

# Status Distrust of Scientific Experts

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## Abstract

Distrust in scientific experts can be surprisingly stubborn, persisting despite evidence supporting the experts' views, demonstrations of their competence, or displays of good will. This stubborn distrust is often viewed as a manifestation of irrationality. By contrast, this article proposes a logic of "status distrust": low-status individuals are objectively vulnerable to collective decision-making, and can justifiably distrust high-status scientific experts if they are not confident that the experts do not have their best interests at heart. In phenomena of status distrust, social status is thus an indicator of distrust, and this has wider implications for the literatures on trust in science and on expert communication.

KEYWORDS: Expertise – Trust – Social Status – Distrust in Science – Science Denial

## Biographical note

Hugh Desmond is a postdoctoral researcher at the Department of Philosophy at Leibniz Universität Hannover and assistant professor at the University of Antwerp. He earned his PhD in philosophy of biology at KU Leuven with visiting fellowships at Princeton University and New York University. After his PhD, he held fellowships in bioethics and applied ethics at the Center for Biomedical Ethics and Law (KU Leuven) and The Hastings Center, and in philosophy of science at the Institute for the History and Philosophy of Science and Technology (CNRS/Paris I-Sorbonne). His work focuses on the logic and normative implications of evolutionary theory, with special attention for the concepts of progress, human nature, and agency. He has also published broadly on the social and methodological dimensions of science: competition, trust, professionalism, and integrity.

*Behind every great fortune, there is a crime.*  
– Often attributed to Honoré de Balzac

*The way to wealth is as plain as the way to market. It depends chiefly on two words, industry and frugality; that is, waste neither time nor money...*

– Benjamin Franklin

## 1. Introduction

The mother of three children, having spent all her life in rural areas, already felt little trust in the government and urban professional classes. Hence when government physicians came to her village offering to vaccinate her daughter, she balked. She just could not believe their promises – that the vaccine had been subject to extensive testing, that it was free of serious side-effects, and that it could help her daughter avoid cervical cancer later on. She secretly worried about being part of a large-scale experiment, or of an effort at population control. No matter the ingenuity with which the doctors argued and pleaded with her, the fact of the matter was that she simply did not trust them.

The well-documented distrust of the HPV-vaccine (Craciun and Baban 2012) is but one instance of the more general phenomenon of deep distrust of scientific experts (Douglas et al. 2019). This distrust is evident internationally, although in light of the ample attention it receives in public discourse, one should hasten to add the nuance that it does not seem to be pervasive: scientists remain the most trusted profession globally, more so even than doctors or nurses (Ipsos 2019). Nonetheless, even as a minority attitude, it is a puzzling and troubling phenomenon.

It is not the distrust per se that is puzzling. For instance, one could and should distrust so-called “scientific experts”<sup>1</sup> if one suspects them of being biased or subject to conflicts of interest. Financial conflicts of interest are particularly corrosive

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<sup>1</sup> In this article I am largely passing over the question: what properties qualify someone as a genuine “scientific expert”? (See for instance: Goldman 2001; Anderson 2011; Brennan 2020.) In this article I will be emphasizing the social and political processes underlying such ascriptions. This is more in keeping with “social role accounts” of expertise (see Watson 2020, ch. 6), but I will not take any stand on this debate. For a discussion of the closely related question of what properties qualify someone as a “professional”, see also Desmond 2020. For purposes here, I have in mind a relatively matter-of-fact understanding of a “scientific expert” as someone who (1) has the relevant educational credentials, (2) is a professional scientist, i.e., conducts scientific research in a particular area according to relevant standards of competence, and (3) is asked to inform the public or to advise policy-makers concerning phenomena they are presumed to be knowledgeable about.

(Holman and Bruner 2017), and historical cases of corruption (such as the tobacco industry manipulating the state of scientific consensus: Oreskes and Conway 2011) have contributed to a widely held perception that industry-funded research is less trustworthy than academic research (Pew 2019). But financial conflicts of interest are not the only legitimate grounds to distrust scientific experts. Suspicion of sexist and/or racist biases could as well: in some areas of medicine such biases seem to have undermined expert judgment (Heise et al. 2019; Ridgeway and Correll 2004).

However, such forms of distrust are relatively circumscribed: they are conditional on defeasible beliefs about the motivations of experts or about the “non-epistemic values” that influence them. By contrast, distrust of the “stubborn” variety being examined in this paper seems much more irrational. It does not seem to involve specific worries that can be allayed. There are no defeasible suspicions of bias. Those who refuse the HPV-vaccine, at least as documented by Craciun and Baban (2012), claim that the vaccine is being pushed in coordination with large pharmaceutical companies in order to maximize profits, or is a sinister ploy to reduce the world population (see also Douglas et al. 2019). When the suspected conspiracy goes so deep, there is little physicians can do to persuade the distruster of their trustworthiness. Do they protest and maintain they have no interest in promoting infertility or in reducing population size? They could refer to studies showing that the HPV-vaccine does not appear to have any effect on fertility (Schmuhl et al. 2020) – but what if the distruster suspects the authors of that study to be part of the conspiracy? In the words of one recent empirical study on the effectiveness of fact-checking campaigns: “fact-checking interventions work only for those people who see value in fact-checking” (Rich, Mildén, and Wagner 2020).

