains 'at least we can have the satisfaction of having worked out what is going on' (Skinner, 2001, p.106; but see Boyer, 2006). Uncanny correspondences also figure highly in Lepselter's (2016) exploration of alien abduction stories told in the 1990s by Americans anxious about freedom and control, and about being duped.

Medical anthropology and CTs

A high proportion of anthropology's CT-related scholarship appears as medical anthro-pology, partly reflecting the subfield's longstanding involvement with health aid flows from the Global North to the Global South. Such programs often provoke concerns related to sovereignty, exploitation, and social coherence, generally voiced in local idioms that can be read as CTs (see Leach & Fairhead, 2007).

Many cultures use blood-stealing and even organ-thieving legends to index worry over broader issues, which today include abuses accrued by populations that physically fuel the global economy (see Campion-Vincent, 2002). The body, and health generally – being essential, fragile, and fickle – serves exceedingly well as a projective screen for these concerns. Presently uncontrollable sicknesses can implore conspiratorial interpretations where a history of health-related abuses exists (e.g., mass sterilisation, unethical experi-mentation), and obvious disparities in who gets sick will feed suspicions.

Take HIV/AIDS. When first identified, rumours abounded regarding its nefarious invention for genocidal purposes. State-backed corporate treachery did in fact indirectly undergird the disease's hold in some ways in some locations, for instance, through machinations that destroyed various communities' livelihoods, pushing people into unsafe sex work or forcing syringe re-use. Farmer demonstrates how this was so in Haiti while exploring the varied narratives through which Haitians expressed knowledge of their betrayal (Farmer, 1992).

In a similar vein, Butt traces HIV/AIDS-related CTs in Indonesia to the everyday experi-ence of 'inconsistent applications of policies, missing information, and omissions in formal practice' and shows how the CTs reference colonisation, militarisation, and racialisation in the region (Butt, 2005, p. 432). Niehaus and Jonsson explore how South African CTs link HIV/AIDS-related suspicions to precarity wrought by deindustrialisation, itself subtended by the way power operates in a global economy (Niehaus & Jonsson, 2005). CTs have pervaded US HIV/AIDS discourses also. Political-economic issues aside, doubt was long ago shown a logical response to informational discrepancies and disagreements between HIV/AIDS experts (e.g., Sobo et al., 1997).

Briggs (2004) tackles faster-moving cholera, calling Venezuelan CTs regarding the scourge creative answers to an 'economy of erasure' in which marginalised populations remain unheard (see also Mathur, 2015). Accordingly, CTs embody a bid to be seen – and a refusal to be reduced, for instance, by epidemiology, which thrives by 'turning people into categories and numbers' (Briggs, 2004, p. 167).

More than this, Briggs demonstrates how his interlocutors were 'theorizing modernity' itself: they articulated local–global links in their CTs in ways that questioned the discursive production and segregation of these domains. As Briggs notes, 'Their appreciation of the crucial role of shifting modes of production and the organization of transnational capital [on the cholera outbreak] is striking' (Briggs, 2004, p. 175). Note the (uncanny?) parallel here to themes underlaying the HIV/AIDS CTs. (For an extension of this analysis to emergent COVID-19 CTs: see Sobo & Drążkiewicz, in press.)

The rule

Such contributions notwithstanding, many anthropologists avoid the CT label; they prefer cultural relativism, with its focus on context, hesitance to separate 'fact' from 'fiction,' and

refusal to insult a way of life as nonsense. This approach, which does preserve rapport and access, may cloak condescension: scholars may disdain 'bad facts' only when held by 'people like us' (see Sobo, 2015a). Regardless, most anthropologists seem to prefer taking the insider's perspective on what outsiders might call a CT, just as they would on any other aspect of a culture (see Harambam, 2017).

Some don't stop there. 'Descriptive relativism' can be so tightly held that it turns into 'normative relativism,' in which we forfeit the right to judge another culture's practices, etc., as 'good' or 'bad.' It can further morph into 'epistemological relativism,' in which between-group differences in worldview make pan-human generalisations impossible (Spiro, 1986).

Our challenge, our responsibility

Truth, for humans, is filtered and constructed; nonetheless, some truths are better substantiated empirically than others. This may not matter most of the time, but it sometimes matters deeply. If we agree, with an eye to social justice and an appreciation of contextual specificities, that some basic, cross-culturally applicable human rights exist – the right to optimise one's developmental potential, say – then we *can* reject unsubstantiated or disproven beliefs that harm a class of individuals. Therefore, despite neutrality's general importance for data collection, if harmful falsities surface in CT discourses we can and should support intervention after the fact (and in keeping with ethics restrictions).

Figure 1 delimits key parameters for action based on the discussion above. To be effective, its content must be informed by subject perspectives.

The present inquiry

I developed Figure 1 by ruminating on three recent research projects, each involving English-speaking adults living in or near San Diego, California. The first study (Sobo, 2015b) concerned school-based health production at an independent alternative school serving 280 pre-K through 12th-grade students (4% Asian, 3% black or African American,
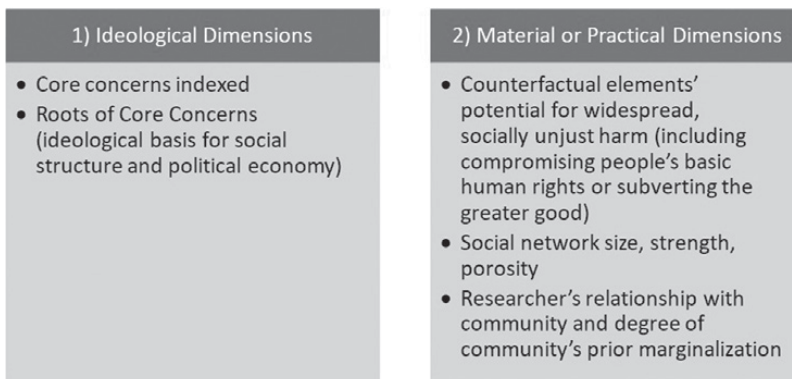
1) Ideological Dimensions	2) Material or Practical Dimensions
• Core concerns indexed • Roots of Core Concerns (ideological basis for social structure and political economy)	• Counterfactual elements' potential for widespread, socially unjust harm (including compromising people's basic human rights or subverting the greater good) • Social network size, strength, porosity • Researcher's relationship with community and degree of community's prior marginalization

Figure 1. Dimensions of conspiracy theories that interventionists must consider.

9% Hispanic or Latino, 60% white, and 24% two or more races [compared to 2.1% countywide]). Family income data were unavailable, but the school received 166 tuition assistance applications the year prior to the study's initiation, and average tuition paid was $6,802 USD. Titled the Healthy Child Development Project (HCDP), this study did not query vaccination. However, parents wanted to discuss it.

A follow-on study – the Vaccine Information Study (VIS; Sobo, 2016) – focused on vaccination from the start. Fifty-three parents with children kindergarten age or younger were recruited at locations that selective vaccinators frequent (e.g., health food stores) and at a daycare centre serving my university and the surrounding community. Average annual household income for participants was about $104,000 USD; average age was thirty-five. Thirty-four (2/3) self-identified as White; six as Latina; four, Filipina; three, Asian; one, Native American; and one, Black (four chose not to state).

The third project, the Paediatric Cannabis Study (PedCan; Sobo, 2017), concerned cannabis use for a child's intractable seizures, some attributed to vaccinations. Twenty-five parents, recruited via word-of-mouth, participated. Fourteen were White; seven, Hispanic; and two each, Black and Filipino. Their average age was 44, their average annual household income, $94,000 USD.

Ethics board-approved methods for each project included surveys, focus groups, and interviews. Narrative data were audio-recorded and transcribed for ethnographically informed content analyses.

My experiences since 2009 as a parent at the school where the first study took place enhanced my understanding of the selective vaccination position. My attendance, by invitation, at relevant family events in the local paediatric cannabis community and by my invited membership in two Facebook support groups for parents enriched the PedCan analysis, as did informational interviews I undertook with a variety of cannabis industry members, clinicians, and pharmaceutical company executives. My longstanding interest in narratives that counter authorised science (e.g.,Sobo et al., 1997) further influenced my reading of the data, which in turn revealed how viewing such narratives *as CTs* helps illuminate the relationships between science, technology, and human values – and provides guidance on what to do about which 'false facts.'

Healthy child development project (HCDP)

Some of the facts vaccine non-conformers referenced were, indeed, unsubstantiated scientifically. I provide specifics elsewhere (Sobo, 2015b) but note here that the autism-vaccine link, already having been refuted, was recast by the few mentioning it as indirect, achieved for instance, through a compromised microbiome. Such plasticity, and the overall heterogeneity of specific reasons given for vaccine caution, do not alter the larger story vaccine selectivity tells.

The broader context of child health and development is part of that story. Many parents worried about permanent developmental delay. As one parent said, 'whoop-ing cough looks like you can treat it and it goes away … so I stopped vaccinating.' Vaccine injuries, on the other hand she explained, have no cure; so it's best just to avoid them.

Suspicions regarding corporations' profit motives also ran high. One parent said that even the American Academy of Paediatrics was 'beholden to companies', which affected

their endorsements. Others surmised that the healthcare industry benefitted from increased treatment needs, due to how immunisations ostensibly weaken our bodies, increasing healthcare demand.

Many parents learned about child health from other school parents, sometimes even getting together to investigate options. For instance, Helen told of a 'big information sharing session' regarding food storage containers. In their stories, many parents articulated a sense that the school formed a community, often through blanket use of the term 'we'.

Parents took pride in the community's 'diligent' and 'conscientious' approach: 'Really, I think we delve about as deep as you can' said Sue. Another mom said, '[Parents here] really take the time to think about things, like they just don't go through just taking whatever society or lobbyists gives them, or advertising.' Individual self-education was common too. As Mel said, '[I] throw all kinds of pencils and homework upon myself.'

Information often came from alternative sources thought 'not biased by the government or a laboratory.' Most parents were, as Brad said, 'somewhat sceptical of the government and somewhat sceptical of sort of big brother and organised medicine, big medicine, big pharma, that kind of thing.'

But parents also made self-authorising assertions like: 'I'll tend to go with something that's from NIH, and then I'll even like go and look at some of the things on PubMed.' Indeed, 'research' often was invoked authoritatively (e.g., 'If you look at brain research'; 'It is pretty well empirically documented'; 'I made that educated choice based on my research'). Several parents referred to their own education in justifying their ability to evaluate and digest information. Noted Darlene: 'Doctors only go to another four years of education, it's not much.'

Alternative choices were taken to symbolise one's capacity for independent thinking. Many spontaneously mentioned the match between the school's ethos and their own 'conscious' approach to raising children. Leticia noted that committing to alternative education 'takes courage' because it is so unconventional. Vaccination nonconformity analogously 'shows that the parents are individual thinkers … it takes a lot of work to go against the grain of society' (Deb).

Although not statistically true, consensus held that typical parents at the school didn't vaccinate. Against this standard, said one mom, 'A lot of people … don't speak up about [vaccinating], because they don't want to be that person who doesn't follow the [school community] mentality.' Some parents said they kept silent about mainstream medical practices to avoid social isolation or evade confrontation. 'There's a vibe', said Malia, describing another parent being warned against pharmaceuticals in a way she saw as 'presumptuous'.

In ways consistent with those reported for small, tight-knit, self-segregating, CT-subscribing groups generally (e.g., Kahan, 2013; Sunstein & Vermeule, 2009), the 'vibe' is reinforced by the community's overarching 'alternative bent' (Iris). Families received 'encouragement, kind of like a collective community concern [at the school] like we should be sceptical of what's out there and we should double check what we are putting into our bodies, and our children's bodies' (Esme). Parents who perceived themselves as part of a special community with particular paediatric expectations received positive social reinforcement for accepting and further disseminating what they learned from alternative sources.

Paradoxically, keeping mainstream behaviours secret supported assumptions regarding their rarity. After a strongly anti-vaccine dialogue in a focus group, one participant did declare 'I immunise my kids . . . . Many parents that I know immunise their kids here.' But she followed this with an affiliative proclamation regarding how she handles fevers (thought beneficial; see Sobo, 2015b): 'I don't run for the antibiotic or Tylenol – I wait, let the fever go up.' 'I have a lot of fights with my parents,' she added, again asserting common cause with school community members versus outsiders: 'I'm considered to be very extremist.' Other vaccinators used similar rhetoric (including lauding the school's pedagogy) to confirm good school citizenship.

Given that many parents found the school's 'alternative bent' attractive, their eldest children may have been missing more vaccinations than usual prior to matriculation. But enrolling one's family and becoming embedded in this tight-knit community often intensified vaccine avoidance and even propagated it among previously vaccinating parents. The social fabric of the school served as an incubator, fostering the extraordinarily high personal belief exemption rates seen in mandated public reportage at the time (51% by kindergarten time; 71.5% in 7th grade) and encouraging a quantified drop in vaccination for many families' younger children. (This exemption means that one or more vaccinations have been foregone, not that none have been taken.)

Vaccine information study (VIS)

The next study directly asked parents with young children what gave them confidence in prior vaccination choices. Full vaccinators had little to say; many simply offered statements like 'It seemed pretty routine, pretty normal' (John). In contrast, the narratives of selectively vaccinating parents generally entailed three themes, all indicating intentional dissent: (a) reading/researching widely, (b) striving to recognise biases, and (c) rejecting belief in a single, correct, one-size-fits-all answer.

The first theme was covered above, so here I only will highlight that VIS parents echoed the distaste for disability (e.g., 'If you're a parent, you know you don't want to do something that, causes, your child to, to, develop a [developmental] problem of some sort'). These parents likewise emphasised how parents may know more than clinicians, who 'don't even know what the [vaccination package] inserts say' (Rebecca).

Also like HCDP parents, VIS parents were wary of biased information; but (perhaps because of the overt vaccine focus) they were more specific regarding the need for information from sources not funded or backed by vested interests. They knew that big studies cost money, and that making money is the American way – but they did not want to be taken advantage of. As Erin reasoned,

> It seems like because it's pretty expensive to do these types of studies that they're typically done by kind of like big pharma type companies, big science companies that have money to do these studies. But that can create, in my opinion, a bias on the study, and so sometimes that can skew the way that things are perceived or . . . the outcomes.

Likewise, as Andrea said, 'If [the doctor's] being paid by pharmaceutical companies, for doing the work, then I can't really trust his opinion – his or her opinion – on the safety of it.'

Selectively vaccinating parents underscored their situational openness: they made choices vaccine by vaccine, disease by disease, and child by child, seeing each one as unique. Again, autism was rarely mentioned, but one parent indicated vaccinating might somehow encourage autism in children prone to the condition. As this narrative shift away from direct causality confirms, parents maintained an openness to new information: informed choice (seen as a parent's right and responsibility) depended on being aware of multiple perspectives. Broad informational exposure signalled both impartiality and thoroughness. Selective parents valorised multivocality so much that, to them, anyone (clinicians included) who did not see that there are many sides to any issue was either not paying attention or not objective.

PedCan

The third project focused on the curative and palliative uses of cannabis in epilepsy, which at the time were unproven scientifically but hadn't been invalidated; nor had cannabis been shown dangerous with prudent use. Despite the lack of overtly 'false facts' here, parent narratives overlapped in certain ways with the vaccination findings, particularly regarding the ideal of raising 'healthy' children primed for independent adulthood, children's individual uniqueness, and the unequal relationship between consumers and self-interested organisations.

Parents had all hoped that biomedicine would control their children's seizures. Many explained its failure in relation to their children's unique constitutions. Indeed, some critiqued depictions of cannabis as a one-size-fits-all miracle cure ('everybody's chemical levels are different, everybody's reactions to either pharmaceuticals, cannabis, diet, all that stuff is all different for every single person'). They also critiqued producers who dissembled regarding the quality of their product in service of quick profits.

Parents did not cast cannabis as a panacea, but hoped that if one cannabis preparation didn't work, another might. Like the doctors did with pharmaceuticals, they practiced trial-and-error. Unlike the doctors, they were openly communal in their efforts: while mainstream medical practice happens on an isolating, one-to-one scale, paediatric cannabis regimen development occurred in the context of a supportive 'cannamom' community.

During the project, mainstream pharmaceutical companies were exploring the market. Most parents were pleased that their children's needs were recognised, and excited about the prospect of buying cannabis medicine at the pharmacy, thus re-entering the patient-consumer mainstream. Most saw pharmaceuticalization as inevitable, too: 'It's just capital-ism', Catherine observed. That 'big pharma' wanted to corner this market and would do so by any means (including, some said, by sabotaging legalisation or underwriting raids to put cottage producers out of business) made sense to the parents. Bernice said, 'If that's what it takes to be able to legally give that to my kid … then I'm thankful.' Pharmaceuticalizaton would also help fill many parents' culturally-influenced preference for precision dosing, and provide some respite time-wise ('It takes me 20 minutes to load my kid in the car on a good day' [Lillian]; 'I'm always sleep deprived … You're in survival mode' [Vivian]).

Still, a subset hoped that pharmaceuticalization wouldn't mean limited formulations, or medicine with, in Sophia's words, 'too much junk in it'. A smaller minority did not want cannabis appropriated, manipulated, and sold for what even acquiescent parents agreed would be an artificially high price, particularly when cannabis tinctures and oils are, as

Catalina noted, 'very easy to make'. They did not want their right to make their own medicine quashed by 'big pharma'. These participants valued parent empowerment and the 'cannamom' network, which pharmaceuticalization would kill. As Lillian proposed, 'our goal should be community gardens; how beautiful would that be growing our own medicine,' adding sardonically 'but where's the money in that?'

The salience in PedCan parent narratives of capitalism's cunning self-interest and the primacy of productive, independent adulthood for these parents paralleled the significance of such themes in CTs held by the VIS and HCDP parents. But the absence of potentially harmful falsehoods coloured my approach to answering 'What do we do'?

