**The Truth Is (Still) out There. On the Epistemology and Cultural Dynamics of Conspiracy Beliefs**

*Abstract*

In the space of all possible beliefs, conspiracy theories stand out with a special and possibly unique feature: they are the only beliefs that predict an absence of evidence in their favor, and even the discovery of counterevidence. In the traditional, narrow sense of the term, a ‘conspiracy theory’ refers to an alternative explanation of a historical event in terms of a small group of actors working together to achieve some nefarious goal. In a broader sense, however, any theory that involves a form of invisible intentional agency can adopt the contours of a conspiracy theory. In this paper, I adopt a broader and more abstract definition of conspiracy theories, based on a conceptual core that unifies all such theories. By drawing comparisons between conspiracy theories in a range of different domains (psychology, religion, pseudoscience), we gain more insight into their central epistemological defects, as well as their cultural dynamics. Some belief systems are inherently conspiratorial, in that they posit some form of intelligent agency that deliberately wants to escape detection, while others merely resort to conspiratorial reasoning when threatened with counterevidence. This paper builds on earlier research into the cultural evolution of belief systems.

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# Introduction

Why do people believe in conspiracy theories? As with many other beliefs, the most straightforward answer is the one believers themselves will give you: because conspiracies really do happen, and thus it is rational to believe in them. And indeed, the pages of history are littered with ‘conspiracies’, defined as those events in which a small group of people act together in secret to achieve a nefarious goal. But there is much more to conspiracy theories than meets the eye. From an epistemological point of view, conspiracy theories (henceforth: CTs) are weird creatures, because they are the only beliefs that predict an absence of evidence in their favor, and even lead us expect counterevidence.

In the traditional definition, conspiracy theories are alternative or ‘contrarian’ accounts of historical events, for example the belief that the moon landing was faked, that Lee Harvey Oswald did not act alone, or that 9/11 was an inside job carried out by elements in the Bush administration (Cassam, 2019; Uscinski, 2018). But conspiratorial theories show up in many different domains that do not (directly) deal with historical events. In this paper, I cast a wider theoretical net, analyzing how beliefs about conspiracies develop and evolve in a range of different domains and fields of inquiry. Looking beyond ‘conspiracy theories’ in the narrow historical sense is enlightening because, as I shall argue, the appeal of CTs derives from a core conceptual structure, which is general enough to be applicable in a range of domains unrelated to history. Indeed, any belief system that posits some form of invisible intelligent agency is susceptible to conspiracy theorizing. Moreover, as we will see, many other belief systems that are not conspiratorial by nature have adopted CTs and their warped explanatory logic as an immunizing strategy in the face of external threats and criticism.

Here’s an outline of the paper. First, I briefly discuss the deep evolutionary origins of conspiracy beliefs. The main reason why our minds evolved to believe in conspiracies and nefarious plots is that those did in fact happen from time to time. Next, I describe the basic conceptual structure that unifies all CTs, both in history and in other fields of inquiry. I then apply this conceptual scheme in different domains, starting with the prototypical conspiracy theory: an alternative explanation of a historical event in terms of a secret and nefarious plot by a small group of actors. Next, I describe CTs in other and more surprising domains: in religion, psychology, psychic research, and pseudoscience in general.

# Believing in conspiracies

## The deep roots of (beliefs about) conspiracies

People conspire against other people, and they have been doing so since the dawn of our species. If you have a species with the cognitive abilities to engage in strategic planning, to form coalitions with others and to strategically conceal information, then you will have conspiracies (Boyer, 2018). From an evolutionary point of view, it is therefore not surprising that we find some psychological adaptations to guard against conspiracies. When our ancestors were living in small bands of hunter-gatherers, beliefs about conspiracies were highly relevant to their personal life. If you don’t realize that a group of people is conspiring against you or your friends, and you fail to prevent their nefarious plans coming to fruition, you may suffer serious consequences, and so may your genes (Lienard & Boyer, 2006).