It is in this sense that the targeted type of distrust in scientific experts can be called “stubborn”: the distrust is resistant to evidence supporting the scientific experts’ views, demonstrations of their competence, or displays of their good will. Because the distrust involves ascribing very nefarious ulterior motives to scientific experts, any efforts by the experts to allay worries or fears come across as efforts to manipulate.

How should such stubborn distrust of scientific experts be understood? *Can* it even be understood? Arguably, the most widespread view today is that the distrust is not only unjustified but simply irrational. Distrusting scientists because they are believed to be in league with a tobacco company may be unjustified distrust – but it is

not irrational. By contrast, because stubborn distrust is so resistant to any form of evidence, it can easily be interpreted (and dismissed) as a form of irrationality.

In its most charitable version, this “irrationality view” of stubborn distrust analyzes the irrationality as a consequence of a lack of opportunity. The ‘distrusters’ may not have received the relevant education,<sup>2</sup> or may lack an appropriate understanding of the relevant science. They may also have been manipulated by misinformation that may have simply flourished spontaneously on social media platforms (Vicario et al. 2016) or that may have been intentionally planted by corporate agents for reasons of financial gain (e.g. Oreskes and Conway 2011; Bakir and McStay 2018).

There are also less charitable versions of the irrationality view, according to which stubborn distrusters are no longer viewed as mere victims of a lack of opportunity, and instead as actively harboring ill-will towards fundamental values such as truth. For instance, some adopt a “post-truth” view of conspiracy theorists and science deniers, and claim they no longer care about truth and only about power or political dominance (examples of the post-truth view include McIntyre 2018; d’Ancona 2017).

While such genuine cynicism undoubtedly exists in some individuals, in this paper I would like to present an alternative that steers away from irrationality views, both in their harder and softer manifestations. One reason for doing so is ethical (or pragmatic): accusing a segment of the population of irrationality is not always helpful since it can provoke resentment, intensify moral outrage, and feed into political polarization (see also Carpenter et al. 2021). The second, more fundamental reason for rejecting irrationality views is that they (especially the harder irrationality views) often ignore how stubborn this distrust can be. Group distrust of scientific experts is a truly intersectional phenomenon and is not just evident at both ends of the political spectrum but, as will become clear, includes mothers concerned for their daughters, as well as indigenous tribes and historically oppressed minorities. The group is too widespread and politically heterogeneous to be simply explained away as a unified, politically motivated group. Hence this article will propose a perspective whereby

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<sup>2</sup> In fact, higher levels of education predict a lower susceptibility to conspiracy theories (Prooijen 2017; De Coninck et al. 2021).

stubborn distrusters can be understood without necessarily endorsing all their conclusions or statements.

The specific proposal is that stubborn distrust in scientific experts is a form of *status distrust*. By the term “status distrust” I mean the type of distrust where a speaker is actively distrusted *in virtue of* their high degree of social status. In this way, social status is not just an indicator of a lack of trustworthiness, but an indicator of *distrustworthiness*. It helps account for the tenaciousness of some distrust in scientific experts because the grounds of distrust lie not in what experts say, or know, or intend, but rather in the “rank” the expert is perceived to occupy in society. It persists despite efforts to coax out trust; it persists despite anything the scientist may say, do, explain, or signal. The distrust is grounded in *who* the scientific expert is, and specifically in their *relative social rank* compared to that of the listener, and not in what the expert actually says or does.

Even though status distrust can often appear to be irrational, it is not in fact irrational and is characterized by a certain logic: low-status individuals have less influence on collective decision-making, and hence are vulnerable to the preferences of high-status individuals. Hence, when their core values are not shared by high-status individuals, then low-status individuals can no longer be confident that their interests will be given appropriate weight in the collective decision-making. This, in brief, is the “logic of status distrust”, and later I will show how it can be a *valid* reasoning scheme.

Status distrust is a peculiar form of distrust because it cuts across the distinction commonly made in the literature on trust between the *affective* dimensions of trust (Baier 1986) and the *rational* or belief-based dimensions of trust (following Hawley 2014; O’Neill 2002). Status distrust, as it is consciously felt, may be largely affective, implausibly articulated and apparently unjustified. Yet, upon closer inspection, status distrust is an expression of a reasonable belief in one’s own vulnerability to others’ intentions.

The focus on status distrust also contrasts with other approaches in the philosophical literature on conspiracy theorizing. There the focus lies on identifying the most popular arguments that conspiracy theorists tend to make, and on analyzing why precisely they are fallacious. While a few adopt a somewhat sympathetic stance towards the epistemic practice (see Coady 2007; 2006), most commentators in this debate conclude that the practice is largely irrational (e.g. Harris 2018; Hansson 2017) and involves some kind of epistemic vice. By contrast, this article will not evaluate the

claims of conspiracy theorists at face value, but will rather take them as manifestations of a deeper social reality involving a sense of vulnerability and alienation from prevalent status hierarchies. At this deeper level, conspiracy theorizing is not necessarily epistemically vicious.