Discussion: the capitalist context of parental fears

CTs are communally held resources for meaning making. Relativism applies; but inclusion of *harmful* falsehoods – such as unsubstantiable vaccination beliefs that could foment an epidemic – requires intervention. It is true that arguments meant to counter a CT may be ignored or even appropriated by the CT's adherents to accommodate the CT's persistence. But, as the ways parents talked about autism showed, CTs are never finished products (i.e., they evolve): we can develop culturally relevant messaging to encourage a shift away from dangerous propositions over time.

Cultural relevance refers here to not just content but form. Present public understandings of how science – and 'truth' – work, seen in parent narratives, make absolutism and overruling without explanation unacceptable. Likewise, we must avoid discouraging active engagement, given parents' awareness of healthcare's demand for participatory patienthood, and related parameters for 'good' parenting. Only by taking parents' need to fulfil role expectations and their specific concerns seriously can we effectively offer convincing reasons to vaccinate or to move oneself along the continuum away from any ossified, earnest support for false claims to a more permeable standpoint.

Providing resources by which people can disentangle false claims from self-perceptions also should help. Recall the sense of community emphasised by so many HCDP parents. People dig in their heels regarding stances to which their identities have fused, particularly when perceived as normative (see Kahan, 2013; Nyhan et al., 2014). Despite a stereotype holding that most children at the first study site (the school) were unvaccinated, half were in fact fully vaccinated, and most others had most vaccinations: broadcasting this respectfully while promoting identification with, for instance, pedagogical values held in common could support consciousness-raising and thus liberation.

This is perhaps most likely if the values targeted support parents' perception of themselves as uniquely discerning self-educators – capacities overtly valued in the US broadly and by study parents, and to which conspiracism (ludic as well as earnest) speaks. One cannot reasonably ask people to give up this self-identification (particularly in small, close-knit communities) without providing alternative sources of identity-positive ideological support, or other opportunities to express scepticism (perhaps even by exposing financial profits made by anti-vaccination websites). Further, in keeping with what research has shown about the importance of social belonging (and with current US reporting regarding far-right COVID-19 conspiracism's heightened appeal among the lonely [e.g., Roose et al., 2000]), providing the means for expressing discernment *in community* is vital.

Bearing witness: core issues and foundations

Concurrently, to best reduce the psychosocial value of false claims, those who study CTs must publicise the deeper worries such claims index: 'bearing witness' can empower those who have deployed those claims to release harmful false elements from cultural models. Scholarly dissemination of deep concerns must reach beyond academic journals. It must target public media in attempts to sensitively communicate the core issues a given CT indexes.

In the research revisited, these included the deceitful nature of healthcare's rhetoric of self-determination and worry over preserving children's developmental potential in service of 'productive' independent adulthood. Both worries hinged, in turn, on how business interests exploit individuals in cunning ways for financial gain.

State-backed corporate treachery, even in medicine

Contemporary capitalism serves as an excellent generative matrix for CTs of all kinds due to its well-known *modus operandi*. It is common US knowledge that, driven by greed, corporations may make false claims; control certain markets unfairly; and manipulate government support, for instance, through lobbyists or by seeding regulatory agencies with their representatives. This is just how capitalism works (and why, at least in the US context, commerce is an important source of conspiracism). The profit-driven impulse for manipulative self-promotion has only deepened with the rise of 'radically privatized' global consumer capitalism (Comaroff & Comaroff, 2003, p. 297).

Given the axiomatic nature of capitalist self-interest, one might expect Americans would reject it outright. Yet, and despite its increasing brutality, they 'cling to the props of the old order' (see Ortner, 2016, p. 54): giving up on this nostalgic view would mean giving up the dream of getting rich oneself someday; and, because private wealth is pitched as a reward for hard work now, it is difficult to imagine anyone working hard – or engaging in pharmaceutical research and development – without its promise. Putting up with corporate greed justifies in some sense personal greed as well (this analysis is extended to COVID-19 CTs, QAnon's included, and to emergent calls for 'medical freedom' in Sobo & Drążkiewicz, in press).

Lobbying, cronyism and even direct pay-offs are culturally-expected means to a wealthy end. When e-cigarette purveyor Juul seeded social media with pro-vape content and paid 'influencers' to model Juul goods, the US public was dismayed to see minors exploited – but not surprised: capitalist subterfuge is expected. Likewise, nobody has been astonished by confirmations that 'big pharma' fuelled the US opioid crisis through dubious marketing and sales practices. Although CTs are humanly ubiquitous at least to some degree, this context provides them extra mimetic and material nourishment.

So do situations where capitalist liberties are taken too far. For instance, parents in these studies were discomforted by our nation's willingness to sacrifice some individuals to adverse pharmaceutical events (e.g., vaccine injury) to assure an available pool of healthy human resources, and by the healthcare's profit motive. Belief in self-responsibly and concern for a child's future in this individualist context provided added catalysts.

Canard of self-responsibility

Individualism serves intensive capitalism by recruiting isolated citizens to do work that social institutions otherwise might, and by masking structural causes of suffering. Parents in each study accepted as theirs the burdens of self-education and care management. In this, they were model American parents.

However, patient empowerment is valued only when decisions conform to expert recommendations. To be punished for self-responsibilization in a context that demands it was maddening. Parents recognised the system's rhetoric regarding active engagement as Machiavellian. Some who found evidence that contradicted their doctors refusals of their self-assertion assumed that the doctors got kickbacks from 'big pharma'.

Isolating clinical traditions, including individual examination rooms and an emphasis on privacy, may support such suspicions, because parents in similar situations may not meet. These traditions thus may be read as 'divide and conquer' mechanisms. The communities formed for instance, on social media as parents sought vaccine information or support for paediatric cannabis use – or simply to offset their isolation and marginalisation – could counter this. The communities also fostered doubt in mainstream medicine stemming from its dismissive disinterest in their questions (and see Drążkiewicz, this issue).

Primacy of productive US adulthood

Individualist ideas of liberty and freedom of choice grounded parent narratives, as it does American identity generally. So did the idealised trajectory of US youth towards full (economically productive) independence. These values, along with related consumer demands (for one's own car, house, entertainment centre) fills factories and other industries with necessary workers.

In the American context, getting a job is paramount. Material needs aside, dependence on others is frowned upon even in old age and for those with disabilities. The US-originated universal design movement, for instance, exemplified by ramps and levered door handles, promotes accessible architecture to preserve independence for seniors and to enable disabled persons throughout the life course.

The shadowside of this – ableism or anti-disability bias – came into play in my research (see Sobo, in press). Self-sufficient adulthood might be an impossible goal for children with intractable epilepsy and for the vaccine injured. Parents in the first two studies practiced vaccine avoidance protectively; parents in the third turned to cannabis to minimise damaging seizures and mitigate unnecessary pharmaceutical side effects. The palpable longing for a 'normal' child made sense seen against the ableist bias of our presently unforgiving political economy.

Individualism, key to self-responsibilization and ableism both, also surfaced also in the emphasis parents placed on the uniqueness of each child. Uniqueness served as both an explanation (for why vaccination might be safe for others but not this child) and an excuse (for why certain pharmaceutical or cannabis regimens failed).

In sum

The infrastructure of doubt provided by late-stage US capitalism subtended parents' core concerns. Beyond the memetic nature of conspiracism in this context (form), parent narratives critiqued the experiential, everyday dilemmas this matrix engendered by pressing all citizens to raise 'healthy', non-disabled children, almost by themselves to

boot (content). Spotlighting these dilemmas will make clinging to any false details that index them much less essential.

Conclusion

Sometimes, cultural discourses that would speak truth to power, or elements within them, oppose scientific consensus. We are bound by our shared commitment to democracy (Harambam, 2017, pp. 273–274) to attend to any substantively plausible warnings such discourses raise. Consider substances once vouchsafed, such as asbestos, tobacco, DDT (dichloro-diphenyl-trichloroethane), and thalidomide. Think too of things once dangerous by expert standards – even deadly – now known harmless in moderation: reading, shaving, sports for girls, swimming after lunch, tomatoes, butter. The body of knowledge that experts accept in one context differs – sometimes extremely – from authorised facts at another.

Recognising the 'imbrication of politics and truth' does not make truth a chimera. As Ho and Cavanaugh note, following Karen-Sue Taussig, 'a situated approach works to make scientific knowledge production more accountable, locatable, and robust' (Ho & Cavanaugh, 2019, p. 162).

Regardless, we cannot know the future: so current scientific consensus matters. When a proposition within a CT clearly has been falsified *and* when holding to it will bring harm, we have both the right and responsibility to dismount relativism's high horse and place our findings in service of interventions that address peoples' real concerns authentically.

As Briggs points out, CTs offer communities a way to fight erasure by those in power; concurrently, then, we must 'critically engage the contemporary politics of exclusion' (Briggs, 2004, p. 163). We must make core concerns visible to the broader public, and to those authorised to address them. This aspect of action may require creative acts of translation (see also Harambam, 2017, p. 272), again not so much of false surface details but rather the deeper concerns foundational to those. If core concerns are addressed, secondary referents (i.e., the falsities) should lose their salience anyhow – assuming they remain unproven.

Until that time, we must not ignore spurious claims. Nor should we frame them as if falsely equivalent to substantively evidenced facts – such as media sometimes does under the 'equal time' banner (see also Hodges, 2018). Hesitance to acknowledge counterfactual claims as false, whether from fear of being called 'ethnocentric' or reluctance to imply expertise regarding areas in which we aren't trained, has kept many in anthropology out of the 'what do we do' conversation. In light of the COVID-19 pandemic, which post-dates the present analysis, the prescience of Drążkiewicz and Harambam's 2019 exhortation to think critically about our role here is chilling. Continued lack of engagement not only leaves people in harm's way. It lets sit intact the dominant dualistic and adversarial preference for debunking while giving tacit approval to a deficit-based model of knowledge – neither of which is tethered to reality.

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Taking vaccine regret and hesitancy seriously. The role of truth, conspiracy theories, gender relations and trust in the HPV immunisation programmes in Ireland

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ABSTRACT

This paper considers the dual approach to conspiracy theories in anthropological studies. While some anthropologists suggest treating them seriously because they might reveal some truths, others argue that conspiracy theories require serious attention, because they are alarming and present a threat to social cohesion and democracy. Analysing conflicts over HPV immunisation programmes in Ireland, this paper investigates if there is a way of bridging this divide. In contrast to most studies on vaccine hesitancy, this paper avoids reducing the issue to the problem of knowledge deficiency. Instead, it takes a holistic approach: rather than seeing medical conspiracy theorising as a problem of singular groups, it examines it as a relational issue that connects and disconnects different stakeholders, including medical professionals, families, and health administrators.

'So, what should we do about *these* people? What should we do about conspiracy theories?' These two questions frequently appeared in many of my conversations regarding the controversies surrounding the HPV vaccination in Ireland. Concerned about the future of immunisation programmes in the country, scholars, health professionals, but also private citizens, were posing these questions in the hope that I could provide practical solutions to this pressing public health issue. When the Covid-19 pandemic hit Ireland in 2020, interest in this issue only intensified, with the debate expanding from specialised medical forums into the public sphere (Drążkiewicz, 2020; Sobo & Drążkiewicz, 2021).

As I will demonstrate in this paper, these are not value-free questions. Their tone and phrasing often suggest that the answer to the 'vaccination problem', is already known: the responsibility for the drop in vaccination levels lies with people propagating conspiracy theories. *These* people: *others*, who are not like *us*.

In this paper, I argue that the recognition of this *us* vs. *them* divide is crucial to a better understanding of how and why people engage with medical conspiracy theories. Most scholars of conspiracy theories focus on the ways in which people endorsing conspiracy theories experience constant feelings of persecution, perceiving the world as a space of endless battle between the forces of good and evil (Uscinski, 2018). In this paper I propose a different approach: rather than seeing the 'vaccine problem' as an issue of singular groups

(often labelled conspiracy theorists), I suggest examining it as a *relational* issue, which connects and disconnects different stakeholders, such as medical professionals, patients and their families, health administrators and pharmaceutical industries. This approach, instead of turning our attention only towards *others* – those who endorse vaccination hesitancy, regret, or disbelief – requires us to also pay attention to those who are implicated in those conflicts, and perhaps are closer to *us*: researchers, policy makers, medical professionals. As I further demonstrate in this article, such a relational approach to vaccination problems allows the revision of strategies to deal with medical conspiracy theories, and look for new, more effective ways of addressing the problem of vaccine hesitancy.

The article is divided into two sections. I start by analysing two dominant trends in anthropological studies of conspiracy theories. Both argue that we need to treat conspiracy theories seriously, yet for different reasons. Both attach different meanings to that term. In the second section, I explain how my answer to the question as to what should be done about conspiracy theories is informed by my study of conflict over the HPV vaccine in Ireland and how a disciplinary context shapes my own stance.

Anthropological approaches to conspiracy theories

Taking conspiracy theories seriously (as a phenomenon that may reveal truths)

Anthropology is a discipline that is mostly concerned with representation. The goal is not necessary to tell the world as it is, to provide 'the truth', but to suggest and explain possible connections between social worlds, and the meanings they have for people who inhabit them. The aim is to provide 'a mode of imagining how individual actions and collective illusions are interlinked, how they are framed, (…) anthropological knowledge then, is not simply knowledge about particular events, practices and ideas, but about the processes by which these came to appear meaningful, perhaps inevitable or mandatory, possibly contestable or even mad' (Hastrup, 2004, p. 468).

While obviously not all anthropologists might agree with such a definition of our discipline, those analysing conspiracy theories seem to follow this approach. For instance, Skinner (2000), in his study of Pan-Africanist conspiracy theories on Montserrat, argues that investigation into the truth behind conspiratorial narratives – as to whether or not there is a global hidden agenda targeting Caribbean populations – is not the way forward for social anthropologists. He argues that a more productive line of inquiry is an examination of how conspiracy theories weave into pre-existing cosmologies and belief systems (Skinner, 2000, p. 108). This attitude became especially popular among scholars analysing conspiracy narratives in the Global South (Bastian, 2003; Behrend, 2007; Bovensiepen, 2016). Focusing on the ways in which people link available prophecies and occult cosmologies with contemporary socio-political struggles avoids the perils of empiricism and normative stances (Bovensiepen, 2016; West & Sanders, 2003). Treating witchcraft or occult cosmologies seriously, anthropologists extended the same courtesy to conspiratorial beliefs. Contextualisation of conspiratorial views in local histories, colonial and economic struggles, provided space for recognising the political nature of the phenomena itself. Specifically, it draws anthropological attention to the ways in which the conspiracy label might be used for political reasons, to discount otherwise serious and often plausible claims (Bale, 2007; Keenan, 2006; Mathur, 2015; Mathijs Pelkmans &

Machold, 2011). Anthropologists recognise that conspiracy theories do not contain 'whole truth'. Yet as they also note, there is often method to this madness (Marcus, 1999). As Brown and Theodossopolous note, conspiracy theories often 'offer a pretty satisfying approximation, demonstrating how in the modern interconnected world, people make sense of the actions and motives of powerful others with reference to old, familiar scripts, and in the process find new bases for self-belief as some consolation for their – and our – powerlessness' (Brown & Theodossopoulos, 2003, p. 334). Such a research-based stance, recognising that conspiracy narratives can point to very real social, economic and political inequalities at both local and global levels, has serious practical implications (Fassin, 2011). It works against defining conspiracy theories and the people propagating them as a social problem. It also opens a space for treating conspiracy theories seriously.

Treating conspiracy theories seriously (as alarming problems)

Of course anthropologists are not the only scholars who may treat conspiracy theories seriously (Dentith, 2018a; 2018b). However, the trajectory that has led them to this view is unique – facilitated by the nature of anthropological enquiry endorsing relativism and side-lining the issue of veracity (Wilson, 2004). It was also made possible by the path that has led many scholars to the studies of conspiracy theories through the studies of religion, specifically occult cosmologies. However, not all anthropologists share this perspective.

Significantly, anthropologists who have entered the field of conspiracy theories through the research of populist movements and neo-conservative politics also argue that we should treat conspiracy theories *seriously*. However, they apply a different meaning to this postulate. For them, conspiracy theories and the people propagating them require (rather than deserve) serious attention, because they present a threat to democracy. Holmes (1999), Holmes et al. (2019), Pasieka (2017), Kalb (2009), and Moore and Sanders (2002) all agree that individuals and movements endorsing conspiratorial thought are dangerous because they foment conflict, spread racism and prejudice, and often generate violence. Consequently, the work of these scholars shows that we must take conspiracy theories *seriously*, not because there might be some truth to their claims, but on the contrary, because the messages they spread are alarming. For these reasons, as Mair (2017) notes, anthropology must overcome an aversion to politics and begin paying attention to people's theories of truth, evidence, belief and ignorance: 'taking thought about thought seriously'.

Positionality and anthropological studies of conspiracy theories

Whether anthropologists see conspiracy theories as a problem that *requires* critical enquiry or a phenomenon which *deserves* in-depth investigation is not incidental. It depends on the topics studied and the positionality of the researchers. The first approach is usually undertaken by scholars who examine issues and societies that are distant from their own offices. This approach is also at play when research focuses on marginalised groups, or those occupying peripheries: black migrant communities in New York (McCarthy Brown, 2003), inhabitants of Montserrat (Skinner, 2000), Timor-Leste (Bovensiepen, 2016), Thailand (Johnson, 2013), , or Ukraine (Carey, 2017). Often, scholars who study 'distant Others' prioritise representation over the veracity of conspiratorial narratives. Some, like Johnson (2013, p. 1059), go as far as to ignore social justice issues connected to conspiracy narratives,

only to achieve the advancement of anthropological theory. On the other hand, the closer to the anthropologist's home the conspiratorial theories are created, the less inclined anthropologists are to suspend their moral stances and more motivated to treat them *seriously*.