Even though we don’t have detailed knowledge about the social conditions of life in the Pleistocene, we do know that humans lived in relatively small bands and were intensely social, routinely forming coalitions with each other to achieve common goals. It is plausible to assume, therefore, that conspiracies posed a genuine survival threat. As a result, those among our ancestors who were alert to clues suggesting that a group of others were conspiring against them, would be more likely to foil or expose the plot, and thus increase their chances of survival. As with many other recurrent dangers, the challenge of identifying conspiracies is dealt with by ‘error management theory’, which describes how a rational agent should deal with errors carrying asymmetric costs under conditions of uncertainty (Efferson, McKay, & Fehr, 2020; Foster & Kokko, 2009; Galperin & Haselton, 2012; Haselton & Nettle, 2006). Inferring a conspiracy when there isn’t one (*false positive*) is less dangerous than failing to spot one when there is (*false negative*). Evolutionary psychologists have compared this to how engineers design a smoke detector (Nesse, 2001): above all we want the device to sound the alarm when there is an actual fire, even if that means having to put up with the occasional false alarm. Psychological mechanisms for inferring conspiracies, and for acting on that basis, may therefore be biased in the direction of (slight) paranoia, resulting in a higher rate of false positives than false negatives (Haselton & Nettle, 2006). When it comes to finding out who is out to get you, it may be better to err on the side of caution.[[1]](#footnote-1)

## Person-oriented vs. cultural beliefs

In our modern age, however, conspiracy theories refer to *shared* cultural beliefs that do not center around the individual believer. Believers in modern-day CTs may well believe that the alleged conspiracy targets a persecuted minority to which they belong (e.g. Muslims), but even in this case the plot does not target the subject in particular. When the belief involves a small-scale conspiracy directed at the individual believer (or a small group of peers), we are not talking about a conspiracy theory *sensu stricto*. As with culturally shared conspiracy theories, such person-oriented conspiracy beliefs may be either true or false, justified or unjustified (or anything in between). If people persist in believing that others are conspiring against them, despite strong evidence to the contrary, they may suffer from clinical “persecutory delusions”, as defined by the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5). Even though there are obvious analogies between general and person-oriented conspiracies and recent research has found associations between schizotypy and conspiracist ideation (Barron et al., 2018; Barron, Morgan, Towell, Altemeyer, & Swami, 2014), it is useful to distinguish both categories of belief. Most believers in culturally shared conspiracy theories are competent and high-functioning members of society and do not suffer from clinical paranoia or schizophrenia (Bost, 2015).

In this paper, I am concerned solely with *cultural* beliefs, which can be shared by a wide number of people from different backgrounds and walks of life. For obvious reasons, person-oriented conspiracy beliefs are typically not good candidates for becoming cultural beliefs, since they are relevant only to the small number of people with whom you are acquainted. If you come to believe that your neighbor is wire-tapping your phone, this will be of interest only to you and your friends, and perhaps to other people in the street (unless you are a celebrity with millions of followers). By contrast, if you come to believe that the moon landing was staged by Stanley Kubrick in a Hollywood studio, you can transmit that belief to others, and eventually it can be shared by millions of people (as indeed it currently is). In the traditional approach, CTs thus refer to shared cultural beliefs which attempt to explain historical events in terms of the secret actions of a small group of individuals. Even though such cultural beliefs may be relatively recent in evolutionary terms, it is plausible that some of the psychological tendencies that explain the formation of person-oriented conspiracy beliefs also shape cultural conspiracy beliefs. People are fascinated with the possibility of nefarious plots because, in an ancestral environment and long before there was any ‘history’ to speak of, such plots were highly relevant. Cultural beliefs about conspiracies are therefore not part of the ‘proper domain’ of our agency-detection modules, but they may well be part of its ‘actual domain’ (Sperber, 1996). They are salient, memorable, seductive, easy to comprehend, and rich with inferential possibilities.

So where did such *cultural* beliefs about conspiracies originate? Despite what many commentators have claimed, we are not living in an ‘age of conspiracy’, and CTs are not an exclusively modern or American phenomenon (Uscinski, 2020, pp. 10-11). Not only do we find CTs in all cultures and throughout modern history, but there is no indication that belief in conspiracies has become more prevalent in recent years or decades. CTs may wax and wane in different historical epochs, but cultural traditions of conspiracy beliefs are remarkably persistent, and occur across a wide range of cultures and communities (Byford, 2011; Uscinski, 2018). Though they are more common in some political constituencies than in others and are especially prevalent among political extremists (Cassam, 2019), sociologists have also found that CTs “disregard ideological barriers” (Byford, 2011, p. 17; see also Swami & Furnham, 2014). Something similar can be seen on an individual level. On the one hand, a recent wave of studies in psychology (for an overview, see Douglas, Sutton, & Cichocka, 2017) has described a number of variables that are associated with belief in conspiracy thinking, such as lower analytical thinking (Swami, Voracek, Stieger, Tran, & Furnham, 2014), lower education, feelings of insecurity and low sense of control, and a tendency to overdetect agency and seek patterns in one’s environment (Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013). On the other hand, the absence of these factors does not immunize against CTs. Poor people from marginalized communities may be more likely to believe in CTs, but there are plenty of highly educated and powerful people who (profess to) believe in and propagate CTs. Indeed, conspiracy beliefs are so widespread that, as Uscinski wrote in a recent monograph, “everyone believes in at least one or a few conspiracy theories” (Uscinski, 2020, p. 12).

