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Darwin, the Flat Earth, and a Mustang:

The Evolutionary Roots of Conspiracy Theories

Flying into Denver on a clear night, you might see the flaming, red eyes of a big blue mustang affectionately known as Blucifer by local Coloradans. Blucifer has long been associated with the mind-boggling and ever-present conspiracy theories that swirl around Denver International Airport (DIA). These theories assert that the Illuminati, the New World Order, the Freemasons, or all three, are using DIA, specifically the underground baggage area, as secret bunkers to hide aliens, lizard people, and the politically elite during times of crisis. While evidence for these claims is lacking, the beliefs persist. Why? Where does this type of thinking originate? Is it an evolutionary adaptation or perhaps an evolutionary “holdover” trait that is on its way to extinction? Charles Darwin’s ideas and the theory of evolution shed light on the human propensity toward conspiracy thinking.

The Flat Earth Society is a growing group of people who believe the earth is flat. They reject the round earth, or “globe hypothesis,” and instead believe the earth is in a sort of terrarium with a dome-like structure. This belief might seem wacky and harmless, and on face value, it is. People are, after all, free to believe all sorts of wacky things if those beliefs don’t turn into actions that harm others. Flat-earthers, however, also tend to believe many other conspiracy theories that are harmful, like the world being run by a globalist agenda (globalist is an antisemitic dog whistle) and a wholesale rejection of everything science-related, like

vaccinations, evolution, and the big bang. These beliefs filter through their communities, schools, and voting booths. They eventually wind up influencing health decisions, school boards, and laws that affect the wider population. Most concerning, though, is that they can lead to dangerous conspiracy theories like QAnon, Sandy Hook, or The Great Replacement Theory.

Cailin O'Connor and James Owen Weatherall, argue in their book *The Misinformation Age*, that false beliefs do not require individual irrationality to take hold and spread. Modeling how ideas move through social networks, they show that people reasonably trust those closest to them over strangers. This lets a false belief travel unchecked through an otherwise rational community (O'Connor and Weatherall min. 23- 40). A flat-earth's community only needs to trust insiders more than it trusts outsiders.

In January 2024, the World Economic Forum (WEF) listed the spread of misinformation as a leading threat to humanity (Lewandowsky et al.). Misinformation and its evil twin, disinformation, which is the intentional spread of false information, form the foundation for conspiracy theories. As Charles Darwin noted in *The Descent of Man*, "False facts are highly injurious to the progress of science, for they often endure long; but false views, if supported by some evidence, do little harm, for everyone takes a salutary pleasure in proving their falseness" (Darwin, ch. 21). In other words, Darwin felt the natural curiosity humans possess would lead them to seek the truth. In today's parlance, however, "truth-seeker" is associated with conspiracy theorists and those who reject accepted mainstream science and expert analysis and opinion in favor of their own, often misguided, research. The quote could be amended to say many become intent on proving the "truthness" of a false fact, or "truthiness," as Stephen Colbert might say. Moreover, these "false views" form the basis for conspiratorial thinking.

Sander van der Linden, in *Foolproof; Why Misinformation Infects Our Minds and How to Build Immunity*, extends Darwin's own metaphor of disease into a literal one, describing misinformation as a kind of virus that hijacks the mind's basic cognitive machinery and spreads from person to person much as a biological contagion does (van der Linden 53:04). Michael Shermer, in his book *Conspiracy: Why the Rational Believe the Irrational*, states that "conspiracism is a rational response to a dangerous world" (Shermer 26). Certain conspiracy theories, such as Watergate, turned out to be true, and we therefore need to take careful steps in determining which conspiracy theories are valid and take strategic steps to debunk those that are false (Shermer 32).

Political scientists Joseph Uscinski and Joseph Parent outline four elements for the existence of a conspiracy: "1) a group; 2) acting in secret; 3) to alter institutions, usurp power, hide truth, or gain utility; 4) at the expense of the common good" (qtd. in Shermer 98). Researchers Jan-Willem van Prooijen and Mark van Vugt put it more concisely: "a conviction that a group of actors meets in secret agreement with the purpose of maintaining some malevolent goal" (van Prooijen and van Vugt 770). Van Prooijen and van Vugt state that conspiracy theories contain at least five essential elements: "1) an assumption of how people, objects, or events are causally interconnected into a meaningful pattern; 2) the plans of alleged conspirators are deliberate" and therefore imply agency; "3) a coalition, or group of actors, working in conjunction; 4) an element of threat; 5) and an element of secrecy"—in short, patterns, agency, coalitions, threats, and secrecy (qtd. in Shermer 99). Within these five elements, we find evidence of Darwin's ideas on traits as evolutionary adaptations.

Humans evolved pattern recognition abilities as threat assessment tools. Discerning patterns and determining causal effects in one's environment are essential skills for survival.

However, while the human mind is primed to look for existing patterns, it can also perceive patterns that are not there (van Prooijen and van Vugt). Psychologist Rob Brotherton, in *Suspicious Minds*, calls this tendency the proportionality bias: the assumption that a big event must have a big cause, which makes small, mundane, or accidental explanations feel unsatisfying even when they happen to be true (Brotherton min 15:30).