The main argument in this paper will tread a path between the sociology of the professions, the anthropology of social status, and the philosophical literature on trust. Hence it is important to indicate how its scope should be interpreted. Its modal force is that of a “how-possibly” argument for the phenomenon of stubborn distrust: it shows *one particular* way in which stubborn distrust can be viewed as a rational phenomenon. It is not a fuller abductive argument, where that one particular way is also argued to be the “best” view on stubborn distrust. For instance, by using the concept of testimonial injustice (Fricker 2007), one could hypothesize whether the distrust of “low-status individuals” (in the terminology of this paper) can be attributed to perceptions of injustice. Weighing these alternatives would require a more detailed engagement with the empirical literature (Prooijen 2017; De Coninck et al. 2021), and, though valuable, that project will not be attempted here in favor of stating the logic of status distrust as fully as possible in its own terms.

The article is structured as follows. I will first give some background on what social status is, how it relates to the trustworthiness of professional and scientific expertise (sections 2 and 3), and how it can indicate a lack of trustworthiness (section 4). Then, in section 5, we zoom in on a case of distrust shown towards precision medicine researchers: I argue that this case exemplifies how status can become an overriding indicator of distrustworthiness. From this, the phenomenon of status distrust will be examined in more detail (section 6), and I argue that this helps account for the apparent irrationality and conspiratorial character of at least some manifestations of status distrust (section 7).

## **2. What does Status Indicate? Two Views in the Sociology of the Professions.**

Before we address what it means for scientific experts to have “social status”, let us first look at what it means for professionals in general. After all, science and the professions are intertwined: professionals are sometimes treated as scientific experts (e.g., psychologists or psychiatrists giving testimony in court) and scientists are also

sometimes client-serving professionals (mainly in domains such as engineering, medicine, or psychology). In fact, according to some sociologists, what distinguishes the professions from other paid occupations is that the professions are “science-based” (Brante 2011).

If one takes a bird’s-eye view of the sociology of the professions, two broad views of the social status of professionals can be distinguished. In what could be called the “traditional view”, social status is conceptualized as an indicator of trustworthiness. The reasoning is the following: professionals are trusted because they are guided by a “transcendent ideal” (e.g., care, justice, truth) and work to apply a body of abstract knowledge which is relatively difficult to acquire. (Freidson’s work is a good example of this view: see Freidson 1970; 2001.) Because of the abstract nature of this knowledge, the practitioners themselves must be the primary judges of how to apply this knowledge in concrete situations. In other words, professionals require considerable autonomy to carry out their work according to their own discretion, and this in turn requires that their clients, patients, etc. have considerable trust in them. The justification of this trust is ensured by the service ideal.<sup>3</sup> Against this background of trust and autonomy, the social status assigned to professionals reflects the high value placed on the services they offer.

This representation of the social status of the professions has been criticized for giving insufficient attention to how professionals *actually* behave. This criticism is that, in reality, professionals engage in certain types of behavior *in order to* acquire and maintain their social status – not to serve their clients or patients. Hence the second, “subversive view” of the social status of professionals: claims of “scientific expertise” or of “service ideals” are simply a means to the end of maximizing social status and privilege.<sup>4</sup>

There are many historical examples to support this view. For instance, town doctors in the 19<sup>th</sup> century as well as medical charlatans were approximately equally incompetent in their ability to cure disease. Yet only the “regular” physicians were accorded respect and status. Why? In the view of Magali Larson, the “service” in

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<sup>3</sup> In the words of Freidson: “The professional ideology of service goes beyond serving others’ choices. Rather, it claims devotion to a transcendent value which infuses its specialization with a larger and putatively higher goal which may reach beyond that of those they are supposed to serve. (...) Such values as Justice, Salvation, Beauty, Truth, Health, and Prosperity ...” (Freidson 2001, 120)

<sup>4</sup> Larson 1977 is the *locus classicus* in the sociology of the professions, but it draws on a long tradition going back to Foucault, Gramsci, or Marx, where service ideals and (bourgeois) professional organizations are analyzed as expressions of power structures.

professional ideology is mainly a means to the end of competition for social status (Larson 1977, p. xii). The physician may have sworn the Hippocratic Oath, but this was a means to obtain trust and social status, and had nothing to do with any real competence.

It is not that the subversive view denies the importance of professional ideals. The disagreement with the traditional views lies in the relative weight attached to the *ideal* and to the *real* motivations of professionals and professional organizations. Thus the subversive view may acknowledge the value of the ideal of care, but will instead emphasize how – in reality – medical bodies seem to be very effective at resisting public controls on cost and thus curbs on their income (M. S. Larson 2003). The professions' pursuit of status need not be conscious or occur only at the individual level, but can occur on the collective level through competition over jurisdictions (Abbott 1988).<sup>5</sup> Even academic debates become *proxies* for these jurisdictional conflicts (Abbott 1988, 69).

What lessons does this hold for the issue of status distrust? In the traditional view, social status is an indicator of trustworthiness, whereas in the subversive view, it is an indicator of a *lack* of trustworthiness, and even of distrustworthiness. After all, status is difficult to acquire, and if high status is assigned to a professional organization, this must have been the result of a conscious struggle to acquire status. However, the presence of an indicator of distrustworthiness does not entail a subject must assume an attitude or belief of distrust. One may still decide to trust the professional for other reasons, even if their high status has a negative impact on their perceived trustworthiness.