# The epistemic core structure of conspiracy beliefs

## Epistemic black holes

Every comprehensive theoretical framework for understanding the prevalence of false or irrational beliefs (superstitions, pseudoscience, paranormal beliefs, myths and fake news) will have to include psychological as well as sociological and cultural factors (Boudry, Blancke, & Pigliucci, 2015; Douglas et al., 2019; Swami & Furnham, 2014). First, certain universal psychological adaptations may dispose us toward such beliefs (e.g. Foster & Kokko, 2009); second, certain personality traits may make some people more susceptible to these beliefs than others (e.g. Irwin, 2009); third, sociological dynamics explain why certain beliefs take hold in certain communities (e.g. Goode, 2000); and fourth, psychological mechanisms explain how beliefs are transmitted from one person to the next, thus forming cultural traditions (e.g. Morin, 2015). This is no different for CTs.

Beyond these psychological, sociological and epidemiological factors, however, I believe there is another important factor explaining the enduring appeal of CTs, which is absent from many other popular beliefs: its strange epistemology. In order to understand the attractiveness of CTs, we need to look at the deep conceptual structure that unifies all CTs, and the warped explanatory logic which follows from it (Boudry et al., 2015). In comparison with other bizarre cultural beliefs, I believe epistemology looms larger in the domain of CTs (and, by extension, also paranoid/persecutionary delusions, which are however not the main topic of interest here).

At bottom, CTs are explanations in terms of a small group of intelligent agents working together to achieve a nefarious goal. Because of its malicious or forbidden nature, the agents wish the conspiracy to remain secret, and will therefore try to evade detection. As a result of this central premise, CTs lead us to expect an absence of evidence in their favor, and may even predict the discovery of counterevidence. After all, the conspirators may have fabricated evidence to throw us off the scent, the better to conceal their secret. Depending on the powers and shrewdness of the alleged conspirators, CTs may therefore be very hard to either verify or falsify. But this also means that they can persist in the teeth of any counterevidence. I believe this warped epistemology is one of the central reasons for the perennial appeal of CTs: not just of any particular theory about one historical event, but of CTs as a general class.

In an earlier paper, I have described CTs as the epistemic equivalent of a ‘black hole’ into which unwary truth-seekers are drawn, never to escape again (Boudry, 2020). Once you adopt the central premise of a CT, you can explain away any missing evidence or counterevidence you encounter.[[2]](#footnote-2) Indeed, researchers have observed that attempts to attack CTs often backfire. For instance, CTs about 9/11 being an inside job were hardly put to rest with the publication of 600-page Report by the 9/11 Commission, or after an extensive rebuttal of every conspiracist claim by the magazine *Popular Mechanics* in 2005 (Dunbar, Reagan, & Meigs, 2011). For the believers, all of this merely demonstrated to what lengths the conspirators and their accomplices were prepared to go to shore up their lies. Likewise, the infamous document known as the Protocols of the Elders of Zion had been exposed as a forgery originating in 19th century Czarist Russia long before the Nazi party (and assorted antisemitic movements throughout Europe) started touting the document as the ultimate proof of the danger of international Jewry. As the historian Jovan Byford writes, when incontrovertible evidence of the forgery was unearthed, “many of the book's admirers simply dismissed [it] as a campaign by Jews to undermine the 'leaked' document which exposes so clearly their sinister secret” (2011, p. 55).

## Historical conspiracy theories

The strong attractive force of the these epistemic black holes, however, comes at a steep cost: the free theoretical parameters in any CT are essentially arbitrary, and can easily be substituted for others. In the case of historical CTs, this means that the same (lack of) evidence can be equally accounted for by postulating many different conspirators, with many different objectives and strategies.[[3]](#footnote-3) In other words, once you adopt the conspiracist mindset, *anything goes*. As a result, though communities of conspiracy believers have little to fear from attacks by outsiders, they have much to fear from *internal* dissent and destabilization. In the absence of any constraints from reality, the details of any truly self-sealing CT are mostly arbitrary, which means that anyone can always come up with a rival theory that reveals a different plot with different perpetrators, using different mechanisms.