Agency detection is another evolved trait needed for threat assessment. Recognizing and understanding motives behind friends or foes is needed to form communities as well as ward off enemies. Conspiracy theorists, however, scour every detail of an agent in the search for confirmation bias that they are scheming, plotting, and intending harm. Threat management systems, like staying away from rancid food or a hot stove, are evolved functions that help humans detect harmful situations (van Prooijen and van Vugt). Brotherton calls this the intentionality bias: the assumption that ambiguous or harmful events were caused on purpose by someone, rather than by chance or coincidence (Brotherton min. 6:36:43).

And lastly, humans developed an alliance detection system to assess threats. Humans are social animals and live in groups. Darwin said, “Everyone will admit that man is a social being. We see this in his dislike of solitude and in his wish for society beyond that of his own family. Solitary confinement is one of the severest punishments that can be inflicted” (Darwin, ch. 4). Humans need other humans to survive. Coalition building is therefore essential to our survival. Sometimes this system goes into overdrive, and people think hostile groups are forming against them when they’re not (van Prooijen and van Vugt).

According to van Prooijen and van Vugt, pattern perception, agency detection, alliance detection, and threat management evolved for different reasons. Van Prooijen and van Vugt are not convinced that these traits are adaptive byproducts. Rather, they suggest that these traits

evolved and stuck around precisely because there are actual conspiracies that can happen. They conclude that conspiracy theory thinking is related to the human coalition mindset—part of evolutionary psychology’s threat assessment and detection system to protect humans against nefarious coalitions (van Prooijen and van Vugt).

Evolutionary anthropologist David Samson outlines a similar case in *Our Tribal Future*, saying that both our capacity for altruism and our capacity for atrocity share the same underlying coalition-building structure, since tribalism is a single adaptation that can be channeled toward cooperation or toward genocide depending on how it is directed (Samson 4). However, Darwin’s own vision of where these evolved coalitions should lead, was the opposite of “exclusionary tribalism” that conspiracy theories like the Great Replacement now attribute to him. As humans formed larger and larger coalitions, Darwin believed the circle of moral concern should expand outward with them, not close ranks against outsiders:

“As man advances in civilization and small tribes are united into larger communities, the simplest reason would tell each individual that he ought to extend his social instincts and sympathies to all members of the same nation, though personally unknown to him. This point being once reached, there is only an artificial barrier to prevent his sympathies extending to the men of all nations and races” (Darwin, ch. 3).

According to Darwin, though, tribal alliances should point humans towards an ever-widening “us,” and not an exclusionary one.

The “conspiracy” surrounding the misapplication of Darwin’s quotes and ideas remains in use in both left- and right-wing places. The extraordinary series *Exterminate All the Brutes*, on the genocide of native populations, wrongly attributes the genesis and basis of manifest destiny

to Darwin. The writer and left social critic Naomi Klein makes the same attributional error in her book *Doppelgänger*:

Within this mindset, genocide is not a crime; it's merely a difficult but necessary stage, one blessed (for the believers) by God or (for the rationalists) by Charles Darwin, who wrote in *The Descent of Man*, "At some future period, not very distant as measured by centuries, the civilized races of man will almost certainly exterminate and replace the savage races throughout the world." A "great replacement" theory if ever there was one. (268)

Not only does Klein take this quote out of context and misapply it, but it's also dangerous.

The great replacement theory is a far-right, white nationalist ideology that believes there is a conspiracy to commit white genocide and that Jewish and other non-white people will replace white people. This ideology has its roots in Nazism. Herbert Spencer's Social Darwinism, scientific racism, and eugenics were misattributed to Charles Darwin and used to justify the Holocaust. Klein's egregious error plays into the white supremacist ideology that, via evolution and natural selection, the white race is destined to replace the savage races and take their rightful place at the top of the hierarchy; nothing could be further from the truth.

If van der Linden is right that misinformation behaves like a virus, then his proposed remedy, "prebunking"—exposing people to a weakened dose of a manipulation technique before they encounter it in the wild, so the mind builds resistance the way a body builds immunity—is the closest thing we have to a vaccine against it (van der Linden min 6:29:30). Understanding conspiracy thinking as an evolutionary holdover does not make it true, but helps explain why humans are so prone to believe conspiracies. Evolution is part of life. The one constant in the

world is change. One change we need is a better approach to understanding and combating harmful conspiracy theories.

The Descent of Man is a text of its era. Yes, it's problematic. But those who invoke Darwin to justify extermination and the those who insist DIA hides lizard people in its underground tunnels are doing the same thing: taking an evolved capacity for pattern, agency, and coalition detection and running it past anything real. But the impulse to see a hidden hand behind Blucifer's glaring red eyes is not madness or stupidity (at least for most)—it is the same threat-detection machinery that once helped small bands of humans survive each other, now misfiring in an information age that didn't evolve with it. Darwin himself seemed to understand how that machinery could misfire long before anyone had coined the word "conspiracy theory": "Ignorance more frequently begets confidence than does knowledge: it is those who know little, and not those who know much, who so positively assert that this or that problem will never be solved by science" (Darwin, Introduction). In this age, let's root for those those who know much.

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