But does it mean that conspiracy theories spread in the Global South or by marginalised groups in the Global North are less alarming than those spread by the privileged citizens of the West? Are they less dangerous? Are the conspiracy theories spread in Eastern Europe, Africa or Latin America really more plausible because, scholars such as Humphrey (2003) would suggest, these regions have historically been subjected to actual conspiracies? Are conspiracy theories propagated in the East or South 'normal', and therefore not a cause for moral panic, while those in the West or close to its borders represent some dangerous deviation and threat, hence the need for *serious* approaches? Is western democracy really so flawlessly conspiracy-free that we have no reason to believe our informants in the UK, Ireland, Italy, the USA, or Germany, when they suspect certain political or medical con-spiracies in their home countries? Or maybe, is it possible, that as anthropologists, we are more forgiving of half-truths propagated within non-Western societies, as we tend to see them as a symptom of non-Western status: yet another incarnation of 'traditional' occult cosmologies (Behrend, 2007; Bovensiepen, 2016; West & Sanders, 2003) or characteristic of post-socialist (Carey, 2017; Humphrey, 2003), or post-colonial (Bovensiepen, 2016; Skinner, 2000) political milieux? Is it possible, that due to our own political positionalities we have less patience and understanding for conspiracy theorists whom we encounter at home, because the stakes are ours, not someone else's?

Lack of consideration for those questions may impact the theories and ethnographies we produce. Those studying distant conspiracy theories risk underestimating the actual social and political consequences that those movements might generate on the ground. At the same time, politically motivated researchers of close-to-home conspiracy theories might be reluctant to move beyond alarming tones, and fail to provide nuanced representations. As Pasieka (2019) argues, in an effort to avoid accusations of giving extremists the 'floor', 'audience', or 'oxygen', scholars of populist movements risk producing simplified ethno-graphies (Pasieka, 2019, p. 6). Yet the same concerns are rarely voiced in regard to studies which call for the recognition of potential truth-value of conspiratorial movements in the Global East or South.

It seems that anthropological studies of conspiracy theories are exemplary of the social mechanisms described by Pitt-Rivers (1977) that suggest that the alien and far-removed 'barbarian' tends to be less problematic then the approximate stranger. This might be a reason why, for many scholars, it is much harder to find a sympathetic voice for an enemy from within, a familiar Other who enters the social body of our own societies, undermining our own structures by spreading false information, accusations and fear, than a conspiracy theorist who does not have influence in our own backyards. But is there a way of bridging these two approaches? Can we study conspiracy theories both seriously and *seriously* at the same time (Ortner, 2016)?

Positionality in the studies of conflict over vaccinations

Studies of conflicts regarding vaccinations and the conspiratorial aspect of them offer an excellent opportunity to explore this question. On the one hand, the public discourse on

vaccinations suggests that people expressing concerns over immunisation programmes belong on the spectrum of Otherness. As Briggs (2004) observes, most conspiracy theories concerning the medical world are intimately inflected with racial, class or gender categories. Medical data also shows that sometimes the problem of low vaccination uptake is to be found among migrant populations, ethnic or religious minorities (Betsch & Sachse, 2013; Dailey, 2013, 2017; Duval et al., 2016; Nyhan & Reifler, 2015). Yet, what really determines the 'otherness' of those who are not taking part in immunisation programmes are their views on vaccinations. People questioning vaccination safety, effectiveness and necessity are seen in opposition to society. They are defined as social deviants, the Others.

The tendency to pathologise is common within discussions on conspiracy theories (Harambam, 2020a; Thalmann, 2019). However, when it comes to vaccinations, this has its own specific dimension. The decision to opt out of vaccination schemes is often perceived as an anti-social act: it threatens herd immunity and puts vulnerable individuals who cannot be vaccinated at risk. It is not clear what exactly the crime actually is of 'anti-vaxxers': legal approaches to immunisation programmes differ across countries. However, they often seem to occupy a space outside of the law (and consequently society) due to their refusal to participate in preventive medicine, and their rupturing of the solidarity approach to society. While 'anti-vaxxers' are dependent on society, they reject the idea of a social debt, and question the unspoken expectation that members of a society must mutually protect each other against mutual risks, such as contagious diseases. Consequently, they are seen as an enemy from within: undermining social welfare and challenging the core values of western societies, particularly the belief in science and rational thinking. Nevertheless, they are still a *familiar* Other. Vaccine sceptics can be found among all social and economic classes, in all societies.

Consequently, the study of the vaccination issue does not sit easily with other anthropological approaches to conspiracy theories. Taking medical conspiracy theories seriously, that is, to accept the possibility that there is some truth to the stories about vaccination damage, or problematics in the production and distribution practices for vaccines, is particularly challenging. This is not because they are outside the realm of possibility. We already have historical studies showing vaccination as a political issue (Holmberg et al.2017; Colgrove, 2006; Vargha, 2018), as well as evidence of unethical practices in vaccination trials (Hoffman, 2005; The Commission of Investigation into Mother and Baby Homes, 2021; The Lancet, 2005), and we know that vaccinations may indeed carry serious side effects (O'Flanagan et al., 2014). But first and foremost, vaccines save lives and make our healthcare systems manageable (as became apparent during the Covid-19 pandemic). Therefore, researchers wishing to look at vaccine-related conspiracy theories seriously risk facing similar accusations as those faced by the scholars of populism: siding with the enemy, giving space to false information etc (Harambam, 2020b).

The pressure placed on scholars who choose to take this path is visible in the opening statements of their publications. Significantly, most anthropological literature on vaccine hesitancy that offers in-depth insights into the worlds of those who experience vaccination doubt, is proceeded by statements about the positive role of vaccination in improving human conditions. These statements are not just statements on the scholars' positionality, but also indirectly work as a counterbalance to the conspiratorial narratives that are discussed in their work. Fairhead and Leach (2012, p. 1) on the first page of their

book, note that 'Vaccination – and especially mass childhood immunization – is acclaimed as the most successful and effective form of public health intervention that there has ever been'. Another example is the work of Sobo (2015, p. 381) who begins her article on the social cultivation of vaccine refusal and delay among Waldorf school parents, by asserting that, 'experts say no other public health effort except sanitized water has had such a major and beneficial impact [as vaccinations]'. In comparison, Sobo's (2019) article on Area 51 does not make any attempts to denounce the truth about UFOs. Similarly, even though anthropological studies of populism are motivated by concern about their capacity to spread dangerous misinformation, they rarely engage in debunking. Instead, some apply creative narrative strategies, in the hopes that they will 'do the justice' (Holmes, 1999), or simply avoid discussing the issue of the veracity of conspiratorial narratives (Boyer, 2006; Moore & Sanders, 2002).

This double standard cannot be explained by the urgency of the issues studied. Spreading misinformation from medical conspiracies may lead to low immunisation levels and serious challenges for public health. However, political conspiracy theories may also result in discriminatory behaviour and violence (Bergmann, 2016). Perhaps a better explanation is in relation to access to the 'truth'. In order to examine the veracity of the claims made within political conspiracy theories, anthropologists may consult political scientists, or historians, who could provide expert knowledge regarding the theories and events studied. Yet increasingly our colleagues in those disciplines admit that even they do not know what is 'really' going on and have difficulty distinguishing between bogus conspiracy theories and genuine conspiratorial politics (Bale, 2007; Dentith, 2018a; Hagen, 2018; Parker, 2000).

When it comes to studying medical conspiracy theories, the situation is slightly different. Here, anthropologists share their field with the applied sciences. Science provides empirical evidence that vaccinations are an effective technology for preventing certain diseases – hence there is less room for anthropological relativising of conspiratorial thought. This is also why studies of vaccination refusal conducted by experts in social medicine are often based on the rationalist assumption that if people have the right knowledge they will act reasonably and follow the correct information, hence the push for debunking and veracity claims in vaccination hesitancy research (Betsch & Sachse, 2013; Nyhan & Reifler, 2015).

However, such studies of vaccination hesitancy are not only informed by scientific epistemology, but also by scientific ethos. As Fassin (2011, p. 43) writes, concerns regarding vaccination safety and efficiency touch 'the very heart of scientific and medical ethics. Conspiracy theories engage the idea of cognitive deviance of science and of moral perversions of medicine'. Similarly, Harambam and Aupers (2015) point out that since the history of science and the individual careers of scientists have been dedicated to separating facts from other claims on truth, they do not approach conspiracy theories from a neutral standpoint. Their approach to conspiracy theories is not only motivated by the need to defend specific medical technology, and science at large, but also by personal investment and commitment to their professions. Hence, the push for truth claims and debunking in vaccination studies, including those conducted by anthropologists. This is also why, I would argue, knowledge and debunking have become the preferred focus of debates regarding vaccination acceptability. However, the effectiveness of debunking, countering misinformation, and focusing on knowledge at large is not confirmed, and

often questioned (Betsch & Sachse, 2013; Maertens et al., 2020). In spite of the prevalence of informational and 'debunking' campaigns, reduction in vaccination rates is becoming more and more problematic in certain areas – so much so, that the World Health Organisation announced vaccination hesitancy as one of its main challenges for 2019.

Conflict over the HPV vaccine in Ireland

Ireland has been influenced by this vaccination crisis. In 2019, after several measles outbreaks, the Minister for Health, Simon Harris, announced the launch of the Vaccine Alliance, aimed at boosting childhood vaccination rates: 'We cannot afford to do nothing (…) Vaccination rates across the country are falling and diseases we had consigned to the history books are now making a comeback,' he argued, at the launch of this new initiative in Dublin. He added that, 'the alliance would build on the success they had with the HPV vaccine, with rates increasing from 51% to 70% in a short time, and it would ensure parents had accurate, evidence-based information about vaccinations' (Ring, 2019). Like Mr Harris, I do believe that the vaccination issue requires *serious* attention. However, I disagree with him when he vilifies people for expressing vaccine hesitancy or regret, and places responsibility for the reduction in vaccine uptake solely on conspiracy theories, while issuing his commitment to 'come out fighting' and 'take on the scaremongers' (O'Regan, 2017). Instead, I argue that in order to influence people's trajectories that lead them towards or away from conspiracy theories, it's imperative to cease 'Othering' and pathologising them. Instead we should start treating them seriously. Building on Sobo's (2015) observation that attitudes towards vaccines are socially cultivated, I will demonstrate that 'facts' and 'truth' are not the only factors that influenced conflicts and uncertainty over the HPV immunisation campaign in Ireland. Consequently, facts about vaccines should not be our only concern when addressing the vaccination problem and medical conspiracy theories. As I will demonstrate, issues of trust and the complicated relationship between the Irish state, healthcare and welfare institutions, and Irish women, lie at the centre of the conflict over the HPV vaccine. For these reasons, when designing interventions to boost vaccine uptake, stakeholders should also consider how those specific relations may be improved.

I have been investigating conflict over the HPV vaccine in Ireland since 2018. One of the most important parts of my research consisted of analysing the work of the Regret ('Reactions and Effects of Gardasil Resulting in Extreme Trauma') group. Regret was set up in 2015, bringing together parents who suspected that their daughters had been injured by the HPV vaccine. Most share similar accounts, describing the difference in the lives of their daughters pre- and post-vaccination. Girls are described as sporty, outgoing, active members of their communities, pre-vaccination. However, girls report suffering from fatigue, anxiety, headaches, brain fog, and breathing problems after receiving the HPV vaccine. According to the girls and their parents, these chronic health issues have had dramatic impacts on their lives, leading to their withdrawal from social life, and often affecting their performance at school. While families associated with Regret argue that these dramatic changes are symptoms of vaccine damage, medical authorities in Ireland deny this, and accuse Regret leaders of spreading conspiracy theories.

I carried out a qualitative study aimed at understanding the positionality of both sides within this conflict, which has had a severe impact on immunisation programmes in Ireland. This comprised interviews with parents (mostly women) associated with Regret. I also talked

to mothers who were not members of this group, but who did not consent to their daughters receiving the HPV vaccine. I met most of my interviewees through social media, in groups dedicated to the discussion of vaccination. I also carried out three months of participant observation at the Health Protection and Surveillance Centre in Dublin, as well as interviews with its staff members, and staff of the Immunisation Office. Furthermore, I spoke to health professionals involved in online and traditional media campaigns for the HPV vaccine. In total, I conducted approximately forty hours of formal interviews for this research.

The HPV vaccine in Ireland

The first HPV immunisation programmes in Ireland were offered to girls only. These were voluntary vaccinations. Girls were vaccinated in schools, in the first year of their second level education. At the beginning, the rate of vaccination uptake was very high (88 and 86% in the academic years 2013/2014 and 2014/2015). However, in 2015, this dropped significantly to 72%, and in 2016, the rate was only 51% (HPSC 2020). What caused this decline?

What do people hear? The perspective of the medical community

When I asked this question of my informants within the medical profession, they uni-formly blamed the Regret group. They accused its representatives of being unhinged, and spreading misinformation and rumours. In their view, stories about vaccination damage were nothing more than conspiracy theories: unfounded and misguided claims. As one of the doctors, who also runs a medical blog, told me: 'You know, people have these weird ideas of what vaccines are, and that they have these magical properties that come up. These pseudoscience theories of gut inflammation and all the things … ' This doctor immediately followed this opinion with the statement that, 'vaccines are not really comprised of these magical cocktails of toxins'. Many of my conversations with health professionals saw a similar dynamic, and it was very clear that the issue of scientific accuracy was of utmost importance to the medical experts and managers I spoke to. Significantly, most of them rejected Regret's claims of vaccination injury. While all of these medical professionals acknowledged that vaccine injury does exist, and that vaccinations do have side effects, they also emphasised that that 'the chances of that are really, really, really, really, really small. Very small.' Their disbelief that the claims made by Regret parents may fall into this category, i.e. that Regret claims may be based on cases of legitimate vaccine injury, was immediately indicated by arguments about causation and correlation, and the need to follow pre-existing medical protocols and methods of inquiry:

> 'The patient is ill. But, is it actually caused by the vaccine? Or, is this a fact that you had the vaccine, but you also have something else going on? (…) The best person to help is your GP, [then they will] consult a specialist and they all go down that route. Because (…), in theory, could someone actually legitimately have a vaccine injury? Yes, (…) but then the pharma-ceutical company actually wants to know what was your injury? How was it caused? What was the risk factor? Why you had injury and everyone else didn't? And (…) how can we take steps in the future, that we will put on the patient information leaflet so to say that with these patients we should take extra concern or caution.'

As the conversation with the blogging doctor reveals, when countering the messaging of Regret, members of the medical community focused most on scientific argumentation

and evidence. For them, the problem was simple: parents did not understand science; they misdiagnosed their daughters, and spread misinformation. It was thus the gullibility of the public and their lack of knowledge that had led to the drop in vaccination rates. According to this logic, access to reputable information was the key to solving the problem of reducing rates of immunisation.

Indeed, a big part of Regret messaging, and the social media presence of its members, relates to information about the so-called perils of vaccination. Much of this information does not come from reputable sources; there is certainly evidence of false claims, logical fallacies, cognitive bias or contradictions – all typical signs of conspiratorial thinking. But, as Mair (2017, p. 3) observes, in the 'post-truth' era, perhaps instead of focusing on what people believe, we should start asking what it is that makes it easier for people to selectively believe or disbelieve in science in a specific moment? What makes it easier for some people, rather than for others, to do so? A similar point was made by Hastrup (2004), who suggested that instead of focusing on what people know, we must pay attention to the issue of what can be known under particular historical circumstances. Moreover, as she notes, knowledge is not all that matters. Our opinions are not reducible to knowledge and evidence, but are also shaped by feelings, emotions, and memories (social and individual). Knowledge is therefore a relational issue that refers to the relationships between people that emerge within a dialogical field (Hastrup, 2004, p. 456).

Following Hastrup, I do not approach the knowledge produced and circulated by Regret parents in the same way as my informants from the medical community – as a knowledge external to the context in which it is produced and used. Instead, I propose to look at such knowledge as an outcome of individual relationships between parents, their daughters and health professionals, and between women and state welfare institutions and services in Ireland.

What do people say? The perspective of people experiencing vaccination regret or hesitancy

Since its establishment in 2015, Regret members have become particularly invested in studying and sharing 'facts about vaccines'. Yet in its early days, when the group was most effective in gaining public attention, members' main focus was on telling the stories of their daughters ('Irish girls'), and bearing witness to the medical difficulties they faced. As I will show, it was these stories, rather than so-called 'revelations' about the 'hidden truths' around vaccines, that were the most powerful and convincing element of Regret's messaging.

In spring 2018, I attended a conference organised by the International Federation of Injured Children and Adults (IFICA). This organisation is very closely connected to Regret, with many parents involved in both. The event took place in a hotel in Lucan, a suburb of Dublin. In many ways it resembled academic conferences: there was a podium for speakers, a big screen for PowerPoint presentations, and rows of chairs for the audience. I sat down next to a woman from Co. Kildare. We chatted about what had brought us there. Shortly after I had explained my research interests to her, the woman leaned towards me confidentially and revealed that she was actually not convinced that her daughter's poor health had been caused by the HPV vaccine. However, she said, she had run out of options, and could not find a solution from either her GP or HSE consultants. Medical professionals had been dismissive of their situation, she said, and this was the only place

where she felt that people treated her seriously and without ridicule. She was ready to try anything, simply to help her daughter.

This story not only demonstrates how the endorsement of certain sentiments, activities or narratives associated with anti-vaccine movements does not always imply an actual belief in conspiracy theories, or in this case, belief in the danger of vaccinations. It also demonstrates how people are attracted to circles such as Regret, highlighting the ways in which people may arrive at a stage of 'vaccination doubt'.