The quoted passages on wealth illustrate these different views on status (see Cheng and Tracy 2013). In the words of Honoré de Balzac, wealth is an indicator of a past crime, and thus a reason to distrust a person.<sup>6</sup> But in the perspective of Benjamin Franklin, the way to wealth is straightforward, via hard work and thriftiness. Presumably he would agree with the converse, namely that wealth is a general indicator of virtue and hence of trustworthiness.

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<sup>5</sup> Though Abbott does not use the term, the interaction between rival professions is essentially – or at least strongly reminiscent of – a Darwinian dynamic (cf. Boyd and Richerson 1985).

<sup>6</sup> Balzac's actual remark is more nuanced in context as it concerns only great fortunes "without an apparent cause". Nonetheless, the popular generalization of his remark to all fortunes is indicative of a common attitude towards wealth. The full quote: *Le secret des grandes fortunes sans cause apparente est un crime oublié, parce qu'il a été proprement fait.* (Balzac 1856, 136)



### **3. Status and Scientific Expertise**

It may not seem obvious that scientists and experts possess status in the way that respected and well-heeled professionals in law or medicine obviously do. Nor are scientists as wealthy as business leaders and business owners. Nor do they have the authority to directly form public policy as politicians might. Instead, scientists can be seen to possess what some anthropologists call “prestige” or freely given respect, as opposed to “dominance” (Henrich and Gil-White 2001). High-prestige individuals are those who can offer skills or services that will benefit others. Such attributions of prestige are also enmeshed in social norms and expectations. Some anthropologists speak of “service-for-prestige” norms (Price and Van Vugt 2014): status may be conferred on individuals in recognition of a competence or skill, in the expectation that the high-status individual will place that skill at the service of the community (through teaching or applying it).

Thus high-prestige individuals are also highly trusted individuals. From this perspective, the high levels of public trust placed in scientists can be interpreted as a proxy for the status accorded to scientists. The trust placed in scientists is much greater than that placed in business leaders or politicians (Pew 2020). In a similar IPSOS poll (Ipsos 2019), which was conducted across 23 countries, scientists were deemed the most trustworthy in a list of 17 occupations, with 60% of respondents actively placing trust. At the bottom of the list were politicians, who were deemed trustworthy by only 9%. And this trust seems justified if one assumes – with good reason – that scientific knowledge has, in the past centuries, served human communities immeasurably through better healthcare and technology. Those who contribute to scientific knowledge offer an important service and are to be accorded high degrees of prestige.

However, and this is highly relevant for the topic at hand, attributions of social status are often somewhat morally ambiguous. A prestigious individual can often call on allies to push through certain actions, and in this way prestige can be converted into dominance. Many positions of prestige explicitly involve some dominance: an oft-cited example (Henrich and Gil-White 2001) is the corporate hierarchy, where a high rank may indicate skill or competence but also the power to promote, demote, hire or

fire employees. In general, prestigious individuals can call on dominance behaviors to maintain their positions, especially when the bargaining power of the low-status individuals is weak (Price and Van Vugt 2014, 2). In fact, the reason why “service-for-prestige” social norms exist (with associated punishments for those who transgress them) is precisely to discourage high-status individuals from falling short of the expectations of service.

Some anthropologists such as Bernard Chapais have argued that both prestige and the dominance of status are ultimately manifestations of what Chapais calls “competence” (Chapais 2015) but which I would simply call “power” in the fundamental sense of the capacity to realize one’s intentions.<sup>7</sup> The rootedness of both prestige and dominance in power illustrates the crucial point that there is often a moral ambiguity involved in assigning a high degree of prestige to an individual: even if done freely, there may still be some subtle threat of coercion or even violence present.

The prestige that scientists enjoy does not escape this ambiguity. What forms of dominance can they call on? While scientists do enjoy high levels of public trust, they also have close links with dominant and much less-trusted segments of society such as business or politics. The business community values research to the extent that it today provides about approximately 60% of all science funding globally – more than governments and universities combined (Scienceogram UK 2013; UNESCO Institute for Statistics 2020). Politicians and policy-makers value scientific research as providing inputs for policy-making, along the lines of the ideal of “evidence-based policy making” (Cairney 2016). While there is no evidence that abuses occur, it seems safe to say that the *opportunity* for subtle abuses of privilege are much more readily available to the scientist than they are, for instance, to a manual laborer.

In sum, scientists do not possess wealth or direct (political) power. They may not even control basic aspects of their “profession” in the way physicians can (controlling the number of new entrants, for instance). However, in terms of prestige – the appreciation for scientific work, the consequent financial support by both the state and private corporations, the impact of scientists on public policy – scientists can be understood to possess a large degree of status. In keeping with the nature of

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<sup>7</sup> This is how Hobbes, for instance, defines “power” in the *Leviathan* (Hobbes [1651] 1996, chapter 10).

prestige, this status can indicate both trustworthiness as well as the potential abuse of a position of trust. The next section fleshes out the latter dimension of social status.

#### **4. Status as an Indicator of Distrustworthiness**

In general, we tend to act more trustingly and trustworthily towards high-status persons than we do towards low-status persons (Glaeser et al. 1999; Lount and Pettit 2012). Yet, if one studies the literature on conspiracy theories, it seems that markers of social status can, at least sometimes, indicate a lack of trustworthiness. For instance, populists and conspiracy thinkers both seem to distrust the “elites” without any further qualification of what the elites believe, say or do (Silva, Vegetti, and Littvay 2017).