This central epistemic defect is an important factor in the cultural evolution of CTs. To the extent that external constraints guide the cultural evolution of CTs, they are often social or ideological constrains. In effect, because the details of any CT are essentially arbitrary, they have more freedom than other belief systems to adapt to the local cultural environment, and also to reflect the ideological preoccupations of the believer. For instance, if a society has a strong current of anti-Semitism, then the Jews provide a suitable culprit for any aspiring CT. If, on the other hand, anti-Semitism is widely abhorred, then conspiracy theorists had better target other culprits. The most striking illustration of such a theoretical shift is the fate of anti-Semitic CTs in the aftermath of the Holocaust. In the first years and decades after World War II, the notion of a world-spanning conspiracy of Jewry was relegated to the fringes of political acceptability. And so, conveniently, the CT tradition erased or downplayed the Jewish elements and shifted its attention to less politically explosive culprits, such as the CIA, the United Nations or the Bilderberg group. Crucially, neither the inclusion nor the later exclusion of the Jews from the CT tradition was determined by empirical evidence, but rather by political convenience. As Byford writes, the main driver of the historical evolution of CTs is “the need to make conspiracy theories more plausible, acceptable and pertinent in response to changing social and political circumstances” (Byford, 2011, p. 97).

In an increasingly globalized modern world, CTs also underwent a more general shift from specific culprits with concrete goals toward more nebulous organizations and goals that are both vaguer and grander. These theoretical shifts appealed more to an increasingly international audience, and also allowed for more flexibility in connecting different events and accommodating a range of different accomplices. With the birth of the modern CT tradition, as Byford observed, “[t]he plot was no longer limited either temporally by the length of the conspirators' term of office, political career or life or spatially by their finite sphere of influence.” (Byford, 2011, p. 43). By making both the perpetrators and their objectives somewhat less discriminate, the essentially arbitrary nature of CTs was also better disguised, and contradictions were less likely to crop up. In a plot that is sufficiently vague, there will always be room for one or more perpetrators, or for various secondary schemes and objectives.

With the advent of the Internet, this move away from specificity has become more pronounced. Before the Internet age, popular CTs tended to present relatively detailed alternative explanations of historical events, such as the murder of JFK. By contrast, many contemporary CTs are not so much full-fledged theories as a series of open-ended questions with answers that are perpetually under construction. The CTs around 9/11 provide a good example (see e.g. Griffin, 2008). Despite more than 18 years of diligent ‘truth-seeking’, conspiracy theorists still can’t agree on who exactly was behind 9/11, how the two towers collapsed, whether a real plane or a missile struck the Pentagon, and indeed, whether any planes hit the towers in the first place (some suspect that they were holograms of some sort). In fact, the only proposition that unifies all CT proponents is a negative one: the official version of events is most definitely a lie which ‘they’ want us to believe.

According to Clarke (2007), the reason for this lack of theoretical progress is the hyper-critical atmosphere of the Internet. Because every new hunch or hypothesis launched by conspiracy theorists is immediately exposed to a barrage of criticism from sceptics, the internet has “retarded the development of many conspiracy theories” (Clarke, p. 169). Clarke focuses mostly on criticism from sceptics of CTs, but I believe his point applies with at least as much force to internal disputes. In principle, conspiracy theorists can always dismiss sceptics as government shills or gullible “sheeple” who have bought into official propaganda, but it is ­harder to deal with fellow conspiracy theorists who already accept that ‘they’ are deceiving us, but who believe in a very different truth. Indeed, because CTs foster a culture of suspicion, they have a particularly volatile social dynamic, with proponents of rival CTs often using conspiratorial reasoning against one another. For instance, when the French conspiracy theorist Thierry Meyssan suggested that on that fateful day the Pentagon was hit by some sort of missile instead of passenger plane, other 9/11 Truthers went on to argue that the theory was so transparently absurd that it must have been planted by the Deep State to sow doubt and discredit the CT community (Sunstein & Vermeule, 2009, p. 223).

# Conspiracies in other belief systems

## Freudian psychoanalysis

In the narrow sense, a conspiracy theory is an alternative theory of a historical event which involves the secret actions of a small group of agents. If you pare down CTs to their basic conceptual structure, however, a CT is any explanation in which an intelligent agent or group of agents purposefully evades detection, with some secretive or malevolent goal in mind. In that broader sense, we find CTs in a wide range of other domains. One surprising example is Freudian psychoanalysis (Cioffi, 1998; Farrell, 1996). If you go back to the original theory (or sequence of theories) about the unconscious developed by Sigmund Freud, you will find that it is essentially conspiratorial in nature. The pivotal concept in Freudian’s theory of the mind is the psychoanalytic unconscious, which is portrayed as an intelligent entity capable of pursuing intentional goals, chief among them the overruling desire to remain hidden and to actively resist investigation by the therapist. In Freud’s most famous works, such as *The Interpretation of Dreams* and *The Psychopathology of Everyday Life* (Freud, 1953, 1960), we are presented with reams of examples in which the unconscious employs clever disguises to escape detection, such as symbolism, denials, inversions, and word plays. In Freud’s earlier writings, it is the so-called ‘censor mechanism’ which covers up and disguises unconscious desires that are too disturbing for the conscious subject to face. In Freud’s later tripartite model of the mind, there is a constant interplay between three components of the mind (Ego, Id, Superego), all of which engage in intentional strategies to achieve their goals, sometimes working at cross-purposes and sometimes collaborating or compromising.