Other parents I spoke to shared similar experiences to those of the woman from Co. Kildare. Some of them, like a Wicklow mother I met, had, after exhausting all traditional pathways, sought help at the highest level, even emailing the Health Minister and the Taoiseach (Prime Minister). However, as she revealed: 'You don't even get an acknowledgement of your email. Nobody bothers to reply to you because you are just like … . You're not even worthy of them replying.' She described this experience as extremely disheartening. My conversations with people who express vaccination regret show that it is not simply 'bad science', or a lack of scientific knowledge that turns them towards conspiratorial beliefs, but instead disappointment with the Irish health service, and a lack of medical support. This Wicklow mother made it very clear that it was the apathy and neglect of medical professionals that had pushed her towards joining Regret and taking action. As she noted, she had never before been involved in any form of social activism and it was the struggle over her daughter's health, and the impact of this on her family, coupled with a lack of professional support, that had eventually pushed her towards Regret.

Contrary to popular perceptions of people who associate themselves with Regret, that depict them as not believing in science, (instead believing in 'magic'), the people I met in the course of my research were actually very strongly invested in medicine. They attended medical appointments (they actively sought them), and eagerly recounted their medical histories. They had folders filled with their daughters' medical records. But significantly, while they had strong faith that medicine could help them, and that there was a solution to their problems, they had lost faith in the idea that Irish doctors cared about them. Each conversation I had with a parent claiming that their daughter suffered from vaccination damage, consisted of the same scenario. Parents told stories of their struggle to get help for their daughters, their feelings of being dismissed and ridiculed by doctors, the trouble they had accessing information on available treatments, and even gaining access to their daughters' health records.

Another leitmotif of those conversations, but also of Facebook and Twitter posts circulated by Regret parents, was major criticism of the Irish government and the HSE in general. While most parents expressed concerns over the pharmaceutical industry, they were much more interested in discussing the specificities of the Irish health system. While 'Big Pharma' mattered, it was the local, Irish healthcare system that mattered the most. Parents I spoke to often accused the government and HSE of 'abandoning girls,' or of converting their physical health issues into mental health issues. Most parents complained repeatedly that the Irish government and the HSE, instead of addressing their problems, applied victim-blaming as a strategy to address the problem of lowering immunisation levels. One Regret supporter described her perception of the government attitude in the following way:

'they got the uptake back up by shaming those children, calling them liars, shaming the parents and blocking them from social media, denying them a public forum (…). In other words, you

know, [they told us:] you don't deserve to speak because your opinion is invalid. That's the position of the Irish government and that extended to the media. (…) I think [they] behaved disgracefully, disgracefully as a state and as a Health Services Executive. (…) They [Regret girls] have absolutely been denied [the right] to be taken seriously, being investigated.'

As she and others noted, the relationship between parents and health professionals was highly unequal. Parents felt patronised and ridiculed. They complained explicitly that instead of being treated seriously, they were accused of fearmongering, and labelled as conspiracy theorists. They were shamed and depicted as people with mental health issues.

I argue that it is these stories and experiences, and not just the 'facts about vaccines,' that had a strong impact on the conflict over the HPV vaccine in Ireland. What these stories reveal is that the central issue in this case is not *knowledge* deficiency, but instead *trust* deficiency. The stories told by my informants, and evident in Regret media accounts, demonstrate a profound lack of trust in the HSE and the government. It is these stories that other parents heard and saw when they searched for information on the HPV vaccine, when they had to sign vaccination consent forms. But why would anyone believe those stories? One Regret member explained this to me as follows:

The reason people believed them was [because of] what they saw for themselves on videos. They heard [girls'] testimonies on radio. They [saw that] these are people not asking for anything. These are people not motivated by anything except for (…) help. They're asking for the government to investigate. And those are very easy concepts for people to understand. Why wouldn't the government just investigate? (…) There will be no investigation. So people look at that. And that's why people believe the mothers, because they're saying, well, why don't you investigate? If anything, why don't you at least meet with Regret?'

As she observes, what captured public attention were the stories they shared that highlighted the complex and troubled relationship that Regret families had with the medical authorities. As Lepselter (2016) shows, in order to gain traction among the public, conspiracy theories and rumours have to resonate with the pre-existing cultural tropes. Even if on the surface medical conspiracy theories circulating around the world seem similar, the reasons for their endorsement and their meanings differ between communities (Sobo & Drążkiewicz, 2021).

For these reasons, in order to understand why the stories of Regret parents and girls resonated with other members of society, we must frame them within the larger historical context, amidst wider relationships linking and disconnecting the Irish state, the medical community, and families.

Connecting the dots: contextualising the vaccine debate within gender and welfare relations in Ireland

Mistrust towards the state and health services is not simply an attribute of the Regret group, but a broader issue in Ireland (Drążkiewicz & Ní Mhórdha, 2020). This general condition also has a specific gender dimension, with the Irish state and medical community having a long record of not listening to women and working against their interests. This is evident in Ireland's reproductive regime, which until 2018, had some of the most oppressive and restrictive abortion laws in Europe (De Londras, 2015, 2018; Drążkiewicz & Ní Mhórdha, 2020; Hesketh, 1990; Quilty et al., 2015). Another example of state abuse towards women were institutions run throughout the twentieth century by Catholic nuns

and funded by the Irish state. Known as Magdalene Laundries, and Mother and Baby Homes, they specifically targeted young women, conspiring against their wellbeing and freedom (Arnold, 2009; McAleese, 2013; Milotte, 2012; The Commission of Investigation into Mother and Baby Homes, 2021). Unmarried pregnant women were sent to those institutions for 'resocialisation' and support. In reality, they were psychologically and physically abused. They lived in atrocious conditions, carrying out forced labour. Mothers were separated from their babies, who on most occasions were given away for adoption, often illegally. Many children died from malnourishment or neglect. A symbol of these atrocities inflicted on women and their children in these institutions became the Mother and Baby Home in Tuam, Co. Galway, where the bodies of more than 700 babies and young children were found in a septic tank, buried illegally, without record. These institutions also hosted unethical clinical and vaccination trials (Department of Health, 1997; The Commission of Investigation into Mother and Baby Homes, 2021).

The highly problematic relationship that the Irish state has with women is also evident in its medical scandals. Examples include the Blood Infection Scandal, also known as the case of Brigid McCole (Farrell, 2006), the Mesh Scandal (Hennessy, 2018), the Hysterectomy Scandal (McCarthy et al., 2008), the Symphysiotomy Scandal (Walsh, 2020). The most recent scandal to rock public faith in the Irish health system became known as the CervicalCheck scandal. In 2018, it emerged that HSE management had concealed deficiencies within the national cervical cancer screening programme, leading to widespread and fatal underdiagnosis of cervical cancer among women Ireland; this once again confirmed that the institutional culture of secrecy and paternalism within the Irish healthcare system was a serious and ongoing problem. While the 2011 CervicalCheck audit showed that some results of cervical cancer tests were inaccurate, the CervicalCheck programme and HSE management decided not to inform the women affected, and kept their revised test results from them for years. This issue only became public in 2018 when Vicky Phelan, who had received a negative test result only to be diagnosed afterwards with cervical cancer, settled a High Court case against a US laboratory subcontracted by CervicalCheck, to assess the test (Phelan, 2019). She refused to agree to a gagging order and went public about the scandal. The 2011 audit showed that the test Ms Phelan took the same year was a false negative, yet she was not informed about it until 2017. Indeed, Vicky Phelan's case was not exceptional, with more than 200 women affected in the same way. Court documents from the Phelan case and the scoping inquiry into CervicalCheck (the so-called Scally Report) revealed that this lack of transparency and the concealing of information was not incidental. It was only in 2015 that the HSE decided that the results of the audit should be passed on to the women's doctors and in turn passed onto the women, 'as appropriate.' In 2016, the decision was made that a 'general rule of thumb' should be that while women should be informed about the audit results, the clinicians should 'use their judgement in selected cases where it is clear that discussion of the outcomes of the review could do more harm than good'. It was also recommended that in cases where a woman had died, doctors need only ensure that the result was recorded in the woman's notes (Carswell, 2018; Scally, 2018).

This scandal only came to light in 2018, and therefore could not have directly influenced the HPV immunisation campaign. However, it demonstrates that a culture of misogyny and paternalistic attitudes in the Irish healthcare and welfare systems continues to be a serious issue. In light of this and the other medical and welfare scandals

highlighted above, many of the grievances of the Regret group – those concerning the paternalistic attitudes of the Irish medical community and its lack of transparency, hardly seem unfounded.

Of course, as Hastrup (2004, p. 462) rightly points out, 'it remains an open question how much time one can allow between cause and effect and still speak of a casual process'. Some evidence from my research suggests that parallels between the current handling of the HPV vaccine and previous State abuse are indeed at play. For instance, the Twitter account user, @vaccinecurious, commented on an article published by the Irish Times that described the cruelty of the Magdalene Laundries: 'there is a clear parallel to be drawn here to the reality of #HPVvaccine victims. They are today's non-credible witnesses of their own experience – only recognised to be denied. The truth about the Magdalene laundries hiding in plain sight'.

Growing up and living in an environment which allows such scandals as those described above, it is not surprising that Irish women, when they hear the Regret's stories, may find them concerning or plausible; after all, it would be not the first time that the Irish government had dismissed women's health concerns. As Pop (2016) notes, attitudes towards vaccines are influenced by various social factors, including social memory, and this might be the case also in the case of the Regret and the HPV vaccine.

Practical implications: fixing knowledge or building trust?

Health professionals' accounts of the HPV immunisation crisis rarely acknowledge the social aspects of the problem. Prevailing narratives that frame the conflict over the HPV vaccine as one of misinformation and lack of knowledge gloss over the wider social contexts that inform the conflict: gender relations, the paternalistic culture of healthcare institutions, and broken relationships of trust. As Engle-Merry and Bibler Coutin (2014) demonstrate, knowledge and politics are always connected, but apolitical techniques can transform conflicts of interest into questions of knowledge. The prioritisation of the perspective of the scientific community, for whom the HPV vaccine is a straightforward issue of science and information, rather than the perspectives of Regret parents, for whom the issue is not simply about the 'truth about vaccines', but also about their unsatisfying relationships with health professionals and the healthcare system at large, renders this highly complex and political issue apolitical. This framing allows the HSE and the Irish State to ignore the social claims made by parents who express vaccination regret or hesitancy. This is further achieved by dismissing these parents as conspiracy theorists. The way in which the conspiracy theory label is manipulated influences the State's choice in whether and how to deal with the issue – to intervene or not (Mathur, 2015). As Pelkmans (2013) notes, conspiracy labels are produced by people in positions of power, often allowing them to discredit those who are suspicious of power. Once the label is established, the only treatment is truth (Parker, 2000).

But while some informational campaigns might have their value, they do not address the issue of trust. Based on my research and the arguments outlined above, I would argue that if we want to take suspicion towards vaccination *seriously* (as a crucial public health problem that needs to be addressed), we also must start treating people's concerns seriously. This requires paying attention to what people actually say when they express vaccination hesitancy or regret, and learning about the trajectories that lead them to these positions. This also requires moving away from the personally invested and normative stance of

medicine, which hitherto has strongly influenced research into vaccinations. What I am proposing is not the suspension of faith in the scientific evidence that vaccinations work, but instead an acknowledgement that not everything can be reduced to knowledge and evidence. That facts are only evidence in relation to a particular question (Hastrup, 2004). If we only ask about what people say about vaccines, what they know, then we will inevitably arrive at the conclusion that there is a problem of knowledge deficiency. However, for decades, members of the public have been vaccinating their children despite having little understanding of the science behind vaccines. People were opting in because doctors told them to do so, because they trusted them, or because the top-down relationship between doctor and patient enforced it. What is new, is not a lack of knowledge about vaccines, but a changing relationship between doctor and patient – or in the Irish case the desire of women in Ireland to subvert this traditionally paternalistic relationship. What is new in Ireland is the ability of women to verbalise their dissatisfaction with the system.

As many scholars of conspiracy theories have noted, people who believe that the system is 'rigged' are less willing to take part in it (Butter & Knight, 2020; Harambam, 2020a; Uscinski, 2018). The decision to participate in the immunisation scheme is one of those rare occasions when patients have actually had a choice to be part of the system or not. For those whose experiences have made them critical of gender and power relations within the healthcare system, vaccine refusal may be an opportunity to (re)claim their agency. The act of opting in or out of the vaccination programme, may, in a way, be understood as a de facto vote for or against existing relationships with the healthcare system.

Attitudes towards vaccines are not born in a vacuum, and are relational. Therefore, I argue that if we wish to encourage more people to have positive attitudes towards vaccines, to believe doctors when they say they are safe, and to not turn towards conspiracy theories, we must ensure that these decisions take place within a framework of trust relationships with medical professionals (Harambam, 2021 This issue). In order to achieve change in the long-term, and prevent the risk of new anti-vaccination movements popping up every few years whenever a new vaccination is introduced (as for example, in the case of Covid-19 vaccine), we cannot just focus on knowledge. Perhaps, once women are trusted and we create more fair approaches to healthcare (encouraging partnership rather than hierarchical relationships), this suspicion towards vaccinations will also begin to fade.

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Towards an ecological ethics of academic responsibility: debunking power structures through relationality in Greek environmentalism

Elvira Wepfer

ABSTRACT

Whether scholars have the academic responsibility to debunk conspiracy theories depends on the social processes these theories set in motion. Based on ethnographic research with environmentalist activists in Greece, I argue that their engagement with conspiracy theories constitutes a kind of debunking that is both conceptual and relational. Specifically, the article traces four qualities of engagement with conspiracy theories in the Greek environmentalist scene: the conceptual opposition of structure with agency, the implementation of agency through personal development, the shift of significance from geopolitical power to environmental concerns, and finally the tackling of existing power structures through consequential ecological ethics. The core of this ethics is responsibility, and as such provides a valuable sign-post for the question this Special Issue poses. I argue that academic responsibility lies first and foremost in the pursuit of relationality. As science is increasingly used to serve political-economic knowledge authority and civil society truth trajectories, an ecological ethics based on relationality renews empiricist realism and thus debunks reifying power structures.

Climate change has become one of the most hotly debated issues of contemporary times.[1] Whether, to what extent, and with what consequences the global climate is transforming occupies the minds and hearts of scientists, politicians, lobbyists and an increasingly outspoken civil society alike. In the US and British contexts of this multi-layered disourse, accusations of conspiracies are employed by different actors to charge or discredit the opponents. Climate change 'sceptics' and 'deniers' are accused of lobbying for the oil industry or other elitist interest groups and thus of conspiring on the cost of the entire planet, while climate change 'affirmers' and 'supporters' are said to scheme over leftist ideologies that strengthen state control or research funding (Runciman, 2014, 1'-12'). Scientists and academics find themselves centre stage of this heated discourse as their expertise and rectitude are challenged. From the 2009 'climategate' controversy, in which climatologists from the University of East Anglia found their private emails hacked and publicly attacked, to national governments' downright denial of scientific indication of

climatic changes, public discourse has come to question the integrity, correctness and virtuousness of scientific and academic work. Scientific knowledge production is thus positioned at an interface of knowledge, truth and reality which links to this special issue on two essential levels. On the one hand, it invites critical consideration of the role of academic responsibility in times of environmental and epistemological uncertainty; on the other hand, it points to the utility of conspiracy theories as an analytical tool for such examination.

The article at hand refrains from entering the denier/affirmer level of the climate debate, yet it situates its analysis in today's multiple uncertainties. As the effects of human-produced environmental degradation reach beyond regional impacts and begin to affect the planetary climate, the latter's growing instability and its unpredictable effects on life on the planet create increasing precarity and uncertainty among large parts of the population. Simultaneously, post-industrial societies are grappling with knowledge authority and truth trajectories in what has been termed the era of 'post-truth' (e.g. Keyes, 2004; Mair, 2017). Post-truth foregrounds emotions and personal opinions at the expense of expert arguments. While probably a long-standing part of public life, this discourse has gained prominence in the new millennium's political and economic situation, and is poignantly present in the climate debate. For social scientists who acknowledge the diversity of knowledges and practices that exist simultaneously, this era, in which conspiracy theories constitute a 'paranoia within reason' (Marcus, 1999), raises an important question: how to regain the authority scientific knowledge has lost in popular discourse while, at the same time, mounting an effective challenge against the 'epistemological violence' of hegemonic narratives (Neimark et al., 2019, 613)? Approaching this question via conspiracy theories, this Special Issue ponders the academic responsibility of debunking. According to the Oxford English Dictionary (OED, n.d.), to debunk has two meanings. First, it is to expose the falseness or hollowness of a belief. But in order to expose falseness or untruth, one has to recognise it, and the troubled history of truth, politics and power which, in its latest manifestation, has given us the era of post-truth, leaves no doubt that telling truth from falseness is a highly complex aspiration (Neimark et al., 2019, 613). Conspiracy theories themselves are an apt illustration of this: they constitute attempts of distinguishing truth from falseness, as they comprise a wide range of convictions, observations and suspicions about human relations being different from what canonised discourses propagate as truth. Arguing against the truthfulness of an idea that challenges canonised truthfulness risks producing a rather static debate. More significantly, claiming to know the truth is a delicate undertaking in times of enhanced uncertainty and public mistrust in knowledge expertise.