This ambivalence towards status can be viewed as a reflection of the very concept of social status. For what is social status? It is the influence over collective decision-making that an individual is given by others. Hence it is in the interest of the group to assign status in such a way that the group optimally benefits. However, once status is obtained, there is always the threat that the individual will bend the collective decision-making to suit narrow individual interests rather than those of the community. Status can thus be both an indicator of trustworthiness as well as a reason to distrust a person. Which half is foregrounded and which half is backgrounded depends on the circumstances.

This brings us to the concept of *status distrust*, which is designed to foreground one half only. It is a form of distrust where a person is distrusted *by virtue of* their (perceived) social status.

Note that in the empirical phenomena of stubborn status distrust, social status overrides all other possible indicators of trustworthiness. In general, status can be a reason to distrust a person but yet be counterbalanced by other reasons. For instance, I may believe that my physician entered the profession primarily for the social status attached to it, but I may still trust the social structures that constrain and guide my physician such that it is in their interest to not disregard my health. In other words, I may conditionally trust my physician in the assumption that, if they are systematically negligent or reckless, they will be caught and their social status will suffer.

By contrast, status distrust specifically refers to instances where status-as-indicator-of-distrustworthiness dominates other indicators or considerations. It is thus a relatively extreme form of distrust. All statements and purported ideals – truth,

justice – are entirely explained away as a means by which to gain social status. Social structures and forms of social control are also distrusted, and hence status distrust can assume a conspiratorial dimension where not just my physician but *all* physicians are negligent and reckless about the value of health.

Status distrust calls to mind extreme forms of conspiracy theorizing; however, there are more understandable forms of status distrust as well. In the following section we discuss a case that illustrates how status distrust can take root.

## **5. Case Study: Data Sharing in Precision Medicine**

An ongoing challenge for precision medicine is that some populations remain underrepresented in the gathered data. In particular, black, indigenous and communities of color have been underrepresented in research in precision medicine (at least in the U.S. context: see Lee 2021). Regardless of whether the potential benefits of precision medicine have been overestimated in general (and this is very likely: see Vogt et al. 2019), this underrepresentation is a clear threat to any hoped-for efficacy of precision medicine, resulting in poorer standards of healthcare.

Why are some populations underrepresented? One important reason seems to be that these communities refuse to share their data with scientists (Lee 2021). This, in turn, can be interpreted as an issue of trust. To consent to handing over one's personal genetic information, as well as information about one's sociopolitical, economic, and environmental context, presupposes considerable *trust* in those receiving the information. When this trust is lacking, it is no surprise that there is little willingness to share personal data.

One exemplifying case<sup>8</sup> concerns how members of the Havasupai took Arizona State University (ASU) to court in the 1990s over violation of consent norms. The problem was that the Havasupai members had originally consented for some of their data to be used for a specific purpose – for ASU researchers to use data from blood samples for diabetes research. However, without asking for further consent, the ASU researchers later reused the same data to research occurrences of schizophrenia in the Havasupai tribe. They also transferred the data to other research institutions so the latter could analyze historic migrations of Native American populations (see TallBear

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<sup>8</sup> Introduced by (Lee 2021), further developed in (Desmond 2021b), and developed yet further here.

2013, 144–45). When the Havasupai discovered this breach of consent, they took ASU to court.

One could simply view this episode as a bureaucratic failure, a run-of-the-mill instance of an institution failing to follow protocol. Yet the deeper question is why precisely the Havasupai took such issue with the failure, and why they experienced the data reuse as a breach of rights. For the ASU researchers could claim they were not ill-intentioned. From the perspective of the good of public health, they could even argue that they acted in accordance with the interests of the Havasupai. After all, by sharing their data, they enabled additional scientific research which could directly or indirectly be expected to help the Havasupai.

From this perspective, the Havasupai protest could even seem irrational, since they did not prioritize the potential benefits of data re-use for their health outcomes. In fact, such cases have inspired some ethicists to advocate for more “nimble” (i.e., less stringent) models of consent, such that data re-use can occur more at the discretion of researchers and without having to receive explicit permission for every single re-use of data (Mckeown et al. 2021). For instance, according to the “blanket consent” model, subjects give consent only once and implicitly allow all future reuses of data (Mckeown et al. 2021). Some have even proposed that sharing personal data for use in medical research should be conceived of as an obligation (Ballantyne and Schaefer 2018). The rationale is that loosening consent requirements would benefit scientific research and ultimately also the health service offered to communities suffering under structural inequities.

Nonetheless, even though we can assume for purposes here that the ASU scientists and their colleagues were motivated by a common good (scientific knowledge) and a specific good for the Havasupai (better healthcare), it is not satisfactory to simply dismiss the Havasupais’ actions as irrational. The deeper question is why they did not share the perception of the ASU researchers, and refused to share their data without their explicit consent, even if the data re-use was ostensibly to promote a better understanding of their history or health outcomes?

