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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.

**KEYWORDS**

Conspiracy theories; debunking; post-truth; sts; epistemic democracy; deliberative democracy; fact-checking; constructivism

## 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

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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 *pre*scriptive instead of a *de*scriptive 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 debunking 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 sociomaterial 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

No potential conflict of interest was reported by the author.

## Notes on contributor

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