In his perceptive book *The Psychoanalytic Movement¸* ErnestGellner called Freud’s psychodynamic unconscious “The Trickster”, since it is conceived as an intentional agent which “can and does interfere with the behavioral evidence about its own existence and activities” (Gellner, 1985, p. 142). The Trickster is always trying to deceive us in unexpected and cunning ways. This, of course, is exactly what the alleged perpetrators of any CT are engaged in. And just like with many CTs about history, the intentions of the conspirator can be seen as sinister and nefarious. In Freud’s view, our unconscious harbors forbidden desires and impulses related to sexual perversion and aggression which would be shocking and intolerable to the conscious subject. Because of this conspiratorial logic, psychoanalysis has the same self-sealing quality as historical CTs, with apparent refutations being transformed into striking confirmations.

Thus, when Freud was unable to find traces of a pathological complex or unconscious desire to account for a patient’s behavior, he was undeterred and treated this as a token of unconscious resistance. Just as with traditional CTs, attempts to contradict the theory backfired. The more a patient “resisted” Freud’s interpretation, the more she was evincing the so-called “denial” mechanism (Cioffi, 1998; Crews, 1986). Consistent with the conspiratorial logic of his theory, Freud believed that his patients (as well as his critics) often harbored a secret and unconscious desire to disprove his theories, to avoid having to confront their own dirty secrets. For instance, when one of Freud’s patients told him that she dreamt about having to spend the holidays with her despised mother-in-law, at face value this seemed to belie Freud’s contention that every dream is a manifestation of an unconscious wish-fulfilment. But as Freud himself explained, psychoanalytic theory has little trouble in dealing with such cases: “The dream showed that I was wrong. *Thus it was her wish that I might be wrong, and her dream showed that wish fulfilled* (Freud, 1953, p. 151)”

Analogous to traditional CTs, the theory of psychoanalysis also suffers from a problem of arbitrariness. As Boudry and Buekens (2011) have argued, the epistemic core structure of psychoanalysis provides a sort of empty shell into which any number of rival theoretical notions can be inserted. As a result, the specific shape and content taken by the theory tends to reflect the preoccupations of the theorist, or the cultural sensibilities of its time, just as the prominence or absence of ‘Jews’ in conspiracies reflected the changing cultural fate of antisemitism (see also Buekens & Boudry, 2012). While Freud’s original theory centered around the Oedipus complex and the notion of infantile sexual desires, later theorists (including Freud himself in his later years) have developed the theory in a wide range of directions: from Rank’s birth trauma to Adler’s inferiority complex, from Klein’s breast envy to Jung’s archetypes. If you take a broad sweep of these theoretical shifts and controversies, it becomes clear that they were not driven by new empirical evidence (Macmillan, 1997). In many cases, the different concepts merely reflected the personal background and convictions of the theorist, and their rise and fall within the psychoanalytic movement mainly reflected changing cultural sensibilities. A striking example is the doctrine of penis envy as a pivotal and formative element in the female psyche, which was introduced by Freud and then later abandoned in the second half of the 20th century. Was the demise of penis envy driven by novel evidence? Hardly, because the same psychoanalytic method had been used throughout the whole period, and had “confirmed” the presence of penis envy in numerous cases. Women stopped ‘wanting’ penises (or psychoanalysts stopped accusing them of doing so) because the whole notion of building the theoretical account of the female psyche around an anatomical shortcoming with respect to the male body was increasingly regarded as embarrassingly male-centered and misogynist (Cioffi, 1998). By way of restoring the balance between the sexes and correcting for Freud’s “phallocentrism”, some psychoanalysts introduced the novel concept of “breast envy” and “vagina envy” (Klein, 2013). But neither of these new concepts nor the original one of penis envy was ever supported by valid and uncontaminated evidence. They merely reflected changing perceptions about the role of women in society at large.