Viewing the phenomenon from the perspective of status distrust can help. First, consider how the scholar of indigenous communities Kimberly Tallbear targets in passing what she calls “Euro-American courts” (TallBear 2013, 181ff.). She reports how many Native Americans do not trust the U.S. justice system. Why? These courts and their jurisprudence are built on the liberal principles of individual autonomy,

property rights, and distributive justice. By contrast, many tribe members feel as if they must act as custodians of their heritage, whether that is their way of life or the DNA they inherited from their ancestors. How can they argue their case in a legal system that views DNA as “raw material” and not worthy of protection in the way for instance intellectual property is (see TallBear 2013, 181)?

The fundamental conceptual framework of the U.S. justice system is thus set up in such a way that the question about sharing data becomes a question about property (who owns the data). By contrast, for the Havasupai, at least according to Tallbear, the question is about “spiritual harm” and “tradition” (TallBear 2013, 181). These are two concepts that are central for Havasupai ethical thinking, but are more or less alien in Western jurisprudence.

This background casts the refusal of the Havasupai to share personal data in a very different light. How can they be sure that future reuses of their data will be sufficiently respectful of their core values? The deliberation whether a particular reuse constitutes a lack of respect or not often involves weighing multiple factors: different values can shift the balance towards one line of action or another. Hence, if the values of test subjects are not represented in this decision-making process, they would seem justified in withholding trust in the counterparty, even if the latter is well-intentioned. If the counterparty (ASU scientists in this case) does not assign much weight to values such as tradition and heritage, how can the Havasupai give “blanket consent” to data reuse?

The alienation of the Havasupai from the legal system underlines the differences in *social status* between the test subjects (the Havasupai) and researchers. Social status has many dimensions (economic, cultural), but as previously mentioned, one of the most fundamental is that it is a measure of how the preferences of an individual weighs on collective decision-making. This case describes, on one side, members of a high-status and trusted profession (science), whose voices are listened to by the business community, by politicians, and the media. On the other is a community that does not receive nearly as much attention, and whose core values do not seem to be even represented by the dominant concept of justice.

From this perspective, it suddenly is no longer so strange why the community would not believe that their voice will be given much weight when difficult trade-offs need to be made. In this way, because of different fundamental values and subsequent

alienation from the legal system, the distrust felt by the Havasupai could be said to be grounded in the status differentials with the scientific researchers.

## **6. The Logic of Status Distrust**

Let us now bring together the different strands of the argument, and flesh out the “logic of status distrust”. The goal here is to sketch a reasoning process that, given certain premises, concludes in status distrust, where a person is distrusted in virtue of their social status. Under what conditions these premises can be considered to be true, and thus status distrust actually justified, is a more controversial question that would require too much further analysis. However, status distrust is so indiscriminate in its rejection of the claims and actions of high-status individuals (and thus so ostensibly irrational) that it will be sufficient for purposes here to even show that there can be some valid reasoning underlying it.

As an intuitive description of a psychological dynamic that is strongly reminiscent of the logic of distrust, consider what Heidi Larson has to say about vaccine hesitancy:

...among the driving sentiments behind the current waves of vaccine questioning and dissent are a sense of lost dignity and distrust (...) those who feel that they are herded like sheep, treated as if they are expected to follow without questioning, that they have no choice. Resistance (...) was born out of sentiments of feeling excluded and not consulted in the planning, of sensing a lack of transparency and feeling ignored when they appeal to be engaged. These sentiments of feeling unheard and not listened to have fueled the volume of voices. (H. J. Larson 2020, p. xxxv)

What Larson is describing here, in the terminology of this paper, is the perception that service-for-prestige norms will not be adhered to. For what does it mean to “feel ignored”? It does not mean that one cannot literally participate in the deliberation that goes into democratic policy-making. After all, in representative democracies, citizens by definition do not directly participate but instead elect representatives who do that deliberation. Hence the “feeling” of being ignored has to do with the relationship with their representatives, and could be glossed as the belief that one’s values and interests

are not represented in this process of deliberation. In fact, surveys indicate that minorities have little confidence that their needs are taken into account (Kaiser Family Foundation 2021a).

The logic of status distrust can thus be encapsulated by the following argument scheme. Suppose that an individual is deliberating about whether or not to enter into some agreement with or commitment to another individual regarding some future action. This could entail handing over personal data, allowing a medical intervention to be carried out, allowing that person to set the budget in the years to come, and so on. Then the truster is “vulnerable”. This vulnerability, in general, follows from the common understanding of what it means to “trust” (Baier 1986).

[Background 1] If two individuals enter into a trusting commitment, the truster is vulnerable to the trustee’s future decisions (from definition of trust).

As further background, assume that the (candidate) trustee – where “trustee” is understood as the trusted person – has high prestige. Given how prestige hierarchies are organized, this entails some assumptions about how high-prestige individuals should behave.

[Background 2] If the trustee has high prestige, the trustee’s future decisions or actions are expected to be constrained by service-for-prestige norms (from definition of prestige).