The second meaning the OED gives of the verb to debunk is to reduce the inflated reputation of a person (OED, n.d.), or a group of people. This is what people who engage with conspiracy theories often aim to do: to expose the scheming mechanisms of governing elites in order to lessen their social standing, and with it their structural power. This article explores how this second kind of debunking unfolds in Greek eco-projects, and how it not only reduces the reputation of governing elites discursively, but *relationally* seeks to make existing power structures redundant. The article traces a four-fold process of grassroots environmentalist engagements with conspiracy theories. It reveals how participants in eco-projects conceptually oppose structure with agency, implement this agency first through personal development, then shift significance from geopolitical power to environmental

concerns, and finally tackle existing power structures through ecological ethics. As this process appears coherent through scholarly interpretation and does not constitute an explicit emic strategy, I consider its parts four *qualities of engagement* of environmentalists with conspiracy theories. Importantly, the lived realities of environmentalists' endeavour include the paradoxes and discrepancies inherent in efforts to reconcile everyday life with ethical ideals. Nevertheless, as these qualities arise from a civil society disenchanted with state and international politics, they illustrate how the current state of mistrust in democracy (Runciman, 2014) yields new forms of relational politics, and how conspiracy theories catalyse and advance this process. At their core, they reveal an ethics of responsibility and as such are helpful in answering the question this Special Issue poses. Whether scholars have the academic responsibility to debunk conspiracy theories – depends. It depends on the claim the theories make, on their social life, and on their impact. In other words, it depends on the social processes these theories set in motion. To study these, this article pays ethnographic attention to people's engagements with theories of truth (Mair, 2017, 4), which serve as sign-post for considerations about academic responsibility. The article takes issue with certain hegemonic narratives propagated as truth without, however, following populist authoritarian agendas that refute positivist science (Neimark et al., 2019, 614). It thereby hopes to advance the debate about conspiracy theories beyond binary discussions of 'positive' and 'negative' 'social consequences' (Jolley & Douglas, 2013, 36) towards examining their processual character as a catalyst for agency. Beyond that, it participates in discussions about the role of critique (e.g. Latour, 2004) through proposing an ecological ethics of academic responsibility. Positioned at the interface of knowledge, truth and reality, social and life scientists need to renew their empiricism by building a holistic examination of the experiences of life. The ways in which Greek regenerative environmentalists challenge structure through agency illustrates an emerging politics of relationality which transforms prevalent social forms through acknowledging responsibility for the ecological environment. This pursuit of relationality, rather than of truth, in scientific knowledge production, is what I argue for.[2]

Context: eco-projects and conspiracy theories in Greece

Eco-projects are grassroots environmentalist initiatives whose participants are concerned with contemporary ecological and social degradation and actively work towards holistic regenerative sustainability. Open to the public for visits, workshops and internships, they constitute hubs of education; aiming to recreate human–environment relations through engagement, they provide spaces for experimentation. Eco-projects actively work to regenerate the natural environment whose severe degradation has of late led to climatic changes, mass extinction and serious soil, air and water pollution (Anthropocene.info, n. d.). Yet their sustainability is not only ecological: participants consider today's dominant social, economic, political and emotional relations exploitative and unequal and aim at holistic regeneration in all relational spheres of life. In this way, they experiment with and teach to others regenerative sustainable practices. In Greece, eco-projects are a recent phenomenon. They have been springing up in response to the 2010 European sovereign debt crisis, which eco-project participants consider but one aspect of a more deep-seated crisis of human relations. They[3] aim to recreate and thereby regenerate these relations through a tripartite approach that includes the self, the social and the environmental.

Goal of this recreation of relations is to overcome today's dominant relational narrative that casts humans as consumers and nature as exploitable resource, and to regenerate these degraded human–environment relations through mutuality. Asserting that 'the imbalances [humans have] produced in the natural world are caused by the imbalances [they have] produced in the social world' (Bookchin, 1964/1971, 62, as cited in Biehl, 1999, 6), Greek environmentalists work towards a more balanced, tripartite relationality among the self, the social and the environmental.

   Incidentally, following conspiracy theories is wide-spread among Greek environmentalists. This reflects a popular local phenomenon: Conspiracy theories are an integral part of local political debates and typically revolve around corporate enrichment, military strategic planning and elitist scheming. Explaining their long-standing tradition and proliferation since the onset of the sovereign debt crisis, anthropologists have considered the country's historical and contemporary lack of geopolitical influence (Sutton, 2003, 196; Kirtsoglou & Theodossopoulos, 2010, 117), have reflected on the historicities and imaginaries of wealth that link them to crisis-capitalism (Rakopoulos, 2018), and have pointed out the perceived imminence of global socio-economic and environmental demise (Bakalaki, 2016, 13, 2014). This literature shows how, within the local context, conspiracy theories constitute attempts to make sense of the world in the midst of complex processes of liberal modernisation, calling attention to contradictions and proposing alternative understandings to those asserted by hegemonic discourses, thereby making public and personal life seem less subject to random forces as they constitute attempts to explain, decode and make less threatening what is beyond one's control (Theodossopoulos, 2013). In this way, anthropologists argue, local discourse challenges global power. However, conspiracy theories not only constitute discursive tools. They also have conceptual power, as they provoke resistance to the hegemony they depict. This article deals with alternative explanations of geopolitical events and policies, spiritual reflections of existence in connection with other-dimensional entities, and mass control through the diffusion of chemicals. I found these proliferating among Greek environmentalists who, in their thirties and forties, belong to the educated middle class.[4]

Environmentalism: with agency against structure

Greece's most renowned eco-project has developed out of a conspiracy theorist online forum. In 2008, the *Zeitgeist Movement ZM* emerged out of a documentary feature trilogy (Joseph, 2011, 2008, 2007) and an internet platform. *ZM*, an international non-governmental organisation, advocates a transformation of society via its economic system through overthrowing the global government of a small number of profit- and power-oriented people. According to the *Movement*, these are grouped together in Judaeo-Christian religious institutions, national governments, and finance corporations who have for centuries executed structural violence over populations by strategically continuing poverty, deception and inequality through a scarcity-based economic system. The Greek chapter of *ZM*, formed in summer 2008, discussed matters online, then began holding weekly meetings in Athens, and finally decided to take action. About 150 people, mostly Athenians, sat down to define the goals they considered most important. They morphed them into the acronym *Free&Real*, standing for **f**reedom of **r**esources for **e**veryone **e**very-where and **r**espect, **e**quality, **a**wareness, and **l**earning. Over two years the group led

a number of small-scale sustainability projects in Greece's capital, but finally moved to the
country side. They felt that the transformation towards a society rid of elitist governance
required a balanced relationship of humans with their environments – in other words, that
being 'free' had to be realised through becoming 'real'. They decided to create a space in
which they themselves as well as anyone interested could attempt developing these
qualities, to learn skills and acquire ethics in accordance with the group's ecological
convictions. Their 'school for self-sufficiency and sustainability' has been running for ten
years, with nearly 20'000 people passing through it.

Countering conspiracy theories' narratives of hegemonic structure, Greek eco-projects
enable activists to take up agency. Conspiracy theories promote a pessimistic worldview
of a society that is increasingly controlled and phased to serve a powerful elite. This
amounts to a personal loss of control and creates a feeling of impotence, a helplessness
based on the inability of taking effective political action (Jolley & Douglas, 2013, 42). On
a national level, this loss of control has been strikingly illustrated by Greece's curtailment
of sovereignty through austerity dictates; on a personal level, conspiracy theories such as
those employed by *ZM* consolidate it through narratives of socio-cultural phasing, cyber-
nation of personal identification, and the digitalisation of finance. Combining national and
personal loss of control, Free&Real's only remaining founding member linked both
austerity dictates and digital social administration to conspiracies. He understood
Greece's creditor IMF to implement 'test-runs' to expand their far-reaching structural
governance to Europe, and saw in the increasing popularity of human micro-chipping
a manifestation of elitist social control. The ensuing feeling of powerlessness he
approached through environmentalism:

> I used to watch a lot of documentaries, and I was very upset and freaked out. I felt I couldn't
> do anything. That's why I did so many drugs: To get to terms with reality. Becoming an
> environmental activist stopped me from destroying myself. It was like a revelation: You can
> create, instead of destroy.
>
> Founding member Free&Real

The former web designer escaped the self-destructive feeling of impotence vis-à-vis
hegemonic structure through evoking the possibility of agency through environmental-
ism. This countering of structure with agency is conceptual in that it constitutes
a possibility, a proposition, a trajectory. And indeed, the increasing global administration
of social identification through cybernation, or computerised control, implies serious
restrictions of civic discretion and personal privacy, so that loss and reclamation of control
on civic levels carry important implications. At the same time, sociologists find that
ideological movements that build on conspiracy theories, such as *ZM*, typically balance
the theories' pessimistic outlook with an optimism-producing call to personal agency
(Asprem & Dyrendal, 2015; Ward & Voas, 2011). This, 'truth activism' ascribes coherence to
a constructed 'common sense' truth in favour of an inconveniently fragmented reality
(Rakopoulos 2018, 384–5). In the context of Greece, anthropologist Alexandra Bakalaki
traces the chemtrail narrative to point out how a story of loss, a lament for a world tainted
by environmental depletion and elitist scheming builds the basis for activist engagement:
'Anti-spraying activists assume the human agency is far more important than contingency
and dismiss narratives according to which the world has grown too complex and

susceptible to systemic risks to be predictable' (Bakalaki, 2014, 19). Whether through environmentalism or anti-spraying campaigns, challenging global power structures with the possibility of personal action allows activists to respond to the loss of control. In this way, activism conceptually generates a sense of agency. This first quality of environmentalists' engagement with conspiracy theories prepares the ground for subsequent processes of appropriation, emancipation and reclamation.

Self-development: appropriation, emancipation and reclamation

The second quality of eco-projects' engagement with conspiracy theories is to implement this conceptual agency via the appropriation of the self. They do so through emancipating themselves from capitalist relational narratives via a reclamation of materiality. As Greek environmentalists challenge canonised narratives about human relations, recreating one's relations to the self constitutes a central aspect of their tripartite relationality. Contrary to dominant narratives that cast the self as a consumer, environmentalists perceive the self as a complex, relational being. Through an environmentalist approach to materiality, they promote the importance of personal development for a socio-environmental change. Transformation of the self for social change is common among people who follow conspiracy theories. Harambam and Aupers (2017), who detect a strong impulse for outreach among their Dutch interlocutors, identify three distinct approaches to social change. While 'activists' try to reform the system through outspoken public and political interventions (120), and 'mediators' aim to negotiate cultural pluralism more moderately (125), 'retreaters' argue for internal psychological change towards the good, the kind and the wholesome (122). They typically follow alternative spiritual practices and plea for subtle social change through an individual turn towards positive 'vibration' and love (123). In this way, the sociologists find, this last group promotes societal change through self-transformation. Other sociological research shows how *conspirituality*, the fusion of conspiracy theories with alternative spirituality,[5] advocates social change through personal spiritual change (Asprem & Dyrendal, 2015; Ward & Voas, 2011).[6] Such studies are helpful to define and differentiate sociological milieus and give clues about the variety of convictions that might otherwise be represented as a coherent collective of 'conspiracy theorists'. However, as they do not venture beyond categorisation, they fall short of exploring both means and ends of self-development, and thus fail to investigate into the processes of social change in which conspiracy theories are involved. The following paragraphs trace these processes in the context of environmentalists' self-development to show how reclaiming materiality through regenerative sustainable subsistence practices allows to appropriate and emancipate the relational self.

At an emergent eco-project close to Korinth, life is deliberately modest. Water has to be gathered at a public well some ten car minutes away from the premises, electricity is available from one single solar panel, and accommodation is provided by three run-down caravans with plastic canvas for window screens. Sanitary installation amounts to two converted chairs stood over hand-dug holes surrounded by droughty wood-and-palm-leaf constructions, the bucket shower seconds as a hand laundrette, and the kitchen is a three-wall shack made from salvaged doors and windows. As for food, it is common to make a stop behind the local supermarket on the way to pick up water. There, balancing one's body on the rim of the large waste containers, one can find a wide selection of out-

of-date food discarded by the shop's employees. Returning with cardboard boxes filled with wrinkly beetroot, bruised apples and last month's lentils to cook a shared meal by burning dry pine branches in a rickety handmade stove constitutes a rather uncommon way to cover nutritional needs in Greece. The project is subtitled to concern 'land, art, meditation'. Land encompasses the natural and built environment, which the project aims to harmonise through regenerative agriculture and construction with natural materials.[7] Art represents expression and communication; and meditation denotes engagement with the self. Taken together, the three concepts exemplify eco-projects' tripartite relationality: they encompass human relation to the self, the social, and the environment. During a conversation, the project founder delineated: 'Through meditation, we can learn to control our emotions and through that develop higher, freer forms of consciousness. But you cannot do this for someone else, it's a task, a challenge, that each accomplishes for himself.' His explanation follows the basic Buddhist concept of the *Four Noble Truths*, which postulates that *dukkha*, or earthly suffering, can be transcended through following the practices connected to the *Eightfold Path to Liberation*, which includes mediation. Indeed, the bright-eyed, middle-aged man engages earnestly in an array of Asian spiritual practices and is well-read about their theoretical and mystical backgrounds. Yet tone and topic of that conversation were not spiritual; rather, he suggested meditation as a strategy to deal with more sinister issues. We were discussing a conspiracy theory about malevolent entities who control us through our chakras. Domiciled on Saturn, they exist in dimensions not easily accessible to humans and, around 10,000 years ago, used advanced technology to engineer into human bodies the seven energy centres central to Euro-American alternative spirituality. Due to their control, humans, who are first and foremost spiritual beings, have forgotten the metaphysical base of existence and now overtly indulge in material reality. The Saturnites, in turn, feed on the emotional output this indulgence generates, as human material experience generates suffering. The project founder, who is well-informed about conspiracy theories and enjoys discussing them, delineated the effects of self-development via meditation as a means to overcome the suffering induced by material reality.

    Employed as a means to overcome materiality-induced suffering, meditation at this eco-project serves self-transformative environmentalist ends.[8] Posing 'land' as the first of its subtitles, the project aims at regenerating its degraded, arid soil and to establish a food forest where currently only desert flowers and cacti thrive. At the same time, the initiative emphasises construction with local natural materials, especially with clay, sand and wood found on the premises. Tackling two essential aspects of human life, nutrition and shelter, the initiative experiments with and teaches to others regenerative sustainable subsistence practices. These constitute a form of material engagement that aims to regenerate degraded environments. The global environmental degradation that has begun to alter planetary climatic patterns and cycles is caused by an aggressive capitalist materialism which, with its production, consumption and waste processes, has made mass-production and mass-consumerism the pivot of human activity. It rests on a narrative of nature as unilaterally exploitable resource, which fosters alienation from our environmental, social and personal relations. Countering this narrative, environmentalists proclaim that subsistence needs can be covered through holistically sustainable regenerative practices that are based on the understanding of reciprocity and mutuality between humans and their natural environment (see below) – and, by extension, between humans themselves. They

thus reclaim materialism from its commodification of nature. Through enacting their tripartite relationality between the self, the social and the environment, they aim to emancipate the self from narratives that reify human relations to the natural environment to resource exploitation. Yet in order to do so, they need to appropriate the concept of the self, which has been conflated with that of the consumer, and develop it into a relationally more wholesome concept. Said differently: overt indulgence into materiality creates suffering, whether spiritually, conspirationally or environmentally. Personal development allows to exit this suffering, and to this end, environmentalists at the project in Corinth employ meditation. Reaching 'higher, freer forms of consciousness' that are not bound by exploitative materialism allows them to create reciprocal relationality. While individual in its focus, meditation's consequences are social if it is undertaken collectively: 'You know, it doesn't work just for yourself, it's not an individual thing. Every person has to free himself for all of humanity to be free', the project leader winked further on in our conversation. Uttered amongst a desert garden and next to a rainwater tank, this remark spoke not so much about freedom from energetically malevolent entities, but from an unsustainable materialism. The end of environmentalists' self-development is not personal, but social transformation. Yet they understand this change to commence through a development of the self. This is the first implementation of their conceptual agency – as mentioned above, in order to become 'free', one has first to become 'real'. This, as the following paragraphs show, has political implications.

Citizenship: shifting significance to environmental concerns

Conspiracy theories have repeatedly been charged with having depoliticising effects. Haram & Aupers' 'retreaters', for instance, emphasise personal 'dropping out' from society over political protest and activism (Harambam & Aupers, 2017, 123). Testing exposure to conspiracy theories, psychologists find a decrease in willingness to engage in politics and, within the climate debate, to act environmentally responsibly (Jolley & Douglas, 2013). However, scholars also point out how theories about climate change carry politically loaded content that divide opinions along traditional political lines (Douglas & Sutton, 2015), and how conspiracy theories create spaces of contestation: Harambam & Aupers find their 'activists' to engage in Beckian 'subpolitics' that rise outside the formal political arena to challenge and reform institutionalised power structures through public intervention and alternative politics (Harambam & Aupers, 2017, 120, cf. Beck, 1997, 52). Parallel to their depoliticising effects, then, conspiracy theories also strengthen existing political affiliations and, additionally, create space for challenge and reform. Accordingly, anthropologists show how they render the world more complex by calling attention to its contradictions (West & Sanders, 2003). An alternative politics also arises from Greek environmentalists' third quality of engagement with conspiracy theories: a shift in significance from geopolitical power to environmental concerns induces the conceptual unlinking of citizenship from the state. Without directly charging the state, environmentalists minimise their engagement with it in favour of their own social structures. In anarchist anthropology, creating novel kinds of community through mass defection instead of direct confrontation has been discussed as an effective impulse for social change (Baker, 2013; Graeber, 2004). In Greek eco-projects, civic engagement for alternative social structures creates a shift in political significance.