Another analogy with traditional CTs is how the conspiratorial logic of psychoanalysis eventually turned believers against each other. Time and again, in the history of the psychoanalytic movement, theoretical disputes were resolved by accusing the other party of harboring some repressed desire or unresolved complex that warranted further psychoanalytic treatment. Freud made a habit of using this strategy against his renegade disciples, and they returned the favor by directing it to their former master (Borch-Jacobsen & Shamdasani, 2011). The analogy with CTs can even be extended to the way in which the psychoanalytic movement has eventually dealt with its liability to internal disruption. According to Crews (1998, p. xxx), the institutional development of the psychoanalytic movement is condemned to be “drastically centrifugal, spinning off ever more numerous, mutually excommunicating schools and cliques” (see also Gordin, 2012, p. 202). With the increasing proliferation of different (and mutually contradictory) versions of the doctrine, most theorists and practitioners have now given up the hope of ever restoring theoretical consensus. Theoretical divisions remain, and some psychoanalytic schools are fairly exclusionary and isolationist (e.g. the French Lacanian school), but many psychoanalysts now tend to adopt an eclectic approach, combining concepts from a range of different schools, and tailoring explanations to the specific needs of the moment. This is analogous to the inclusive approach of modern-day conspiracy theorists, in which there is ample room for a wide range of different culprits (the Freemasons, the Illuminati, the Rothschild family, the Knights Templar, etc.). More recently, psychoanalysts have shied away from making any sweeping doctrinal claims about the nature of the unconscious. Elaborate and detailed explanations of dreams and symptoms, such as were characteristic of Freud’s heyday, are now a thing of the past. Instead, when pressed on the scientific merits of their theory, many psychoanalysts have retreated to rather insipid and vague statements about the formative role of early childhood in our mental development, or about the importance of sexual desire in human life. Indeed, many of these deflationary interpretations of psychoanalysis take the form of negative statements, analogous to the conspiracist claim that “they are lying to us” and “we haven’t been told everything”. For instance, according to leading Freudians, the kernel insight of psychoanalysis is “that humans make more meaning than they grasp” (Lear, 1995) and that “much of mental life is unconscious.” (Holland, 2004), both of which are truisms that would be endorsed by any psychologist either today or in Freud’s time.

## Pseudoscience and the paranormal

The case of Freudian psychoanalysis shows that the epistemic core structure of CTs crops up in fields that are unrelated to history or world events. In fact, many irrational belief systems that are not CTs in the narrow sense of that term involve a conspiratorial element, or resort to conspiratorial logic in the face of criticism or counterevidence. Parapsychologists, for example, have hypothesized that the paranormal forces they are trying to track down – sometimes called *psi* – are not impersonal natural phenomena, but rather semi-intelligent forces that purposefully evade detection. The influential parapsychologist John Beloff, for example, claimed that psi phenomena are “actively evasive” (Beloff, 1994, p. 7). When parapsychologists search for evidence of invisible intelligent agents, such as ghosts or spirits or fairies, this conspiratorial logic is of course even more tempting. The spirits of deceased people may have their reasons for evading detection or for refusing to collaborate with scientific investigators, and the fairies at the bottom of the garden may wish to retain a little privacy (Hines, 2003). In the field of ufology, several researchers have also explained the dearth of evidence for alien visitation by speculating that the visitors deliberately cover up their tracks. In his book on extraterrestrial visitation, history professor David Jacobs has argued that the evidence for alien abductions is so patchy because the abductors have carefully installed a “wall of secrecy” (Jacobs, 1998, p. 117): they “cloud” the experience of their abductees, implant false memories and “perceptually alter potential witnesses” (1998, p. 112).

Even if a belief system or field of inquiry does not center around invisible intelligent agents, as in ufology or ghost busting, proponents may still resort to CTs when confronted with adverse evidence. In fact, conspiracy theorizing is such an attractive gambit for evading adverse evidence and explaining away missing evidence that almost every pseudoscience has resorted to it. The simplest and most expedient way is to accuse the scientific establishment of “covering up” the evidence for your favorite theory (Boudry & Braeckman, 2012). Creationists and ID theorists have resorted to this strategy (Pennock, 1999), as have climate sceptics (Douglas & Sutton, 2015), HIV denialists and Holocaust revisionists (Shermer & Grobman, 2002), anti-vaccination activists, homeopaths and believers in assorted forms of alternative medicine (Goldacre, 2010), and even academics of Frankfurtian Critical Theory (Heins, 2007). Depending on the circumstances, other agents or organizations may be accused of engaging in a conspiracy, such as pharmaceutical or biotech companies, the World Health Organization, the Jews, or various other interest groups.