With this background in place, the logic of status distrust can be systematized in the following way:

1. [Premise 1: status vulnerability] Assume that the truster has low prestige: then in the case of a future conflict of interest between truster and trustee, the trustee will be able to garner more trust and social support from third parties compared to the truster.<sup>9</sup>

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<sup>9</sup> This premise reflects: (1) the definition of social status as being able to give greater weight to one’s own preferences in collective decision-making, (2) empirical evidence that high-status individuals are trusted more –(Glaeser et al. 1999; Lount and Pettit 2012). The premise also assumes that status distrusters are not widespread (populists; conspiracy theorists). If status distrusters *are* widespread,



2. [Premise 2: service doubt] The low-status truster has reason to believe that the concept of service inherent in the dominant service-for-prestige ethos – the norms and values that determine how prestige is allocated and maintained – does not integrate their core interests.
3. The low-status truster has reason to believe that the trustee’s future decisions, which are governed by service-for prestige norms (see background 2), will come in conflict with the truster’s core interests (from premise 2)
4. The low-status truster has reason to believe that they will not be supported by third parties in case of conflict (from premise 1).
5. Therefore, the low-status truster has reason to distrust the (candidate) trustee in virtue of their high degree of prestige<sup>10</sup> (from 3, 4).

The logic of status distrust reflects the first-person perspective of the low-status individual: their vulnerability in the collective and uncertainty about the future. The logic describes how individuals can be vulnerable to a collective decision-making process over which they have a relatively low degree of control. Moreover, while they may not entirely understand this collective decision-making process, they do believe that the process does not take their best interests into consideration. The decision-making may not, as in the case of the Havasupai above, even recognize the legitimacy of their deeply held values.

The logic of status distrust goes beyond viewing the intentions of scientists (or high status individuals in general) in a subversive way. For instance, I could cynically believe that all scientists are really motivated by gains in status. However, this need not lead to a blanket distrust of all their claims. I could still justifiably trust that some or even many scientific claims are trustworthy, because it would be in their self-interest to publish true claims. This self-interest would be guaranteed by a system of rewards for true claims (career incentives) and punishment for false claims (through replication research).<sup>11</sup>

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then the usual indicators for high status (education; wealth; etc.) can become indicators for low status. (For instance, during communist revolutions of the past, education, wealth, etc. became markers for low status.)

<sup>10</sup> This is, strictly speaking, “prestige distrust”. However, speaking of “status distrust” is appropriate insofar as dominant, non-prestigious individuals are to be distrusted (since they coercively or violently act to further their own narrow interests); “dominance distrust” is ubiquitous.

<sup>11</sup> See Desmond 2021c for an in-depth analysis of how this dynamic of trust works.

By contrast, the logic of status distrust describes a more “stubborn” form of distrust, where persons are distrusted regardless of what they say or do. They are distrusted merely in virtue of the status they possess, or in other words, in virtue of the social rank they are assigned in relation to others. This may be ironic and even seem irrational given that status (and prestige in particular) can often indicate competence and trustworthiness – and that societies try to organize status hierarchies in such a way as to reward competence. Thus, if scientists have high prestige, there could be a good reason for that. However, this view of status and trustworthiness ignores the fundamental ambiguity involved in social status. High-status members can use their position of trust and privilege to bend collective decision-making to their own specific advantage, and if low-status members believe that the concept of service of a community is misguided, then the core ingredients for status distrust are present.

Note that status differences in themselves do not need to trigger status distrust. It is the “service doubt” premise that triggers status distrust. For instance, the infamous Tuskegee experiment illustrates how vulnerability can be transformed into status distrust. The experiment, involving Black men being purposively left untreated when they contracted syphilis, was a breach of human rights by the medical establishment and is often claimed to have led to a deeply rooted distrust in medical experts in some Black communities (Alsan and Wanamaker 2018). How does such triggering of status distrust work? Past traumatic events increase the credence in the belief that high-status groups do not adhere to service-for-prestige norms – or at least, that their concept of “service” does not sufficiently acknowledge the interests of the low-status group.

Episodes of vaccine hesitancy during the COVID-19 pandemic provided further examples, in that the communities most resistant to vaccines were the socioeconomically and/or socioculturally disadvantaged ones (Paul, Steptoe, and Fancourt 2021). This was also ostensibly irrational because these communities were also the ones that had the most to gain from vaccines (Paul, Steptoe, and Fancourt 2021). However, the true dynamic at play is that these communities have a deep-seated distrust of government scientific experts. This distrust was “stubborn”, as documented by their resistance to media efforts to combat misinformation (Kaiser Family Foundation 2021b).

In this way, stubborn distrust can be understood to involve a valid reasoning scheme, once one acknowledges status differences and the vulnerability of low-status

individuals (or groups) in the face of collective decision-making. An urgent question is, of course, whether the reasoning scheme can also be sound. *Should* one, sometimes, withhold trust because of the status of the putative trustee? This turns in particular on premise 2, namely what it means for one's core interests not to be represented in a service-for-prestige ethos.

One example, even if slightly artificial, would be the situation of low-status status citizens within self-serving totalitarian regimes. In such cases, a small group of persons (constituting the "regime") have a very large sway over collective decision-making. They even control the information flow so as to make this decision-making process opaque to most citizens. And crucially, they are primarily concerned with the interests of the regime rather than those of most citizens. Here citizens lack republican liberty (Pettit 1997): they are vulnerable to an arbitrary power. They have no guarantees that their vulnerability will not be taken advantage of sometime in the future. They even would have reason to believe that their vulnerability *will* be taken advantage of. Hence distrust in any member of the regime would be justified in virtue of their high status (albeit dominance rather than prestige).