In Greece, as in many nation states, ideological affiliation with political parties is a serious local concern. Political support is treated as a matter of principle and a question of loyalty, and it is common to vote for government by tradition. At the same time, and in considerable contradiction to this, citizens' relations with the state rest on a well-established culture of contestation. This has its roots in the fierce resistance Greek citizens posed to four hundred years of Ottoman rule and reflects more recent perceptions of the state as a colonising force pursuing a 'western' hegemonic project that opposes communal self-administration gained in the late empire (Herzfeld, 1987; Papataxiarchis, 1999), and has recently flared up again in the riots that contested the onset of austerity. Within this local paradox of adhering to the government yet contesting the state, Greek environmentalists refute both party politics and active engagement with the state. After a series of IMF bailout loans tied to harsh austerity measures, the Greek population voted against further restrictions to their country's sovereignty in the July 2015 referendum. Only days after the plebiscite far-left Syriza, the newly elected party in government, accepted another bailout loan with even harsher conditions, side-stepping the 'no' of over 61% of the population. That summer, a new group of members formed at Free&Real, most of them in their twenties. They all declared that this had been the last time they had voted, as voting only legitimised the scheming of politicians for their own profits. Disappointed with the party whose 'no more austerity cuts' campaign had given hope to many at the beginning of the year, the activists refuted their govern-ment, not through active opposition, but by disengaging with its legitimisation.

Greek environmentalists conceptually unlink their citizenship from the state and relate it to environmental concerns instead. The scarce environmental policies under recent Greek legislature are fully compliant with demands by Greece's creditors. They have pronounced the opening of the country's closed energy sectors to international investors (Argenti & Knight, 2015) – a process which, anthropologists observe, maintains the power structures that led to the economic crisis in the first place through interventionist policies, privatisation, and market liberalisation (Knight, 2017, 30). These strip the Greek state of its sovereignty while maintaining incentives for private profit over environmental, societal, and ethical needs (Knight, 2017, 30). In response, environmentalists decided to take matters into their own hands. A founding member of Free&Real put it thus: 'We created this group because we realised one thing: Don't wait for the state to do something about the environment, because you'll wait forever. Instead, just do it yourself.' Rather than waiting for environmental laws to be set up and put into practice, the group that formed in opposition to conspirational governance decided to engage personally with ecological and environmental matters. By abandoning voting practices and generally minimising demands on the state[9] in favour of social structures arising through environmentalism, Free&Real participants conceptually unlinked their citizenship from engagement with the state. Officially, citizenship is tied to state membership and categorised as a cluster of civil, social, and political rights and obligations. These social structures importantly shape citizen's identities as they inspire the formulation, implementation, and contestation of political agendas which prescribe society's norms, values and behaviour (Englund, 2006; De Koning et al., 2015; Ong, 2006; Shore, 2004). Taking identity shaping one step further, the project participants lived their citizenship not in relation to the state, but to the environment. Beyond the conceptual, Greek environmentalists manifest the civic aspect of this altered identity through committed outreach. Their projects are typically open to

visitors all year round and provide regular practical workshops as well as internships for the public. At the same time, these initiatives provide spaces for assembly, exchange and support. This commitment to creating alternative social structures follows from the conceptual unlinking of citizenship as tied to the state.

The reconceptualisation of citizenship allows environmentalists to shift significance away from conspiracy theories. As white trails marked the flight lines of aircrafts too high to spot in detail on the Corinthian sky, the conversation moved from potentially malevolent entities in faraway realms to chemical substances released right above our heads. The 'chemtrail' theory has its base in the observation that the precipitated emissions of some aircrafts seem to differ significantly from others, and suspects those emissions that stay visible for extended periods to contain chemicals geared at mass control.[10] Asked about who is behind this mass manipulation, the project founder replied:

> Does it matter, actually? If we had more electricity, I could open my laptop and show you lots of research that people did on these things, and what they have found. But, you know … it's their research, not mine, so I don't know if it's true. I just observe, that's all. And then I act, here, in the way I can.

> Project founder Corinth

His answer struck a chord. In late winter I had helped trimming trees in a project deep in the mountains of Chalkida Province, Evia Island. One of the project members there noted that

> I've been observing the sky for over eight years, since we came here, and I have seen it change. More trails, more dust, more uncleanness. I haven't looked it up, and I'm not even interested in knowing who it is, because I can't stop them. But I see what I see, and I draw my consequences. That's why I'm here, doing all this.

> Project member Chalkida

The question of who was behind conspiracies had become secondary to the action that could be taken, not against it, but in spite of it. As environmentalists shift their engagement from a reaction to official politics to a response to environmental concerns, they grant regenerative sustainability more significance than the doings of a small elite. Importantly, they shift their attention away from geo-political scheming towards ecological relations that enable regeneration. The activist agency Bakalaki (2014) traces in the chemtrail narrative here explicitly turns away from 'truth activism' (Rakopoulos 2016) to environmental activism, from seeking truth to observing reality. As they reconceptualise their citizenship, environmentalists challenge existing social structures and their canonised power through a conceptual shift in significance. Ethnographic attention to this process accomplishes three things. First, it demonstrates how people who follow conspiracy theories not necessarily make these theories' content their main focus. It thus objects to scholarly classification of 'conspiracy theorists' as a homogenous group (e.g. Coady, 2006/2018, 1) and widens the debate beyond mapping any 'subcultural milieu' (Harambam & Aupers, 2017, 114) that may exist, to demonstrate the utility of conspiracy theories as an analytical processual tool through which to view civic engagement. Second, it complements the analysis of the first, personal implementation of agency with an investigation into social structures. It thus adds to the relation with the self the relation with the social, and illustrates how engagement with conspiracy theories generates space

for a 'subpolitics' of relationality. Third, it depicts the shift from seeking truth to observing reality and as such gives form to my argument about scientific knowledge production. What remains is to approach the third, environmental component of environmentalists' tripartite relationality and agency. In doing so, the following section detects an ethics of responsibility and instils content into form.

Responsibility: recreating relationality through ecological ethics

Psychologists Douglas and Sutton (2015) find the endorsement of conspiracy theories to correlate with a readiness to conspire. This, they believe, is based on a 'lax personal morality' (550) which makes people who follow conspiracy theories more willing to participate in conspiracies themselves. With some analytical imagination, environmentalists' conceptual unlinking of citizenship from the state can be considered counter-conspirational. Beyond such abstract musings, however, the scholars' interpretation of loose morals does not hold true for Greek environmentalists. In fact, it is their substantial consideration of ethics that guides their agency and civic engagement. It is also what instils the main argument of this article with substance, or content: the fourth quality of environmentalists' engagement with conspiracies lies in tackling power structures through an ecological ethics of responsibility. This ethics is consequential in that it considers the effects of human conduct on the environment, and suggests that this conduct commences from a responsive exchange. Through its practice, Greek environmentalists recreate human–environment relations that countervail capitalist narratives of exploitation and make them, in effect, redundant. In a similar way, I suggest, scientific knowledge production can regain its lost authority through grounding its examination of relational reality in an ecological ethics of responsibility.

The sustainable and regenerative practices Greek environmentalists implement and teach in their projects for the most part follow permaculture, a dynamic design process invented in the 1970s by Australians Bill Mollison and David Holmgren as a 'permanent (agri-)culture' (Mollison & Holmgren, 1978), and since developed into a multi-dimensional approach to human–environment relations engaged in eco-projects worldwide. Its 12 principles are based on three ethics, which parallel environmentalists' tripartite relationality of self, other and environment: the three ethics are *earth care, people care*, and *fair share* (ibid.). While caring for the earth and one's social surrounding correspond to a multitude of practices that are ecologically, socially, economically and emotionally sustainable, permaculture's third principle calls for critical self-assessment. To measure the fairness of a claimed share amounts to looking at the impact the claim has on all parties involved. Such an ethics is consequential in that it assesses human conduct according to its effects on its environment (Fassin, 2012). 'We are the most powerful species on the planet, and we need to use this power wisely', a permaculture teacher passionately involved in the Greek eco-project scene declared. Besides considering power, permaculture's third ethic reveals the mutuality of humans and the environment. A long-term member of Free&Real put it thus: 'We have to respect nature, and we have to consider nature.' Both respect and consideration imply 'looking at', via Latin *respectus* 'regard', literally 'act of looking back (or often) at one', and Old French *consideracion*, 'a beholding, looking at' (OED, n.d.). While beholding means studying something in detail, looking back necessitates a mutual gaze. Permaculture, and through it Greek

environmentalists, postulates the mutuality or co-creation of relations between humans and other parts of nature. At the root of the three ethics, the permaculture teacher explained, lies responsibility. 'The three ethics can be summed up in one word: responsibility. Because every being has intrinsic value, and every system of beings has value.' As the ability to respond and to be responsive, responsibility, like respect and consideration, suggests an exchange. Permaculture advocates that human conduct commence from the recognition of intrinsic value and consider its consequences accordingly. This act of responsibility is grounded in the recognition of the co-creation of human–environment relations.

Approaching relationality from an ecological angle allows environmentalists to determine an ethical framework through which to deal with power. The concept of intrinsic value renders redundant capitalist narratives about nature as an exploitable resource, as it situates beings' and systems' value outside monetary valorisation. This, in turn, carries forward the shift in significance from geopolitics to environmental concerns, as it posits relational ecological ethics as the base of any kind of relations. Relating this framework back to conspiracy theories, it does not directly charge power or point out untruth, but it tackles existing power structures through an alternative relationality built on responsibility. And it does so, importantly, through localised on-the-ground activism. Analysing the Greek photographic documentation of alleged chemtrail spraying with its emphasis on skies over places and regions, Bakalaki finds that the focus 'on the damages the practice causes to this country goes hand in hand with emphasis on the fact that in an interconnected world, there can be no local strategies or solutions' (Bakalaki, 2016, 17). For environmentalists the case is different: their eco-projects consolidate concerns for *global* geopolitics and environmental degradation with *local* engagement through experimentation with and education about responsible relationality. Shifting significance from 'truth activism' to environmental activism entails a reorientation from universalist morality to place-based ecological ethics. In this way, they debunk power structures in the second meaning of the term: they reduce the inflated reputation of processes and narratives through relationally making them redundant. An ecological ethics of responsibility, both in grassroots environmentalism and scientific knowledge production, grounds its observation of relationality in place-based engagement of responsive exchange. As they experiment with and teach to others regenerative sustainable practices such as permaculture, Greek environmentalists emancipate the self, create spaces for alternative social structures, and acknowledge the mutuality in human relations with nature. From a tripartite relationality derives a tripartite agency, at the base of which lies an ethics of place-based responsibility. Academic responsibility, I suggest, ought to depart from such ecological ethics, too.

Conclusion: academic responsibility in times of uncertainty

This article set out to fathom academic responsibility in times of environmental and epistemological uncertainty. The uncertainty induced by effects of human-produced environmental degradation can, for now, hardly be overcome. Yet some of the confusions about knowledge authority and truth trajectories epitomised in the 'post-truth' era, I suggest, may be averted. As public mistrust in expert knowledge relates, at least within the climate debate, to a misuse of scientific language to cover up diverging interest from

politics, economics, and civil society (Runciman, 2014, 12′-37′) social and life scientists need to thoroughly rethink their empirical tools to arrive at a renewed empiricism centrally built on a holistic examination of the experiences of life. In Bruno Latour's words, we urgently need to shift from 'matters of fact' to 'matters of concern' (Latour, 2004) in order to launch into a considerate inquiry of the multifarious contributors, processes and relations of life. This is needed to counterbalance the trend of 'naturalising the purification of scientific responsibility from issues of social and moral 'responsibility' (Bakalaki, 2014, 17, cf. Briggs, 2004, 172–4) and to assume academic responsibility at the interface of knowledge, truth and reality. This article has attempted to do so through ethnographic attention to Greek regenerative environmentalists and the ways in which they challenge structure through an agency. This has allowed me to distance myself from reified concepts of truth employed in populist authoritarian agendas and at the same time to disclose the epistemological violence of hegemonic narratives. What emerges is a multifaceted account of experiences of reality, which itself is illustrative of an emerging politics of relationality. This politics acknowledges that responsibility for the ecological environment transforms prevalent social forms and, like environmentalists' tripartite approach, recreates relationality (Harvey, 2000, 199ff.). As such, it entails useful instructions to overcome one of the modern sciences' most deep-seated limitations. Conspiracy theories arise out of the creative and imaginative suspicion, or Cartesian doubt that, as an outcome of Enlightened modern thought, sits right at the heart of the ethnographic approach. The ways in which Greek environmentalists exchange the pursuit of truth with the pursuit of relationality exemplifies the shift from 'matters of fact' to 'matters of concern'. In Latour's words, 'the critic is not the one who debunks, but the one who assembles' (Latour, 2004, 246). In order to regain the authority scientific knowledge has lost in popular discourse while at the same time mounting an effective challenge against the epistemological violence of hegemonic narratives (Neimark et al., 2019), its production needs to start from a holistic observation of relational reality and to root in an ecological ethics of responsibility expressed through place-based engagement. This, I contain, amounts to academic responsibility.

Notes

1. This article was written in 2019, before the outbreak of SARS-coV-2 which sparked an unprecedented popularity of conspiracy theories. Research conducted during Greece's first national lockdown (an international public health measure to cope with the pandemic) further consolidated the findings presented here.
2. Thanks to the anonymous reviewer for encouraging me to make my argument more explicit and suggesting relevant and enlightening literature.
3. While the Greek eco-project scene does not constitute a unified movement or ideology, both their concurrence with the European sovereign debt crisis and this triplet of relationality coalesce their efforts to socio-environmental change.
4. Part of this research was funded by the Wenner Gren Foundation and the University of Manchester's School of Social Sciences Studentship.
5. Alternative spirituality or 'New Age' entails a wide range of spiritual practices borrowed variously from Asian religions, Latin American and African shamanism, and novel interpretations of European folk practices. For useful introduction see Sutcliffe 2003.
6. But see, for instance, Thierbach-McLean 2019 for critique of depoliticisation and individuation of social change.

7. Mainly cob, a sand, clay and straw mix similar to adobe.
8. See also Wepfer 2018, 113–144 for a secular approach to self-transformation in Greek eco-projects.
9. E.g. through education outside formal institutions, alternative health practices and recreation of decision-making processes. This by no means arises to any absolute disengagement from the state. Environmentalists generally stressed that they did not exist outside national or social systems but merely acted in partial opposition to them.
10. The onset of solar geoengineering to minimise climate change has lately fuelled this debate (see, for instance, Keith & Wagner, 2017).

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Against modernist illusions: why we need more democratic and constructivist alternatives to debunking conspiracy theories

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ABSTRACT

Various societal and academic actors argue that conspiracy theories should be debunked by insisting on the truthfulness of real "facts" provided by established epistemic institutions. But are academic scholars the appropriate actors to correct people's beliefs and is that the right and most productive thing to do? Drawing on years of ethnographic research experiences in the Dutch conspiracy milieu, I explain in this paper why debunking conspiracy theories is not *possible* (can scholars actually know the *real* truth?), not *professional* (is taking sides in truth wars what we should do?), and not *productive* (providing more "correct" information won't work as knowledge acceptance is not just a cognitive/epistemic issue). Instead of reinstalling the modernist legitimation narrative of science, I argue in this paper for an alternative that is both epistemologically stronger and sociologically more effective. Building from research and experiments with epistemic democracy in the field of science and technology studies, I propose to have "deliberative citizen knowledge platforms", instead of elite experts groups alone, asses the quality of public information. Such societally representative bodies should enjoy more legitimacy and epistemic diversity to better deal with conspiracy theories and the broader societal conflicts over truth and knowledge they represent.

1. Introduction

The increasing popularity of conspiracy theories in many different public domains is of much concern to a wide variety of actors. Public health officials face mounting distrust towards modern medicine and its technologies, legacy media corporations are framed as being partisan and need to explain why their news is objective, (high school) teachers encounter resistance in class while teaching history and geopolitical affairs, environmental institutes need to disclose how they measure climate change and government officials in legislature and policy-making feel the accusatory politics of populist leaders and constituents. Because conspiracy theories embody alternative explanations of societal phenomena that often, but not always, involve the covert actions of certain groups of people, mainstream or established institutions face increasing difficulties operating the way they do, and need to deal with the rising distrust towards the knowledge they produce or rely on. From the perspective of such

actors, conspiracy theories – and the broader climate of distrust towards experts and truth – form a clear danger to the well-functioning of these mainstream institutions, and more generally, to the fabric holding democratic societies together. This potential danger has only become more urgent during the 2020 Sars-Cov-2 crisis in which various established mainstream authorities encountered serious contestations from conspiracy theorists who are challenging their (evolving) truths on the virus, its nefarious effects on our health, and its mitigations measures (Harambam, 2020b; Sobo & Drążkiewicz, 2021). This dynamic which would aggravate an already challenging public health crisis (Zarocostas, 2020).

This widespread concern puts much societal pressure on academics studying conspiracy theories. Obviously there is now more public attention and funding potential for such research, but scholars of conspiracy theories are often forced to position themselves *normatively* towards their research subject as well. Policymakers, journalists and other civil society organisations approach scholars with a need for understanding what conspiracy theories are, how they function, who believes in them, *and* what can be done about them. The dominant underlying assumption in such requests is that conspiracy theories are flawed, irrational and dangerous understandings of reality, and that citizens must be protected against such ideas, especially in these 'post-truth' times where it is increasingly hard to know what is real or true anymore (d'Ancona, 2017; Davis, 2017). In line with the many fact-checking initiatives that currently abound to curb the spread of various forms of disinformation online (Graves, 2016), conspiracy theories are to be countered by debunking these alternative accounts of reality and by a harder insistence on the truthfulness of real 'facts' provided by established epistemic institutions (Lewandowsky et al., 2020).

But are academic scholars of conspiracy theories the appropriate actors to correct people's beliefs and is that even the right and most productive thing for them to do? A central premise in the social sciences is, after all, that scholars should occupy themselves with researching what *is* and not with prescribing what *ought* to be (Weber, 2009). But there are, besides this professional imperative that is not always realistic, other reasons why debunking conspiracy theories is not the best way to go to deal with the distrust towards epistemic authorities that undergirds the popularity of conspiracy theories. Drawing on years of ethnographic research experiences in the Dutch conspiracy milieu (Harambam, 2020a), I argue and explain in this paper why debunking conspiracy theories is not possible, not professional and not productive. Basing myself on research and experiments with epistemic democracy in the field of science studies, I propose instead a more effective and democratic alternative to deal with conspiracy theories and the broader societal conflicts over truth and knowledge they represent.