## Religion and conspiracy belief

In a recent paper, Edis (2019) draws analogies between CTs and different religious traditions. In dealing with challenges from modern science, theologians and ordinary religious believers have often resorted to CTs. Most obviously, young-earth creationists have accused the “scientific establishment” of conspiring to suppress certain evidence (e.g. of a worldwide Flood), in order to obscure the truth of the Bible and to promote godless materialism. But the conspiracy thinking runs much deeper, and is not confined to certain fundamentalist denominations. In many religious traditions, either God himself or Satan and his minions are involved in a conspiracy, in the sense that they are purposefully deceiving humanity about certain hidden truths, with a particular objective in mind. In the Christian tradition, the Devil is portrayed as a powerful and deceitful creature who, because of his spite and jealousy against God, wants to lure humans into unbelief by various means of deception. In many religious traditions, however, God himself is deliberately hiding from the world and, when he does intervene, is careful enough to cover up his tracks. In Christian theology this is known as the *deus absconditus* or *deus otiosus*. Naturally, the idea of a Satanic plot is closer to a traditional CT because of the obvious malevolent intention of the conspirator. By contrast, in the case of God deceiving humans (Nieminen, Boudry, Ryökäs, & Mustonen, 2017), believers usually assume that his intentions are benevolent. But the conspiratorial logic remains the same, es Edis explains: “There is still a peculiarly hidden power pulling the strings of nature, who is actively trying to remain hidden, and who can be known only through special means available to initiates.” (Edis, 2019, p. 157)

Surprisingly, according to Edis, the responses to modern science developed by liberal theologians are in some respects *more* conspiratorial than those of their conservative fundamentalist counterparts. This is especially visible in the theological responses to evolutionary theory, which provides a number of important challenges to Biblical literalism and to theism in general (Coyne, 2015; Edis, 2002). Fundamentalist Christians, for their part, have confronted this challenge head-on by throwing overboard certain portions of modern science. Some fundamentalists believe that God has created species *de novo* during the course of our planet’s history, in more or less its present form, while others admit that evolution has occurred but maintain that God has intervened at crucial moments to bring about certain adaptations, foster evolutionary innovation, or steer evolution in the right direction. Importantly, most of these creationists believe that God has left the fingerprints of his creative work in plain sight. Most notably, around the turn of the century an influential school of creationism claimed to have found scientific evidence of Intelligent Design in nature, in the form of certain “irreducibly complex” (Behe, 1996) structures in nature that cannot be explained by blind evolutionary mechanisms. According to these creationists, irreducibly complex structures bear the unmistakable fingerprints of an intelligent author, and mainstream scientists were blind in refusing to see this (Boudry, Blancke, & Braeckman, 2010; Pennock, 1999).

More liberal theologians, by contrast, refuse to accept any such straightforward evidence of divine design, and have forcefully rejected the scientific arguments of creationists (Miller, 2000). They, too, believe that God is ultimately responsible for the evolution of life, but they don’t think he has directly intervened in his creation, or at least not in any straightforward and detectable way. Theologians like John Haught (Haught, 2000, 2004) and evolutionary biologists like Kenneth Miller (2000) have suggested that during the course of evolution God has been using more subtle means to fulfill his creative plan, meddling with quantum processes in DNA molecules to trigger the right mutations. Crucially, however, God has made sure that his actions remain undetectable by means of human statistical methods. In other words, these theists admit that all the available evidence is consistent with processes of pure chance and necessity, but they maintain that God has been secretly tweaking atoms and molecules behind the scenes, making sure never to exceed the threshold of statistical detectability. As Edis points out, this liberal theology is significantly more conspiratorial than that of religious fundamentalists, who believe that God has left the evidence of his design in plain sight, for all to see.

In any event, here again, we see that there is little hope of achieving consensus about the nature of the divine conspiracy. How exactly has God interfered in the natural world, and how many times has this happened in the history of the world? And are we dealing with the God of Christianity, Islam, Judaism, or Mormonism? Given that God is all-powerful and has seen fit to cover up his tracks, it is impossible to tell.