The case of totalitarianism may be relatively extreme, and the difficult question arises as to what extent that model can carry over to law-based liberal democracies. The question is also beyond the scope of this paper. However, some remarks can be made about how one could analyze the question. Perhaps a group such as the Havasupai, who have a different concept of justice than that governing the legal system, might experience a lack of republican liberty if the legal system did not recognize their core interests. This could be disputed: one could argue that the Havasupai's core interests can be indirectly respected in a liberal legal system through the value of religious freedom. However, the question still arises whether prioritizing values such as tradition or way of life *should* be allowed by a liberal legal system characterized by an emphasis on values such as autonomy or property? To what extent should a legal system denote some values as illegitimate? Also genuinely immoral actors may feel status distrust, but this status distrust could be viewed as unjustified since it is desirable that some (immoral) interests are not represented in collective decision-making. Thus, there is no easy answer to the question how we can distinguish between justified and unjustified status distrust. Nonetheless, we can conclude that *if* a low-status individual believes that high-status individuals do not have the interests

of low-status individuals at heart, then it is not surprising that they conclude that status is an overriding indicator of a lack of trustworthiness.

## 7. Conspiracies and Irrationality

One benefit of the logic of status distrust is that it can be used to make sense of why stubborn distrust in scientific experts often assumes a conspiratorial dimension and can appear to be irrational.

Regarding the conspiratorial dimension of status distrust, recall that status distrust is not grounded in beliefs about competences or in evidence about actual states of affairs. It is not even directly grounded in beliefs about the personality or ambitions of the distrusted individual. Instead, it is grounded in the relative social status of that individual. However, a status hierarchy reflects what a *group* “values” (insofar as one can use agential language to describe a group). Hence status distrust is less about an individual per se, and more about group structure. Because high-prestige individuals are defined solely in terms of their status, they simply become representatives of the group structure that low-status individuals experience antagonistically. In this way it becomes more understandable why concepts such as “the elite” or “the establishment” become so central in phenomena of status distrust. These concepts *personify* status hierarchies: even though the latter are the true object of status distrust, they are abstract and impersonal entities, and can be difficult to grasp intuitively. Thus the conspiratorial dimension of status distrust can be seen as an attempt to articulate the grounds of distrust (a social structure or concept of service that is experienced as misguided) in a more clear agential framework, where the malevolent intentions of high-status agents are emphasized.

In this way, when nefarious intentions are ascribed to the scientific expert, the function of such ascriptions is both to express a lack of control as well as doubt about the goodness of future outcomes. When a distruster says of vaccine scientists “they want to reduce the world population”, this statement is to be read less as a description of a state of affairs (i.e., Tarski-style “snow is white” propositions) and more as a description of the social position of the distruster and of their perception of the benevolence of the community. The fact that low-status mothers from rural areas in Romania believe (or fear) that physicians are aiming to curtail fertility (Douglas et al.

2019; Craciun and Baban 2012) can be seen to reflect their sense of their relative powerlessness compared to high-status physicians and government officials.

If one focuses on the exact reference of the claims of the distrusters, then it is easy to conclude that these claims are unjustified and even irrational. There is typically no “elite” or “establishment” that is characterized by high degrees of cooperation and unified intentionality. However, this literal reading of conspiratorial distrusters ignores the social function of ascribing conspiracies. Moreover, even though low-status distrusters may be unable to clearly articulate why precisely they distrust the high-status experts, they are not necessarily wrong in believing that they will be harmed if they trust them. Even if researchers are motivated by the common good of scientific progress, they may still inadvertently end up harming participants if the interests or values of the latter do not guide the researchers’ future scientific decision-making.

Elsewhere the need for an ethics of expert communication has been highlighted, which should give guidelines to experts on how to extract actionable messages from the scientific state of the art (Desmond 2021c; Elliott 2017). To the recommendations listed there could be added: be aware of status differences entailed by the gap in expertise, and emphasize that the expert communication is about care and service to the community, and not only about scientific truth.

## **8. Conclusion**

The stubborn distrust in the pronouncements of scientific experts, at least in some domains, is a well-documented, international phenomenon. It takes on apparently irrational dimensions, is often conspiratorial, and distrusters remain recalcitrant to arguments or demonstrations of evidence that could dissuade them of their distrust. This article shows how we need not attribute such distrust to irrationality. Instead, it is possible to understand the reasoning process underlying such stubborn distrust.

The proposal is that we need to look at the social reality underlying this stubborn distrust, and in particular at the crucial role played by social status. Even though this is not commonly acknowledged, scientific experts are in fact high-status individuals, whether one looks at the wide societal appreciation of their work or at the weight given to their opinions. This means that scientific experts can be subject to a

particularly intractable type of distrust, that is status distrust, where a person's claims are distrusted simply because of that person's social status.

Status differentials are inevitable in any society with political leadership and a division of labor. The ground of status distrust is not the existence of status differentials. Instead it is the perception that high-status individuals do not care about the fundamental values and interests of the low-status individuals. This can occur even if high-status individuals believe themselves to be well-intentioned: all that is necessary is a misguided concept of service, or a concept of justice that does not acknowledge the values of some groups. In this way, through elucidating a reasoning process concluding in indiscriminate distrust of science, the logic of status distrust can help expert communication to be done with more self-awareness and care for the most disadvantaged members of society.

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