2. On the popularity of conspiracy theories: diversity and meaning

The contemporary popularity of conspiracy theories is studied by a wide number of scholars from different disciplines that increasingly move away from the older pathology model. Whereas earlier scholars conceived of conspiracy theories as the flawed, irrational and dangerous ideas of paranoid minds (Hofstadter, 2012; Pipes, 1997; Popper, 2013), that assumption is increasingly hard to maintain now that so many people engage with conspiracy theories in many different ways. Psychologists advance certain personality traits (e.g., authoritarian, narcissistic), cognitive biases (e.g., confirmation bias and illusory pattern recognition) and more general psychological afflictions (anxiety, stress,

uncertainty, exclusion, victimisation, anomie, cynicism, distrust, etc.) as leading individuals to endorse conspiracy theories (Brotherton, 2015; K. M. Douglas et al., 2019). Scholars in cultural and social studies explain the popularity of conspiracy theories as broader cultural attempts to grapple with the complexities, anxieties and inequalities induced by large-scale social developments (globalisation, mediatisation, technocratization, corporatisation) and the autonomous workings of opaque systems (e.g., bureaucracies, capitalist systems, mass-communication technologies) (Aupers, 2012; Knight, 2000; Melley, 2000). Conspiracy theories help making the world understandable again.

    Both of these approaches do not engage with conspiracy theorists themselves, allow for too little diversity within the conspiracy milieu and cannot avoid explaining the popularity of conspiracy theories in deficit terms (Harambam, 2020a). This is why I argued for an ethnographic approach to the study of conspiracy theories in order to understand their popularity from the lived experiences of the people actually engaging with conspiracy theories. Following my own ethnographic research in the (Dutch) conspiracy milieu, I showed how conspiracy theories and the people engaging with those are not one of a kind, but significantly differ in theme, self-image and practice (Harambam, 2020a). For example, while contemporary conspiracy theories often point to the corrupted workings of modern institutions such as media and science, those challenging climate change are markedly different from anti-vaccination claims and groups. The former may endorse and deploy scientific methods to find the real truth (like 9/11 conspiracy theorists or flat-earther's), but those engaging in the anti-vaccination movements often espouse holistic, New Age influenced, ideas on health and the body, and trust other epistemologies as well. And although they might both regard themselves as 'critical freethinkers' going against the stream, the way they give shape and meaning to conspiracy theories in their everyday lives reveals distinct practices and identifications (Harambam & Aupers, 2017). Prominent figures in the conspiracy world, such as Alex Jones or David Icke, are aware of such different subcultures attracted to conspiracy theories and exploit multiple epistemic sources to serve these different crowds (Harambam & Aupers, 2019). More generally speaking, the reasons and motivations for engaging with conspiracy theories are similarly diverse, whereas for some these are expressions of discontent with the current socio-political order, for other's they are playful mind-stretching exercises or supernatural longings for a life beyond the here and now (Harambam, 2020a, pp. 131–156). Even as most conspiracy theories challenge the epistemic authority of science to define truth, some do that out of a critique of the materialism of science, and others out of distrust of the objectivity of facts or via feelings of exclusion and mockery by scientific experts (Harambam & Aupers, 2015).

    The point is that people engage with conspiracy theories in many different ways and for a wide variety of reasons, and this has important implications for debunking initiatives. While conspiracy theories *do* indeed question mainstream truths, it can be questioned whether a sole insistence on the 'proper facts' is therefore the right and most productive way to go. Drawing on my own research experiences, and on other scholarly work on how to deal with alternative notions of truth, I will explain now why debunking is not possible, not professional and not productive, after which I present an alternative way out of the serious issues contemporary societies face with truth.

3.1 Why debunking is not possible

Blatant lies and outright falsehoods in public discourse can form clear danger for individuals and societies at large, especially when they are propagated or shared by powerful actors who have great reach and influence. Examples of such 'fake news' abound in recent years: from the paradigmatic cases of Trump's inauguration crowd, Pope Francis' support for Trump and Brexiteers' £350 M a week when leaving, to the thousands of smaller scale items circulating the online world in which inflammatory statements are made that at second sight seem ridiculous and fabricated. While some are sensational stories simply amusing people when procrastinating online, others can have severe consequences as they may incite hatred or violence to specific groups, think of Jews, and immigrants in Europe or the Rohingya in Myanmar. In most of such cases, it is fairly easy to show that statements have not been made or that pictures have been manipulated. This is the endless work of the many fact-checkers all over the world who occupy themselves with analysing and debunking the abundance of dubious claims online. And although much factchecking is not as straightforward as it seems, mostly because it involves interpretative work (Graves, 2016; Uscinski & Butler, 2013), real lies and fabrications are easy to spot and correct, and it is important that this happens.

Most conspiracy theories are, however, a different kind of beast. This is firstly so because conspiracy theories tend to have a 'self-sealing quality': they are resistant to corrections or contrary evidence because these debunking efforts are easily seen as proof and part of a larger conspiracy theory (Sunstein & Vermeule, 2009). This renders 'conspiracy theories at their heart unfalsifiable' (Barkun, 2006). But conspiracy theories are just as difficult to debunk since they often challenge established truths with complex claims of corruption and deceit that are for a variety of reasons difficult to prove or disprove. Take for example, 9/11 conspiracy theories, the allegations that the WTC towers have not collapsed because of (hijacked) planes hitting the towers, but because of highly secretive thermite detonations. Finding out whether such complex claims are true or false requires large independent investigative research involving various kinds of experts who need to operate with multiple governmental agencies and the available evidence at hand. Such is normally the task of official 'truth' commissions, but these are often, as with the 9/11 case, criticised for being compromised by time, resources and political pressure. Not satisfied with the research done and the report written, critics stand up and form counter groups, such as the *9/11 Truth Movement*, who start their own investigative research into the events. The result is a public truth war where different actors put forward various kinds of arguments and evidence in order to win public opinion (Hughes, 2020). It should not surprise anyone that the economic, political and social power of those actors are key influencers here. So what can social scientific scholars *on* conspiracy theories actually say about the veracity of any of such complex claims without resorting to established authorities?

The same can be said about vaccination conspiracy theories. These allegations that vaccinations are not as harmless and beneficial for individual and public health as mainstream authorities claim they are, are just as complex to prove or disprove. While public health institutes, epidemiologists and other established (medical) experts point to the massive amount of scientific research done on the benefits and safety of vaccinations, critics organised in anti-vaxx movements argue that such research is untrustworthy because of the deep involvement of pharmaceutical companies. It is a compelling argument to distrust such allegedly 'independent' vaccination research, especially when various other industries

(tobacco and fossil fuel) have proven track records of manipulating scientific research (Oreskes & Conway, 2011). Finding out what is really the case with vaccinations requires large independent investigative research involving various kinds of experts who can assess the validity of current and historical research and enjoy trust from the different publics involved. Again, a social scientific scholar *on* vaccination conspiracy theories cannot say much about the truthfulness of either such claims without resorting to the authority of established institutions and procedures. Obviously, this is not a bad strategy to take when living in the complex knowledge societies of today. In fact, this is the way it works: we need to rely on experts and we need to trust epistemic authorities since there is most often no other way to find out ourselves (Drążkiewicz, 2021; Holst & Molander, 2019; Rosenfeld, 2018).

But when the issue at stake is precisely the truthfulness of established knowledge and the credibility of experts and mainstream epistemic institutions, then this strategy falls short. With due exception, scholars wishing to debunk conspiracy theories generally have no field-specific or expert knowledge about the topics concerned, so how are they to delineate truth from falsity on such complex issues without reiterating and leaning on the same (epistemic) authorities conspiracy theorists challenge? Debunking academics position themselves as such too easily on the powerful side of the status quo. What can be done, however, is what science and technology studies (STS) scholars practice when researching knowledge controversies: they analyse competing truth claims 'symmetrically' (Bloor, 1991; Sismondo, 2011). The scholar temporarily *ignores* prevalent hierarchical power relations between science and their assailers and researches both claims on truth with the same conceptual tools and moral presumptions. Doing so, they open up the black box of knowledge production and assess the socio-material networks upholding these facts on both sides of the equation (Latour, 1987). This means assessing *how* that truth is assembled, by whom and with what procedures, infrastructures and resources. As such, it becomes possible to differentiate good from worse knowledge on the basis of substantive (*how* does it hang together?) instead of authority arguments (it's true, just listen to the experts!), which is a much better argument to make. Scholars fearful of dubious actors and their alternative knowledge need not worry: scientific research is rigorous and knows many quality control checks, they may be breached sometimes, but this institutionalised way of producing solid knowledge can easily stand the test with many of its competing claims on truth, especially those of a manipulative kind. However, this time such an assessment is done on clear empirical analyses of substantive and tangible quality characteristics, instead of abstract appeals to authority.

3.2 Why debunking is not professional

One of the fundamental characteristics of modernist (social) scientific research is the widely held and institutionalised ideal of objectivity: the social, ethical, and political values of scholars do and should not influence the production of scientific knowledge (Merton, 1973). The ideal that scientific knowledge will therefore be universal, impartial and truthful became a fundamental pillar of the (modernist) authority of science (Brown, 2009). Such ideas of the value-free and objective nature of scientific knowledge have, for good reasons, been challenged in the last half century by theoretical arguments and empirical research of scientific knowledge production alike (H. Douglas, 2009; Harding, 1986; Latour, 1987), and they can better be seen as professional boundary work trying to uphold the authority and independence of science (Gieryn, 1999). Like any other cultural domain, science (its practices,

procedures and products) is infused with values, simply because it is a human endeavour of a particular people in a particular setting at a particular moment in history (Doyle McCarthy, 1996; Franklin, 1995). Moreover, science is situated in broader societal fields where the interests, ideologies and institutions of different actors interact, influence and oppose each other (Gieryn, 1999; Latour, 1987; Toulmin, 1990).

While the objectivity of science still dominates public discourse and remains a key characteristic of (the PR of) science (Daston & Galison, 2010; Gieryn, 1999), especially in post-truth discussions, few (social) scientists would deny, especially in informal situations, that their practice and products are entirely void of social, ethical or political considerations. Objectivity can therefore better be seen as a *pres*criptive instead of a *des*criptive of science: scholars should put effort in pursuing their quest for better knowledge without letting too obvious normative and political factors influence their practice. From that perspective, Max Weber (Weber, 2009) detailed a long century what has become *the* quintessential professional imperative for social scientists to live and work by: because all our knowledge of the world is the product of our own meaning-making practices, nobody can claim to know the real, objective, and only truth about the world we live in. The only thing we *can* know is *how* people construct and attach meaning to that world. Sociologists should therefore only describe and explain how and why different people in different cultural contexts create and lend authority to (their versions of the) world. Setting science apart from other cultural domains (politics, religion or the arts) in order to preserve their autonomy and distinctiveness (cf. Latour, 2013), Weber urged scholars to speak only about what *is*, what people make of the world, and not about what *ought to be* (the latter, he said, is reserved for politics or religion). The moral and political opinions of the (social) scientist should therefore be kept as much as possible at bay.

Although Weber's plea for a 'value-free' sociology has been criticised ever since (Gouldner, 1962; Hammersley, 2017), the ideal to temporarily suspense one's own ideas about truth and morality gained much traction in academia, remarkably in the positivistic and interpretative traditions alike (albeit differently). Like many scholars of religion, parapsychology, extremist groups, and other contestants of the (scientific) mainstream, during my research, I similarly bracketed off my personal thoughts about whether conspiracy theories are true, rational and/or harmless. Especially since my main objective was to understand the appeal of conspiracy theories from, in a classic anthropological fashion, 'the native's point of view' (Geertz, 1983, pp. 55–73), insisting on my own or on societally dominant interpretations of reality would only hamper such understandings. This effort at 'verstehen', crucial for interpretative social science, worked well to get into the lifeworlds of various conspiracy theorists, and understand what their ideas, motivations, identities, practices, worldviews, and social relations look like, so that the reader, who may be alien or even hostile to such thought, can comprehend what animates these people (Harambam, 2020a). The same counts for the (contentious) relations conspiracy theories/ists have with various other actors, such as science and its advocates. As is common in STS, I study all positions and interactions *symmetrically* (Bloor, 1991), meaning with no im- or explicit epistemological or moral preference for one party.

However appropriate and adequate this research strategy is in theory, it turns out difficult in practice, as I found out myself, to remain agnostic about conspiracy theories and stay neutral in the contestations they are embroiled in. First of all, by writing about conspiracy theories/ists in non-normative fashion, I contribute to the rehabilitation of this

stigmatised term (Husting & Orr, 2007), and, according to some (critics), I give conspiracy theorists as such too much of a stage for their (flawed and dangerous) ideas (Harambam, 2020a, pp. 231–238). Similarly, my neutral op-ed published in a Dutch newspaper about the similarity of arguments of a biotech professor critical of the pharmaceutical industry and of the anti-vaccination movement generated much criticism from the mainstream, and appraisal from the (conspiracy) margins. Both parties used my neutral analysis as arguments in their own political campaigns, making clear what scholars of scientific controversies argued long ago 'that analysts, whatever their intentions [to stay neutral], cannot avoid being drawn into the fray' (Scott et al., 1990, p. 474). This is so because the sociological study itself will be taken as a resource or weapon by rival parties to deploy it to their advantage in their battles for epistemic authority. Journalists, policymakers and civil society organisations often demand of me to take position on thorny conspiracy theory issues as well. And while I continue to argue that staying agnostic on truth issues and neutral on societal battles for truth is the best thing to do when doing research, in practice that is hard to maintain. Our knowledge production as academic scholars is easily captured and politized by whoever deeming that opportune. The disinterested claims that I make throughout my study will in the outside world be taken up and deployed in real struggles for epistemic authority and public legitimacy. So what to do?

We can continue to insist on our neutrality as academics, proclaim even more emphatically that we only describe what is and refrain from making any moral or political judgements, but this seems rather naïve and smug to me. Naïve because it assumes that we can actually stay neutral, and smug because it assumes that such neutrality is the moral thing to do. The question is therefore not how to stay neutral, but how to give shape to our situated position as scholars in society. The works of Zygmunt Bauman, Bruno Latour and Roger Pielke Jr are informative here as they argue that in a postmodern world where multiple forms of knowledge and knowing are competing, and science can no longer operate as the high arbiter of truth, scholars should be more like 'Interpreters' (Bauman, 1987), 'Diplomats' (Latour, 2013), or 'Honest Brokers' (Pielke, 2007) of the different knowledge-, value- and belief systems we encounter today. Following Gouldner again, I argue that our objective as scholars should not be 'to bring parties together, but to do justice […] in conformity with some stated normative standard' (Gouldner, 1968, p. 113). The normative standard that I put forward as a way out of this "science is neutral/science is politics" stalemate is our most cherished procedure to settle disagreement peacefully: democracy. This is no simple slogan to complacently flaunt with, nor a hollowed-out phrase used to legitimise imperialism, but democracy in the sense of an institutionalizable procedure to deal with difference and conflict in a productive and non-violent manner. Academic scholars do not need to take sides, or declare what is true through debunking activities which may jeopardise our independent and trustful position, but we ought to make sure that the best available truth – whatever we define as best – will prevail.

To do so, we need to think about how all different parties can properly participate in open and public battles or debates about quality knowledge. This is vital to the future of social science itself, recalibrating the legitimacy of our knowledge claims and societal position, just as it is vital to our future as open democratic societies. Because scientific knowledge increasingly plays a major role in any political dispute, it is of utmost importance to have fair and equal possibilities of engaging in such debates about what is true

and what not. In a world where nation-states and large multinational corporations have tremendously more possibilities to produce knowledge to their advantage, we need to think about ways of giving scientific voice to the interests of us, ordinary citizens and all other inhabitants of the world who lack such possibilities. Otherwise, the scales always tip to powerful. While I do not (necessarily) side with conspiracy theorists (or their critics), it is important that critique and dissent are not marginalised, ridiculed, or suppressed. Some conspiracy theorists may go wrong in this or that direction, or be stubbornly unapproachable for debate, but the price we ultimately pay for societal obedience is far greater than a public distrust of epistemic authorities. As Brian Martin argues, 'society will be better off if more people are able and willing to openly question standard views. This holds true even if critics, by later judgement, turn out to be wrong. What is important is the process of open debate. When debate is inhibited or squashed, the potential for abuse of power is magnified enormously' (Martin, 1996, p. 7). I couldn't agree more.

3.3 Why debunking is not productive

Polling agencies such as Gallup and Edelman, and academic survey research often report on a widespread distrust of mainstream institutions (politics, media, science, medicine, etc.), and point to rising legitimacy crises as a consequence (Inglehart, 1997; Misztal, 2013; Rosanvallon & Goldhammer, 2008). And although science and its knowledge are overall still highly trusted and appreciated, especially in comparison to other institutions (Achterberg et al., 2017; Gauchat, 2011), it is important that we understand *why* (certain) people are distrustful of science and reject its knowledge as truthful. This is not as intuitive and straightforward as it seems. The assumption that 'ignorance is the basis of a lack of societal support for various issues in science and technology' (Simis et al., 2016) has strongly influenced the way science positions itself towards their publics. Following this dominant knowledge *deficit model* in science communication, people will accept science and its knowledge when they better understand how it works. As a result, much effort is put on educating the public and increasing their 'scientific literacy' (Miller, 1983). Current fact-checking and conspiracy theory debunking efforts share similar assumptions: people have (for various reasons) no access to quality information and suffer as such from a 'crippled epistemology' (Sunstein & Vermeule, 2009), but if we show people the right information instead, then they will accept established (scientific) truths.