# Conclusion

This paper has attempted to understand the warped epistemology and cultural dynamics of conspiracy beliefs. To do so, I have gone beyond the narrow focus on CTs in the domain of history, drawing analogies with other conspiratorial belief systems. As we saw, CTs are sometimes used in an instrumental and superficial fashion, serving as immunizing strategies to protect an already existent belief system from criticism. In these cases, the conspiracy as such is not central to the belief system, and its central parameters (perpetrators, goals, mechanism) will usually be a direct function of its immunizing purpose (e.g. biologists suppress evidence for creationism to serve their materialist agenda). Indeed, virtually any theory can be rescued from refutation by positing a conspiracy of some sort to suppress the evidence in its favor, or to fabricate evidence against it. Provided that the alleged conspiracy is fool-proof and that the conspirators are powerful and smart enough to cover up their tracks, the theory will be rendered completely impervious to counterevidence. Because the logic of CTs provides such a convenient tool for protecting belief systems, the epistemic ‘black hole’ of conspiracy thinking opens up in the vicinity of a range of different pseudosciences and other irrational belief systems (from astrology to ufology to creationism).

By contrast, certain belief systems are inherently conspiratorial, in the sense that the conspiracy is part and parcel of the belief system. The most obvious examples are ‘conspiracy theories’ in the narrow and traditional sense, denoting alternative accounts of historical events in terms of the secretive actions of a small group of individuals. But there are other, more surprising examples of conspiracies theories, notably Freudian psychoanalysis. By postulating an intelligent mental entity that purposefully evades detection, Freud’s original theory was essentially conspiratorial in nature. Mainstream religious traditions, too, often involve various forms of conspiracy thinking.

From an epistemological point of view, the main defect of CTs is their immunity to counterevidence and criticism, and their resulting arbitrary character. In effect, they provide a sort of protective shell into which any theoretical content can be unloaded. In the case of traditional (historical) CTs, the central elements that make up any particular CT (perpetrators, goal, mechanism) can be more or less varied at will, and substituted for one another. In the case of Freudian psychoanalysis, different psychoanalytic schools have attributed different desires and other mental contents to the unconscious, and none have found any difficulty in adducing evidence for their own particular theory, and in explaining away difficulties or apparent refutations. In the case of religion, any apparent lack of evidence for a deity can be explained away by a secret plan on the part of this deity to remain hidden. The only problem is that the identity of this deity, and the nature of His mysterious ways, are impossible to figure out.

In view of these central epistemological defects, the cultural evolution of conspiracy beliefs displays similar patterns. In the long run, any such belief system is unstable, because it will always be vulnerable to internal disruption by rival theories that accommodate the evidence equally well. In the early stage of the belief system, the founder or originator may develop a full-fledged CT, fleshing out the theoretical details in some detail (perpetrator, plot, mechanism), but sooner or later someone will come along to change the nature of the plot. In the absence of any rational means to settle such disputes, and thus of any epistemic constraints ‘channeling’ the cultural evolution of the belief system, most CTs therefore fail to achieve any sort of meaningful progress. In some cases, we witness a proliferation of many rival CTs, each with its own devotees, while in other cases we see that the belief system slowly evaporates. Believers eventually refrain from making any positive claims about the nature of their plot, and retreat to vague and negative statements. Traditional conspiracy theorists rally around the claim that, whatever is the truth of the matter, what ‘they’ are telling us is most definitely false. Religious believers may express belief in a hidden divine presence in the world, but they will not be able to specify the nature of his involvement in the world or the purpose of his design. The truth, whatever it is, remains out there.

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1. The logic or error management does not necessarily predict biased belief, but rather biased action. Behaving in a slightly paranoid fashion may be the outcome of a biased belief (‘They are conspiring against me’) but it may also be the result of a true belief in conjunction with a biased action policy (‘It’s unlikely that they are really conspiring against me, but I’d better take precautions anyhow just to be safe’). For a critique of this conflation in the literature, see (McKay & Efferson, 2010). [↑](#footnote-ref-1)
2. I deliberately avoid the technical term ‘falsification’ here, since it is associated with Karl Popper’s philosophy of falsificationism, which suffers from well-known philosophical problems. In short, the Popperian notion of ‘falsification’ suggest that theories can be definitively refuted by one-off observations or crucial experiments, but this has hardly ever happened in the history of science. Theories are always tested in bundles, together with boundary conditions and auxiliary assumptions, and are almost never abandoned after the first (apparent) refutation (Boudry, in press; Hansson, 2006; Lakatos, 1970). [↑](#footnote-ref-2)
3. In effect, this is a radical version of the problem of underdetermination in philosophy science, which states that any given piece of evidence is always logically compatible with different theories, and that therefore theories are always underdetermined by evidence (see Stanford, 2009). But though scientists have different methods to discriminate between such rivals (e.g. simplicity, fecundity), and one of the rivals may always be ruled out by the next piece of evidence, this is not the case for rivals CTs, which are always empirically equivalent to each other. [↑](#footnote-ref-3)