   Notwithstanding the importance of highlighting blatant lies and outright falsehoods in public discourse, the reality of why people distrust, resist or reject established facts and scientific knowledge is much more complex than mere misunderstanding or a lack of knowledge (Misztal, 2013; O'Neill, 2002). A first factor to consider is the more general disillusion with (the promise of) science to deliver reliable knowledge about the world, especially in relation to the increasing complexity of many scientific problems and the (felt) inability of science to respond adequately (Beck, 1992), but also because of the close connections to corporate and state actors (Jasanoff, 2011). As conspiracy theorists often argue, they distrust science and its knowledge because they feel it is corrupted through its collusion with vested interests (Harambam & Aupers, 2015). Second, the formal way science often positions and explains itself to its publics can create alienation and distrust, for example, through a too technical and rationalistic framing of political issues (Wynne, 2001) that is partly due to an institutionalised lack of understanding and training of how

to communicate and engage effectively with different audiences (Simis et al., 2016). As a consequence, ordinary people regard science too often as elitist, smug and authoritarian because they discard people's own experiences, interests and other ways of knowing (Harambam & Aupers, 2015). Third, and perhaps most important here, people are no isolated and rational blank sheets on which more information can be written, but they are emotional, social and cultural beings who have feelings, morals, ideologies and world-views that greatly affect the way knowledge is interpreted and accepted (Berger & Luckmann, 1991; Haidt, 2012; Rutjens & Brandt, 2019). As Frank Fischer argues from a Mannheimian perspective, being able to relate to those who produce knowledge and to their ideas of what a good society constitutes is an important factor in the acceptance of knowledge (Fischer, 2009, 2019). Moreover, people live in social contexts that influence the types of knowledge they value and live by: endorsing scientific or other forms of knowledge may therefore be less of cognitive and rational activity than an expression of identity, belonging and subcultural allegiances (Harambam & Aupers, 2017; Sobo, 2015). The point is that social, cultural and political contexts are far more important in the acceptance of facts and science than mere information deficits allow for.

The realisation that fact-checking and debunking 'incorrect' conspiracy theory beliefs are often not sufficient to let people think otherwise about important societal issues and scientific controversies is increasingly shared by debunking scholars. A long line of (experimental) research shows that correcting people's understandings may only in some cases work (Lewandowsky et al., 2017; Zollo et al., 2017), most notably when the counter messages focus on the 'correct facts rather than the myth' (Cook & Lewandowsky, 2011), and when they highlight the (misleading) persuasion techniques (Schmid & Betsch, 2019). However, in many other cases, such research emphasises the difficulty to dislodge previously held beliefs and change deeply held convictions about reality by fact-checking and debunking corrections alone (Jarman, 2016; Lodge & Taber, 2013; Nyhan & Reifler, 2010). This is especially the case when debunking efforts use the language, arguments and facts that go against the political ideology, social identity and worldview of people (Cook et al., 2015; Kahan, 2017), or when corrections (are perceived to) come from opposed ideological and societal groups (Graves, 2016; Harambam, 2017). In such cases, scholars report of 'backfire effects' indicating that corrections could actually further strengthen and consolidate the original beliefs (Hart & Nisbet, 2012; Nyhan & Reifler, 2010). Debunking may therefore only exacerbate societal polarisation and widen the public gap with scientists and the broader elites they are part of. And even when people know that certain information is untrue because of corrective debunk-ing measures, they may often continue to endorse that information simply to express their identity and subcultural affiliations (Nyhan et al., 2019; Schaffner & Luks, 2018; Swire-Thompson et al., 2020). The ironic truth of debunking efforts may ultimately be that it is not so much the truthfulness of information that counts, but people's social distance to the producers and adjudicators of knowledge.

4. Deliberative citizen knowledge platforms: a constructivist and democratic alternative

How we, academics, should deal with conspiracy theories and the broader societal conflicts over truth and knowledge they represent is a thorny and complex matter. The previous sections detailed why debunking efforts are not the best strategies for

academics to engage in because they presume that scholars (can) actually know the *real* truth (1), because taking sides in societal knowledge contestations is not what we should do (2), and because providing more or 'correct' information will not even work since knowledge acceptance is dependent on people's worldviews and identification processes (3). These limitations of debunking strategies, however, do point to alternatives that may be more viable and productive. There can obviously be no uniform one-size-fits-all solution to the diverse problems contemporary societies face with truth and knowledge in the public sphere, if only because different people engage with conspiracy theories in different ways and for different reasons (Harambam, 2020a). But given that much of today's discontent and distrust of established information arises out of the (felt) impossibility to openly assess and contest (established) truth claims, I lean on two important principles developed in science and technology studies (STS) that I categorise under the notions of *insight* and *inclusion* (cf. Hackett et al., 2008; Sismondo, 2011).

First, STS make transparent and traceable how scientific facts (and other forms of knowledge) are produced, giving as such much insight into the various socio-material networks that enact and uphold (scientific) knowledge (Latour, 1987; Lynch, 1997; Mol, 2003). Such scholars show how scientific facts are no 'mirror of nature' (Rorty, 2009), but the *product* of human (inter)action, embedded in a wide network of research practices, validation structures, professional networks, political dynamics, competition, that bring and keep these truths in life (Gieryn, 1999). This does not make scientific knowledge less true, but it does make it human, and most importantly, it allows for inspection. This means opening up the black box of (established) knowledge to assess *how* that truth is assembled, by whom and with what procedures, from what sources of knowledge it taps, what socio-material networks and infrastructures it upholds, and so on (Latour, 1987). Such empirically detailed analyses make (public) debate possible about which forms of knowledge we, the public, want to be led by *without* having to lean on a blind faith in experts and/or the ruling truth. These discussions may then perfectly include the emotions, values and identity issues of both scientists and ordinary citizens, since the positivist linear model of *first science, then politics/policy* is exchanged for one in which science and politics can be as mutually inclusive as they in reality are (Pielke, 2007). At the same time, dubious entrepreneurs of flawed knowledge will inevitably own up: exactly by exposing the practices and interests underlying certain knowledge productions, we can act against the manipulations and abuses of power of whichever interest group one has in mind, be they Trump, scientists, anti-vaxxers, climate science denialists, or worse. Indeed, constructivism does not lead to the devaluation of knowledge, it can help restore it.

Second, STS fosters the inclusion of (afflicted) citizens and their expertise in the production and evaluation of knowledge, often called epistemic or knowledge democracy (H. M. Collins & Evans, 2002; Fischer, 2009; Hamlett, 2003; Harris, 2020). Commonly today, this is reserved for expert scientists themselves who, despite outside pressures, decide internally what good knowledge is and how that should be achieved (Gieryn, 1999). This can, however, lead to dogmatism and groupthink, which does not improve the quality of knowledge. Indeed, much research shows that the collective intelligence of more diverse groups (in terms of background, expertise, cognition, worldview), where dissent is stimulated, is much higher (Mair et al., 2019, pp. 21–28). The exclusionary ivory tower attitude can also lead to (more) societal alienation and disengagement from science, which does no good to the public status of, and trust in science (Moore, 2017). When people feel represented and heard by (scientific) experts, and when they can relate to or even influence their knowledge production, this will only benefit the legitimacy

and epistemic authority of science (Brown, 2009; Fischer, 2009). It thus makes both epistemic and political sense to open knowledge evaluations up to others. Just like several STS projects have shown how it is possible to productively include different kinds of societal groups in the production of scientific knowledge and directing policy (Arksey, 1998; Epstein, 1996; Rabeharisoa et al., 2014; Sclove, 2000), so too do I believe that it should be possible to include different citizens and give them voice in the establishment of criteria, procedures and evaluations of public knowledge.

To be sure, this is no plea for some form of scientific populism or an epistemic mob rule, but it is a call for more public influence on how we evaluate knowledge so that our epistemic institutions and the high-quality knowledge they generally produce gain more legitimacy. A same time, such institutions can take advantage of citizen's variegated ideas and expertise, and improve the quality of their knowledge. Instead of having elite groups (like academics) debunk the ideas of conspiracy theorists, the constructivist and more democratic alternative I put forward are 'deliberative citizen knowledge platforms' that should asses the quality of information in the public domain in organised cooperation with relevant stakeholders and experts. Such public and well-organised confrontations of different ideas should lead to outcomes that draw on, and supported by the expertise and interests of more societal groups than is currently the case. Critics of deliberative knowledge projects often argue that ordinary citizens cannot form robust and well-informed opinions, and are easily manipulated by organised interest groups (Hamlett, 2003; Smith, 2009). While it is important to guard against such interferences, all depends on how deliberative forums are organised: when experts and laymen are put in the right conditions to productively exchange knowledge and experiences, ordinary citizens are informed enough to make coherent and well-reasoned decisions (Fishkin, 2018; Harris, 2020). Besides these experiences in 'deliberative democracy' initiatives (Reybrouck, 2018), the proposed citizen knowledge platforms can also draw on the ideas and experiences that several science and technology scholars gained in projects involving citizens and experts alike in public dealings of highly complex societal issues (Callon et al., 2009; Latour, 2004a).

More empirical inspiration can be drawn from the recent Irish citizens' assemblies that had been set up in light of two contentious referenda (gay marriage and abortion). These deliberative bodies were populated with randomly selected citizens who worked together (with experts) over a longer period of time and following clear procedures with the goal of fueling public debates with well-considered information and recommendations (Farrell et al., 2019). This stands in stark contrast to the misleading information and false one-liners that characterised the 2016 Brexit referendum, which only led to increased societal polarisation and political deadlock. Deliberative citizen assemblies, on the other hand, make it easier for people to understand the complexity of the issue at stake and the trade-offs involved, helps people relate to other viewpoints, and can as such better resolve disagreements on controversial issues (Curato et al., 2017). Taiwan has shown how such experiments in public deliberation can be scaled up to *online* environments as well: more than 26 topics have been discussed through *vTaiwan*, involving almost a quarter of its 23 million population, with 20 of them contributing to decisive government action (Lin, 2018). Democratically engaging citizens in the production, evaluation, and policy afterlives of public knowledge seems a very viable way out of the current information crisis mistakenly dubbed post-truth.

Obviously, I cannot offer fully detailed plans about how deliberative citizen knowledge platform should look like (e.g., what composition and selection procedure it should have, and

how it should be organised and financed). These are all matters to be discussed in the public discussions prior to installment. But a sure thing is that these platforms need to consist of and represent a wide variety of people, so that their activities are seen as trustworthy and legitimate, while they can tap on diverse forms of expertise and experience. While factcheckers and conspiracy theory debunkers may fail to convince their audience because of aforementioned reasons, they do go a long way by making transparent or 'assessible' the genealogy of information (O'Neill, 2002). The provided insight in the origins and transformations of contested claims is, just like transparency about the construction of scientific facts and the socio-material networks that uphold them, of great importance to publicly evaluate any claim on truth, and increase trust in public knowledge. The proposed citizen platforms should therefore firstly occupy themselves with the *contents* of public knowledge, assessing the quality of information, but this means taking into account as well the broader *context* in which these are produced and circulated. Given the prominence of the internet in today's information landscape, this means that they should have insight and voice in (the regulation of) technologies (e.g., filtering algorithms), malicious actors (e.g., bots, trolls, and interest groups) and infrastructures (e.g., social media platforms) that all influence the information people get to see (Bennett & Livingston, 2018; Marwick & Lewis, 2017; Starbird et al., 2019). The biggest challenge ahead of us lies perhaps with the big tech companies who play an important role in the circulation of conspiracy theories and other contentious contents, but have a bad track record in cooperating with public authorities towards a safer and healthier internet that upholds public values instead of commercial interests (Livingstone, 2018; Van et al., 2018; Zuboff, 2019).

Conclusion

The question whether academic scholars should debunk conspiracy theories does not stand alone but is situated in broader post-truth discussions about what to do about the presence of various forms of 'untruths' in (online) public discourse. The dominant response to this crisis of information is a re-instalment of the positivistic ideal in which facts are objective and unequivocal, where experts should be listened to, and where *the* Truth is sacred (Harambam, 2017). Legacy media corporations such as CNN, The Washington Post and The New York Times started largescale publicity campaigns against fake news and alternative facts, factchecking organisations (PolitiFact or Factcheck.org) became prominent truth adjudicators of various dubious claims in the public sphere, and social media platforms deploy (factories of) content moderators and develop automated tools to remove 'harmful content'. And while scholars of fact-checking (Graves, 2016) and content-moderation (Gillespie, 2018) practices show how these activities are in reality much more ambiguous, complex and subjective, the public image of such actors and their activities is the notion that *the* Truth can be restored by strictly separating objective facts from subjective opinions, fantasies and values.

Intellectual blame for this information crisis is often put on postmodernism (and with one blink, on constructivism too) which is supposed to have cultivated a popular disdain for science, facts and truth, while providing the rhetorical tools to de(con)struct widely accepted truth claims. Open up any book or read any commentary on post-truth, and the same argument is heard: we are in a war against unreason and relativism, facts and truth are no longer sacred, and those awful French thinkers have provided bigots and conspiracy theorists the arguments to break down well-established facts and democracy at large. Bestsellers from Michiko Kakutani (2018), Lee McIntyre (2018), Matthews d'Ancona (2017),

or Evan Davis (2017) all problematise postmodernism as the root cause of the current information crisis and put forward positivistic answers like recuperating truth as an important value, highlighting the objectivity of scientific facts, and re-establishing the authority of experts. Even Bruno Latour, often (wrongly) seen as the archetypical postmodernist, is questioning what he and his STS 'friends' have done now that 'the weapons of social critique [are] taken away from us by the worst possible fellows as an argument against the things we cherish' (Latour, 2004b, p. 227). The science wars that haunted academia in the 1990s, are now democratised and played out in the open with ordinary citizens, conspiracy theorists and political actors deploying constructivists arguments in their battles for truth, epistemic authority and political power (Harambam, 2020a, pp. 196–201).

Many STS scholars question therefore whether their research efforts and conceptual tools are indeed responsible for post-truth and the public demise of established facts and expertise (H. Collins et al., 2017; Fuller, 2016, 2018; Jasanoff & Simmet, 2017; Lynch, 2017; Marres, 2018; Sismondo, 2017). Some argue that STS's 'logic of symmetry, and the democratizing of science it spawned, invites exactly the scepticism about experts and other elites that now dominates political debate' (H. Collins et al., 2017), and that it is therefore 'most puzzling that STS recoils from these tropes whenever such politically undesirable elements as climate change deniers or creationists appropriate them effectively for their own purposes' (Fuller, 2017). Others hold that post-truth's selective use and strategic disregard of (scientific) facts and established knowledge has little to do with STS (Lynch, 2017; Sismondo, 2017)(Lynch, 2017; Sismondo, 2017). Whether an academic discipline alone can bring forth, or even be held responsible for the emergence of a cultural condition as complex and multifaceted as post-truth seems implausible and even megalomanic, but the modernist dream of transcendent, objective and value-free facts miraculously discovered by disinterested scholars is for many people today simply hard to believe (Harambam, 2020a, pp. 217–222). In this paper, I have therefore argued why prevalent efforts to debunk conspiracy theories, or to counter them with an insistence on the 'hard facts' without considering the broader context in which knowledge is produced, shared and appropriated are wrong and doomed to fail. As Noortje Marres argues, 'it would be a mistake to return to a classic intellectual strategy––the politics of demarcation––in the face of this danger', since we are 'at risk of re-instating an outdated strategy for securing the role of facts in public debate, one in which public respect for knowledge is based on authority' (Marres, 2018, pp. 423–424).

Instead of blaming the constructivism of STS, and black boxing facts again by shouting even louder that science and its knowledge are really objective and truthful, I argued in this paper for an alternative that is both epistemologically stronger and sociologically more effective. Building from the STS tropes of insight and inclusion, I proposed to have deliberative citizen knowledge platforms, instead of elite experts groups, assess the quality of information in the public domain in organised cooperation with relevant stakeholders and experts. Such platforms draw, on the one hand, on more diverse sources of expertise, and as more diverse people are represented in such platforms, they should enjoy more legitimacy. The focus should then not just be on the contents of (contentious) information, but on the contexts in which they originate, circulate and find legitimacy as well. Solutions will need to differentiate between different people adhering to conspiracy theories as their needs and potential to change may vary significantly: focus perhaps on the questioning majority instead of the convinced zealots. Obviously, there are conditions and limits to what forms of knowledge

we, as democratic societies, should allow to be assessed by these citizens platforms. Some conspiracy theories may just not be worth the trouble and investment as they do little harm to other citizens and/or democratic institutions. Others may cross the very distant boundaries of what we allow to be free speech in democratic societies: when conspiracy theories incite or call for violence, hatred or demonise certain societal groups (Jews, immigrants, Muslims, etc.), then we, as *a society*, and not (only) as academics, should do something about it. There are clear limits to free speech in democratic societies, and these are legally institutionalised and should be penalised as such (Cannie & Voorhoof, 2011; McGonagle, 2017). But for the rest people should believe and express themselves in ways they see fit.

Another caveat refers to the socio-political context in which academics operate. In societies where democratic institutions and governmental structures are strong, independent and accountable, then such citizen platforms are realistic. But when scholars operate in societies where the independence and quality of these institutions are in danger of becoming politicised (think of Turkey, Poland and Hungary), then such solutions are hard to even think of. Especially as leaders of such countries often express conspiracy theories themselves, and for the sole gain of consolidating power, it makes good sense to go against their manipulations. However, such efforts should still not be to debunk (their) conspiracy theories, but to strengthen local democratic institutions so that *they* can do something about it. The overall point of this paper is that our democratic societies, and the knowledge and values we want to live by, are too important to be left in the hands of a powerful elite of experts and technocrats alone.

Disclosure statement

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